



RESEARCH REPORT

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Topic: **Impact of Water Meter Replacement on
a Water Utility's Potential Revenue**

A Research Report submitted to the Faculty of Engineering and the Built Environment, University of the Witwatersrand, Johannesburg, in partial fulfilment of the requirements for the degree of Master of Science in Engineering.

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DECLARATION

I declare that this Research Report is my own, unaided work. It is being submitted for the Degree of Master of Science in Engineering at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at any other University.



(Signature of candidate)

5th Day of April 2019 in Randburg

ABSTRACT

Water demand management focuses on implementing a number of smaller projects which have the potential to reduce water usage. Focus has been placed on meter replacement projects, based on the premise that water meter accuracy degrades over time. Johannesburg Water embarked on a water meter replacement project, with a focus on replacing water meters which had not been read due to technical faults. By making use of the meter reading information provided by Johannesburg Water, for the old meter and new meter, a comparison of a year's worth of consumption was undertaken. Further the effect of the meter size, chronological age and volumetric age was considered. The average monthly revenue increase was calculated for the entire sample (3679 properties). This translated to an average monthly revenue increase per-property-per-month of approximately R304. Results indicate that there is no one-size-fits all meter replacement strategy, Water Utilities need to consider their unique conditions.

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ABBREVIATIONS

AWE	Average Weighted Error
AWWA	American Water Works Association
CPI	Consumer Price Index
DM	Decentralised Metering
DMA	District Metered Area
DN	Nominal Diameter
DP	Displacement Piston
FO	Fluidic Oscillator
GIS	Geographic Information System
gpm	Gallons per minute
GPS	Global Positioning System
IWA	International Water Association
JW	Johannesburg Water
kℓ	Kilolitres
ℓ	litres
ℓ/m	litres per minute
Ltd	Limited
MD	Managing Director
Mgallons	Mega Gallons
Mℓ	Mega Litres
m ³	cubic metres
m	metre
MJ	Multi-Jet
mm	millimetres
ND	Nutating Disc
NPV	Net Present Value
NPVC _n	Net Present Value Chain
NRW	Non-Revenue Water
OM	Optimal Metering
ROI	Return on Investment
SGID	Surveyor General Identification Number
SOC	State Owned Company
T-codes	Technical Faults
TU	Turbine
yr	year
UFR	Unmetered Flow Reducer
UM	Universal Metering

IMPACT OF WATER METER REPLACEMENT ON A WATER UTILITY'S POTENTIAL REVENUE

EXECUTIVE SUMMARY

Water scarcity issues have traditionally been addressed through the implementation of large-scale water supply augmentation projects. However, water demand management has increasingly become a more viable and attractive alternative. Water demand management is considered a short-term project with almost immediate effects. The water demand management approach includes small changes that reduce water use for individual customers that will eventually amount to a significant reduction in the overall water demand (Friedman et al. 2011).

As a result, large-scale water meter replacement or installation projects are widely recognised as an efficient means to reduce water usage. Johannesburg Water (SOC) Ltd, has the objective to ensure the effective and efficient metering of water being supplied to customers within its area of jurisdiction. Between 2013 and 2015, Johannesburg Water implemented a large-scale meter replacement project (resulting in more than 50,000 meter replacements) throughout its area of authority. In consideration of the large capital cost of the implementation of the project, the purpose of this investigation was to determine the effect of the large-scale meter replacement on the Water Utility's overall potential revenue and whether there was a return on investment (ROI). Additionally, the investigation aimed to propose an optimal maintenance and replacement timeframe for meters employed by Johannesburg Water, taking into account a meter's chronological age, volumetric age, and size.

The information which formed the basis of the investigation was obtained from two separate data sources. The first data source was a list of residential water meters obtained directly from Johannesburg Water (Database 1). The second data source that was considered was directly linked to the large-scale meter replacement project undertaken by Johannesburg Water between 2013 and 2015, where more than 50,000 meter replacements were executed (comprising Database 2). In order to verify the meters from Database 1 that formed part of the large-scale meter replacement project, a comparison was done between the old and new meter serial numbers on both databases. Only properties where both the old and new meter serial numbers were a match, on both databases, were considered for further investigation. The above exercise resulted in a final data sample of 3,679 properties where a meter change had occurred during 2013 to 2015.

Based on the sample obtained, an analysis was conducted on the following factors:

- Overall impact of large-scale meter replacement project
- Meter size
- Chronological age of the meter
- Volumetric age of the meter

For the overall impact of the large-scale meter replacement project, the average monthly potential revenue increase was calculated for the entire sample (3,679 properties). This translated to an average monthly potential revenue increase per property per month of approximately R304.83.

Only considering the newly installed 15 mm meters as this was the largest sample size (3,603 of the 3,679 properties), this resulted in an average monthly potential revenue increase of approximately R 247.11 per month per property.

Various meter sizes were reviewed. When comparing new 15 mm meter installations with new 100 mm meter installations, the Payback Period (i.e. the length of time to recover the capital costs) for the former was found to be 8 months, and that of the latter 12 months. Although the capital costs of the bulk meter replacement are significantly higher than the 15 mm meter installations, their Payback Periods are comparable, therefore the Water Utility will see a higher ROI on the bulk meters.

As chronological age is a significant factor when considering meter accuracy degradation, the Payback Period was reviewed for the meters aged 2 years old to 10 years old. Meters aged 3 and 4 years old, had an average Payback period of 66.2 and 57.7 months respectively. In comparison, meters aged 7, 8, 9 and 10 years old had Payback Periods of 5.6, 8.9, 6.3 and 8.5 months respectively.

When comparing the various results across the separate payback period groupings, it was found that, on average, the Payback Periods are below a year. However, when considering meter chronological age, there is a significant difference between meters 2 years old when compared to meters of 10 years of age, therefore indicating that chronological age of the meter must be considered when assessing a meter's replacement potential

The expectation was that the higher the volumetric reading, the lower the associated Payback Period. However, flow range 5,200 – 6,750 kℓ returned a comparable Payback Period, as compared to the 0 – 1,000 kℓ range. In order to attempt to access the reason behind this result, a further comparison was done between the chronological age of the meters within these various flow ranges. It was noted a sizeable number of meters (544 meters) aged 10 years old appeared within the 0 –

1,000 kℓ flow range. Therefore, the chronological age of the meter may have a larger impact on meter accuracy when compared to the volumetric age.

The results indicate that there is no one-size-fits-all meter replacement strategy, Water Utilities need to consider their own unique conditions when it comes to meter replacement. However, some key components to be considered, include:

- Chronological age of the meter – older meters have a higher Return on Investment and shorter Payback Period.
- Size of the meter – bulk meters have a higher Return on Investment and shorter Payback Period when compared to standard domestic meters (15 mm diameter meters).
- Incorrect sizing of meters may have a negative effect on potential revenue.

CHAPTER 1. INTRODUCTION

In South Africa, confusion often occurs regarding the various definitions related to water shortages. This has been particularly prominent recently due to the water crisis taking place in the City of Cape Town. The following terms, in particular, need to be defined and understood upfront as they all have differing meanings (Sustainable Jersey (2013)):

- Water Scarcity – is the lack of sufficient water resources to meet the demands of water usage within a region.
- Water Stress – although a relatively new term, it is defined as the difficulty of obtaining sources of fresh water to be used for a period of time, which may result in the depletion and the deterioration of the available existing water resources.
- Water Availability – is the quantity of water that can be used for human purposes without significant harm being caused to ecosystems or other users.
- Water Shortages – are a result of climate change, including droughts and floods or an increase in polluted water supplies. Furthermore, increased human demand (as a result of increased population) or general overuse or wastage of water may result in water shortages.
- Water Crisis – a situation where the available potable or unpolluted water within a region is less than the demand of the region.

Water scarcity is measured in terms of the total water resources that are available to the population of a region. This is based on the 'Falkenmark indicator' or 'Water Stress Index', according to the Global Water Forum (2012). The indicator defines water availability in terms of thresholds. Where the amount of renewable water in a country is below 1,700 kℓ per person per year, but above 1,000 kℓ per person per year, the country is deemed to be experiencing water stress. If the indicator is below 1,000 kℓ, but above 500 kℓ per person per year, the country is said to be experiencing water scarcity and for any value below 500 kℓ, the country is experiencing absolute water scarcity.

Based on the above, and according to Knoema (2014), South Africa's renewable freshwater was estimated to be 966.3 kℓ per person per year. This implies that South Africa is a water scarce country.

Although the term a 'water stressed' or a 'water scarce' country is used loosely, the signs of reduced water availability exist in South Africa:

- The South African Weather Service indicated that between July 1960 and June 2004 there had been 8 summer rainfall seasons in which the measured rainfall was less than 80 % of the normal expected rainfall. A 25 % deficit is considered a severe meteorological drought.

- However, in contrast to the above, when considering the information contained in the Water Resources of South Africa Studies, WR2005 and WR2012, the Mean Annual Runoff (MAR) has only decreased slightly between the various studies undertaken:
 - WR90 – 51 121.30 million kℓ /a (Time period: 1920-1989)
 - WR2005 – 49 210.32 million kℓ /a (Time period: 1920-2004)
 - WR2012 – 49 114.74 million kℓ /a (Time period: 1920-2009)

This would imply that the surface water availability has remained relatively stable or constant. Further, the WR2012 report went on to indicate that there are large variations in water quality across the country as a result of contamination of the resources. Therefore, although the surface water may remain constant, contamination thereof would reduce the availability of water to consumers.

- The Department of Water and Sanitation (2016) indicated that dam levels as recorded on the 16th of October 2016 approached a critical low point when compared to previous years. If one considers the trend over the past 5 years, as indicated by the black trend line, dam levels were approaching 'very low' storage status. If one were to compare the years 2014 to 2016, the trend appears to be a continuous decline (Figure 1-1).
- It is noted that a 5-year time period, as indicated above, can be considered short in terms of climatic factors; however a study titled 'State of the Climate in 2017', completed by the American Meteorological Society, indicated that Cape Town in 2017 experienced its driest year since 1933. Further, there has been a steady increase in annual mean temperatures since 1951 (Figure 1-4).

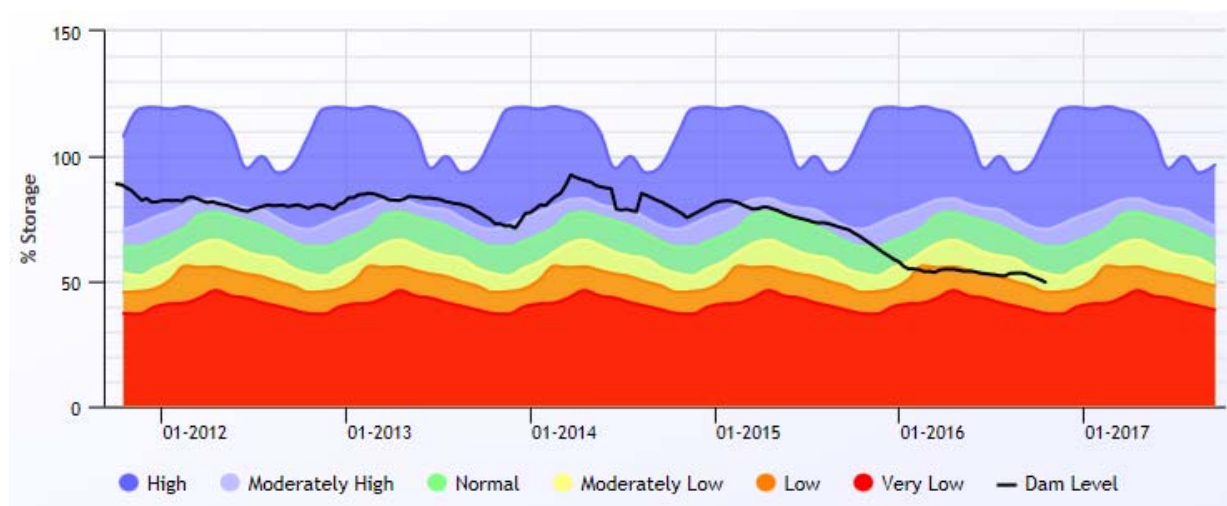


Figure 1-1: Surface Water Storage - National, (Department of Water and Sanitation, 2016)

More recently however, the updated storage status has begun to increase again; towards a moderately elevated level (refer to Figure 1-2). However, it should be noted that this is based on the

overall national storage levels. When comparing individual regions, some areas remain critical as can be seen in Figure 1-3.

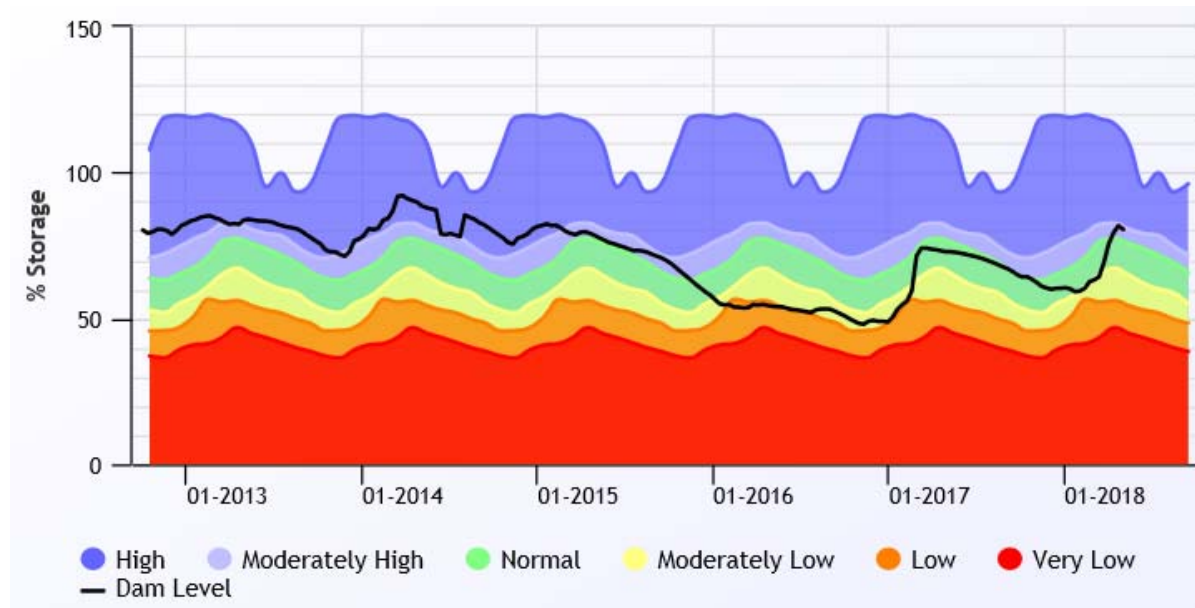


Figure 1-2: Surface Water Storage - National, (Department of Water and Sanitation, 2018)

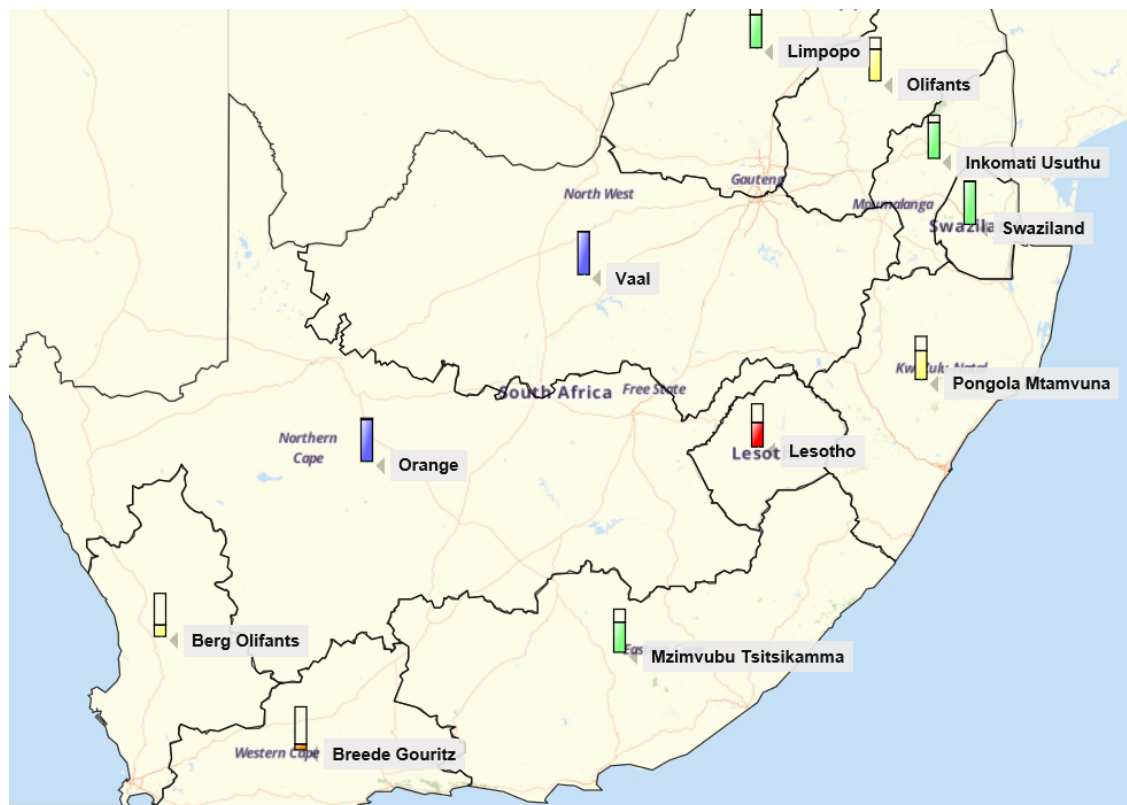


Figure 1-3: Storage Levels per Region (Department of Water and Sanitation, 2018)

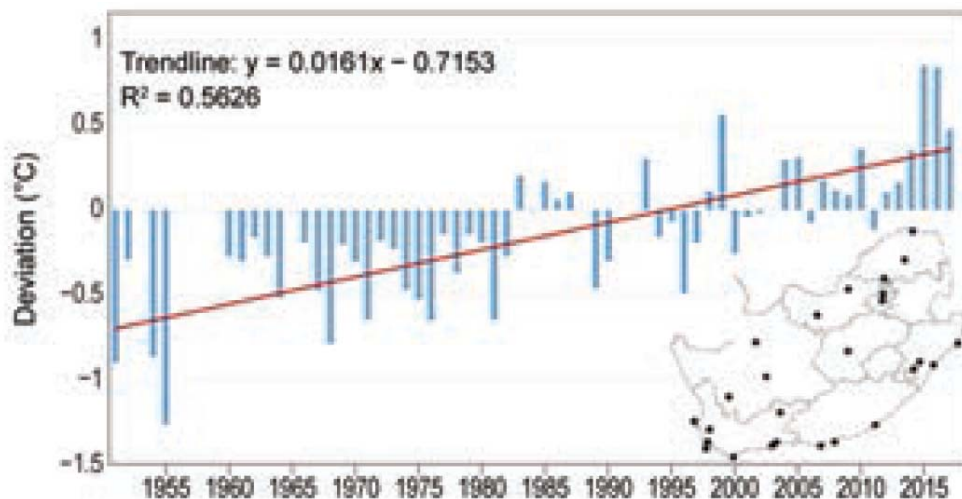


Figure 1-4: Annual mean temperature anomalies for 1951 to 2017 (South African Weather Service, 2017)

The crisis being experienced within the City of Cape Town highlights the necessity for water conservation and demand management. The city implemented Level 6B water restrictions, resulting in each person only being able to utilise 50 litres or less per day in total, whether at home, work, school, gym or elsewhere. The restrictions were applied in order to avoid what was termed “Day Zero”. “Day Zero” was to be the day that almost all of the taps in the City of Cape Town would be “turned-off” and each person would have to queue for water at one of approximately 200 sites. In June 2018, following the winter rainfall, the dam levels were at 42.7 % (News24, 2018), which was at a higher level for the same time periods in 2016 and 2017. The Cape Town Water Outlook 2018, reported that dam levels had risen to 55.8 % as on 19 July 2018 (Figure 1-5). City of Cape Town managed to avoid Day Zero, as a result of the intense water demand management programmes, constant communication, awareness campaigns and behavioral changes with regards to water usage (Figure 1-6).

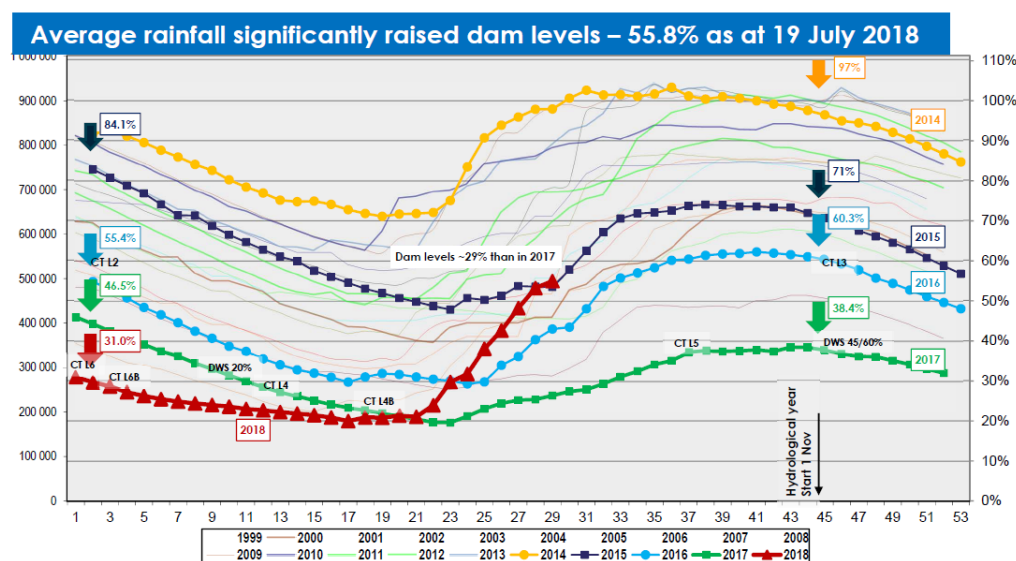


Figure 1-5: Average rainfall resulting in raised dam levels (Department of Water and Sanitation, July 2018)

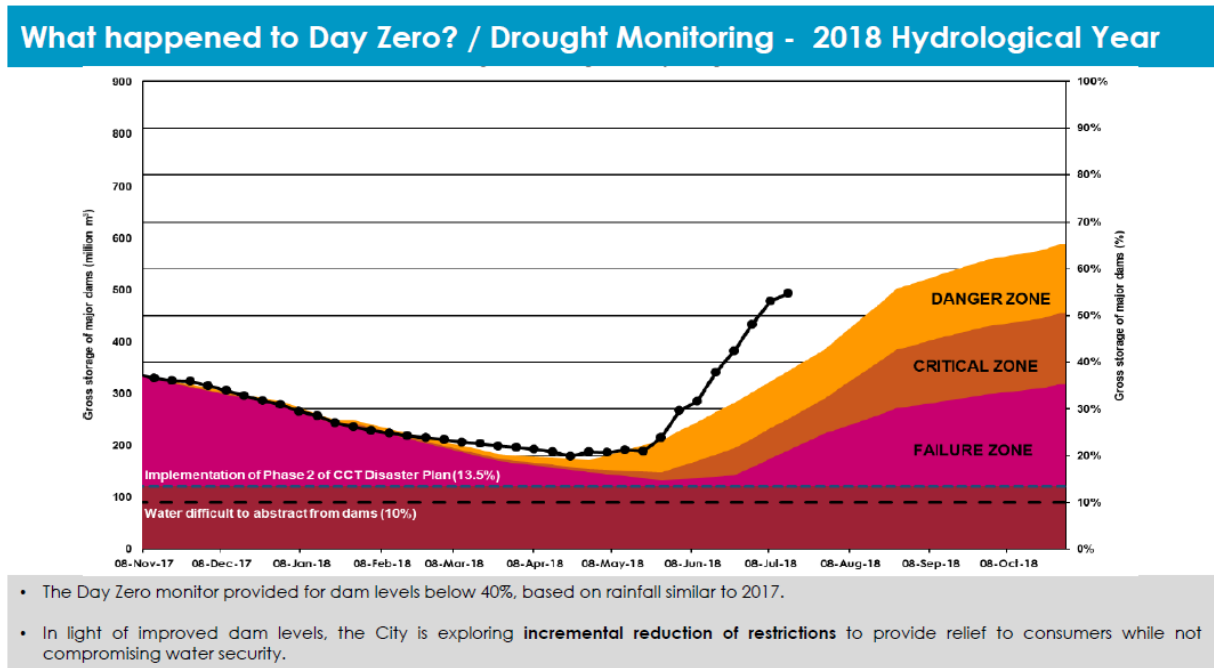


Figure 1-6: Cape Town Drought Monitoring (Department of Water and Sanitation, July 2018)

Water scarcity issues have traditionally been addressed through the implementation of large-scale water supply augmentation projects. However, water demand management has increasingly become a more viable and attractive alternative for several reasons including:

- a) The lower overall capital cost when compared to large-scale bulk infrastructure projects;
- b) Increasing water supply does not address the overall issue, being water wastage; and
- c) Water demand management is considered a short-term project with almost immediate effects. The water demand management approach includes small changes that reduce water use for individual customers that will eventually amount to a significant reduction in the overall water demand (Friedman et al. 2011).

Large-scale meter replacement or installation projects are widely recognised as an efficient means to reduce water usage. However, the available documented information regarding water savings from meter replacement have been limited to a relatively small sample size (Selsky 2001). The sentiment is also echoed in Masia et al. (2013) that meter replacement projects have a role in Water Demand Management, with particular reference to Smart Metering Solutions. Masia et al. (2013) reported that if customers are not billed, or billed incorrectly, for their water usage, they will continue to misuse an already scarce resource, further putting strain on current water demands.

Water meters are considered a water utility's "cash register" (Wilson, 2003; Van Zyl, 2011). In the Alameda County Water District (ACWD) in Fremont, California, revenue generated from water consumption was the district's primary source of income. Single family residential customers with 15 mm meters, represented about half of all consumption revenue, which was roughly estimated to be in the region of \$15 million (Yee, 1999). In South Africa, the eight metropolitan cities have been estimated to forfeit R6.5 billion annually through technical losses in water and electricity. Reducing the metropolitan losses by an estimated 4.6 percent through technical interventions was projected to result in a potential R300 million reduction in the local government equitable share in 2016/17 (National treasury, 2016).

Water meters, especially mechanical water meters, experience a degradation of accuracy over time (Stoker et al. 2013). This degradation is a function of several factors, such as mechanical wear, poor water quality, abnormal water velocities, erroneous throughput volumes (i.e. excessive volumes for incorrect meter size), and installation and handling. The evidence that aging makes water meters less accurate, leads to the hypothesis that revenues are lost because the consumption of water is not completely recorded by aging meters (Arregui, 2006; Shields et al. 2012; Couvelis, 2015). This implies that inaccuracies lead to, in most cases, underestimated flow rates. It has been on this basis that local water utilities have implemented large-scale meter replacement projects. On the other hand, however, replacing water meters that are still providing reasonably accurate recordings can be considered wasteful and futile. According to Allender (1996), Davis (2005), Fantozzi (2009), Viyakespan (2010) and Moahloli (2017), between the two economically opposing tendencies mentioned above, there is a point that economically justifies the cost of the meter replacement.

It is against this backdrop that this study proposes to investigate the impact that large-scale meter replacement projects have had on an identified water service provider's revenue generation. This study will consequently propose an optimal maintenance or replacement time based on the above findings.

1.1 Justification for Research

Prior research (Arregui, 2006; Shields et al. 2012; Couvelis, 2015; Allender, 1996; Davis, 2005; Fantozzi, 2009; Viyakespan, 2010 and Moahloli, 2017) provides an overview of meters' applicability and impact on Water Demand Management and in some instances, has identified the optimum replacement volume or period, as well as factors that influence meter accuracy. Prior research also indicates that each water utility should undertake its own study in order to arrive at a specific replacement period, based on site conditions and tariff structures. Equally important is that the impact that meter replacement can potentially have on a Water Utility's revenue generation, and therefore the utility's ability to provide the appropriate service, has not specifically been calculated, taking into consideration the large investment required to undertake a large-scale meter replacement project.

1.2 Research Objective

The objectives of this research report are:

- 1) to investigate the impact that large-scale meter replacement projects have had on an identified Water Utility's potential revenue generation; and
- 2) to propose an optimal maintenance or replacement time for meters employed by the Water Utility. Factors to be considered include:
 - the age of the meter being replaced;
 - volumetric reading at replacement; and
 - the size of the meter being replaced.

1.2.1 Research Questions

The following provides an overview of the questions which this research report will attempt to answer:

- a) If a meter is replaced with a smaller or larger diameter meter, what is the impact on the overall potential revenue generated by the Water Utility?
- b) Is there an optimal time when a meter is to be replaced?
- c) Which indicators best account for meter deterioration and hence can be used to determine the best time to replace a meter?

1.2.2 Ethical Considerations

- A request was made to Johannesburg Water (SOC) Ltd requesting permission to proceed with this investigation. A memorandum for access to information for purposes of use in a research agreement was signed granting permission (Annexure A)
- No GIS profiling of customers' consumption was undertaken, nor was any personal customer information gathered. The study is limited to metered consumption comparisons.

1.3 Hypotheses

The following are the hypotheses which this research report wishes to test:

- Hypothesis 1. *The replacement of aging residential water meters positively impacts the accuracy of water consumption logging. This is based on the assumption that the accuracy of water meters degrades over time.*
- Hypothesis 2. *The Capital Costs associated with the replacement of the water meter are greater than the increase in potential revenue associated with the installation of a new Water Meter, therefore resulting in an extended pay-back period to recover the overall capital costs.*
- Hypothesis 3. *Large-scale Meter Replacement projects result in increased potential revenue generation for the Water Utility.*

CHAPTER 2. LITERATURE REVIEW

The following literature review aims to identify studies addressing water metering, with particular reference to optimum replacement periods and strategies, water meter degradation over time, water meter inaccuracies (related to low flow or other factors), water meter maintenance strategies and cost benefit analysis related to water meter replacement.

The review also aims to determine if there is a link between meter replacement and water demand management initiatives.

2.1 Water Meter Replacement Studies

It is a generally accepted norm that replacing aged water meters can significantly enhance revenue generation for a water utility (Shields et al., 2012). This “norm” has been based on the premise that, over time, mechanical devices such as water meters will wear and deteriorate, and that this deterioration can be further exacerbated by poor water quality. However, the exact time period recommended for replacement varies across water utilities worldwide. The result of this is that a single strategy is yet to be adopted globally (see paragraphs below).

Davis (2005) also echoes this perception and states that the average field service for water meters is between 10 and 20 years before the meter is replaced. This has been based on the assumption that meter accuracy decreases with length of service.

In 2013, the Managing Director (MD) of Sensus Metering Systems, Mr. Basil Bold, in an article published by Engineering News, was quoted as saying that, “*the South African Water Meter Manufacturers Association has proposed legislation to set the local target at ten years*”. This statement was made with reference to meter replacement time frames. In agreement with this statement, Germany recommends a six-year replacement period (Bold, 2013). Also, the Susanville Water Department in California indicates that meters need to be replaced every 20 to 25 years (Susanville Water Department, 2010). The City of London undertook a study in December 2008 which indicated that a water meter should be replaced between 1,900 kℓ and 2,800 kℓ of water passing through the meter, with the optimal time occurring when the meter registered 2,400 kℓ. Based on the City of London’s water usage profile for typical residential consumption this translates to a 9 to 13-year replacement time period (McNally, 2008).

Considerable research has been undertaken to determine measures or key identifiers for meter replacements (Arregui et al., 2011; Fontanazza et al., 2012; Johnson, 2003 and Lund, 1988). These measures or key identifiers can be utilised in a maintenance replacement schedule.

A study by Ncube (2015) indicated that in order to comply with the 8 % error limit for in-use meters, a meter that has conveyed between 8 – 10 Mℓ is a likely and appropriate meter replacement guideline figure. This correlates with the 8 Mℓ proposed by Mutikanga (2012). These studies however do not quantify the potential gains or losses in revenue if meters are replaced below their recommended ceilings.

Davis (2005) who conducted research within the Metropolitan Domestic Water Improvement District, Northwest of Tucson, Arizona, indicates a different value to that proposed by Ncube (2015), and demonstrates that the cumulative flow volume through the meter, combined with the average percentage of water used by residential customers at low flow levels, were the driving factors for meter replacement. Based on the analysis by Davis (2005) it was determined that the optimum cumulative volume for meter replacement for the particular district under review was 1.42 Mgallons (5,375.3 m³) – refer to Figure 2-1.

In order to determine this optimum cumulative volume of 1.42 Mgallons, Davis (2005) followed the below approach:

- a) A meter accuracy results database was created. The database included the following parameters:
 - Date of meter removal;
 - Meter number;
 - Cumulative flow as recorded on the meter;
 - Meter size;
 - Tested accuracy at low, medium and high flows.
- b) In addition to the above, the percentage of time that meters operated within the various flow ranges was measured. To achieve this, flow recorders were installed at selected residences during the four seasons of the year in order to determine the percentage of flow per flow region (i.e. low, medium, high) per season. This experiment was conducted on 132 customers. It was found that 10.87 % of the flow occurred in the low flow region (where the meter is the most inaccurate), and 22.31 % and 66.81 % in the medium and high flow ranges respectively, where the meter is the most accurate.

Flow ranges were defined as follows:

- Low Flow – 0 to 0.25 gpm (0 to 1.136 ℓ/m)
 - Medium Flow – 0.25 to 2 gpm (1.136 to 9.092 ℓ/m)
 - High Flow – 2 to 15 gpm (9.092 to 68.191 ℓ/m)
- c) A single manufacturer database was analysed, with meters in service for longer than 10 years. The aim of the investigation was to analyse meter age in isolation to other factors which can potentially contribute to a meter's inaccuracies. Consequently, by considering a single manufacturer, inaccuracies as a result of varying meters types were not a contributing factor to the overall analysis.
- d) The database was screened and 'outliers' were removed. Thereafter the data was plotted using graphs that show cumulative flow versus accuracy for low, medium and high flows. It was noted that the scatter of the data at the low flows was the greatest. A best fit trend line was fitted to each data set and combined into Figure 2-1.

It must be noted that over extended volumetric use, meter accuracy shows a definite decline, with steeper deterioration experienced in low flows.

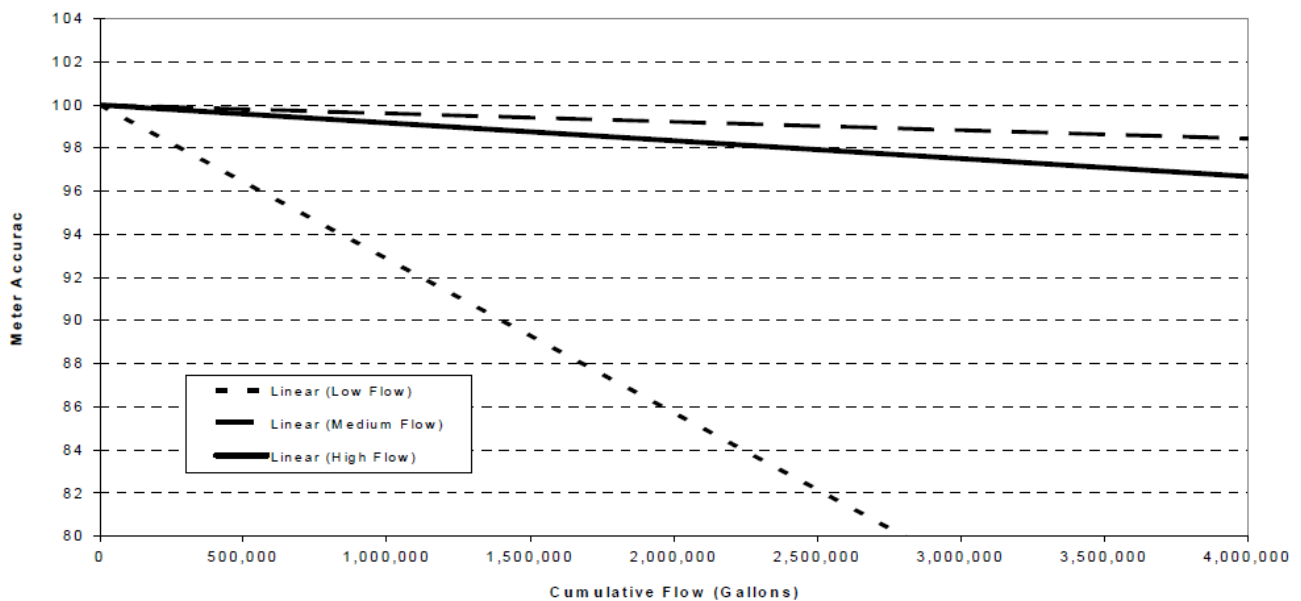


Figure 2-1: Meter Accuracy versus Cumulative Flow-Summary of Data Trend Lines (Davis, 2005)

Davis (2005) further went on to quantify the optimum replacement point by utilising revenue generation and replacement cost as the basis for comparison. The residential usage for the Metropolitan Domestic Water District System was estimated to be 130,000 gallons (492 k ℓ) per year (this was based on the entire district's water usage patterns). For ease of calculation or analysis Davis (2005) calculated the number of years it would take for the average annual usage to reach 500,000 gallons (1892 k ℓ). This translated to approximately 4 years (i.e. $500,000/130,000 = 3.8$ years). Thereafter the estimated number of years to accumulate metered volumes in 500,000 gallon

increments (1,892 kℓ) was determined. The average accuracies at each cumulative flow volume (in increments of 500,000 Gallons) was calculated from the trend lines as indicated in Figure 2-1. From the initial percentage-time calculations that flow is registered in the low, medium and high flow ranges, in addition to the average residential bill (\$33.56 or approximately R350) per month, the amount of dollars lost per year due to increasing meter inaccuracies was determined. This was achieved by utilising the trendline degradation as contained in Figure 2-1.

The estimated amount of dollars lost per year, as determined above, was then plotted against the total number of calculated years that the meter has been in use. This was done using increments of 500,000 Gallons which resulted in a rough translation of 4 years per 500,000 Gallons. By summing the area under the graph, the total amount of revenue lost can be determined for each increment. Taking into consideration the estimated replacement cost of the domestic meter, it was determined that at 1.42 MGallons (5,375.3 kℓ), the lost revenue would exceed the replacement cost. This would be considered as the optimum replacement point for the meter and translates to approximately 11 years. However, Davis (2005) reiterates that the cumulative volume be adopted for meter replacements rather than the number of years in use, because of the positive association between volume and inaccuracies, there is a resultant loss of revenue

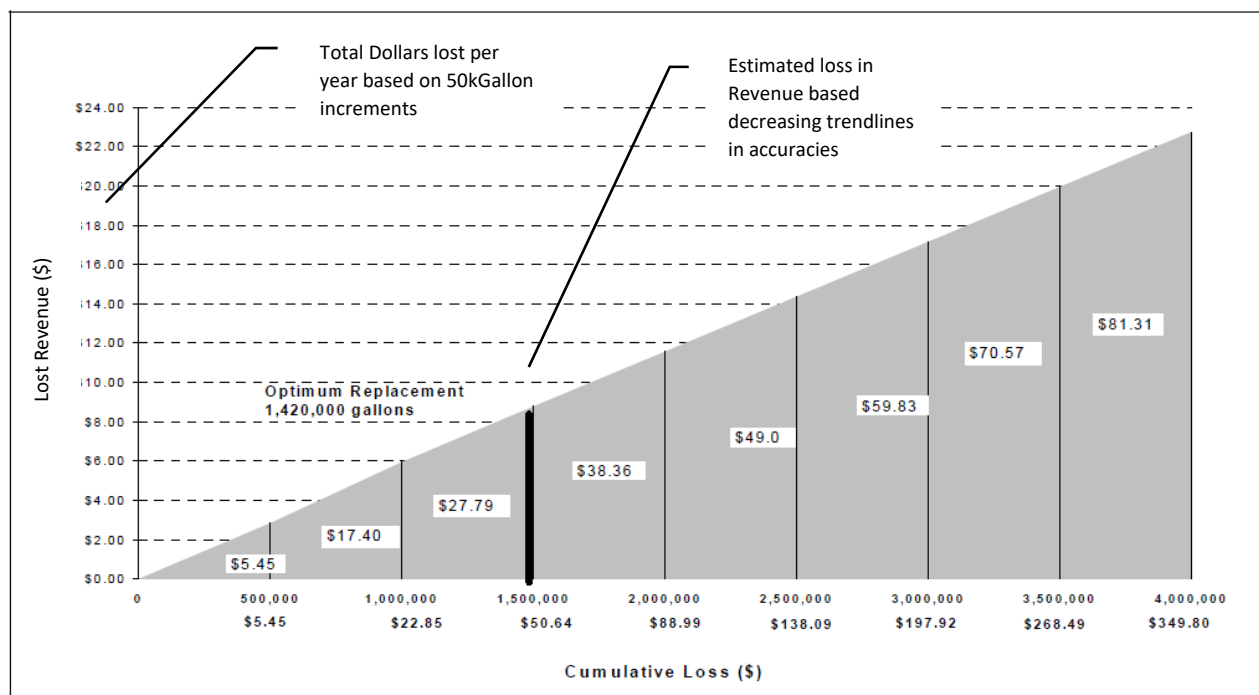


Figure 2-2: Average Lost Revenue versus Cumulative Flow for Residential Consumers (Davis, 2005)

Moahloli (2017), Fantozzi et al. (2009) and Arregui et al. (2006) found that a relationship exists between water meter age and accuracy, in addition to the total registered volume and accuracy.

Moahloli (2017), further indicated that the average volume of apparent losses due to meter inaccuracies was calculated to be 1.8 kℓ per meter per month. Moahloli (2017) showed that by using the net present value chain (NPVC_n) method, the optimum period for meter replacement was estimated to be at 9, 12 and 16 years at the total registered volumes of 3,971 kℓ, 5,162 kℓ and 6,750 kℓ and at 10 %, 8 % and 6 % real discount rates, respectively. It should be noted that Moahloli (2017) utilised a quantitative method, by applying existing statistical data and numerical analysis, to arrive at the above conclusions. In order to determine the optimum period for replacement, a comparison was made as to when the meter replacement and water loss cost coincided with the NPVC_n.

The net present value chain was calculated as follows:

Equation 2-1: Net Present Value (Moahloli, 2017)

$$NPVC_n = \left[C_{acq} + C_{inst} + C_{adm} + \sum_{i=1}^n V_i \cdot \varepsilon_i \frac{C_w}{(1 + r')^{(i-1)}} \right] \cdot \frac{(1 + r')^n}{(1 + r')^n - 1}$$

Where:

n = number of years / period

C_{acq} = Initial water meter acquisition costs

C_{inst} = Initial water meter installation costs

C_{adm} = Initial administrative costs

C_w = Selling price of water

V_i = Average Volume consumed by a user on the year i

ε_i = Error of the meter for year i

r' = Real discount rate (depreciation rate for municipal meters)

With regard to the above-mentioned formula, it was originally developed by Arregui et al. (2006), who stressed the importance of the meter error determination (ε). Arregui et al. (2011) indicated that metering error is dependent on the operating flow rate, which follows a very specific and characteristic curve path (i.e. error curve of the meter), which is further dependent on meter type. Each meter type has a varying error curve, and each was verified by a lab test of on average 35 new meters at the Polytechnic University of Valencia. It was further noted that since the errors vary throughout the measurement range, the amount of water not registered by a water meter depends on both the shape of the curve, as well as the consumption flow rates of the consumers. Therefore, as a result, both parameters need to be combined to calculate the weighted error of a meter. Several authors have proposed different methods to calculate the weighted error of a meter (Male et al.,

1985; Allender, 1996; Yee, 1999; Johnson, 2001; Ferreol, 2005; Arregui et al., 2006). However, the selected methodology will have a significant impact on the final results (Arregui et al., 2009).

Moahloli (2017) opted to make use of the following formula (van Zyl, 2011) to determine the error of the meter:

Equation 2-2: Meter Error (van Zyl, 2011)

$$\varepsilon_i = (V_i - V_a)/V_a$$

Where:

ε_i = Relative meter error

V_a = actual volume (consumption measured by the new meter (Couvelis & van Zyl, 2012))

V_i = indicated volume (consumption measured by the old meter (Couvelis & van Zyl, 2012))

The meter replacement and water loss costs were determined using the following formula:

Equation 2-3: Meter Replacement and Water Loss Cost (Moahloli, 2017)

$$\text{Meter Replacement and water loss costs} = (C_{acq} + C_{inst} + C_{adm}) + \left(\sum_{i=1}^n \forall_i \cdot C_w \cdot \varepsilon_i \right) (1+r')^n$$

Where:

n = number of years of the replacement period

C_{acq} = Initial water meter acquisition costs

C_{inst} = Initial water meter installation costs

C_{adm} = Initial administrative costs

C_w = Selling price of water

$\forall_i$ = Average Volume consumed by a user on the year i

ε_i = Error of the meter for year i

r' = Real discount rate (depreciation rate for municipal meters)

i = meter age

Moahloli (2017) assumed a varying discount rate of 6, 8 and 10 % for the meter replacement and water loss costs thereby giving varying meter replacement points (see Figure 2-3).

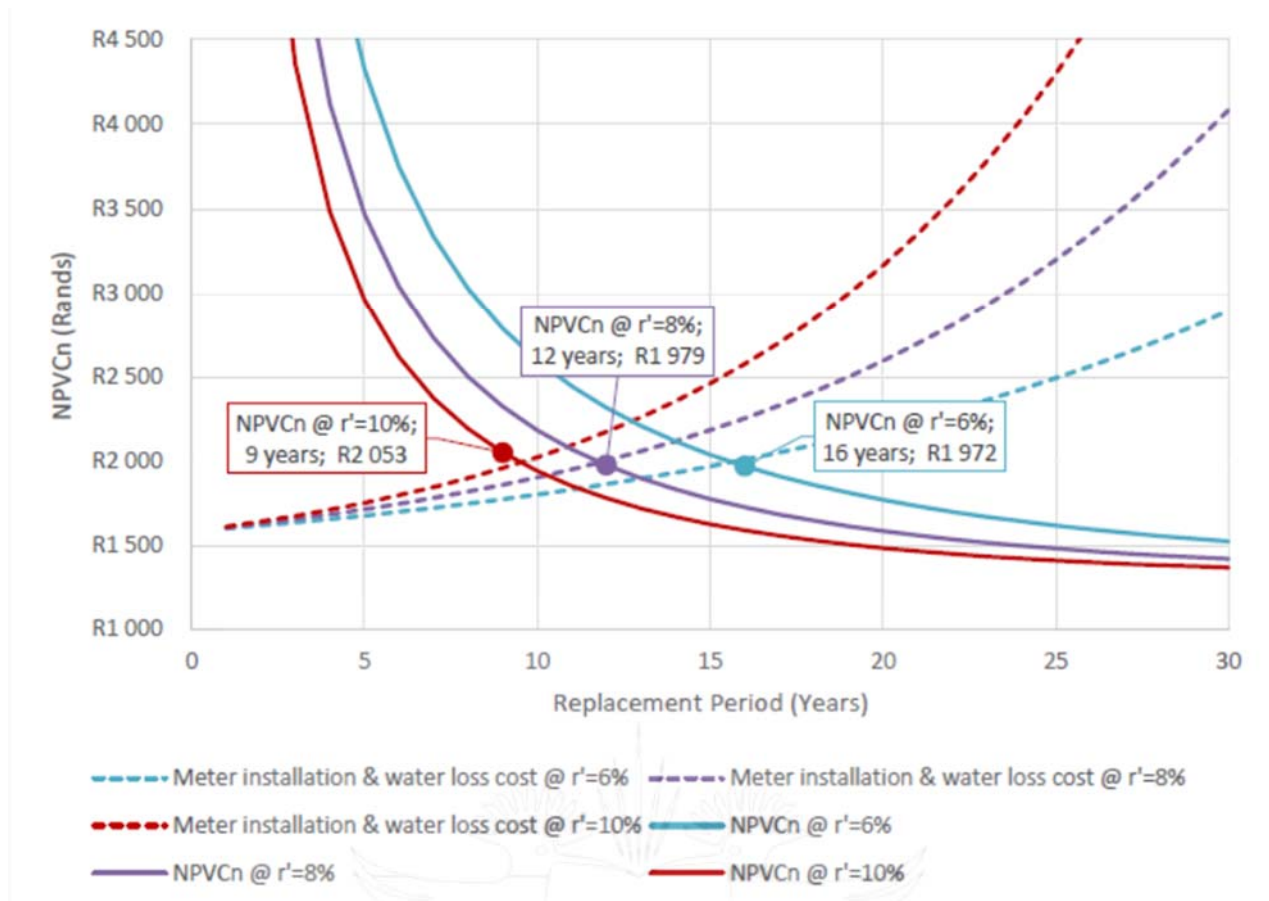


Figure 2-3: NPVC_n plotted against meter installation and water loss costs to determine optimal replacement period (Moahloli, 2017)

Allender (1996) concurred with the premise that aging water meters are becoming less accurate and, as a result, lead to the loss of revenue. He further inferred that replacing water meters, which are providing accurate recordings, will result in wasteful expenditure for the water utility. Allender's (1996) investigation was limited to a sample size of 32 meters, with 8 meters per varying age group (15, 20, 25 and 30 years). Each meter was subjected to a known water flow being passed through it, and if a reading of 60 % was noted, it meant that 40 % of the water going through did not register. He determined that the water meter's recording capability diminished over time and that at low flow intensities the percentage errors were notably higher. This corresponds with Davis' (2005) findings. Allender (1996) highlighted that as a result of the error being larger within the lower flow range, the customer's consumption patterns also directly impacted meter inaccuracies. Allender (1996) thereafter conducted a sample test of 3 average households to determine the percentage split of usage. He found that 12 % of the water usage was within the low flow region, 86 % in the intermediate (medium) flow region and 2 % in the high flow region. This is a very different usage pattern when compared with Davis (2005), which found 10.87 % of the flow occurring in the low flow region (where the meter is at the most inaccurate), and 22.31 % and 66.81 % in the medium and high flow regions respectively. This may be the result of the limited sample size used by Allender (1996), when

compared with Davis (2005) who utilised 132 customers, or as a result of the varying consumption patterns from different consumers.

Although both Allender (1996) and Davis (2005) followed very similar approaches, Davis' (2005) results were linked to meter volume rather than meter age. Allender (1996) further went on to determine the optimum meter replacement period, linked to economic benefit, in a similar fashion as that undertaken by Davis (2005). In contrast to Davis, Allender's (1996) conclusion was that each water utility should conduct an independent investigation to determine the optimum meter replacement point because a significant difference in replacement cost and water tariff structure will lead to varying replacement points. Allender (1996) indicated that the value in the study was the methodology followed rather than the conclusion reached. The following table provides an overview of Allender's (1996) findings linked to the particular water utility under review.

Table 2-1: Average Annual Cost of a Water Meter

Years	Meter Cost	Cost of Use	Accumulated Cost	Average Cost per Year
1	\$39.00	\$0.00	\$39.00	\$39.00
2		\$0.00	\$39.00	\$19.50
3		\$0.00	\$39.00	\$19.30
4		\$0.00	\$39.00	\$9.75
5		\$0.00	\$39.00	\$7.80
6		\$0.00	\$39.00	\$6.50
7		\$0.00	\$39.00	\$5.57
8		\$0.00	\$39.00	\$4.88
9		\$0.00	\$39.00	\$4.33
10		\$0.10	\$39.10	\$3.91
11		\$0.30	\$39.40	\$3.58
12		\$0.70	\$40.10	\$3.34
13		\$1.20	\$41.30	\$3.18
14		\$1.80	\$43.10	\$3.08
15		\$2.56	\$45.60	\$3.04
16*		\$2.90	\$48.50	\$3.03
17		\$3.24	\$51.71	\$3.04
18		\$3.58	\$55.32	\$3.07
19		\$3.92	\$59.24	\$3.12
20		\$4.26	\$63.5	\$3.18
21		\$6.99	\$70.49	\$3.36
22		\$9.72	\$80.21	\$3.65
23		\$12.45	\$92.66	\$4.03
24		\$15.18	\$107.84	\$4.49
25		\$17.92	\$125.76	\$5.03
26		\$30.06	\$155.82	\$5.99
27		\$42.20	\$198.02	\$7.33
28		\$54.34	\$252.36	\$9.01
29		\$66.48	\$318.84	\$10.99
30		\$78.64	\$397.48	\$13.25

*Minimum replacement point

Fantozzi (2009) proposed that the whole life cycle cost, customer water usage profile and actual consumption patterns be used as a scientific basis for domestic meter replacement programmes. Fantozzi's (2009) methodology has been applied to some Italian case studies and has been implemented by these water utilities. Further, Fantozzi (2009) proposed that at the time of the water meter replacement, a device known as an Unmetered Flow Reducer (UFR) be installed. The aim of the device is to cause water to pass through the water meter in batches, where the flow is below the minimum accurately measured flow. Fantozzi's (2009) research considered similar factors as considered by Davis (2005) and Allender (1996) including: meter error test with low, medium and high flows, customer usage patterns in low, medium and high flow rates, domestic meter replacement costs, average annual water used by customers and water utility tariff structures. The investigation utilised 738 meters from the four different water utilities, ranging in in-service life of 1 to 20 years. To define customer usage patterns, Fantozzi (2009) proposed two separate methods of analysis:

- Standard domestic consumption profiles available in existing literature. It has been noted that the limitation in this method is that actual consumption patterns may vary considerably when comparing actual and predicted patterns.
- The installation of new, calibrated water meters. As this method was expensive, Fantozzi (2009) selected 50 customers as a basis and 1litre/hour data loggers were installed.

Fantozzi (2009) found that each method resulted in comparable results and therefore, the following consumption pattern was utilised.

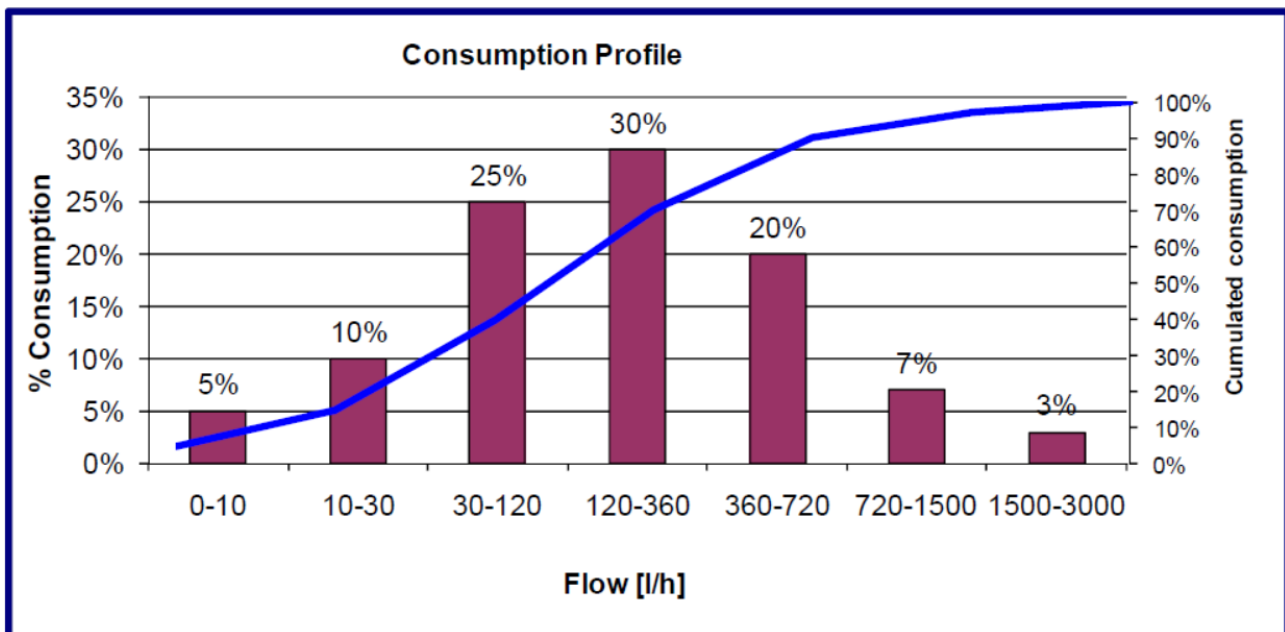


Figure 2-4: Consumption Profile (Fantozzi, 2009)

The consumption profile allowed Fantozzi (2009) to determine an Average Weighted Error (AWE) of each in-service meter, by plotting the weighted band of flow ranges. It should be noted that the majority of water meters under investigation in the study (DN 15 mm meters) did not register any flow below 15 litres/hour, which contributes about 15 % of the flow range (refer to Table 2-2). It was as a result of the outcomes presented in Figure 2-4 and Table 2-2 that Fantozzi considered the installation of the UFR.

Table 2-2: Pattern of consumption of a Residential Consumer in Flow Bands

Flow Range (Litre/Hour)	% of Customer Consumption	Flow Band	Weight for Flow Band
0-10	5%	$Q_{\min} (Q_1)$	15%
10-30	10%	$Q_{\min} (Q_1)$	
30-120	25%	$Q_t (Q_2)$	55%
120-360	30%	$Q_t (Q_2)$	
360-720	20%	$0.3 Q_n (0.3 Q_3)$	20%
720-1500	7%	$Q_n (Q_3)$	
1500-3000	3%	$Q_n (Q_3)$	

Fantozzi (2009) made use of the Net Present Value of the Revenue Lost or Gained calculation for all the Italian Water Utilities to determine the optimum replacement point for in-service water meters. Further, three scenarios were considered:

- Scenario 1 – a policy where meters are replaced only on a run-to-fail basis;
- Scenario 2 – a policy where meters are replaced based on an economic calculation
- Scenario 3 – a policy where meters are replaced based on an economic calculation and the installation of the URF. This scenario also considered the additional volumes which would be measured as a result of the installation of the URF as well as the additional cost of the actual device.

Fantozzi (2009) concluded that Scenario 3 achieved the best results in terms of volume of water recovered (Figure 2-5).

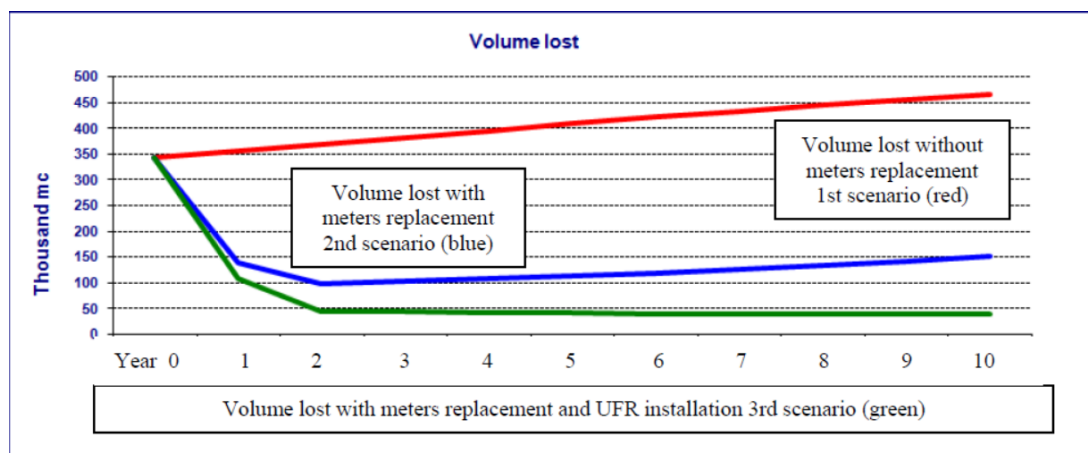


Figure 2-5: Volume lost with meter replacement and UFR installation (Scenario 3 Green) (Fantozzi, 2009)

Taking into consideration the Net Present Value and accumulated cash recovered, Fantozzi (2009) concluded that Scenario 3 yielded the best results, in terms of cash recovery (Figure 2-6).

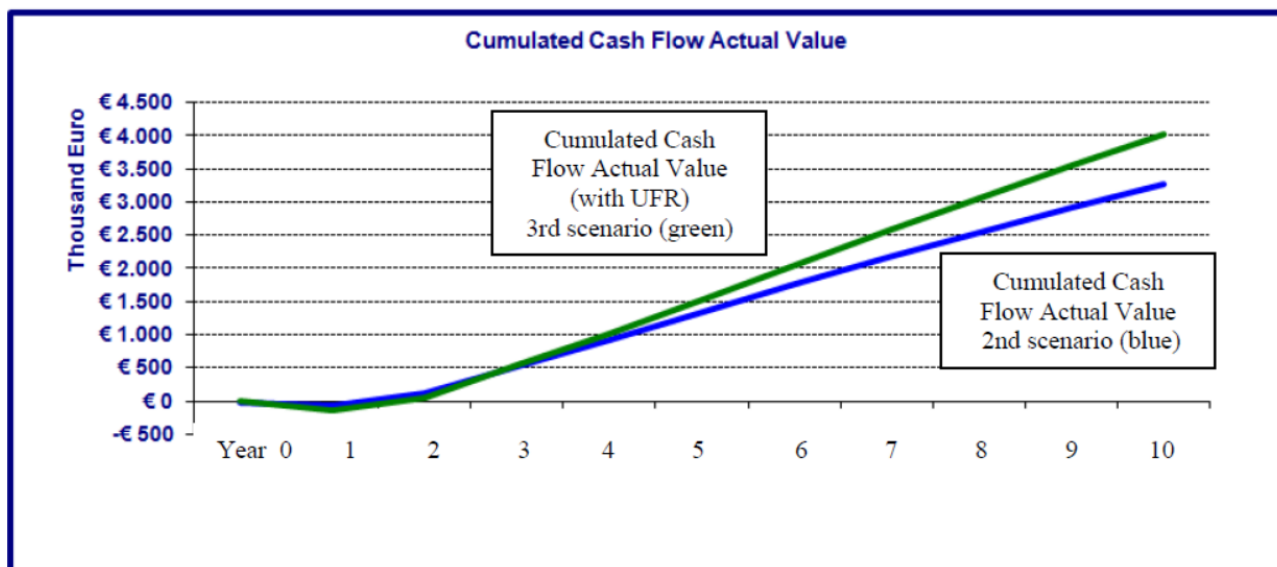


Figure 2-6: Actual Cumulative Cash Flow for Scenario 2 and 3 over 10 years (Fantozzi, 2009)

Fantozzi (2009) noted that each utility had varying input patterns, and as a result the optimum replacement period varied between 9 to 19 years (Table 2-3). Fantozzi (2009) concluded that “system-specific economic meter replacement policies are feasible”. This is a valuable outcome, and implies that it would be inappropriate to generate generic meter replacement periods, where one-size-fits-all.

Table 2-3: Meter Replacement Findings, Fantozzi (2009)

Town	Gorizia	Padova	Luserna and Cavour	Pinerolo
Total number of customer meters	16 000	118 000	4 100	3000
Meter size (in mm)	DN 15	DN 13 and DN 20	DN 13 and DN 20	DN13
Average meter age (> 10 years)	72%	87%	55%	20%
Average meter age (> 20 years)	49%	51%	27%	48%
Meters tested	212	305	80	141
Total under registration	12.31%	8.84%	20%	28%
Error	3.41%	0.65%	8%	6%
Unmeasured flow (below start-up)	8.90%	8.19%	12%	22%
Total volume through the meters (mc/year)	3 200 000	17 700 000	616 000	51 000
Total volume not measured by the meters (mc/year)	390 000	1 500 000	125 000	144 000
Economic replacement age which maximise return of investment				
Meter replacement	19 years	32 to 34 years	9 to 10 years	23 to 24 years
Meter replacement + UFR	10 years	24 to 25 years	4 years	10 to 11 years
Scenarios analysed and chosen plan	10 years	19 years	9 years	10 years
Economic benefits of a meter replacement policy				
With UFR	€ 417 000	€ 9 350 000	€ 515 000	€ 417 000
Without UFR	€ 270 000	€ 4 428 000	€ 442 000	€ 270 000

Viyakesparan (2010) reported on an investigation conducted by the Regional Council in Australia, who wanted to determine a water meter replacement strategy. The strategy was based on meter accuracies and ultimately the optimum payback period. Viyakesparan's (2010) study was based on an initial desktop assessment, taking into consideration the cumulative volume of the existing meters as contained on the council's meter reading database, in addition to the extrapolated ages of the meters.

Viyakesparan (2010) concluded that the optimum cumulative volume for the Council was found at the maximum error which corresponded with a cumulative volume of 3.9 Mℓ. This is significantly different when compared to Ncube (2015) and Mutikanga (2012) who both indicated a cumulative volume of 8-10 Mℓ and Davis (2005) at 5.3 Mℓ. However, it should be noted, that Viyakesparan (2010) utilised the findings made by Davis (2005) and Fantozzi (2009) in determining the optimum replacement point. This is with reference to the meter inaccuracies determined at the low, medium and high flow ranges. The existing meter reading database for the Regional Council in Australia was utilised as the point of reference for the consumption of customers.

This however did have its own inherent problems with regards to meter reading information and discrepancies therein; and therefore, the following assumptions were made:

- If there was a difference greater than 40,000 between the "Total Consumption" versus "Last Meter Reading", these readings were ignored. If there was a difference between 500 and 40,000 between the "Total Consumption" versus "Last Meter Reading", the "Total consumption" was utilised; and for differences below 500, the "Last Meter Reading" was utilised.
- The average consumption for the Council was taken as 250 kℓ /year.
- Date of installation of the water meter, was used to determine the age of the meter.

Using the metering database, Viyakesparan (2010) determined and profiled each metering age against estimated errors (Table 2-4).

Table 2-4: Age Profile against Errors

Aged (Years)	Percentage Distribution	Accuracy Estimates (Arregui et al.)	Error for >10 years (Fantozzi)	Overall Error
0-5	15%	68%	14%	10%
5-10	9%	94%		
10-15	56%	88%		
15-20	19%	85%		
>20	0%	82%		

Viyakesparan (2010) further acknowledged that age of the meter cannot be considered independently of the volumetric measurement as a meter in excess of 15 years of age may have a low volumetric reading. Figure 2-7 illustrates this distribution against age.

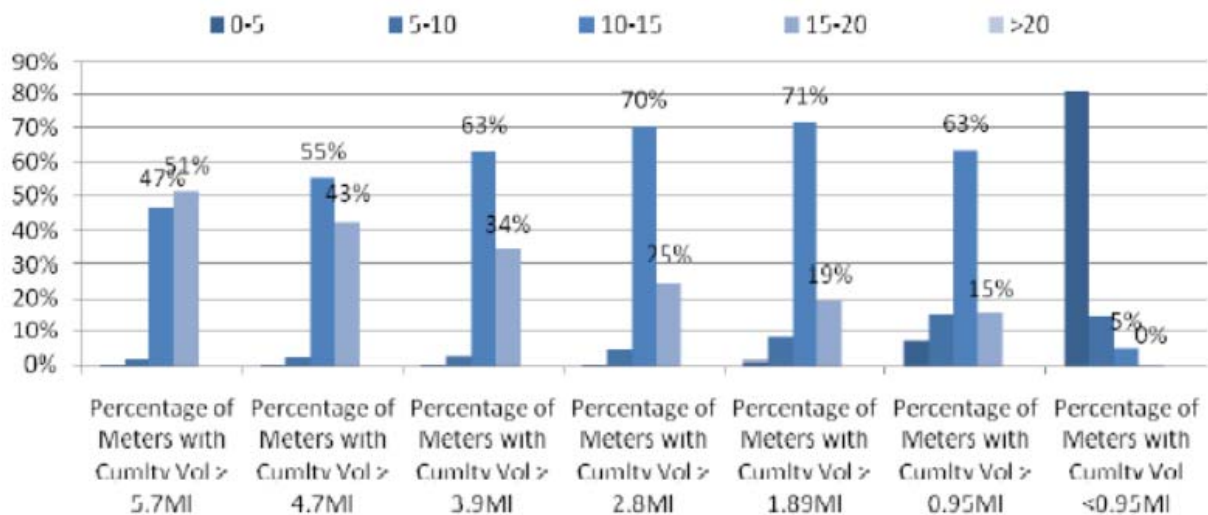


Figure 2-7: Meter Age Distribution versus Cumulative Volumes (Viyakesparan, 2010)

Viyakesparan (2010) concluded that the greatest error in meter accuracy occurred at a volume of 3.9 Ml. Based on the Council's water usage profile for domestic customers, the annual consumption per year was 276 kl, which translates to an equivalent age of approximately 13 years. The Council decided that this would be the meter age for replacement. It should be noted that the term used for the meter age at replacement was deemed "equivalent age" which was determined via mathematical extrapolation (i.e. the volumetric reading is deemed an equivalent age and not necessarily the actual age of the meter).

Further, Viyakesparan (2010) concluded that there is no relationship between meter age and cumulative volume. However, meter age is required in order to determine the optimum payback period for a meter replacement. The overall meter strategy therefore was that the council should target meter replacements that have the highest cumulative volumes and high average consumptions. These meters are deemed to be of the highest priority due to them having the highest metering inaccuracies. These meters were mapped using Geographic Information System (GIS) to assist with the prioritization (refer to Figure 2-8 and Figure 2-9). Where the highest average consumption and highest cumulative volumes match, the meter replacement strategy should target these areas (Example: based on Figure 2-8 where the orange points are within the same area as the light blue points on Figure 2-9, these Figures have been included to demonstrate who GIS can potentially be utilised as a tool for prioritization).

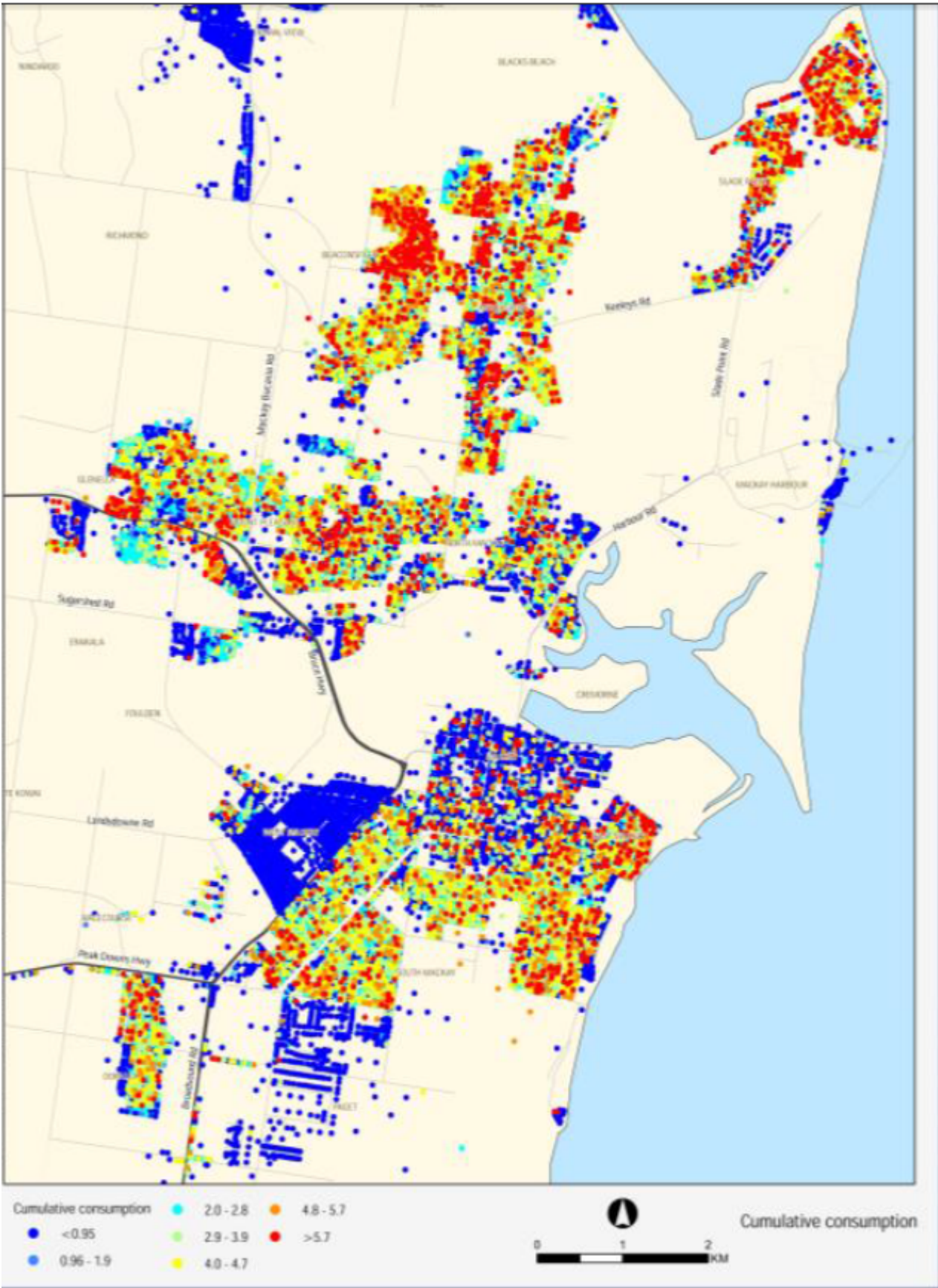


Figure 2-8: GIS Mapping of Cumulative Consumption (Viyakesparan, 2010)

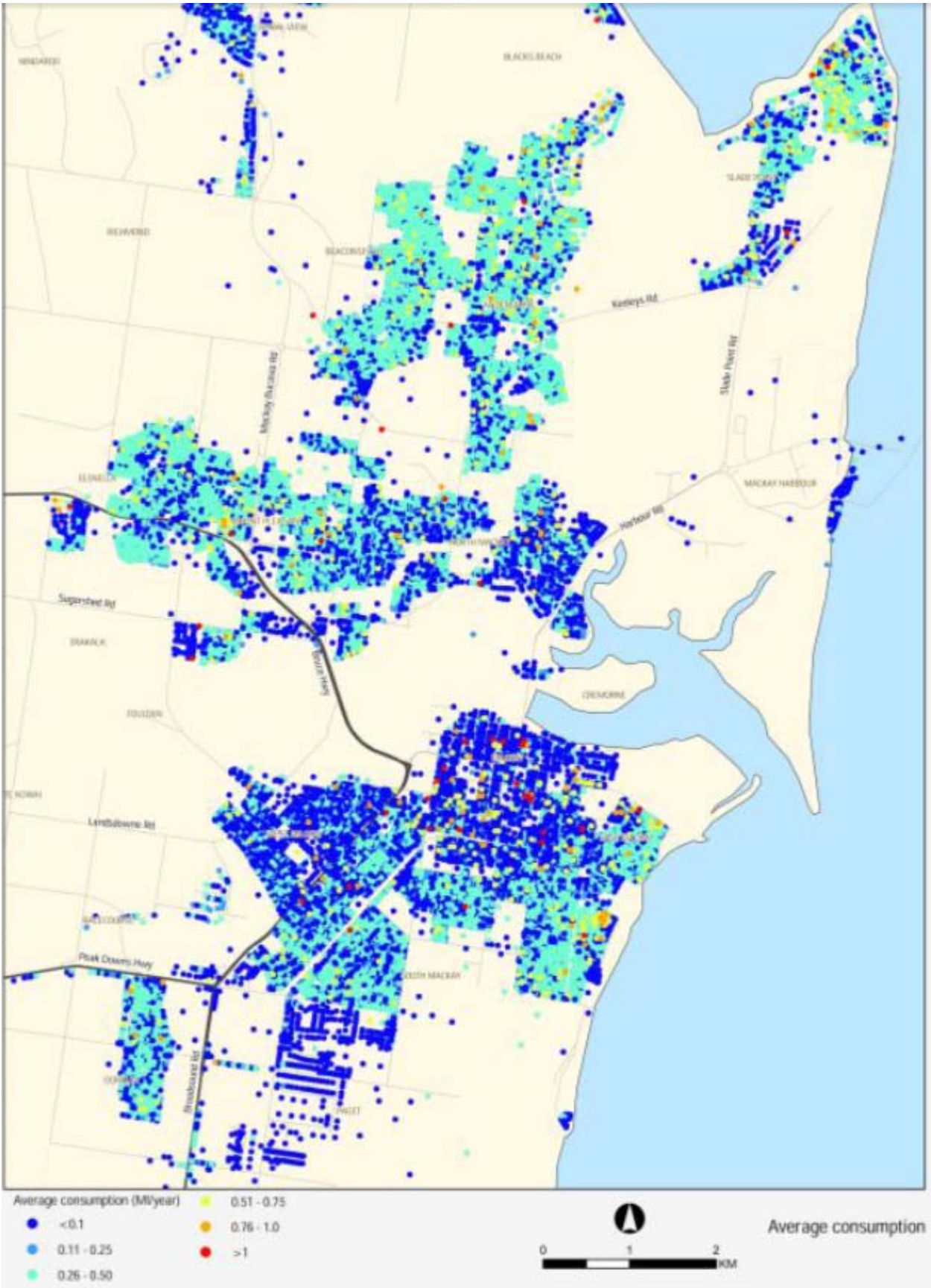


Figure 2-9: GIS Mapping of Average Consumption (Viyakesparan, 2010)

Based on the above studies, the recommended replacement age of a water meter varies considerably. It should be noted that the variables utilised in each analysis addressing optimum replacement and economic benefit, may have resulted in differing conclusions. Further, each investigation is in agreement that meter degradation over time does occur, particularly in the low flow regions.

As a result of the varying inputs into the optimum replacement period of the water meter, it is recommended that each water utility consider their actual on-site meter conditions, replacement costs and tariff structures when determining the optimum replacement period of water meters.

Table 2-5 provides an overview of some replacement periods recommended by the various studies.

Table 2-5: Comparison on Meter Replacement points

Reference	Recommended Replacement Age	Meter	Area / Country / Municipality
Bold (2013)	10 years		South Africa
Susanville Water Department (2010)	20 to 25 years		California
Bold (2013)	6 years		Germany
McNally (2008)	9 to 13 years		City of London
Ncube (2015)	8 – 10Mℓ		South Africa
Mutikanga (2012)	8Mℓ		Uganda
Davis (2005)	1.42MGallons (5.3ML)		Arizona
Moahloli (2017)	9, 12 and 16 years and total registered volumes of 3 971, 5 162 and 6 750kℓ at 10%, 8% and 6% discounted rates		South Africa
Fantozzi (2009)	Varying (9 to 19 years), dependent on inputs		Four Italian Utilities
Viyakesparan (2010)	3.9Mℓ		Regional Council of Australia
Allender (1996)	16 to 30 years		Anne Arundel Country (Maryland)

2.2 Water Meter Degradation and Inaccuracy Studies

Apparent losses are the non-physical losses that occur in a water utility's operations due to the following factors:

- Customer meter inaccuracies (reading errors);
- Errors in the processing of customer billing information; and
- Unauthorised consumption.

This by definition is considered a commercial loss, as it is directly linked to water which is not accounted for and thus not paid for.

As discussed above, meter replacement strategies have been based on the premise that meter accuracy degrades over time. This degradation has been utilised as the basis to quantify revenue losses and therefore an optimum point for meter replacement (i.e. when revenue lost equals the meter replacement costs). Meter inaccuracy is linked to the International Water Association definition of apparent losses. Previous studies have indicated that the largest contributor to apparent losses is metering errors (Rizzo, 2005).

Therefore, the following discussion addresses estimated meter degradation over time and metering inaccuracies.

A study conducted by Couvelis (2015) was aimed at determining the effect that meter age has on water meter accuracy. Couvelis (2015) quantified the deterioration in water meter accuracy with age and determined the average age of water meters in South Africa. The eThekweni meter replacement database was utilised as the basis for the investigation. Couvelis (2015) utilised 12 months' worth of meter reading data, pre- and post-replacement of a water meter. The following assumptions were taken into consideration:

- The under-registration error of each replaced meter was assumed to be an increase in consumption after the replacement of the meter;
- The actual consumption 1 year pre- and post-meter replacement is identical; and
- The new meters have insignificant error when compared to older meters.

Couvelis (2015) found that domestic consumption decreased over the study period (May 2004 to February 2011), which implied that there is likely an under-estimation when compared to the actual meter under-registration.

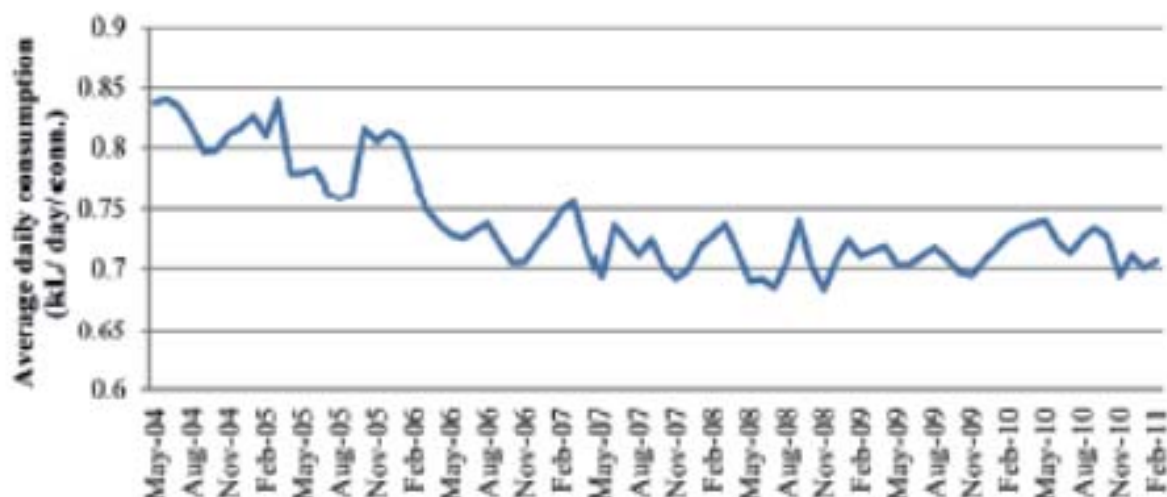


Figure 2-10: Average Daily Consumption in the eThekweni municipal supply Area for Study Period (Scruton, 2011)

By completing a statistical analysis and grouping the meters according to age and volumetric consumption in increments of 5 years and 1,000 kℓ respectively, Couvelis (2015) was able to determine the estimated percentage difference pre- and post-meter replacement. Refer to Table 2-6 and Table 2-7.

Table 2-6: Descriptive Statistics for meter error as a function of age

Statistic	Meter Age							
	0 to 5yr	5 to 10yr	10 to 15yr	15 to 20yr	20 to 25yr	25 to 30yr	30 to 35yr	35 to 40yr
Mean Age %	25.05	20.21	13.27	8.00	2.76	-1.53	0.71	-1.21
Median (%)	0.25	-3.85	-5.12	-7.86	-8.37	-8.16	-5.60	-7.17
Standard deviation (%)	162.78	151.29	217.95	118.80	70.90	41.98	55.20	40.63
Minimum (%)	-99.11	-98.60	-99.76	-99.75	-96.89	-84.96	-94.75	-85.84
Maximum (%)	8035.94	12119.98	19581.32	5807.14	1337.04	559.11	1301.28	404.18
No of meters	7815	22662	11736	15292	2155	2524	1348	1535

Table 2-7: Descriptive Statistics for meter error as a function of volume through the meter

Statistic	Volume through the Meter										
	0 to 1Mℓ	1 to 2Mℓ	2 to 3Mℓ	3 to 4Mℓ	4 to 5Mℓ	5 to 6Mℓ	6 to 7Mℓ	7 to 8Mℓ	8 to 9Mℓ	9 to 10Mℓ	10 to 11Mℓ
Mean Age %	54.4	19.6	8.5	4.8	4.5	-0.7	-1.7	-4.8	-4.8	-6.4	-6.2
Median (%)	8.3	-1.3	-3.5	-4.5	-7.5	-7.1	-8.2	-8.7	-8.5	-9.7	-9.5
Standard deviation (%)	223.7	157.4	73.6	65.9	285.1	54.5	55.7	39.0	41.7	38.8	41.1
Minimum (%)	-98.9	-98.3	-99.1	-96.6	-97.2	-96.2	-96.0	-98.6	-96.9	-93.7	-95.7
Maximum (%)	12359.3	9518.8	1779.0	1909.4	19581.3	1697.8	1329.3	483.3	615.0	467.5	605.8
No of meters	13803	13285	8832	6306	4894	3082	2996	2371	1852	1455	1050

Further, Couvelis (2015) plotted the findings as depicted in the Table 2-6 and Table 2-7 and noted a very definite trend line when considering volumetric consumption (Figure 2-12). This translated to an increasing under-registration of 0.9 % of consumption per 1,000 kℓ of water measured. Therefore, for every additional 1,000 kℓ measured, the apparent losses increase by a factor of 1 %. When considering the median meter error compared to the meter age, there is a linear trend for meters younger than 25 years. This translated to a 1 % decrease in meter accuracy every 3 years. Couvelis

(2015) attributed the outliers after the 25-year age to the fact that manufacturing of meters has changed considerably and that the sample size was limited.

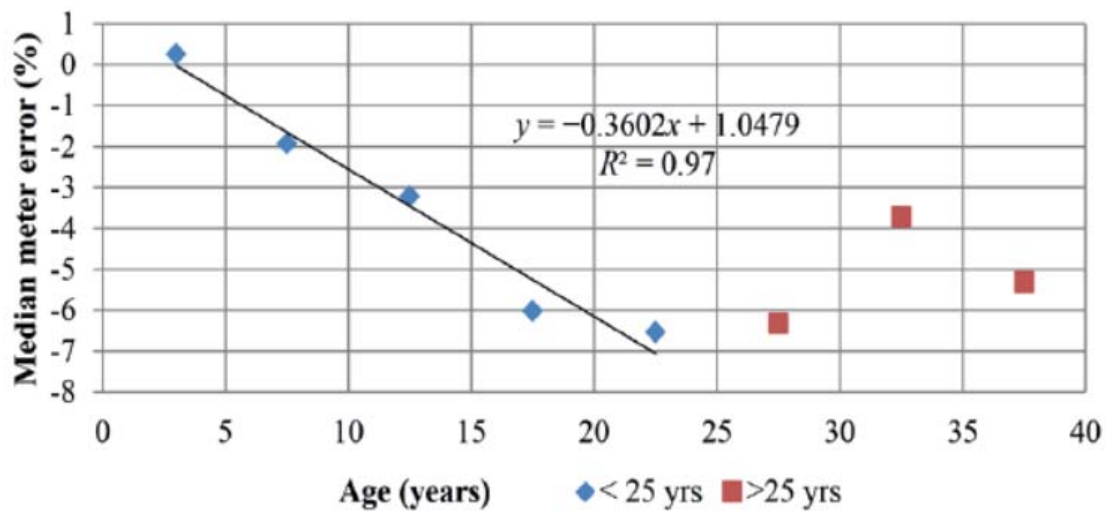


Figure 2-11: Median Meter Error versus Age (Couvelis, 2015)

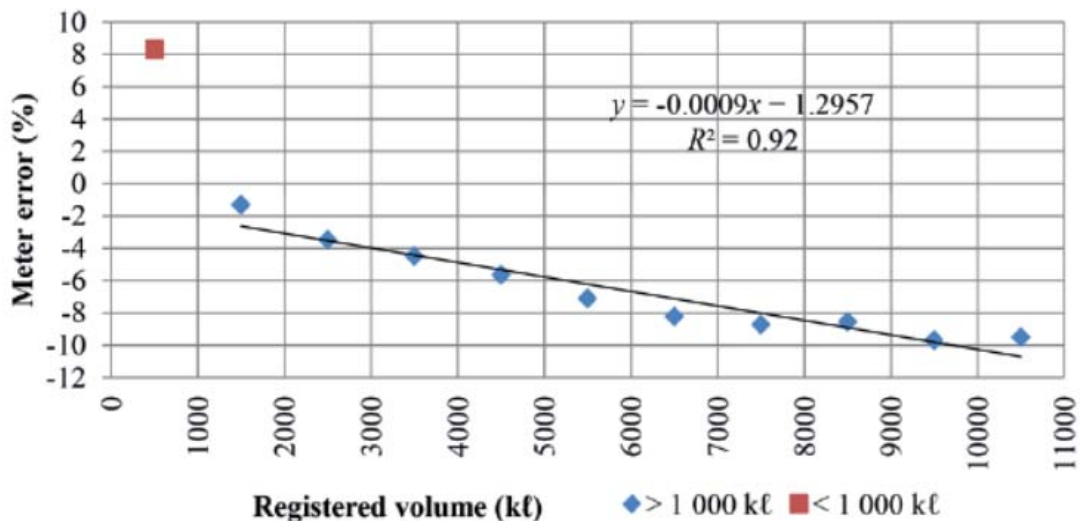


Figure 2-12: Median Meter Error versus Registered Volume (Couvelis, 2015)

Couvelis (2015) further determined that the average age of meters within South African is approximately 10 years, with most replacements occurring at 20 years of age. The information was based on the National Water Demand Archive (Van Zyl and Geustyn, 2007).

Studies have been conducted to quantify losses as a result of the low flow inaccuracies of water meters (Tzamtzis and Paralika, 2003; Arregui et al., 2006; Mutikanga, Sharma and Vairavamoorthy, 2011 and Sheilds et al., 2012).

Although the error linked to the water meter degradation over time forms part of the overall apparent loss, meter inaccuracies can also be caused by other factors, not directly linked to wear-and-tear and the aging of the water meter.

Arregui (2016) published a paper entitled, 'Quantifying measuring errors of new residential water meters considering different customer consumption patterns'. Currently the assumption is that newly installed meters have very small, or close to zero, inaccuracies. However, Arregui aimed to provide evidence on how newly installed meters perform. In total, 330 meters were tested with varying parameter classifications, with a minimum of 30 per meter type in order to gain an average error rate. Of the 330 meters tested, 20 were found to be defective (due to poorly controlled production methods or manufacturing procedures and subsequently were replaced with new meters. However, in a real-world scenario, these meters would remain in the ground, unbeknownst to the water utility, resulting in poor water measurements and control. Arregui (2016) concluded that positive displacement meters obtained a much lower metering error than single jet meters, indicating that meter type is crucial when selecting appropriate metering solutions. Further, it was observed and proven that water meters have a larger error percentage at low flows.

More recently, Couvelis (2015) indicated that there is a clear distinction between the overall apparent loss experienced due to meter age and due to low flow range non-registration. The aim of the investigation was to determine the total apparent losses due to the under-registration of a new meter as a result of on-site leakage as well as the additional under-registration linked to the meter aging. It should be noted however that the investigation was based on database information, and was not validated by physical meter testing information.

On-site leakage is defined as the leakage which occurs on a customer's property, downstream of the water meter. Although this water forms part of the overall water demand, as it is deemed measured, it however contributes significantly to apparent losses. This is due to the fact that the majority of the flow associated with leakage occurs within the low flow profiles of the water meters where the error rating is at its highest. Couvelis (2015) therefore aimed to measure the on-site leakage at various properties in order to quantify under-registration. Couvelis (2015) made use of database information received from Cape Town and Mangaung to identify domestic water meters which were less than 3 years of age in middle- to high-income areas. It was assumed that the accuracies were similar to those of new meters. Couvelis (2015) confirmed the presence of on-site leaks by monitoring the meter readings at 5-minute intervals for a 15-minute period, while no water was being utilised by the consumer. If a leak was identified, the procedure would be repeated at a

different time of the day to verify the leak. Corrections were made based on the manufacturer's accuracy curves as described by Lugoma et al. (2012) (Table 2-8).

Table 2-8: Descriptive Statistics of on-site leakage data corrected for meter error

Description	Cape Town	Mangaung	Johannesburg (Lugoma et al., 2012)
No. of properties investigated	402	166	128
No. of properties with leaks	69	47	86
On-site leakage incidence	17.1%	28.3%	67%
Properties with on-site leakage			
Mean leakage rate (ℓ/h)	21.2	39.1	23.4
Median leakage rate (ℓ/h)	10.0	20.0	8.6
Minimum leakage rate (ℓ/h)	5.7	5.7	5.7
Maximum leakage rate (ℓ/h)	449	411	411
All properties (with and without on-site leakage)			
Mean leakage rate (ℓ/h)	3.6	11.1	15.7
Ave Monthly losses (kℓ/property)	2.6	8.0	11.0

Following the determination of the above, Couvelis (2015) compared the actual volume of flow read against the corrected volumes of on-site leakage, thereby confirming the following apparent losses:

- Cape Town – 13.1 % (2.81 ℓ/h per leaking property) of the on-site leakage is unmetered
- Mangaung – 2.7 % (1.1 ℓ/h per leaking property) of the on-site leakage is unmetered
- Johannesburg – 10 % (1.7 ℓ/h per leaking property) of the on-site leakage is unmetered

It was noted that the findings did not include flow that occurred within the starting flow-rate region as this flow cannot be read. Therefore, it can be assumed that the apparent losses are in the region of 10 % to 15 %, preferably erring on the upper limit. Further, Couvelis (2015) concluded that the apparent loss due to on-site leakage is 2.2 % of the overall consumption.

Mukheibir et al. (2012) indicated that traditionally, under-registration of a water meter has been considered the primary contributor to non-revenue water and also, therefore, what is considered water meter inaccuracies. As Couvelis (2015) indicated above, it is difficult to quantify the water which is “lost” due to non-registration at the low flow regions of the water meter; however, Mukheibir et al. (2012) attempted to quantify this loss. Further, non-registration of flow can increase and result in higher volumes of non-revenue water as the meter ages (Arregui et al., 2005).

Mukheibir et al. (2012) considered the following components:

- the extent of non-registration at low flows for both new and old/aged meters;
- quantification of the frequency of low flow events in normal, daily household water usage; and
- determination of the role the usage of water has on overall non-registration.

By making use of the Unmetered Flow Reducer (UFR), Mukheibir et al. (2012) was able to quantify the volume of non-registered flow at 1 % of the average daily registered consumption for a new meter, and 3.5 % of the average daily registered consumption for an aged meter. Further Mukheibir et al. (2012) indicated that the average under-registration was between -0.4 % and +0.1 %, changing from over registration to under-registration as the meter aged.

Therefore, the combined unregistered flow is as follows:

Table 2-9: Percentage of Non-Registration associated with each range of total Registered Volume (Mukheibir et al., 2012)

Meter Registration (kℓ)	0-500	501-1000	1001-1500	1501-2000	2001-2500	2501-3000	3000 +
Under / over registered % (results from meter testing)	0.1%	0.1%	0.1%	0.0%	-0.2%	-0.4%	-0.4%
Non-registered % (extrapolated)	-1.0%	-1.4%	-1.8%	-2.3%	-2.7%	-3.1%	-3.5%
Unregistered % (combined)	-0.9%	-1.3%	-1.7%	-2.3%	-2.9%	-3.5%	-3.9%

The critical conclusion by Mukheibir et al. (2012) was that to create meter replacement strategies solely on the basis of registration age or volume consumed, as proposed by Davis (2005), Ncube (2015), Mutikanga (2012), Moahloli (2017), and Viyakespan (2010) is not cost effective. Consideration must be given to both the non- and under-registration components of volume passing through the meter (i.e. non-registration component is water which is not measured by the water meter at all and under-registration is water which is measured in the lower flow ranges but has a higher error associated with the readings and is therefore considered inaccurate).

In order to demonstrate this effect, Mukheibir et al. (2012) utilised the Net Present Value (NPV) to determine the optimum replacement point of a water meter, assuming the following constants:

- A meter replacement cost of \$95.00;
- A discount rate of 7 %;
- A 29-year analysis period; and
- A rising block tariff structure:
 - o <400 ℓ/d (<161 kℓ/yr) = \$1.80/kℓ
 - o <880 ℓ/d (<321 kℓ/yr) = \$2.10/kℓ
 - o >880 ℓ/d (>321 kℓ/yr) = \$3.10/kℓ
- For consumptions greater than 3,000 kℓ, the annual increase in the percentage of unregistered volume was considered the same annual rate used to reach the 3,000+ kℓ
 - o Therefore, for an annual consumption of 250 kℓ, it would take 12 years to accumulate to the 3,000 kℓ registered volume. To determine the annual increase in percentage unregistered volume for the combined losses, the calculation is as follows: $(-4.0 \text{ Less } -0.9)/(12-1) = -0.28 \text{ \%/yr}$ (based on a linear relationship)

Mukheibir et al. (2012) concluded that based on the unregistered percentages, as determined in the investigation, it is not cost effective to replace water meters if they registered less than 250 kℓ/yr. As indicated above, utilities are basing their meter replacement policies on replacement ages, total volume registered, a combination of both, or the loss of revenue incurred by the water utility as a result of the under-registration losses. However, Mukheibir et al. (2012) found that the revenue loss as a result of unregistered flow, for a meter with an average annual usage of 150 kℓ /yr, would not exceed the overall replacement cost of a new meter at 20 years (3,000 kℓ registered volume) or even 40 years (6,000 kℓ /yr registered volume). However, for an annual consumption of 250 kℓ /yr, the economically optimal period to replace the water meter is at 11 years, which is based on the combined effect of non- and under-registered water volumes. For higher annual consumption of between 300 kℓ /yr and 400 kℓ /yr, the loss resulting from non-registration are high enough to justify the replacement of the water meter. However, by only considering the under-registration, the meters would not require replacement. This is depicted in Table 2-10.

Table 2-10: Year for Meter exchange based on NPV (Mukheibir et al. (2012))

kℓ /yr	Under-registration	Non-registration	Combined
150	No replacement	No replacement	No replacement
200	No replacement	No replacement	No replacement
250	No replacement	No replacement	Year 11
300	No replacement	Year 11	Year 10
350	No replacement	Year 10	Year 10
400	No replacement	Year 10	Year 9
450	Year 11	Year 9	Year 9
500	Year 11	Year 9	Year 9

It is once again emphasised that meter replacement strategies are dependent on meter replacement costs, type of meters within the system and the particular Water Utility tariff structures.

Shields (2011) conducted an investigation to determine the point at which it becomes cost effective to replace a water meter, based on the volume of water which passes through a water meter undetected, compared to the replacement cost of the water meter. Shields (2011) aimed to determine a methodology to be utilised to determine the optimum meter management plan. Shields (2011) attempted to determine meter inaccuracies by passing a known volume of water through various meter types and manufacturer models, and by further varying those volumes between various flow ranges. Meter types included displacement piston (DP), single-jet (SJ), multi-jet (MJ), nutating disc (ND), fluidic oscillator (FO) and turbine (TU) meters. Shields (2011) concluded that different types of meters varied in accuracy performance, with particular reference to the lower flow

rates. Therefore, it may be more cost effective to replace a worse performing meter in the low flow ranges with a more accurate meter as an effective meter replacement strategy.

Fontanazza (2015) conducted an investigation into the apparent losses observed due to metering inaccuracies. Apparent losses can be defined as losses as a result of water not being registered on the demand side of a consumer. This ultimately results in the supply input into a distribution system being higher than the demand volume being measured, which is therefore considered a loss. Fontanazza (2015) aimed to model the apparent losses in order to focus maintenance efforts (for example, towards meter replacements). The study was undertaken in a region where water supply was erratic, where pressure varied and water pipes experience dry periods. This inherently causes metering issues as a result of the low flow situations being experienced. A small district metered area, or DMA, (an enclosed supply and demand area) was set up to form the basis of the research experiment. The DMA consisted of 14 service connections that supplied 52 consumers. Therefore only 52 meters were considered. The metering sample varied in meter ages from 0 to 25 years of age. Fontanazza (2015) followed a stepped approach whereby the following initiatives were undertaken:

- Installation of a flow regulating device;
- The replacement of all meters in excess of 10 years of age; and
- Later the replacement of all meters older than 5 years.

Before and after each step, the percentage of apparent losses was measured in order to provide an indication of the reduction in apparent losses. It was noted that the apparent losses reduced from 33 % to 5 %. As flow regulators are not a standard installation, a final step was introduced where the flow regulating device was removed, and the result was an increase in apparent losses to 9 %. In conclusion, as Fontanazza (2015) followed a stepped approach and aged meters measured a higher apparent loss, this would imply that meter age can be an effective means to control apparent losses within the system.

Consideration has also been given to external factors which affect meter accuracies. Buck et al. (2012) undertook a study to determine the effect on a meter's registry performance when subjected to a burst of quartzite sand and how this affected the expected life of the meter. Buck et al. (2012) concluded that different meter types respond differently and the effects vary based on the location of the damage to the meter. The study however did not quantify the resulting potential losses.

2.3 Water Meter Replacement utilised to Conserve Water

The motivation for water meter replacement is often linked to the principles of Water Demand Management and Conservation. With the potential to reduce apparent losses (as discussed above), meter replacement is a critical link in the overall Water Balance as described by the International Water Association (IWA).

Substantial research has been undertaken to quantify the impact and/or articulate the importance of Water Demand Management and this has been the justification for the implementation of large-scale meter replacement or installation projects (Arregui, Cabrera & Cobacho, 2006; Hanke & De Mare, 1982 and Stewart et al., 2010).

Masia et al. (2013) proposed that there is this perceived acceptance with Water Utility officials that the introduction of Smart Metering Technologies can reduce the amount of non-revenue water (NRW). By undertaking a controlled survey, 41 respondents including engineers and managers involved in planning, design and operations at Johannesburg Water, Ekurhuleni, Tshwane, Emfuleni and Mogale City municipalities, took part. The following (Figure 2-13 and Figure 2-14) provides an overview of the pre-conceived perceptions related to Smart Metering and its overall effect on water usage and billing (for example, 26 of the respondents believe that Smart Metering Technologies will result in efficient billing, Figure 2-13 and 20 of the respondents are unsure whether the technologies are reliable Figure 2-14).

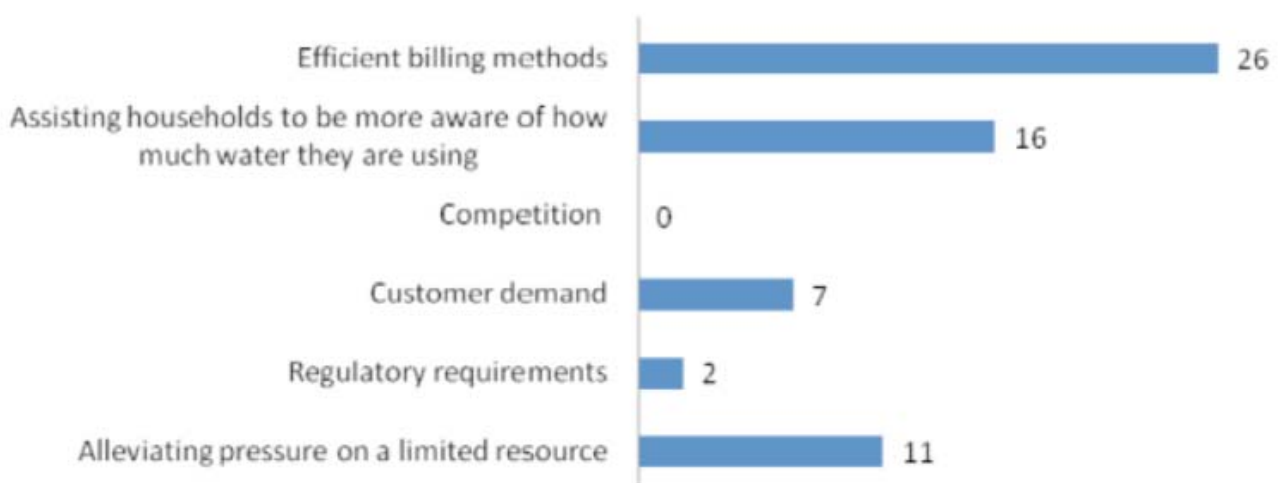


Figure 2-13: Primary consideration for adopting smart meters (Masia et al., 2013)

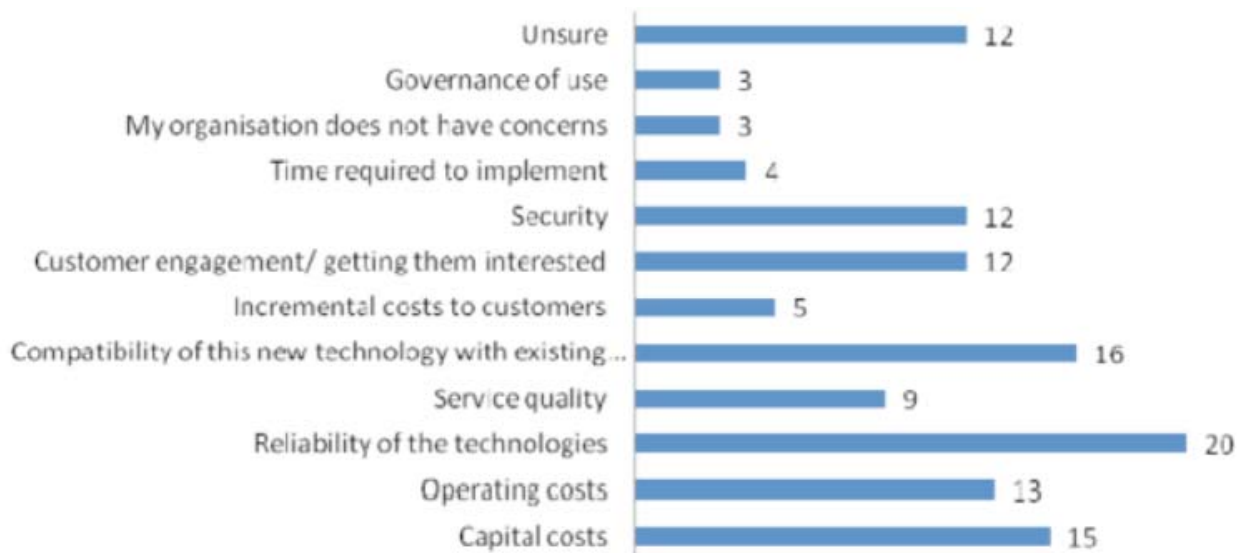


Figure 2-14: Concerns in Adopting Smart Meters (Masia et al., 2013)

Masia et al. (2013) however concluded that if customers are not billed or billed incorrectly for their water usage, customers will continue to misuse the already scarce resource, further putting strain on current water demands.

Noss et al. (1987) acknowledged that water utilities in the United States utilised water meters as a means of effecting water conservation through billing surcharges, increasing block rates and general customer awareness. Although the average residential household consumes far less water when compared to industrial users, the number of residential households are considerably larger. Further, unless the residential water meter is maintained and tested, the potential losses due to meter inaccuracies can be a significant portion of a water system's total losses.

Hanke (1981) conducted a study to determine whether the universal metering in Perth, Australia would produce a worthwhile conservation effort. The study included the review of 17,968 unmetered water connections, which utilised 14 % of the total water produced. This approach would require the installation of 17,968 water meters. Hanke applied the following formula, the objective of which was to maximise the net benefits from the adoption of any given strategy.

Equation 2-4: Conservation Effort, (Hanke, 1981)

$$\Delta[Q.MC] \geq \Delta[U + E + F]$$

Where:

Q = reduced water production

MC = marginal costs

U = resource cost to the water company of adopting the policy

E = resource cost to the consumer of adopting the policy

F = the value of “useful” consumption

Hanke (1981) went on to quantify each of the above parameters and concluded that the intervention would be cost effective. It should be noted that extensive knowledge of the usage and customer profile is required to adequately utilise the formula correctly. Therefore, if a water utility were to undertake economic analysis to determine whether the effort would result in an effective conservation effort and economic benefit, a sound knowledge of the customer database is required.

In a paper, Zetland (2013) documented the move to residential water metering in England and Wales and the impacts of the move on lower metered demand and higher charges for heavy water users. He concluded that the move resulted in more conscious water use. However, most consumers felt that they were being overcharged for water usage.

2.4 Tariff Structures Linked to Revenue Recovery

In order to generate the revenue required to maintain the overall water system, it is imperative that tariff structuring is formulated correctly. Further, water meters form an integral part of this process, and if not managed correctly can result in significant losses to a water utility. As a result, attempts have been made to assist in the tariff structuring of the water utility. Further, the manuals which have been developed show a direct link between cost recovery via accurate water metering and the overall tariff structure.

The American Water Works Association (AWWA) publishes a manual (M1) which provides a means to establishing cost-based rates or fees for the water supply. The aim is to ensure that the cost-based rates provided are sufficient to allow the water utility to build, operate, maintain and reinvest into their water systems. It was further noted that by adequately funding water systems, there is a direct link to the economic development and sustainability of a community. This process has a long history, where operators recognised the need for sufficient funding as early as 1949. Further, it highlights the need for accurate metering, and the fact that water meters are a water utility's “cash register”.

Some key items to consider in determining the cost of water supply include:

- Effectiveness in covering total revenue requirements (i.e. potential full cost recovery);
- Revenue stability and predictability (potentially through accurate metering);
- Stability and predictability of the rates;
- Promotion of conservation and efficient use (which can be linked to the current situation; within the City of Cape Town and the current water use tariff to drive down usage);
- Fairness of apportionment of the cost to different ratepayers (which is a common consideration in the context of South Africa with the varying income levels);
- Avoidance of undue discrimination within the rates;
- Efficiency in responding to change in supply and demand;
- Freedom from controversies;
- Simple and easy to understand;
- Simple to administer; and
- Legal and defensible.

The manual (M1) noted that the most important area to be considered is the customer data available. The manual (M1) or guideline further goes on to confirm that the water utility should maintain accurate and extensive records which are related to customers' usage. The manual states that the most significant source of revenue for most water utilities is the production of water sales or "rate" revenue. Without accurate customer billing information, the creation of an adequate rate structure can potentially be hampered, thus causing the generation of insufficient revenue to meet a utility's revenue requirements and capital expenditure requirements.

The Water Utility Report (2nd Edition, 2003) conducted by ABS Energy Research, highlights that in some countries, water is treated as a social commodity rather than an economic investment. The provision of fresh water to people has traditionally been subsidised by governments, which however has resulted in an adverse effect on conservation efforts and poverty alleviation, due to the increased wastage of water. This further impacts the introduction of a metering system, as the communities tend to reject the installation of meters, with the preconceived idea that they will be paying excessive amounts for water. However, it was noted that people living in poverty areas often end up having to pay higher prices for water as a result of purchasing from vendors, as they do not have direct access to water supply. In addition, some key items highlighted in the study include the following:

- About \$300 billion a year is paid by various users for water usage, where majority is paid by urban users who only contribute approximately 10 to 15 % of the total amount consumed. The agricultural sector consumes 70 %

- Pilot studies conducted in Orenburg Vodokanal, Russia indicated that although metering of individual households is preferable, at a minimum, water should be metered per supply block. Further, there is conclusive evidence that individual metering reduces consumption and improves revenue collections.
- Replacement of water meters at the end of their useful life span is more economical than repairing them.
- Demand for water meters in Eastern Europe and China is growing more rapidly than Western Europe where overall demand is lower.
- Poland and Latvia are two countries that utilise water metering extensively. Installation of water meters began in 1994 in Poland and within the first year, consumption dropped by 50 %.
- South African was noted as having a political obstruction as a result of a call for pre-paid meters to be removed or broken after installation. However, within the developing world the introduction of volumetric charging is crucial for the generation of additional revenue.

Although the report indicates that meter replacement at the end of the meter's useful life is more economically feasible, the research paper did not indicate at what point this replacement is deemed appropriate.

In contrast to the above, Chambouleyron (2004) indicated that the norm for water pricing by economists has traditionally been a marginal cost pricing approach. However, this has not taken into consideration the inherent problems associated with water metering itself (i.e. installation and maintenance costs) and the optimal number of meters required to cover water production costs. Chambouleyron (2004) aimed to confirm whether Optimal Metering (OM), Universal Metering (UM) and Decentralised Metering (DM), should have the same tariff structure applied. Through a theoretical approach, Chambouleyron (2004) concluded that water consumption should be charged as per a marginal cost basis, regardless of whether a decentralised or centralised structure is adopted. However, the recovery of metering costs under UM and OM should be recovered through a fixed fee paid by the end user, with a discount factor. While under DM the cost can be recovered through the exclusion of a discount. He further indicated that universal metering would be optimal as long as metering costs are low enough to be compensated by the usage.

It has been assumed that metering is the best means of cost recovery, which has formed the basis to motivate meter replacement strategies. However, some economic revenues have indicated that universal metering (McNally, 2003 and Chambouleyron, 2004) may not be the best solution.

Taking into account a South African backdrop, the tariff structure is governed by the Water Services Act 108 of 1997 (A National Assessment of Water Services Tariffs from Source to Tap and Return Flows to Source, 2015-2016, South African Department of Water and Sanitation). These regulations govern the supply of potable water and sanitation services to consumers. The primary objective of the regulations is to protect consumers, municipalities and water service institutions and to ensure the application of adequate management principles.

Based on the regulations, a water service institution must take the following into account when determining water service tariffs:

- a) Recovery of the cost of water purchased;
- b) Recovery of overhead and operational and maintenance costs;
- c) Recovery of the capital costs which are not financed through any grants or subsidies;
- d) Allow for the replacement, refurbishment and extension of water services and infrastructure;
- e) Ensure that all household have access to basic water supply and sanitation.

Where possible, the water service institution must provide a controlled volume of water (i.e. a metered connection). Where the volume is too low or too remote to meter, uncontrolled provision of water may be necessitated.

Further, due the socio-economic discrepancies widely found in South Africa, since 2001 the Government introduced a rising clock tariff structure in an attempt to provide equitable access to water for all, where the first block is a free, basic water allowance, with the cost recovery principle being that the higher users cross-subsidise the free basic water block tariff and that water conservation measures are in place (i.e. financial penalties to excessive users).

Although the above principles are the governing structure in South African, it was noted that, unfortunately, municipalities are currently not reporting on the criteria utilised in setting their individual block tariffs and as a result confirmation of full cost recovery cannot be determined; and, further, the confirmation of whether there is sufficient revenue to eradicate the water supply backlog issues in poverty stricken areas cannot be ratified.

Tariff regulations must allow for future monitoring to enable the sector regulator to measure and assess the following:

- a) Affordability of water services;
- b) Equitable access to water services; and
- c) Profit margins of a water services institution.

2.5 Summary

The following provides a summary of each of the key items identified during the literature review:

a) Water Meter Replacement Studies

- The recommended replacement age of a water meter varies considerably.
- The variables which contributed to the varying recommended replacement age of a water meter included meter types, site conditions, sample sizes being considered and tariff structures.
- Each investigation agreed that meter degradation over time does occur, particularly in the low flow regions, where the meters are less accurate.

b) Water Meter Degradation and Inaccuracy Studies

- There is a definite decline in meter accuracy with age.
- Meter inaccuracies are related to the functionality of a particular meter type and its ability to read all of the flow passing through it.
- Water meters tend to under-register, particularly in the low flow regions, where a meter is typically less accurate.
- Water meters tend to have an increase in apparent losses as the meter ages (volumetrically as well as actual age).

c) Water Meter Replacement Utilised to Conserve Water

- Meter replacement strategies as a means to conserve water have been deemed an accepted norm; however, studies have indicated that although residential consumers tend to use less water, their overall contribution to a region's water usage is far outweighed by industrial users.
- Without accurate knowledge of consumer usage patterns, actual water savings will be difficult to quantify

d) Tariff Structures Linked to Revenue Recovery

- Tariff structures should be based on consumer water usage patterns, cost of water supply, economic conditions and political conditions.

Although each study attempted to answer distinct and separate questions, the overall resounding common conclusion reached was that there is no one-size-fits-all type solution. Each water utility has its own unique parameters and as such should undertake its own investigation to determine the optimum meter replacement time-period. With the water meter being considered the cash register and a revenue generation tool for a water utility, it is key that the replacement point is economically viable for that water utility.

CHAPTER 3. METHODOLOGY

3.1 Johannesburg Water (SOC) Ltd and the City of Johannesburg

The Water Utility considered during this investigation was Johannesburg Water (SOC) Ltd. Johannesburg Water is a state-owned company, with the City of Johannesburg being the only shareholder. Johannesburg Water is responsible for 12,066 kilometres of water distribution pipes, 122 reservoirs and water towers, 6 wastewater treatment works, 2 biogas-to-energy plants, 38 sewer pumping stations and 11,576 kilometres of sewer pipelines, stretching from Midrand to Ennerdale. (Johannesburg Water (SOC) Ltd, Business Plan, 2018/19)

Johannesburg Water has the objective to ensure the effective and efficient metering of water being supplied to customers within its area of jurisdiction.

In accordance with Johannesburg Water's metering policy (Johannesburg Water Business Plan 2013/14) and the City of Johannesburg Metropolitan Municipality by-laws (Local Government: Municipal Systems Act, 2000 (Act No. 32 of 2000)), all water consumers on a Level of Service 3 (municipal pipe supply to a stand) must be metered. Furthermore, all consumer meters within the jurisdiction of Johannesburg Water must, at all times, be in operational condition to allow for accurate consumer consumption monitoring and must be accessible to facilitate meter reading.

In accordance with the Water Services By-Laws for the City of Johannesburg Metropolitan Municipality, Section 13(a) of the Local Government: Municipal Systems Act, 2000 (Act No. 32 of 2000) and as approved by the City of Johannesburg's Council, Sub-Section 8, Payment for Water Services, Clause (3) states: *"The Council may estimate the quantity of water services provided in respect of a period or periods within the interval between successive measurements which may not be more than 180 days apart, and may render an account to a consumer for the services so estimated, which estimate must, for the purposes of these By-laws, be regarded as an accurate measurement until the contrary is proved"*.

In addition to the above, it is a legal requirement that each water meter to be installed, must comply with the standard SANS 1529 and must be tested by a registered verification officer in an accredited testing facility. In addition, any meter in the field which does not comply with the accuracy requirements as stipulated in SANS 1529 must be withdrawn from service immediately.

As a result of the above Water Services By-Law, in 2013 (March) to 2015 (March), Johannesburg Water implemented large-scale meter replacements (more than 50,000 meter replacements) throughout its area of jurisdiction. This was in order to address the backlog of water meters which had received estimated measurements for billing purposes in excesses of 6 months. Meters had been earmarked as Technically Faulty meters (i.e. T-Codes), which by definition referred to failed readings as a result of maintenance issues.

Examples of such T-Codes included, but were not limited to:

- Cannot locate meter;
- Faded/Frosted Dial;
- Maintenance required;
- Meter Flooded;
- Meter box/lid jammed; and
- Meter suspected stopped

3.2 Data Collection, Filtering and Analysis

The following steps were employed in the collection, filtering and analysis of data.

3.2.1 Step 1: Data and Database Verification

The information which formed the basis of the investigation was obtained from two separate data sources.

The first data source was a list of residential water meters obtained directly from Johannesburg Water. The list included approximately 111,792 different meter numbers. Each meter number had the following additional information:

- Meter reading information for the period July 2003 to July 2015. It should be noted that the meter reading information was obtained directly from meter readers in the field. Therefore, there may be an element of human error in the recorded information. Further, there are extended periods where the recorded meter reading is indicated as zero, as a result of no readings being taken. If a meter was only installed in a specific year, readings were only recorded from that period.
- Each meter is linked directly to a unique Surveyor General Identification Number (SGID) which is the identification for the property.
- Meter installation dates – these dates were assumed to be the date of meter manufacturer and therefore used to determine the age of the meter, if serial numbers could not confirm the actual meter age

After obtaining the dataset of 111,792 properties, SGID's were used to match the old meters with the new meters. (Table 3-1).

Table 3-1: Matching Old and New Meter using SGID

SGID	Meter No.	Meter Description	Comment
T0IQ0000183000001830014700	XFR340	Old	Match
T0IQ0000183000001830014700	ORG374	New	
T0IQ0000183000001830015000	CPJA4738	Old	Match
T0IQ0000183000001830015000	TJK1447	New	
T0IQ0000183000001830015200	30267829	Old	Match
T0IQ0000183000001830015200	URA2250	New	
T0IQ0000183000001830015700	PRK3329	Old	Match
T0IQ0000183000001830015700	CTRK0799	New	

The above exercise, resulted in a total number of 55,896 metered properties, each with a meter change occurring between the July 2003 and July 2015 period.

The second data source that was considered was directly linked to the large-scale meter replacement project undertaken by Johannesburg Water between 2013 to 2015 where more than 50,000 meter replacements were executed.

This data set included the following information:

- Property Address
- Technical Fault logged against the old meter
- Old Meter Serial Number
- Old Meter Size
- Old Meter Closing Reading
- New Meter Serial Number
- New Meter Size
- New Meter Type
- New Meter Class
- New Meter Installation Date
- New Meter GPS Location

In order to verify the meters from the original Johannesburg Water database (Database 1) that formed part of the large-scale meter replacement project (Database 2) a comparison was done between the old and new meter serial numbers on both databases. Only properties where both the

old and new meter serial numbers were a match, on both databases, were considered for further investigation (Table 3-2).

Table 3-2: Meter Project Serial Number Match

SGID	Old Meter (Database 1)	New Meter (Database 1)	Old Meter (Database 2)	New Meter (Database 2)	Comment
T0IQ01150000000025800001000000000	505173	13056488	505173	13056488	Match
T0IQ01230040000069100000RE0000000	UKL7882	13032407	UKL7882	13032407	Match
T0IQ03450030000268000000000000000	BSRA0952	GKL0485	BSRA0952	GKL0485	Match
T0IR01160000000002400008000000000	EKX0028	13039632	EKX0028	13039632	Match
T0IR02920590000059800001000000000	C-DJA2214	13055739	C-DJA2214	13055739	Match
T0IQ00360020000080600000000	20000904	13039072	CKUK822	13039072	Mismatch
T0IQ00420000000009600000000	C-XUU430	HKC2941	CFRM1586	HKC2941	Mismatch

The above exercise resulted in a final data sample of 3,679 properties where a meter change had occurred during 2013 to 2015. The justification for only considering meters replaced during the large-scale meter replacement project, that took place during this period, was:

- The actual cost of meter installation was known and therefore financial benefit or loss to Johannesburg Water can be determined;
- The old and new meter sizes were known and could be compared;
- Exact locations of meter installations were known, and income groups of the households could potentially be considered in the analysis; and
- The reason for new meter installations were known.

3.2.2 Step 2: Filtering Records

Based on the literature review undertaken, over time, mechanical devices, such as water meters, will wear and deteriorate and this can be further amplified by poor water quality. Therefore, the investigation was only based on 12 months' worth of meter readings prior to the meter replacement and 12 months' meter readings after the replacement. It is noted that 12 months of data may have limitations, in terms of not taking user profiling into account (i.e. change in property ownership or similar), however, the justification for this approach is based on the premise that the water meter wears over time. Therefore, during the period directly prior to the meter replacement the meter should be at its least accurate and after the meter replacement the new meter should be operating at its optimum performance. Therefore, by comparing these two time periods, it is assumed that the largest performance difference should in theory be noted. This is similar to the approach followed by Couvelis (2012), who made use of consumer meter database information and compared consumption one year before and after a meter is replaced. Further, by considering the full 12-month period, seasonal variations can be taken into consideration, providing a more accurate average monthly consumption. Also, in the majority of the cases, only 12 months' worth of meter readings

were available post meter replacement. Therefore, in order to compare before-and-after performance, only 12 months' worth of readings were considered for both the old and new meter, to ensure that the time periods were comparable. It should also be noted that in some cases, a meter reading may not have occurred for an extended period. Therefore, only meters with more than 12 months' worth of actual readings were considered. Further, as the direct impact of the new meter installation was to be considered in the investigation, the study compared the meter readings as close as possible to the meter change. For example, considering SGID - T0IQ01230040000069100000RE in Table 3-3, no readings were logged starting from April 2013 up until January 2014, which when the new meter was read for the first time. Therefore, the closest period of actual readings was comprised of those taken from June 2011 to April 2013. While the new meter was installed in June of 2013 for this particular stand, it took 6 months before a new reading was taken.

Table 3-3: Meter Time Period Calculations

SGID		Meter Number	Opening Reading	Closing Reading	Start Month	End Month	Number of Months	Number of Readings
T0IQ01230040000069100000RE	Old Meter	UKL7882	1872	4014	June 2011	April 2013	22	12
	New Meter	13032407	698	2087	Jan 2014	June 2015	16	12
T0IQ0000183000001830015200	Old Meter	URM5761	253	2996	Feb 2010	Aug 2012	30	12
	New Meter	13033079	815	2318	April 2014	July 2015	14	12

3.2.3 Step 3: Comparing Consumption

As mentioned above, the comparison of meter performances was based on the average monthly consumption read at each of the 3,679 properties identified, for the periods before and after the meter replacement.

In order to determine the average monthly consumption, the following formula was utilised:

Equation 3-1: Average Monthly Consumption

$$\text{Average Consumption} = \frac{(\text{Last Reading} - \text{Start Reading})}{\text{Number of Months}}$$

Where:

- Average Consumption = the average monthly consumption at a property based on actual meter readings. This does not take into account any losses as a result of meter performance
- Last Reading = the last reading taken in the period under consideration
- Start Reading = the first reading taken in the period under consideration

- Number of Months = the number of months included in the time-period. It should be noted that the period may be longer than 12 months as a result of meter readings not being taken in a particular month. See Table 3-3.

The above formula was applied for both pre- and post- meter replacements, in order to create a basis of comparison. See (Table 3-4)

Table 3-4: Average Monthly Consumption Calculation for Two Properties

SGID		Meter Number	Start Reading	End Reading	Number of Months	Average Monthly Consumption (kℓ/month)
T0IQ01230040000069100000RE	Old Meter	UKL7882	1872	4014	22	97.36
	New Meter	13032407	698	2087	16	86.81
T0IQ0000183000001830015200	Old Meter	URM5761	253	2996	30	91.43
	New Meter	13033079	815	2318	14	107.38

Note: The above comparison was completed for all 3679 properties.

3.2.4 Step 4: Consumption Deviation

To determine whether there was an increase or decrease in average monthly consumption, a direct comparison of the Average Monthly Consumptions as per Table 3-4 were reviewed as follows:

Equation 3-2: Deviation in Monthly Consumption

$$\text{Deviation} = \text{New Meter Average Monthly Consumption} \\ - \text{Old Meter Average Monthly Consumption}$$

Where:

- Deviation = average increase/decrease in monthly consumption
- Old Meter Average Monthly Consumption = the old meter average monthly consumption as calculated in Table 3-4
- New Meter Average Monthly Consumption = the new meter average monthly consumption as calculated in Table 3-4

A positive value indicated an increase in consumption after replacement of the old meter and a negative value indicated a decrease in consumption. Based on the assumption that a water meter's accuracy decreases over time, the deviation results are expected to be mostly positive values.

Table 3-5: Deviation in Monthly Consumption Calculation

SGID		Meter Number	Average Monthly Consumption (kℓ/month)	Deviation in Monthly Consumption (kℓ/month)	Increase or Decrease
T0IQ01230040000069100000RE	Old Meter	UKL7882	97.36	-10.55	Decrease
	New Meter	13032407	86.81		
T0IQ0000183000001830015200	Old Meter	URM5761	91.43	+15.95	Increase
	New Meter	13033079	107.38		

Note: The above comparison was completed for all 3,679 properties.

3.2.5 Step 5: Confirm Meter Characteristics

The characteristics (listed below) of the old and new meters were required in order to ascertain the Deviation as calculated in Step 4.

Unfortunately, Database 1 provided by Johannesburg Water did not include meter class, meter make, meter model and meter size. An analysis was done of the old meter information based on serial numbers and meter manufacturer naming conventions, and only 35 meters could accurately be assigned a class. Of that class information, only 11 had a change in class from old to new meter. The sample size was deemed insignificant and was therefore not investigated further.

The information recorded during the large-scale meter replacement project only included the below listed information for the new meter, and the meter size for the old meter. Therefore, the comparison of meter characteristics was limited to the old and new meter sizes (see Table 3-6).

The following characteristics may have resulted in the deviations:

- Meter Sizes
- Meter Class
- Meter Make
- Meter Model/type

Table 3-6: Meter Size Comparison

SGID	Old Meter	New Meter	Size Old	Size New
T0IQ011500000000258000010000000000	505173	13056488	25mm	15mm
T0IQ01230040000069100000RE00000000	UKL7882	13032407	25mm	15mm
T0IR035800000000767000010000000000	CPKG8734	GKG4943	25mm	15mm
T0IR051407900001097001000000000000	URL9545	13057377	20mm	15mm
T0IR096100000000073000000000000000	CDRA8003	13033196	25mm	15mm
T0IR096700800000029000000000000000	ERK0052	13018429	25mm	15mm
T0JR058700100000103000000000000000	38232812	GKH0091	25mm	15mm
T0IQ021600200003596000000000000000	URM4428	13013075	20mm	15mm
T0IQ034500300002572000000000000000	TRA7109	GKF8225	20mm	15mm
T0IQ048702900001450000000000000000	9499367	13050879	100mm	100mm

Note: The above comparison was completed for all 3,679 properties.

3.2.6 Step 6: Age and Volumetric Analysis

Based on the literature review undertaken, the largest factor contributing to a Deviation in average monthly consumption is meter age and/or volumetric age.

For the meters in the filtered dataset, the volumetric age was taken as the closing meter reading as indicated in Table 3-3. To determine the age of the old meters, installation dates were extracted from both the Johannesburg Water database, and from the meter serial number labelling standards.

For example, all Kent Meters follow the naming convention shown in Table 3-7.

Table 3-7: Kent Metering Label Convention

Starting Letter (of the 6-7digit alpha-numeric meter number)	Year of Manufacture
V	1995
W	1996
X	1997
Y	1998
Z	1999
K	2000
L	2001
M	2002
N	2003
O	2004
P	2005
Q	Not Used
R	2006
S	2007
T	2008
U	2009
D	2010
E	2011
F	2012
G	2013

Notes:

- The alpha-numeric serial number is often prefixed with meter class, e.g.: C-ORM042 refers to a C class meter made in 2004
- Kent meters, made earlier than 1995, often had serial number with the year manufactured indicated by the first two numbers, e.g.: 94-1200496 means the meter was made in 1994

Sensus metering followed a similar convention as the earlier Kent meters, where the first two digits of the serial number are indicative of the year of manufacture, e.g. 94050284 was made in 1994, and 95255357 was made in 1995.

Utilising either the year of manufacture or the installation date as per the Johannesburg Water database, the age of the old meters in the filtered dataset was determined (See Table 3-8).

Table 3-8: Age of Meter Calculation

SGID	Meter Installation Date	Old Meter	Chronological Age (yrs.) on Replacement of the Meter	Volumetric Age (kℓ)
T0IR062900100000200000240000000000	2009/01/13	TRK7972	4	468
T0IQ034500300002767000000000000000	2009/03/23	URA1586	5	546
T0IR096702700001476000000000000000	2008/08/05	TRK5420	5	1832
T0IQ012200000000195000000000000000	2005/12/10	PKS2586	8	1043
T0IR056303200000882000000000000000	2006/01/16	CPJA3415	8	6389
T0IR03500000000000300000RE00000000	2003/04/09	NUB718	10	14978
T0IR089200600003987000000000000000	2004/04/05	LXZ439	10	575

Note: The above comparison was completed for all 3,679 properties.

3.2.7 Step 7: Variations Analysis

The purpose of this step was to determine the factors which may have resulted in deviations in consumption and therefore potential revenue loss. The following factors were considered:

- Change in meter size
- Chronological age of the meter in years
- Volumetric age of the meter
- Locality of meter replacement

3.2.7.1 Change in Meter Size

Groupings for the different changes in meter sizes are shown in Table 3-9.

Table 3-9: Meter Sizing Groups

Groups	Old Meter Size	New Meter Size	Deviation in Average Consumption	Number of Properties in the Dataset
1	20mm	15mm	Increase	1654
	20mm	15mm	Decrease	877
2	25mm	15mm	Increase	629
	25mm	15mm	Decrease	442
3	20mm	40mm	Increase	2
4	25mm	80mm	Increase	1
5	40mm	15mm	Increase	2
6	40mm	40mm	Increase	9
	40mm	40mm	Decrease	6
7	40mm	50mm	Increase	3
	40mm	50mm	Decrease	2
8	50mm	40mm	Decrease	1
9	50mm	50mm	Increase	13
	50mm	50mm	Decrease	9
10	80mm	80mm	Increase	6
	80mm	80mm	Decrease	3
11	100mm	100mm	Increase	15
	100mm	100mm	Decrease	5
Total				3679

After grouping the different changes in meter size, each group was analysed to determine the magnitude of the deviation and whether any patterns could be noted. Results are discussed in further detail under CHAPTER 4.

3.2.7.2 Chronological Age of the Meter in Years

The chronological age of the meters (in years) was grouped as shown in Table 3-10.

Table 3-10: Groupings for the Difference Meter Age Groups

Old Meter Age	Number of Properties in the Dataset
2	10
3	12
4	46
5	54
6	70
7	96
8	128
9	141
10	1884
11	93
12	55
13	60
14	31
15	123
16	80
17	31
18	18
19	114
20	64
21	26
22	8
23	59
24	259
25	172
26	21
31	1
32	21
33	2
Total	3679

After grouping the different meter ages, each group was analysed to determine the magnitude of the deviation and whether any patterns could be noted. Results are discussed in further detail under CHAPTER 4.

3.2.7.3 Volumetric Age of the Meter

The grouping of meters according to volumetric age was based on a flow range, as per Moahloli (2017).

Table 3-11: Meter Age in terms of Volumetric Reading Groups

Groups	Flow Range	Number of Properties in the Dataset
1	0-1000kℓ	711
2	1000-2000kℓ	629
3	2000-4000kℓ	899
4	4000-5200kℓ	348
5	5200-6750kℓ	326
6	Greater than 6750kℓ	766
Total		3679

After grouping the meters according to volumetric age, each group was analysed to determine the magnitude of the deviation and whether any patterns could be noted. Results are discussed in further detail under CHAPTER 4.

In CHAPTER 4, volumetric age of the meters was related to chronological age.

3.2.7.4 Locality of Meter Replacement

The location of the replaced meter was plotted (utilising the GPS information available) against the various areas within the City of Johannesburg. Decreases and/or increases in consumption were indicated utilising different colour codes in order to identify potential patterns. Results are discussed in CHAPTER 4.

3.2.8 Step 8: Potential Revenue Generation

To determine the impact the Average Monthly Consumption Deviation had on the overall potential revenue generation for Johannesburg Water, monthly billing information was generated to reflect revenue pre- and post- meter replacement. It should be noted that this comparison was completed for all 3,679 properties identified.

Johannesburg Water makes use of a rising block tariff billing structure as indicated in Table 3-12.

Table 3-12: Johannesburg Water Tariff Structure 2017/18

Kilolitres connection Month	per per	2017/2018 Tariff (R/kℓ)
0-6		R 7.14
6-10		R 7.58
10-15		R 13.17
15-20		R 19.63
20-30		R 26.96
30-40		R 29.22
40-50		R 37.11
+50		R 38.72

The block tariff structure ensures that consumers who utilise excessive volumes of water are charged more, in the hope that usage is kered.

The monthly billing per property was calculated as follows:

Equation 3-3: Monthly Billing Calculation

Tariff 1 (R7.14)

$$(Average\ Monthly\ Consumption - 6) = Remainder\ 1$$

$$If\ (Remainder\ 1) > 6 \xRightarrow{Then} Consider\ Tariff\ 2$$

$$If\ (Remainder\ 1) < 0 \xRightarrow{Then}$$

$$Monthly\ Billing = Tariff\ 1 \times Average\ Monthly\ Consumption$$

Tariff 2 (R7.58)

$$(\text{Remainder } 1 - 4) = \text{Remainder } 2$$

$$\text{If } (\text{Remainder } 2) > 4 \xRightarrow{\text{Then}} \text{Consider Tariff } 3$$

$$\text{If } (\text{Remainder } 2) < 4 \xRightarrow{\text{Then}}$$

$$\text{Monthly Billing} = \text{Tariff } 2 \times \text{Remainder } 2 + \text{Tariff } 1 \times 6$$

Tariff 3 (R13.17)

$$(\text{Remainder } 2 - 5) = \text{Remainder } 3$$

$$\text{If } (\text{Remainder } 3) > 5 \xRightarrow{\text{Then}} \text{Consider Tariff } 4$$

$$\text{If } (\text{Remainder } 3) < 5 \xRightarrow{\text{Then}}$$

$$\text{Monthly Billing} = \text{Tariff } 3 \times \text{Remainder } 3 + \text{Tariff } 2 \times 4 + \text{Tariff } 3 \times 6$$

Tariff 4 (R19.63)

$$(\text{Remainder } 3 - 5) = \text{Remainder } 4$$

$$\text{If } (\text{Remainder } 4) > 5 \xRightarrow{\text{Then}} \text{Consider Tariff } 5$$

$$\text{If } (\text{Remainder } 4) < 5 \xRightarrow{\text{Then}}$$

$$\text{Monthly Billing} = \text{Tariff } 4 \times \text{Remainder } 4 + \text{Tariff } 3 \times 5 + \text{Tariff } 2 \times 4 + \text{Tariff } 1 \times 6$$

Tariff 5 (R26.96)

$$(\text{Remainder } 4 - 10) = \text{Remainder } 5$$

$$\text{If } (\text{Remainder } 5) > 10 \xRightarrow{\text{Then}} \text{Consider Tariff } 6$$

$$\text{If } (\text{Remainder } 5) < 10 \xRightarrow{\text{Then}}$$

$$\text{Monthly Billing}$$

$$\begin{aligned} &= \text{Tariff } 5 \times \text{Remainder } 5 + \text{Tariff } 4 \times 5 + \text{Tariff } 3 \times 5 + \text{Tariff } 2 \times 4 \\ &+ \text{Tariff } 1 \times 6 \end{aligned}$$

Tariff 6 (R29.22)

$$(\text{Remainder } 5 - 10) = \text{Remainder } 6$$

If $(\text{Remainder } 6) > 10 \xRightarrow{\text{Then}}$ Consider Tariff 7

If $(\text{Remainder } 6) < 10 \xRightarrow{\text{Then}}$

Monthly Billing

$$\begin{aligned} &= \text{Tariff } 6 \times \text{Remainder } 6 + \text{Tariff } 5 \times 10 + \text{Tariff } 4 \times 5 + \text{Tariff } 3 \times 5 \\ &+ \text{Tariff } 2 \times 4 + \text{Tariff } 1 \times 6 \end{aligned}$$

Tariff 7 (R37.11)

$$(\text{Remainder } 6 - 10) = \text{Remainder } 7$$

If $(\text{Remainder } 7) > 10 \xRightarrow{\text{Then}}$ Consider Tariff 8

If $(\text{Remainder } 7) < 10 \xRightarrow{\text{Then}}$

Monthly Billing

$$\begin{aligned} &= \text{Tariff } 7 \times \text{Remainder } 7 + \text{Tariff } 6 \times 10 + \text{Tariff } 5 \times 10 + \text{Tariff } 4 \times 5 \\ &+ \text{Tariff } 3 \times 5 + \text{Tariff } 2 \times 4 + \text{Tariff } 1 \times 6 \end{aligned}$$

Tariff 8 (R38.72)

$$(\text{Average Monthly Consumption} - 50) = \text{Remainder } 8$$

Monthly Billing

$$\begin{aligned} &= \text{Tariff } 8 \times \text{Remainder } 8 + \text{Tariff } 7 \times 10 + \text{Tariff } 6 \times 10 + \text{Tariff } 5 \times 10 \\ &+ \text{Tariff } 4 \times 5 + \text{Tariff } 3 \times 5 + \text{Tariff } 2 \times 4 + \text{Tariff } 1 \times 6 \end{aligned}$$

Table 3-13 provides an indication of the applicable calculations for a few of the properties under consideration.

Table 3-13: Average Monthly Billing Calculation for a Few Properties

SGID	Meter Serial Number	Average Monthly Consumption (kl/month)	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	Monthly Billing (R)
			R7.14	R7.58	R13.17	R19.63	R26.96	R29.22	R37.11	R38.72	
T0IQ01150000000025800 001000000000	505173	27	6	4	5	5	7	0	0	0	R 425.88
	13056488	26	6	4	5	5	6	0	0	0	R 396.99
T0IQ01230040000069100 000RE0000000	UKL7882	96	6	4	5	5	10	10	10	46	R2 944.73
	13032407	90	6	4	5	5	10	10	10	40	R2 725.90
T0IQ03450030000268000 000000000000	BSRA0952	15	6	4	5	0	0	0	0	0	R 134.62
	GKL0485	29	6	4	5	5	9	0	0	0	R 479.80
T0IR01160000000002400 008000000000	EKX0028	68	6	4	5	5	10	10	10	18	R1 883.32
	13039632	45	6	4	5	5	10	10	5	0	R 998.00

To determine whether there was an increase or decrease in average monthly billing, a direct comparison of the Average Monthly Billing (as per Table 3-14) was reviewed as follows:

Equation 3-4: Deviation Average Monthly Billing

$$\text{Deviation} = \text{New Meter Average Monthly Billing} - \text{Old Meter Average Monthly Billing}$$

Where:

- Deviation = average increase/decrease in monthly billing
- Old Meter Average Monthly Billing = the old meter average month billing as calculated in Table 3-14
- New Meter Average Monthly Billing = the new meter average month billing as calculated in Table 3-14

A positive value indicated an increase in billing/revenue after replacement of the old meter and a negative value indicated a decrease in billing/revenue. Based on the premise that a water meter's accuracy decreases over time, the deviation results are expected to be mostly positive values.

Table 3-14: Deviation in Monthly Billing/Revenue Calculation

SGID	Meter Serial Number	Monthly Billing (R)	Deviation in Monthly Potential Revenue (R/month)	Increase or Decrease
T0IQ011500000000258000010000000000	505173	R 425.88	R28.89	Decrease
	13056488	R 396.99		
T0IQ01230040000069100000RE00000000	UKL7882	R2 944.73	R218.83	Decrease
	13032407	R2 725.90		
T0IQ034500300002680000000000000000	BSRA0952	R 134.62	-R345.18	Increase
	GKL0485	R 479.80		
T0IR011600000000024000080000000000	EKX0028	R1 883.32	R885.32	Decrease
	13039632	R 998.00		

The Return on Investment is calculated based on the Capital outlay associated with the Johannesburg Water large-scale meter replacement project that took place between 2013 and 2015.

Table 3-15 provides an indication of the associated meter replacement cost, based on actual meter size.

Table 3-15: Average Cost of Meter Replacement

	15-25mm	40mm Bulk Meter	50mm Bulk Meter	80mm Bulk Meter	100mm Bulk Meter	150mm Bulk Meter	50mm/20mm Combo	80mm/20mm Combo	100/20mm Combo	150mm / 20mm combo
Contractor 1	R 2 329	R 5 119	R 18 669	R 24 569	R 30 869	R 44 969	R 25 469	R 32 269	R 36 869	R 59 969
Contractor 2	R 1 979	R 5 431	R 23 910	R 30 164	R 36 976	R 70 055	R 31 474	R 41 468	R 55 213	R 105 105
Contractor 3	R 1 968	R 3 918	R 16 828	R 20 228	R 23 528	R 44 528	R 27 728	R 31 328	R 41 028	R 66 528
Contractor 4	R 2 406	R 5 946	R 15 726	R 19 486	R 24 256	R 35 441	R 26 726	R 28 986	R 39 406	R 55 441
Contractor 5	R 2 431	R 5 679	R 15 666	R 19 066	R 23 516	R 35 066	R 27 166	R 39 066	R 44 516	R 54 566
Contractor 6	R 1 954	R 3 754	R 17 504	R 23 004	R 26 704	R 45 079	R 26 504	R 35 104	R 40 104	R 61 819
Average Cost	R 2 178	R 4 974	R 18 050	R 22 753	R 27 641	R 45 856	R 27 511	R 34 703	R 42 856	R 67 238

Based on Table 3-15, the average cost to replace a residential property meter (15 to 25 mm) is R2,178 (this includes costs of meter installation, material and transportation). It should be noted that the analysis was based on the tariff structure set in 2017/2018 and therefore replacement costs were escalated to 2018, to have a standard time period to confirm potential revenues (therefore not having to consider the municipal financial years compared to a typical calendar year)

By taking into consideration the average increase/decrease in monthly potential revenue, the Payback Period can be determined.

Where the overall average monthly potential revenue was a negative value, there would be no Return on Investment.

Equation 3-5: Payback Period

$$\text{Payback Period} = \frac{\text{Cost of Replacement}}{\text{Average Increase Revenue}}$$

Where:

- Payback Period = Number of Months
- Cost of Replacement = R2 178 (where a 15 mm meter was installed) (see Table 3-15)
- Increase Potential Revenue = As determined in Table 3-14

3.2.9 Step 9: Indication of Key Performance Indicators

Based on the Variation Analysis described in Section 3.2.7 the following factors were investigated as possible performance indicators that could form the basis for a meter replacement programme:

- Change in meter size
- Chronological age of the meter in years
- Volumetric age of the meter
- Locality of meter replacement

CHAPTER 4. ANALYSIS AND RESULTS

The following provides an overview of the questions which this research report attempted to answer:

- a) If a meter is replaced with a smaller or larger diameter meter, what is the impact on the overall potential revenue generated by the Water Utility?
- b) Is there an optimal time when a meter is to be replaced?
- c) Which indicators best account for meter deterioration and hence can be used to determine the best time to replace a meter?

The following are the proposed hypotheses:

- Hypothesis 1. *Replacement of residential water meters affects the meter reading accuracy. This is based on the assumption that the accuracy of water meters degrades over time. Therefore, by replacing an "aged" water meter the meter accuracy should improve and result in a positive effect on the potential revenue generated from the meter*
- Hypothesis 2. *The Capital Costs associated with the replacement of the water meter are greater than the increase in potential revenue associated with the installation of a new Water Meter, therefore resulting in an extended pay-back period to recover the overall capital costs.*
- Hypothesis 3. *Large-scale Meter Replacement projects result in increased potential revenue generation for the Water Utility.*

In order to address the above questions, the analysis of the data was broken down into the following categories:

- Overall Impact of the large-scale meter replacement project
- Change in meter size
- Chronological age of the meter in years
- Volumetric age of the meter
- Locality of meter replacement

4.1 Overall Impact of Large-Scale Meter Replacement Project

To determine the impact the Average Monthly Consumption Deviation had on Johannesburg Water's overall potential revenue generation, the monthly volumes and billing for each property was determined pre- and post- meter replacement (Refer to 3.2.8, Table 3-4 and Table 3-14).

An initial analysis of the change in consumption was undertaken for all properties. The initial analysis did not take into consideration varying meter conditions (i.e. the meter sizes, volumetric reading or similar, these variables are discussed later in the report). Taking into consideration the overall trendline for all properties, it appears that there is an overall increase in consumption per month of approximately 15.35 kℓ (Figure 4-1). The R-squared coefficient of determination is a statistical measure of how well the regression predictions approximate the real data points. The closer to 1 the R-squared value is, the better the fit of the regression line and the closer the line passes through all the points; an R-squared value equal to 1 indicates that the regression predictions perfectly fit the data. With such a low value of R-squared as indicated in Figure 4-1 below, it indicates that there is a significant variance in the overall change in monthly consumption per stand, which would indicate that the current trendline is not an accurate fit of the represented data.

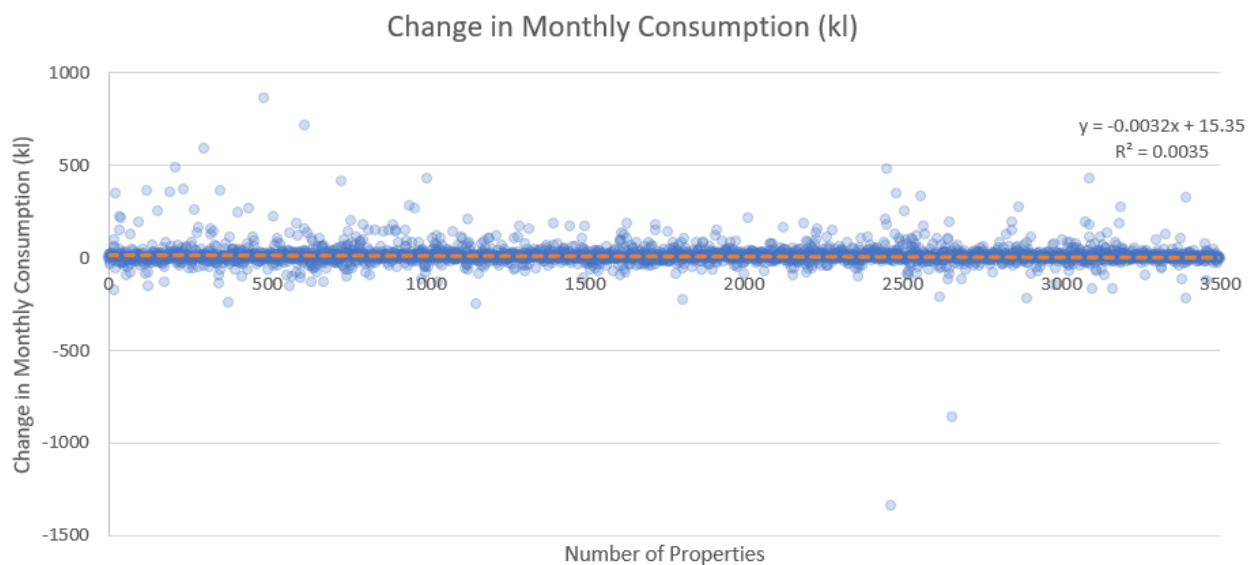


Figure 4-1: Change in Monthly Consumption per Property

An alternative analysis to be taken into consideration is a paired t-test, which is used to compare two population means where the two samples under investigation can be paired together. In the above case, this would be the pre- and post- meter replacement monthly consumption.

By comparing the same property's monthly consumption before and after meter replacement, one is effectively using each property as its own control. That way the correct rejection of the null hypothesis

(in this case, approximately 15 kℓ difference made by the meter replacement, as indicated by the trendline) can be determined (Table 4-1). It should be noted that the level of significance was set at 0.05 and therefore by comparing to the t-Stat below, this would indicate that the hypothesis that the average change in consumption of 15 kℓ, is accepted and there is a difference between the pre- and the post- meter replacement consumptions.

Table 4-1: Paired T-Test Calculation Consumption

	<i>Monthly Consumption Post-Meter Replacement</i>	<i>Monthly Consumption Pre-Meter Replacement</i>
Mean	52.37754778	42.89185671
Variance	28046.60754	23818.58094
Observations	3679	3679
Pearson Correlation	0.940863029	
Hypothesised Mean Difference	15	
df	3678	
t Stat	-5.885510467	
P(T<=t) one-tail	2.16163E-09	
t Critical one-tail	1.645268025	
P(T<=t) two-tail	4.32327E-09	
t Critical two-tail	1.960609183	

Taking the calculation further, one can conclude that the change in consumption is anywhere between 7.65 kℓ and 11.32 kℓ (Table 4-2).

Table 4-2: Calculation of Standard Deviation and Confidence Levels Consumption

Mean Difference	9.49 kℓ
Stand Dev. Of Difference	56.83
Standard Error of Difference	0.94
T alpha half 95% CL	1.96
Lower Confidence Level	7.65 kℓ
Upper Confidence Level	11.32 kℓ

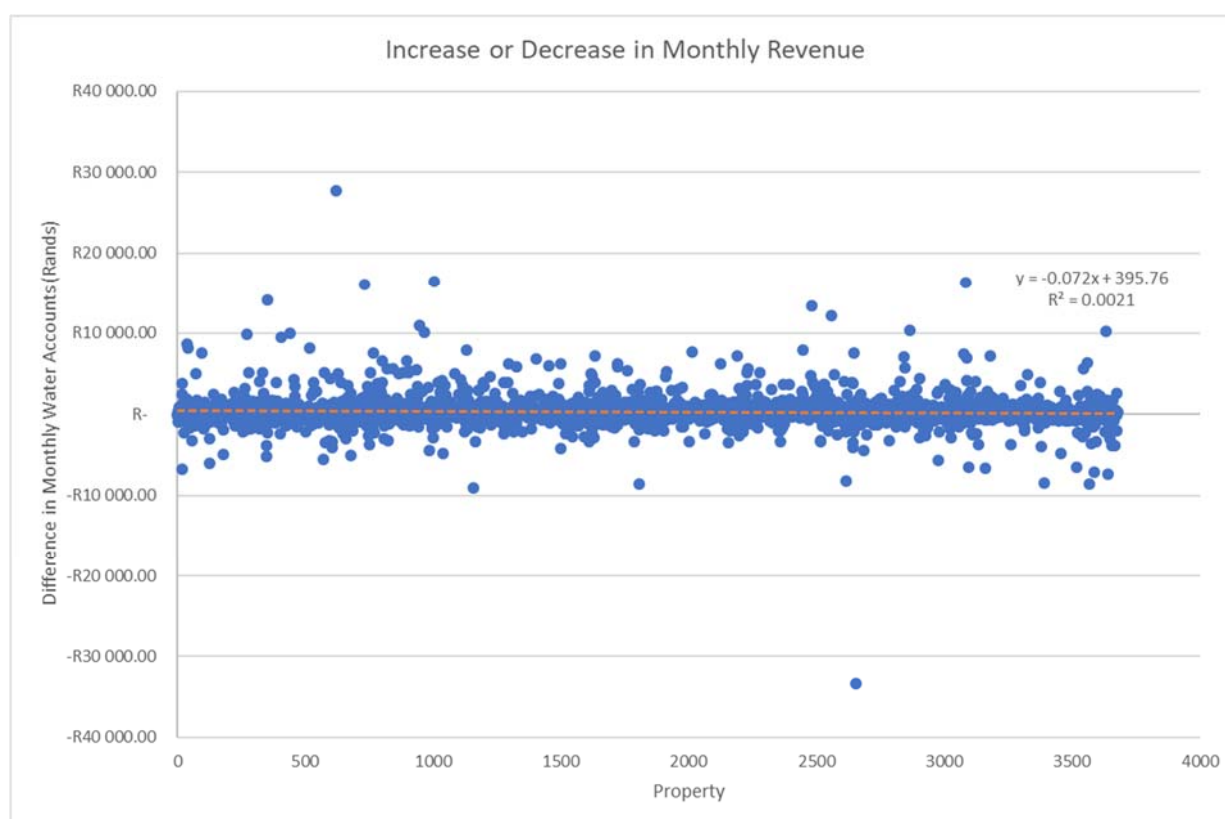
Although change in consumption is directly linked to potential revenue, taking into consideration the actual stepped tariff structures, the correlation between the two variables is not direct.

The difference in the Average Monthly Potential Revenue pre- and post- meter replacement per property was utilised as the basis to determine if there was an overall increase in potential revenue as per Table 3-14 and Table 4-3.

Table 4-3: Deviation in Monthly Billing/Revenue Calculation for a Few Properties

SGID		Meter Serial Number	Monthly Billing (R)	Deviation in Monthly Potential Revenue (R/month)	Increase or Decrease
T0IQ011500000000258000010000000000	Old	505173	R 425.88	R28.89	Decrease
	New	13056488	R 396.99		
T0IQ01230040000069100000RE00000000	Old	UKL7882	R2 944.73	R218.83	Decrease
	New	13032407	R2 725.90		
T0IQ034500300002680000000000000000	Old	BSRA0952	R 134.62	-R345.18	Increase
	New	GKL0485	R 479.80		
T0IR011600000000024000080000000000	Old	EKX0028	R1 883.32	R885.32	Decrease
	New	13039632	R 998.00		

The Deviation in Monthly Potential Revenue was plotted for the 3,679 properties in the filtered dataset and thereafter, the average increase/decrease per property in potential revenue was identified.

**Figure 4-2: Deviation in Monthly Potential Revenue**

As per Figure 4-2, when considering all 3,679 properties, the Average Monthly Potential Revenue to Johannesburg Water increased by approximately R395/month.

Once again by using the paired t-test analysis and assuming that the null hypothesis in this case, is approximately R395 one can determine whether the hypothesis that the average change in potential revenue of R395, is accepted and whether there is a difference between the pre- and the post- meter replacement potential revenues per property (Table 4-4). By comparing to the t-stat value, one would assume that the hypothesis is accepted.

Table 4-4: Paired T-Test Calculation Potential Revenue

	<i>Monthly Potential Revenue Post-Meter Replacement</i>	<i>Monthly Potential Revenue Pre-Meter Replacement</i>
Mean	1423.826289	1118.999278
Variance	41623162.48	35231185.5
Observations	3679	3679
Pearson Correlation	0.943652129	
Hypothesised Mean Difference	395	
df	3678	
t Stat	-2.555177542	
P(T<=t) one-tail	0.005326634	
t Critical one-tail	1.645268025	
P(T<=t) two-tail	0.010653268	
t Critical two-tail	1.960609183	

Taking the calculation further, one can conclude that the change in monthly potential revenue is anywhere between R 235.66 and R 374.00 per month (Table 4-5).

Table 4-5: Calculation of Standard Deviation and Confidence Levels Potential Revenue

Mean Difference	R 304.83
Stand Dev. Of Difference	2140.52
Standard Error of Difference	35.29
T alpha half 95% CL	1.96
Lower Confidence Level	R 235.66
Upper Confidence Level	R 374.00

To calculate the Payback Period, only the newly installed 15 mm meters were taken into consideration, as this was the largest sample size (3,604 of the 3,679 meters), see Figure 4-3. For these meters, there was an Average Monthly Potential Revenue increase of approximately R 395/month (see Figure 4-3), which is the same as the entire sample.

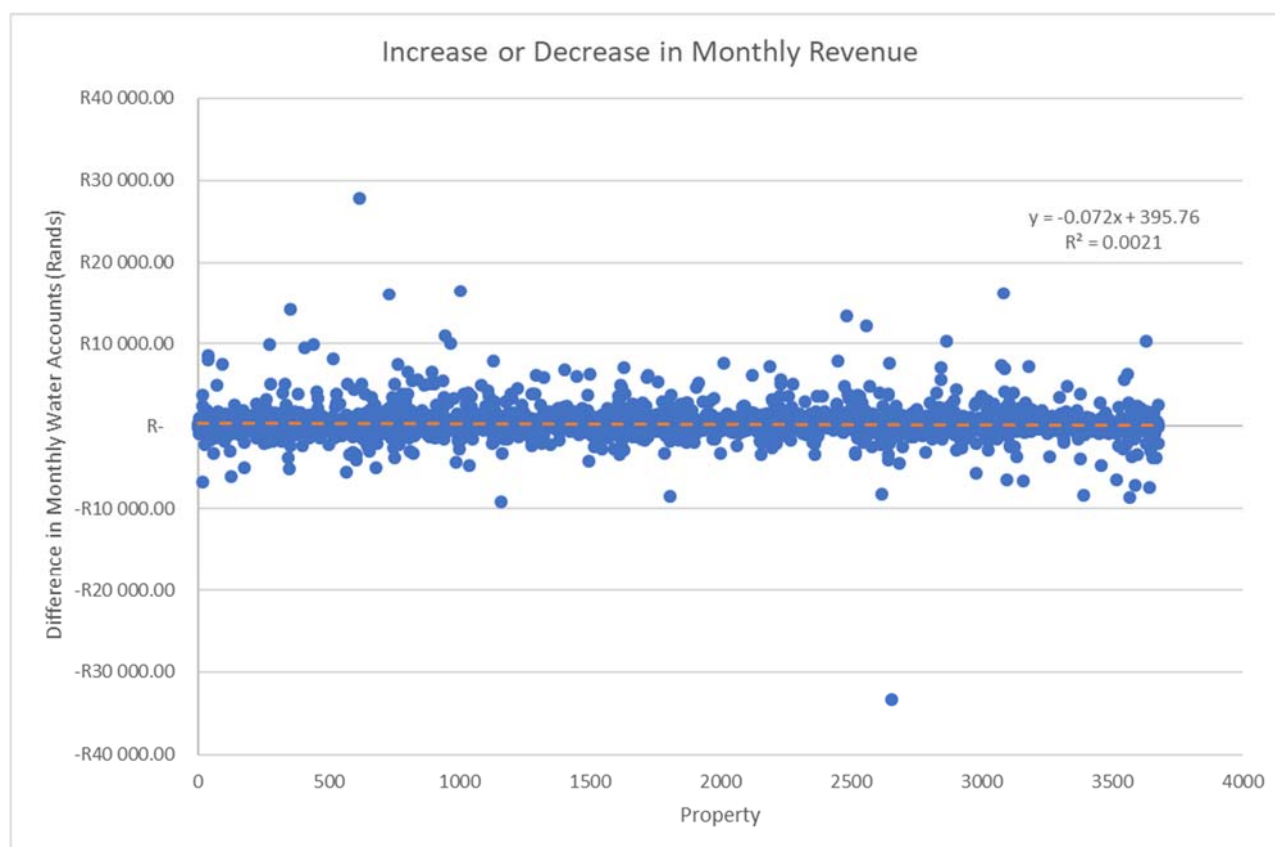


Figure 4-3: Deviation in Monthly Potential Revenue – 15 mm Installations only

When taking into account the 95 % confidence indices, the change in monthly potential revenue is anywhere between R 186.96 and R 307.25 per month for the 15 mm meter sample (Table 4-6).

Table 4-6: Calculation of Standard Deviation and Confidence Levels Potential Revenue (15 mm Meters)

Mean Difference	R 247.11
Stand Dev. Of Difference	1861.22
Standard Error of Difference	30.69
T alpha half 95% CL	1.96
Lower Confidence Level	R 186.96
Upper Confidence Level	R 307.25

Given the average Capital Cost of R2,178 for the 2013 installation of a 15 mm meter, and annual inflationary increases based on the Consumer Price Indices (CPI) (Statistics South Africa, 2018; P0141), see Table 4-7, Payback Period is calculated.

Table 4-7: Percentage Increase in Inflation per Month CPI – March 2018, P0141

Year	Jan	Feb	March	April	May	June	July	Aug	Sep	Oct	Nov	Dec	Average
2014	5.8	5.9	6.0	6.1	6.6	6.6	6.3	6.4	5.9	5.9	5.8	5.3	6.1
2015	4.4	3.9	4.0	4.5	4.6	4.7	5.0	4.6	4.6	4.7	4.8	5.2	4.6
2016	6.2	7.0	6.3	6.2	6.1	6.3	6.0	5.9	6.1	6.4	6.6	6.6	6.4
2017	6.6	6.3	6.1	5.3	5.4	5.1	4.6	4.8	5.1	4.8	4.6	4.7	5.3
2018	4.4	4.0	3.8										

Utilising the Annual Average CPI values as depicted in Table 4-7 above, the replacement cost for a 15 mm meter installation in January of 2018, would be approximately R2,708. January 2018 was utilised as a base date, as the tariff structure under review is the 2017/2018 stepped tariffs.

Therefore:

Equation 4-1: Average Payback Period

$$\text{Payback Period} = \frac{\text{Cost of Replacement}}{\text{Average Increase in Monthly Revenue within the Tariff Year}}$$

$$\text{Payback Period} = \frac{R2708}{R186.96}$$

$$\text{Payback Period} = 14.5 \text{ months}$$

Note: the lower confidence index was utilised.

Therefore, based on the above, Johannesburg Water would start seeing a return on investment after approximately 14.5 months.

In order to get a better understanding of the Return on Investment, the Net Present Value (NPV) calculation was utilised per property in the 15 mm meter group (i.e. 3,604 properties), to determine the payback period.

Equation 4-2: Net Present Value Calculation

$$NPV = \left[\sum_{t=0}^n \frac{R_t}{(1+i)^{(t)}} \right]$$

Where:

n = number of months / period

t = time period

i = interest (taken as 5.3 % as per Table 4-7, year 2017)

R_t = net cash inflow-outflows during a single period t

By considering the NPV per property and determining when the cash inflow is greater than the cash outflow, the average time taken to start seeing a return on investment per property was calculated at 7 months (Refer to Annexure A for calculations and see Table 4-8).

Table 4-8: NPV Return of Investment

Time Period (Months)	Number of Properties
0 – 3 months	534
3 – 6 months	556
6 – 12 months	950
12- 18 months	237

Time Period (Months)	Number of Properties
Greater than 18 months	6
No Return on Investment	1321

It should be noted that of the 3,604 properties under consideration, 1,321 (37 %) had a decrease in the monthly potential revenue, which would have resulted in a direct Capital loss to the Water Utility. This Capital investment would have had to be recovered from the properties where increased sales were noted. Therefore, this could account for the higher return on investment period noted, when only considering the average increase in potential revenue (Equation 4-1).

An important consideration however, is that the above does not take into account any degradation of the meter performance within the first year of installation or any variation in customer water usage and therefore is based on the assumption that the average increase in monthly potential revenue would remain constant. Further, stuck meters were not taken into consideration, as the data utilised was from instances where 12 months of reading data was available for both pre-and post- meter replacements.

4.2 Change in Meter Sizing

Meter sizing information was grouped as follows (please note for ease of reference Table 4-9 is a repeat of Table 3-9):

Table 4-9: Meter Sizing Groups

Groups	Old Meter Size	New Meter Size	Consumption	Number of Properties
1	20mm	15mm	Increase	1654
	20mm	15mm	Decrease	877
2	25mm	15mm	Increase	629
	25mm	15mm	Decrease	442
3	20mm	40mm	Increase	2
4	25mm	80mm	Increase	1
5	40mm	15mm	Increase	2
6	40mm	40mm	Increase	9
	40mm	40mm	Decrease	6
7	40mm	50mm	Increase	3
	40mm	50mm	Decrease	2
8	50mm	40mm	Decrease	1
9	50mm	50mm	Increase	13
	50mm	50mm	Decrease	9
10	80mm	80mm	Increase	6
	80mm	80mm	Decrease	3
11	100mm	100mm	Increase	15
	100mm	100mm	Decrease	5
Total				3679

Thereafter each Group was accessed to determine the magnitude of the deviation and whether any patterns could be noted.

With regards to Groups 4 and 5 the meter change was an extreme variation and is discussed below:

- Group 4: Meter was a 25 mm, changed to an 80 mm – meter originally supplied a petrol station which was expanded to include a car wash and restaurant facilities, therefore the overall demand increased.
- Group 5: Meters were originally 40 mm, changed to 15 mm meters – original meter size was based on supply pipe diameter and not the consumption patterns of the property, thus resulting in an oversized meter. The downsize was approved based on consumption demand.

Based on Table 4-9, within the different groupings, there is a mixture of properties which experienced either an increase or decrease in overall consumption. However, groups 3, 4, 5, 6, 7, 8, 9, 10 and 11 were deemed to have too small a sample size to accurately determine a conclusive response as to whether the meter change in size could have potentially impacted the measured consumption.

Within Groups 1 and 2, however, a regression analysis was undertaken (Figure 4-4 and Figure 4-5). It should be noted that for both groupings that the R-squared value is significantly lower than 1, indicating that the trendline is not an adequate fit and likewise when taking the potential revenue into consideration (Figure 4-6 and Figure 4-7).

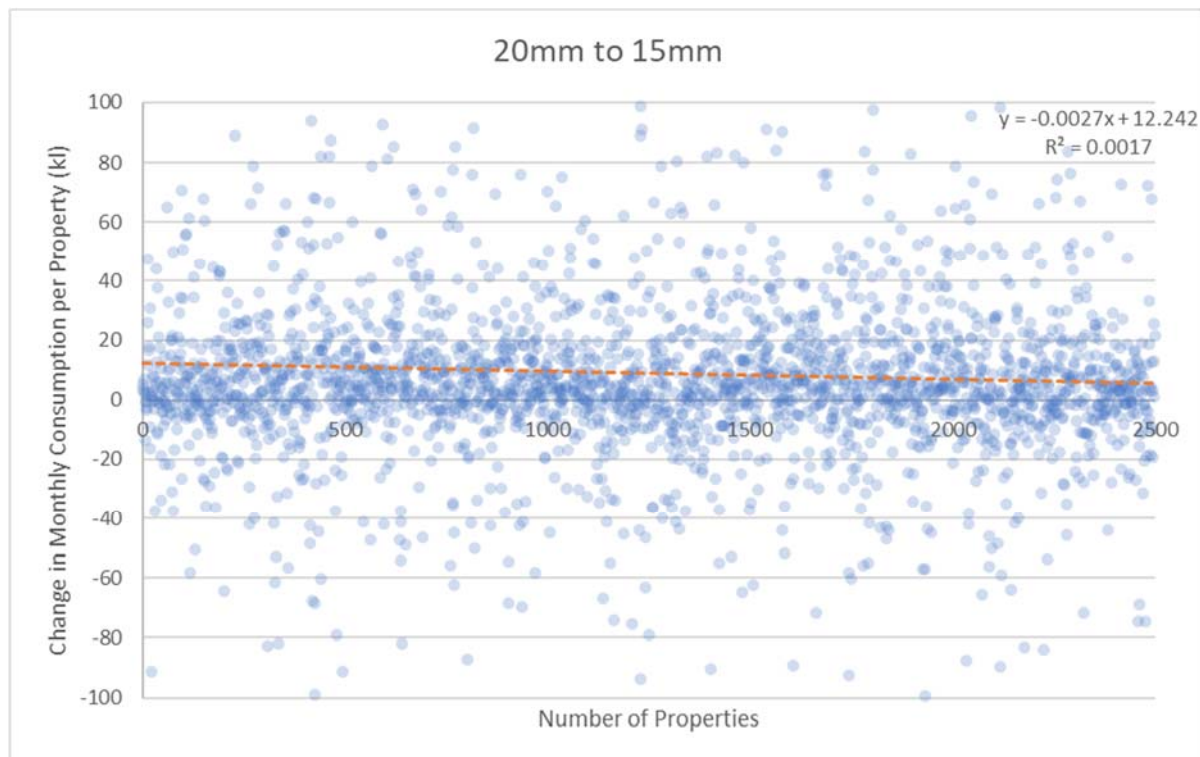


Figure 4-4: Regression Analysis Group 1 – Consumption (kℓ)

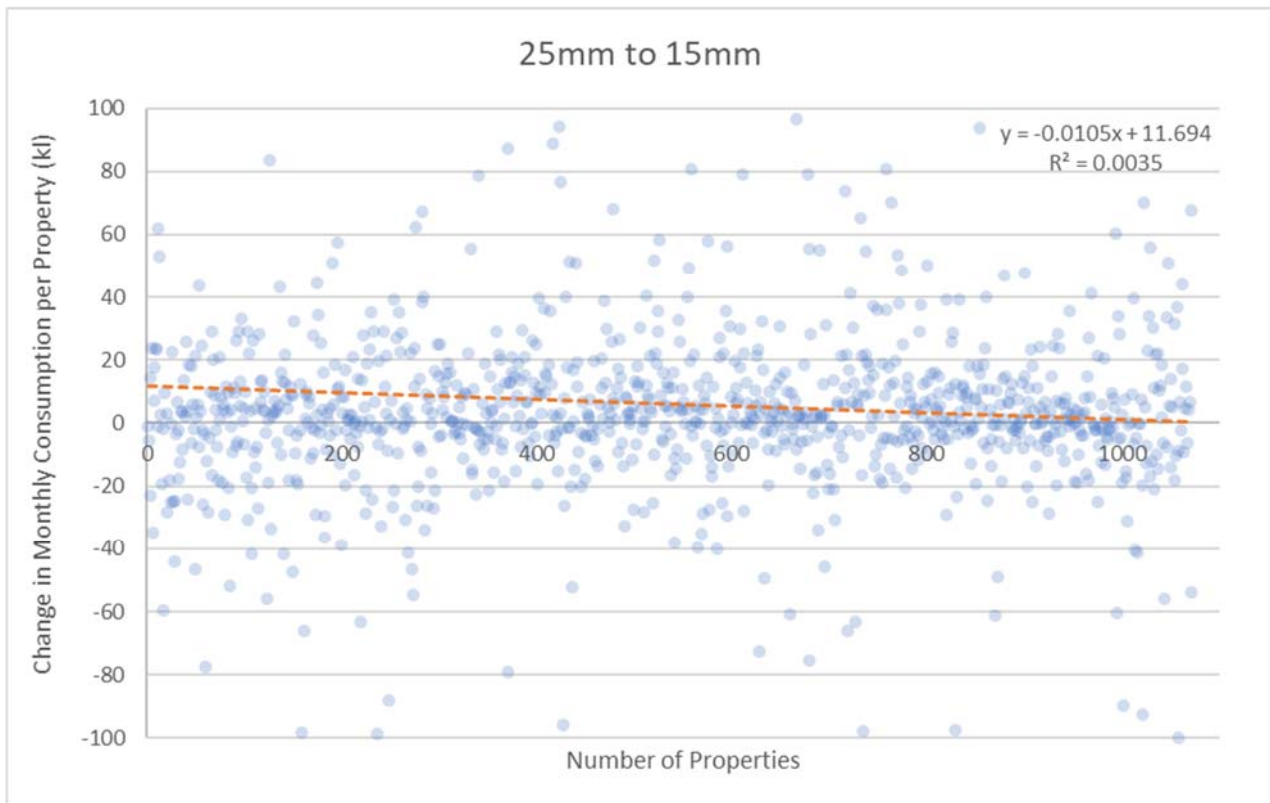


Figure 4-5: Regression Analysis Group 2 – Consumption (kl)

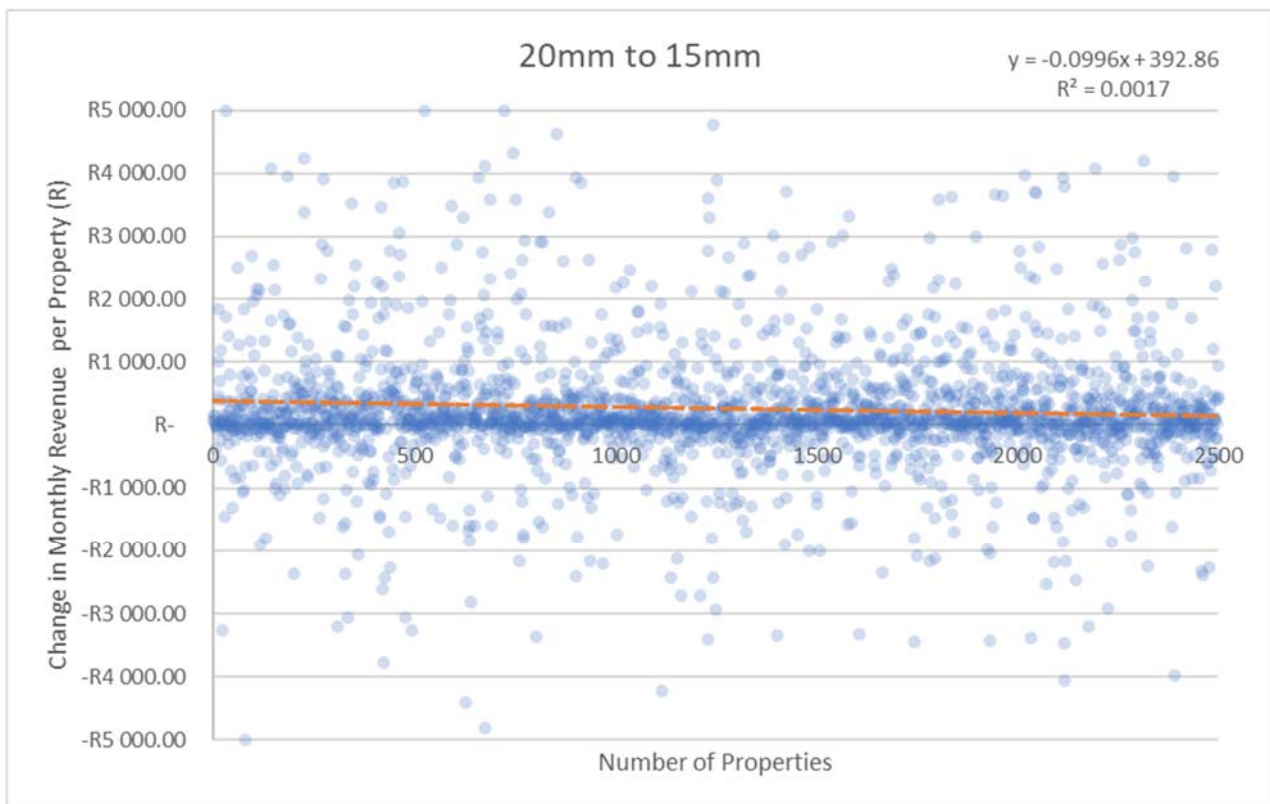


Figure 4-6: Regression Analysis Group 1 – Monthly Change in Potential Revenue (R)

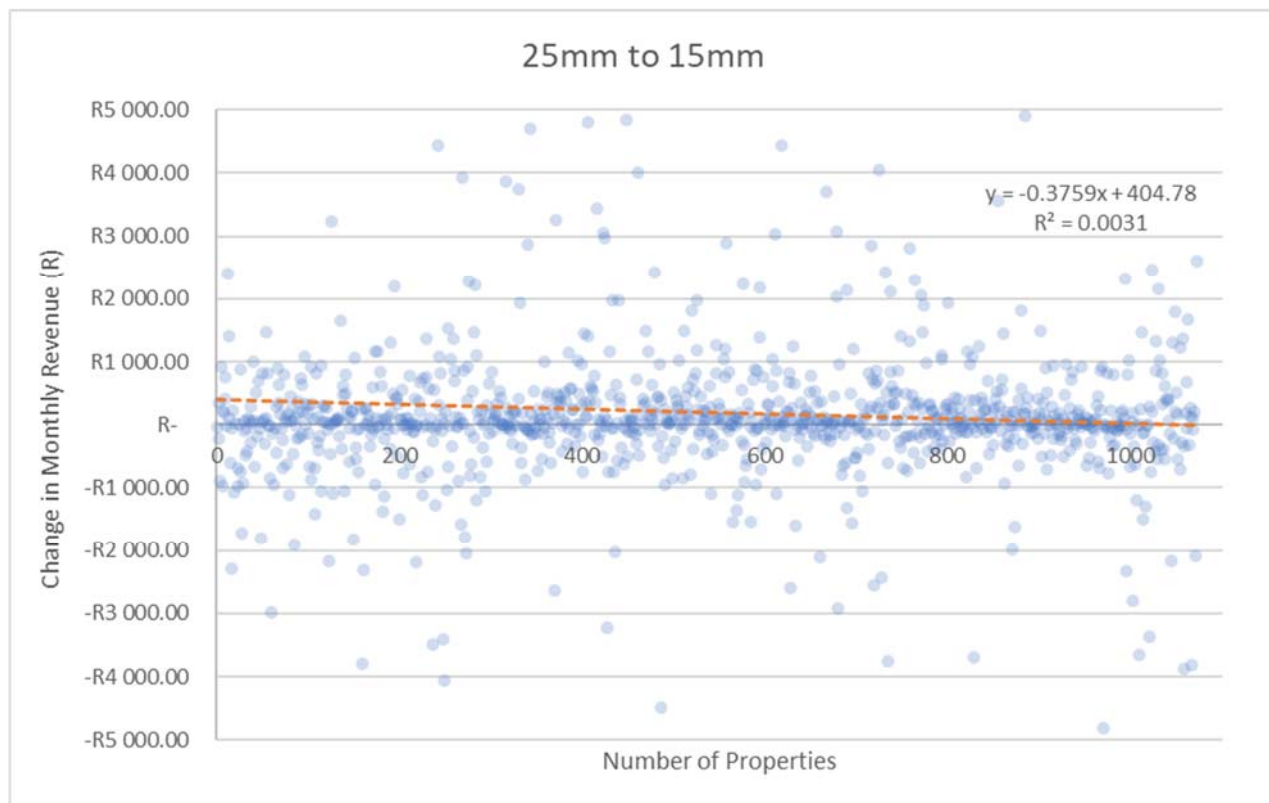


Figure 4-7: Regression Analysis Group 2 – Monthly Change in Potential Revenue (R)

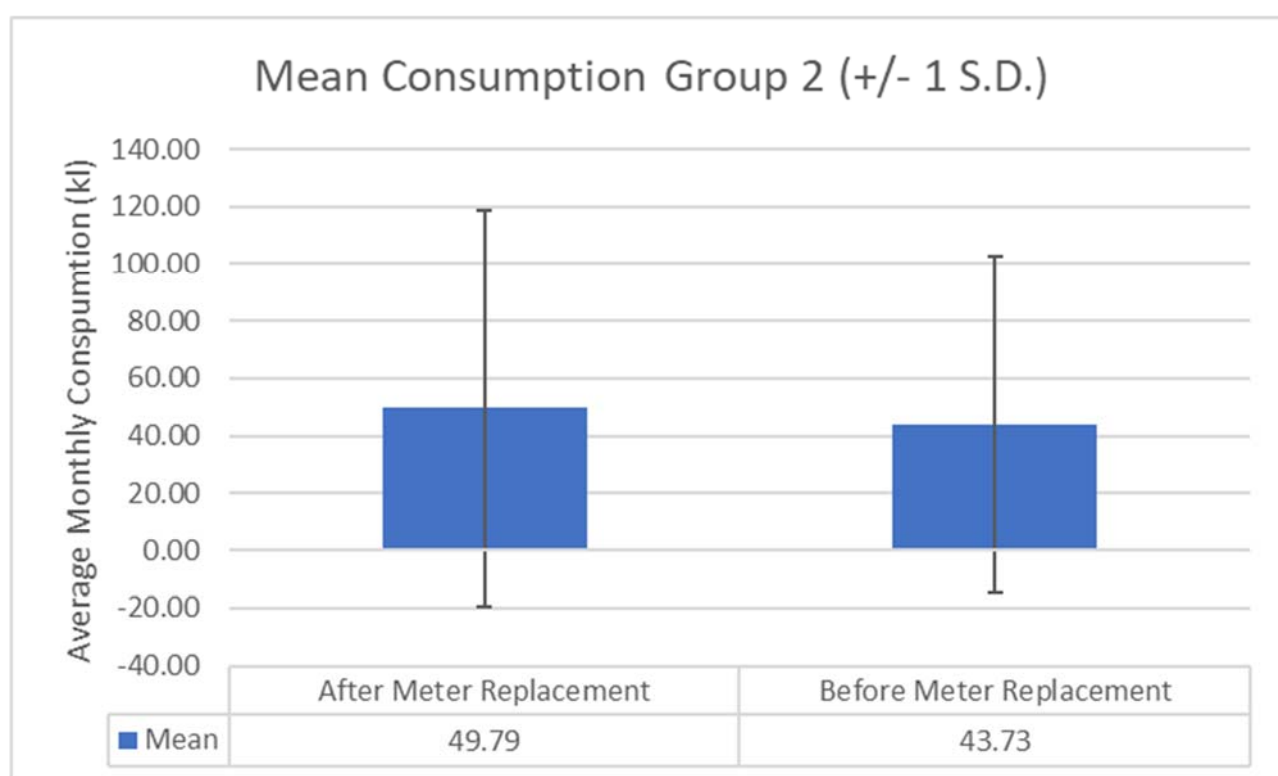
The sample did not include any meters which were replaced like-for-like (i.e. 15 mm with a 15 mm). This may be as a result of the 15 mm meter only being introduced in more recent years and no older 15 mm meters being found in the field.

For Groups 1 and 2, old meters were replaced with new meters of a smaller diameter (i.e. 20 mm and 25 mm meters were replaced with 15 mm diameter meters). For these two groups, the increase and decrease in average monthly consumption and potential revenue are approximately equal with the average increase slightly outweighing the average decrease (Table 4-10).

This could indicate that, in general, the 20 mm and 25 mm meters may have been slightly oversized and with the introduction of the 15 mm meters the lower end users' consumption was registered. However, 36 % of the sample indicated a decrease in consumption. Unfortunately, meter class information for the entire sample was not available to confirm the reasons for the decrease in consumption. The total average consumption for the 1,071 properties where a 25 mm was replaced with a 15 mm meter, indicated an increase in average monthly consumption of approximately 6 kℓ/month (Table 4-10 and Figure 4-8). Furthermore, this resulted in an average increase in potential revenue of approximately R203/month (Table 4-10).

Table 4-10: Sample Size Standard Deviation

Group	Old Meter Size (mm)	New Meter Size (mm)	Deviation	No. of meters	% of meters within each Group	Difference in Consumption (kl)			Difference in Revenue (Rand)		
						Average	Lower Limit based on a 95% Confidence	Upper Limit based on a 95% Confidence	Average	Lower Limit based on a 95% Confidence	Upper Limit based on a 95% Confidence
1	20	15	Increase	1654	65%	8.87	7.06	10.69	266.70	199.72	333.69
			Decrease	877	35%						
2	25	15	Increase	629	59%	6.06	4.13	7.99	203.08	77.52	328.65
			Decrease	442	41%						
Σ				3602							

**Figure 4-8: Old 25 mm meter replaced with new 15 mm meter Average Monthly Consumption Deviation**

When considering the 20 mm meters being replaced with the 15 mm meter, there appeared to be an average increase in consumption of approximately 8 kl/month and potential revenue of approximately R266/month (Table 4-10).

Taking into account that the average household consumption in Johannesburg is estimated at approximately 30 kℓ/month this translates into an average increase of 27 % per property.

The largest increase in consumption can be seen in Group 1, with an overall increase in total consumption of 23 % (Groups 3, 4 and 5 were not considered due to the relatively small sample sizes), see Table 4-11 and Figure 4-9.

Table 4-11: Total Consumption Variation of the Groups

Groups	Old Meter Size	New Meter Size	Old Meter Total Monthly Consumption (kℓ)	New Meter Total Monthly Consumption (kℓ)	Difference in Monthly Consumption (kℓ)	Overall Change % in Consumption	Sample Size
1	20mm	15mm	74 785.21	97 243.46	22 458.25	23%	2531
2	25mm	15mm	46 848.26	53 282.15	6 433.89	12%	1071
3	20mm	40mm	358.76	622.27	263.51	42%	2
4	25mm	80mm	30.08	95.27	65.19	68%	1
5	40mm	15mm	28.38	43.00	14.62	34%	9
6	40mm	40mm	10 636.47	11 925.66	1 289.20	11%	15
7	40mm	50mm	1 916.64	2 083.86	167.22	8%	5
8	50mm	40mm	414.00	312.09	-101.91	-33%	1
9	50mm	50mm	8 679.61	9 694.22	1 014.61	10%	22
10	80mm	80mm	3 471.14	3 567.28	96.14	3%	9
11	100mm	100mm	10 630.60	13 827.73	3 197.13	23%	20
Total			157 799.14	192 697.00	34 897.86	18%	3679

Notes:

- The larger overall percentage increase in consumption between Group 1 and Group 2 can be attributed to the larger sample size associated with Group 1
- Group 3 increase in consumption is associated with the flow rates now operating within the permanent flow rate of the meter (where the accuracy is higher), when compared to the maximum flow rate of the smaller meter, where the flow rates are less accurate if operating in this zone on a continual basis.

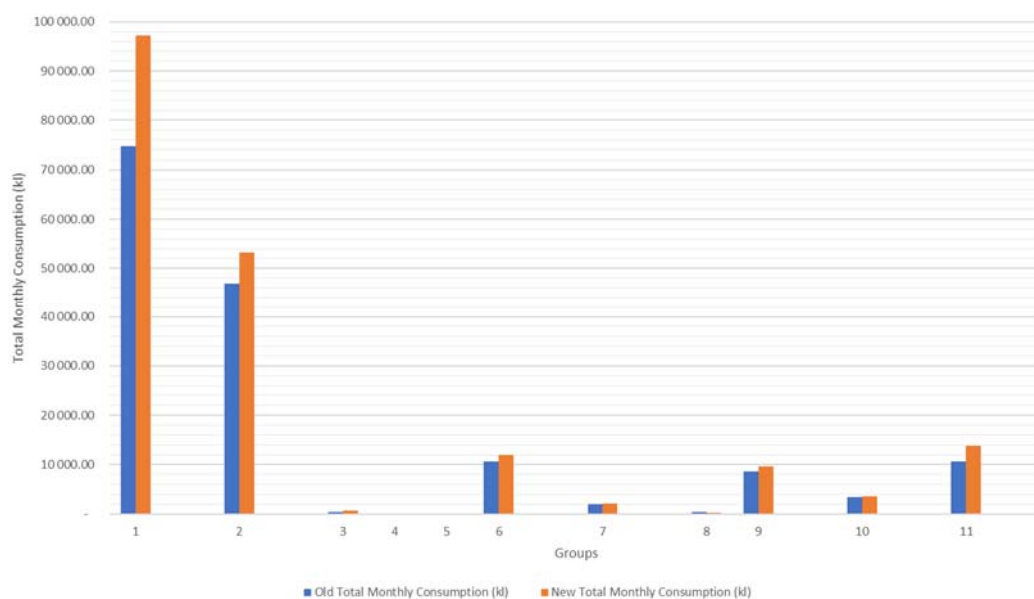


Figure 4-9: Comparison of Total Monthly Consumption

The largest increase in potential revenue can be seen in Group 1, with an overall increase of 30 % (Groups 3, 4 and 5 were not considered due to the relatively small sample sizes). See Table 4-12 and Figure 4-10. (Refer to Annexure B for individual and aggregated calculations)

Table 4-12: Total Potential Revenue Variation

Groups	Old Meter Size	New Meter Size	Old Meter Total Monthly Potential Revenue (Rand)	New Meter Total Monthly Potential Revenue (Rand)	Difference in Monthly Potential Revenue (Rand)	Overall Change % in Potential Revenue	Sample Size
1	20mm	15mm	R1 601 685.56	R2 276 713.24	R675 027.69	42%	2531
2	25mm	15mm	R1 171 264.87	R1 386 554.87	R215 290.00	18%	1071
3	20mm	40mm	R12 368.18	R22 562.52	R10 194.34	82%	2
4	25mm	80mm	R509.20	R2 923.02	R2 413.83	474%	1
5	40mm	15mm	R311.89	R566.53	R254.64	82%	9
6	40mm	40mm	R400 633.32	R450 317.57	R49 684.26	12%	15
7	40mm	50mm	R70 382.50	R76 857.21	R6 474.71	9%	5
8	50mm	40mm	R15 264.14	R11 318.22	R3 945.92	-26%	1
9	50mm	50mm	R319 640.08	R358 987.28	R39 347.19	12%	22
10	80mm	80mm	R127 990.84	R131 240.36	R3 249.53	3%	9
11	100mm	100mm	R396 747.77	R520 216.09	R123 468.32	31%	20
Total			R4 116 798.34	R5 238 256.92	R1 121 458.57	27%	3679

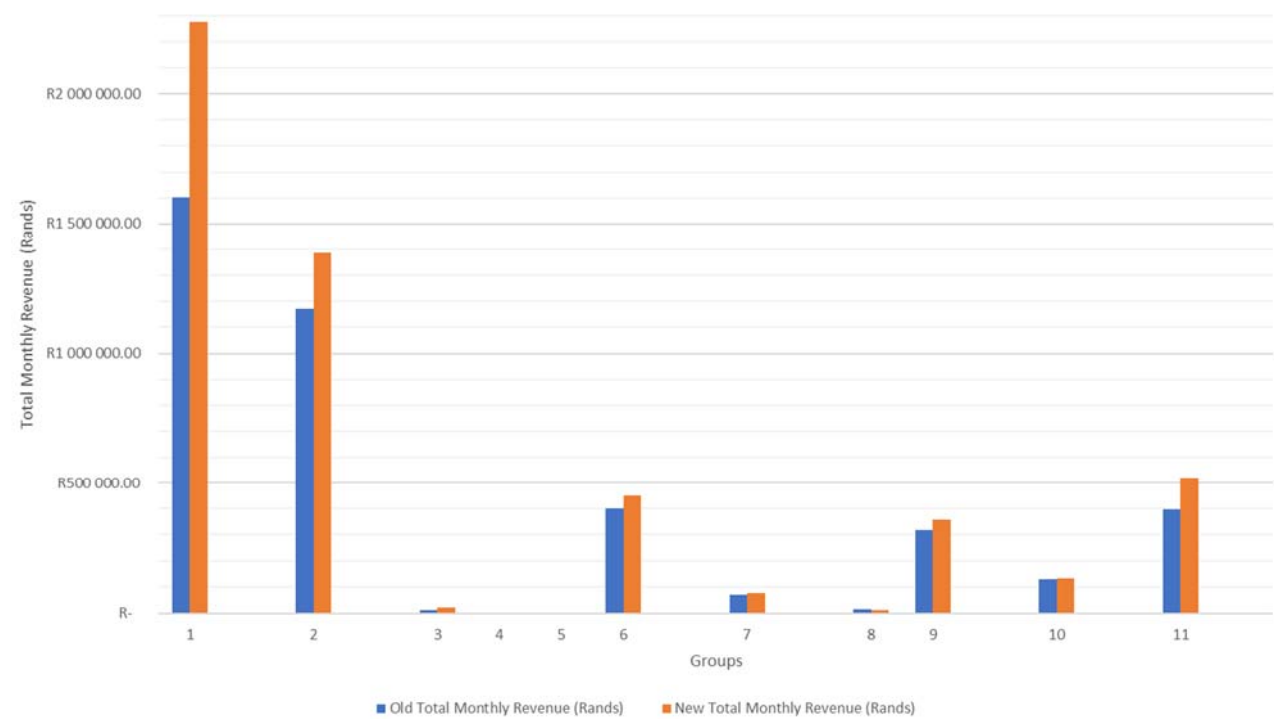


Figure 4-10: Comparison of Total Potential Revenue Consumption

While the meter replacements in Group 1 resulted in an overall increase of 30 % per month in the total potential revenue generated for Johannesburg Water, Group 11 meter replacements produced a 24 % increase in the total potential revenue generated.

Taking into consideration the Capital Cost for Groups 1, 2, 6, 9 and 11 the Payback Period is as per Table 4-13. The analysis was based on the average payback period per meter, taking into consideration the NPV as per Equation 2-1, refer to Annexure C for detailed calculations.

Table 4-13: Payback Period per Group

Groups	Sample Size	Cost per Meter (2013)	Cost Per Meter (2018)	Total Capital Cost (2018)	Total Increased Monthly Potential Revenue	Payback Period (average) Months	Payback Period (individual Properties) Months
1	2531	R 2 178	R2 708	R6 854 362.81	R675 027.69	8	7.1
2	1071	R 2 178	R2 708	R2 900 443.53	R215 290.00	11	7.0
6	15	R 4 974	R6 185	R92 771.40	R 49 684.26	14	3.66
9	22	R18 050	R22 444	R493 761.19	R 39 347.19	14	8.0
11	20	R 27 641	R34 369	R687 386.21	R123 468.32	12	9.83

It should be noted that this analysis is based on this particular project and these payback periods are associated with the increased potential revenue of this particular project. The payback periods may not be similar for an alternative project.

4.3 Chronological Age of the meter in years

The chronological age of the meters were grouped as follows (please note for ease of reference is Table 4-14 a repeat of Table 3-10):

Table 4-14: Groupings of Meters based on Chronological Age

Old Meter Age	Number of Properties
2	10
3	12
4	46
5	54
6	70
7	96
8	128
9	141
10	1884
11	93
12	55
13	60
14	31
15	123
16	80
17	31
18	18
19	114
20	64
21	26
22	8
23	59
24	259
25	172
26	21
31	1
32	21
33	2
Total	3679

The magnitude of the deviation was analysed for each group.

As per the meter size analysis contained in Section 4.2, each Group's total consumption pre- and post- meter replacement, as well as the average changed monthly consumptions, were evaluated (See Table 4-15).

Table 4-15: Meter Age Analysis

Meter Age	Number of Properties	% of Sample	Old Meter Total Monthly Consumption (kℓ)	New Meter Total Monthly Consumption (kℓ)	Difference in Monthly Consumption (kℓ)	Old Meter Total Monthly Potential Revenue (Rand)	New Meter Total Monthly Potential Revenue (Rand)	Difference in Monthly Potential Revenue (Rand)	Overall % Change in Consumption	Overall % Change in Potential Revenue	Average Change in Consumption (kℓ)	Average Change in Potential Revenue (Rand)
2	10	0.27%	369.60	395.42	25.82	R8 525.42	R8 934.12	R408.70	6.53%	4.57%	2.58	R40.87
3	12	0.33%	1 856.41	1 929.91	73.50	R64 763.60	R66 424.85	R1 661.26	3.81%	2.50%	6.13	R138.44
4	46	1.25%	3 362.98	4 093.86	730.88	R102 205.52	R130 402.26	R28 196.74	17.85%	21.62%	15.89	R612.97
5	54	1.47%	3 643.26	4 224.48	581.22	R108 288.42	R129 846.68	R21 558.25	13.76%	16.60%	10.76	R399.23
6	70	1.90%	3 714.91	3 749.31	34.40	R100 869.45	R101 189.21	R319.76	0.92%	0.32%	0.49	R4.57
7	96	2.61%	6 516.11	8 874.61	2 358.50	R199 921.89	R286 701.07	R86 779.18	26.58%	30.27%	24.57	R903.95
8	128	3.48%	8 903.65	10 563.20	1 659.55	R269 141.97	R329 244.71	R60 102.74	15.71%	18.25%	12.97	R469.55
9	141	3.83%	7 312.83	9 568.94	2 256.11	R202 776.02	R283 151.03	R80 375.00	23.58%	28.39%	16.00	R570.04
10	1884	51.21%	52 838.72	73 285.52	20 446.80	R1 137 132.00	R1 754 319.08	R617 187.07	27.90%	35.18%	10.85	R327.59
11	93	2.53%	15 404.19	16 705.71	1 301.52	R538 033.76	R582 999.65	R44 965.89	7.79%	7.71%	13.99	R483.50
12	55	1.49%	3 532.49	4 361.67	829.18	R102 844.97	R132 793.28	R29 948.31	19.01%	22.55%	15.08	R544.51
13	60	1.63%	3 222.95	3 365.30	142.35	R87 252.38	R91 744.43	R4 492.05	4.23%	4.90%	2.37	R74.87
14	31	0.84%	1 932.03	1 301.38	-630.64	R56 158.57	R29 960.66	-R26 197.91	-48.46%	-87.44%	-20.34	-R845.09
15	123	3.34%	3 875.13	4 223.24	348.10	R78 310.22	R86 977.40	R8 667.18	8.24%	9.96%	2.83	R70.46
16	80	2.17%	3 215.64	4 433.11	1 217.48	R77 445.84	R119 903.69	R42 457.85	27.46%	35.41%	15.22	R530.72
17	31	0.84%	1 894.54	1 915.91	21.37	R54 542.81	R55 386.87	R844.06	1.12%	1.52%	0.69	R27.23
18	18	0.49%	785.98	774.84	-11.13	R19 015.56	R18 405.41	-R610.16	-1.44%	-3.32%	-0.62	-R33.90
19	114	3.10%	5 135.73	5 588.02	452.30	R128 922.89	R143 516.70	R14 593.82	8.09%	10.17%	3.97	R128.02
20	64	1.74%	4 237.12	5 178.90	941.79	R122 239.32	R157 203.59	R34 964.27	18.19%	22.24%	14.72	R546.32
21	26	0.71%	1 374.07	1 537.23	163.15	R37 904.31	R41 568.70	R3 664.39	10.61%	8.82%	6.28	R140.94
22	8	0.22%	310.73	454.98	144.25	R6 578.56	R11 920.38	R5 341.81	31.70%	44.81%	18.03	R 667.73
23	59	1.60%	2 929.30	3 901.04	971.74	R75 650.89	R109 923.52	R34 272.63	24.91%	31.18%	16.47	R580.89
24	259	7.04%	8 553.12	9 535.68	982.56	R177 357.95	R209 495.04	R32 137.09	10.30%	15.34%	3.79	R124.08
25	172	4.68%	9 543.66	9 693.10	149.45	R262 637.29	R270 233.68	R7 596.39	1.54%	2.81%	0.87	R44.17

Meter Age	Number of Properties	% of Sample	Old Meter Total Monthly Consumption (kℓ)	New Meter Total Monthly Consumption (kℓ)	Difference in Monthly Consumption (kℓ)	Old Meter Total Monthly Potential Revenue (Rand)	New Meter Total Monthly Potential Revenue (Rand)	Difference in Monthly Potential Revenue (Rand)	Overall % Change in Consumption	Overall % Change in Potential Revenue	Average Change in Consumption (kℓ)	Average Change in Potential Revenue (Rand)
26	21	0.57%	1 948.66	1 687.07	-261.59	R60 021.83	R49 645.60	-R10 376.23	-15.51%	-20.90%	-12.46	-R494.11
31	1	0.03%	166.92	67.00	-99.92	R5 697.07	R1 828.30	-R3 868.77	-149.13%	-211.60%	-99.92	-R3 868.77
32	21	0.57%	1 177.98	1 241.47	63.49	R32 025.85	R33 747.63	R1 721.78	5.11%	5.10%	3.02	R81.99
33	2	0.05%	40.45	46.09	5.64	R533.97	R789.37	R255.41	12.23%	32.36%	2.82	R127.70
Totals	3679.00	100%	157 799.14	192 697.00	34 897.86	R4 116 798.34	R5 238 256.92	R1 121 458.57	4.02% (average)	3.19% (average)		

In order to depict a similar analysis and ensure no other variable but the meter age has changed, the below is a representation of the above table, only taking into consideration meters which were 20 mm in diameter and replaced with 15 mm (i.e. Group 1 analysis Section 4.2 above).

Table 4-16: Meter Age Analysis – 20 mm to 15 mm

Meter Age	Number of Properties	% of Sample	Old Meter Total Monthly Consumption (kℓ)	New Meter Total Monthly Consumption (kℓ)	Difference in Monthly Consumption (kℓ)	Old Meter Total Monthly Potential Revenue (Rand)	New Meter Total Monthly Potential Revenue (Rand)	Difference in Monthly Potential Revenue (Rand)	Overall % Change in Consumption	Overall % Change in Potential Revenue	Average Change in Consumption (kℓ)	Average Change in Potential Revenue (Rand)
2	1	0.04%	15.38	18.92	3.54	R 146.49	R 216.02	R 69.53	18.72%	32.19%	3.54	R 69.53
3	5	0.20%	430.18	257.43	-172.75	R 13 491.36	R 6 753.86	-R 6 737.50	-67.11%	-99.76%	-34.55	-R 1 347.50
4	22	0.87%	760.95	816.87	55.92	R 17 695.09	R 19 586.04	R 1 890.95	6.85%	9.65%	2.54	R 85.95
5	24	0.95%	940.30	1 108.34	168.04	R 21 603.79	R 27 719.76	R 6 115.96	15.16%	22.06%	7.00	R 254.83
6	32	1.26%	1 377.04	1 375.21	-1.84	R 34 330.41	R 33 623.03	-R707.39	-0.13%	-2.10%	-0.06	-R 22.11
7	48	1.90%	1 393.32	2 115.35	722.03	R 29 532.79	R 54 927.10	R 25 394.31	34.13%	46.23%	15.04	R 529.05
8	75	2.96%	2 589.17	3 188.38	599.21	R 57 183.03	R 77 986.70	R 20 803.67	18.79%	26.68%	7.99	R 277.38
9	84	3.32%	2 670.97	3 822.95	1 151.98	R 57 480.81	R 96 824.79	R 39 343.98	30.13%	40.63%	13.71	R 468.38
10	1713	67.68%	41 855.47	59 672.46	17 816.99	R 809 266.88	R 1 332 341.10	R 523 074.22	29.86%	39.26%	10.40	R 305.36

Meter Age	Number of Properties	% of Sample	Old Meter Total Monthly Consumption (kℓ)	New Meter Total Monthly Consumption (kℓ)	Difference in Monthly Consumption (kℓ)	Old Meter Total Monthly Potential Revenue (Rand)	New Meter Total Monthly Potential Revenue (Rand)	Difference in Monthly Potential Revenue (Rand)	Overall % Change in Consumption	Overall % Change in Potential Revenue	Average Change in Consumption (kℓ)	Average Change in Potential Revenue (Rand)
11	43	1.70%	3 175.19	2 527.05	-648.15	R 97 210.15	R 68 496.91	-R 28 713.24	-25.65%	-41.92%	-15.07	-R 667.75
12	31	1.22%	1 138.54	1 290.41	151.87	R 25 271.43	R 30 292.41	R 5 020.98	11.77%	16.58%	4.90	R 161.97
13	42	1.66%	2 130.47	2 281.52	151.05	R 56 522.20	R 61 917.19	R 5 394.99	6.62%	8.71%	3.60	R 128.45
14	16	0.63%	617.44	646.12	28.68	R 14 021.46	R 14 446.42	R 424.96	4.44%	2.94%	1.79	R 26.56
15	48	1.90%	1 609.96	1 586.73	-23.23	R 33 284.69	R 31 691.08	-R 1 593.61	-1.46%	-5.03%	-0.48	-R 33.20
16	30	1.19%	1 053.53	1 890.99	837.46	R 23 520.25	R 53 446.96	R 29 926.71	44.29%	55.99%	27.92	R 997.56
17	17	0.67%	737.64	726.27	-11.37	R 18 049.28	R17 946.22	-R 103.06	-1.57%	-0.57%	-0.67	-R 6.06
18	5	0.20%	201.02	145.64	-55.39	R 4 678.66	R 2 658.76	-R 2 019.90	-38.03%	-75.97%	-11.08	-R 403.98
19	56	2.21%	2 587.14	3 075.05	487.91	R 66 363.16	R 82 667.25	R 16 304.09	15.87%	19.72%	8.71	R 291.14
20	33	1.30%	1 540.61	2 099.27	558.66	R 38 870.16	R 58 601.03	R 19 730.87	26.61%	33.67%	16.93	R 597.91
21	8	0.32%	305.86	374.44	68.58	R 6 970.86	R 9 370.24	R 2 399.38	18.32%	25.61%	8.57	R 299.92
22	4	0.16%	117.97	157.79	39.81	R 1 995.27	R 3 465.56	R 1 470.29	25.23%	42.43%	9.95	R 367.57
23	20	0.79%	920.17	1 193.73	273.55	R 22 629.38	R32 480.92	R 9 851.54	22.92%	30.33%	13.68	R 492.58
24	64	2.53%	2 207.22	2 249.08	41.86	R 48 110.11	R 48 185.37	R 75.26	1.86%	0.16%	0.65	R 1.18
25	93	3.67%	3 228.38	3 555.93	327.56	R 69 156.12	R81 811.64	R 12 655.52	9.21%	15.47%	3.52	R 136.08
26	8	0.32%	910.89	709.70	-201.18	R 29 293.66	R21 381.91	-R 7 911.75	-28.35%	-37.00%	-25.15	-R 988.97
31	0											
32	7	0.28%	229.92	311.73	81.81	R 4 474.10	R 7 085.60	R 2 611.50	26.24%	36.86%	11.69	R 373.07
33	2	0.08%	40.45	46.09	5.64	R533.97	R 789.37	R 255.41	12.23%	32.36%	2.82	R 127.70
Totals	2531	100%	74 785.21	97 243.46	22 458.25	R 1601 685.56	R 2 276 713.24	R 675 027.69	8.04% (average)	10.19% (average)		

From Table 4-15, the largest increase in total consumption and potential revenue was for meters aged 22 years. However, since there were only 8 properties within this group, contributing 0.22 % to the overall assessment, these results were deemed inconclusive. Meters aged 10 years had the second highest overall increase in consumption and potential revenue, with 27.9 % and 35.18 % respectively. It was noted that there was a significant decrease in potential revenue for meters aged 31 years (211.66 % reduction in overall potential revenue); however, this was for a single meter and no other meters formed part of this sample group to allow for an accurate assessment. The majority of the meter age groups showed an increase in overall consumption and potential revenue, with the exceptions of meters aged 14, 26 and 31 years. For these groupings, the sample sizes were 31, 21 and 1 respectively. The cause for the reduction is not clear, however, as the assessment is based on actual readings taken in the field, human error and the relatively small sample sizes may have contributed to the skewed outcome. Further, the relatively small sample size of groups 14, 26 and 31 does not instil confidence in the results provided and can be discarded.

Further by comparing Table 4-15 and Table 4-16 the results are consistent in nature, even when the meter size change remains constant.

Figure 4-11 and Figure 4-12 are a graphical representation of Table 4-15.

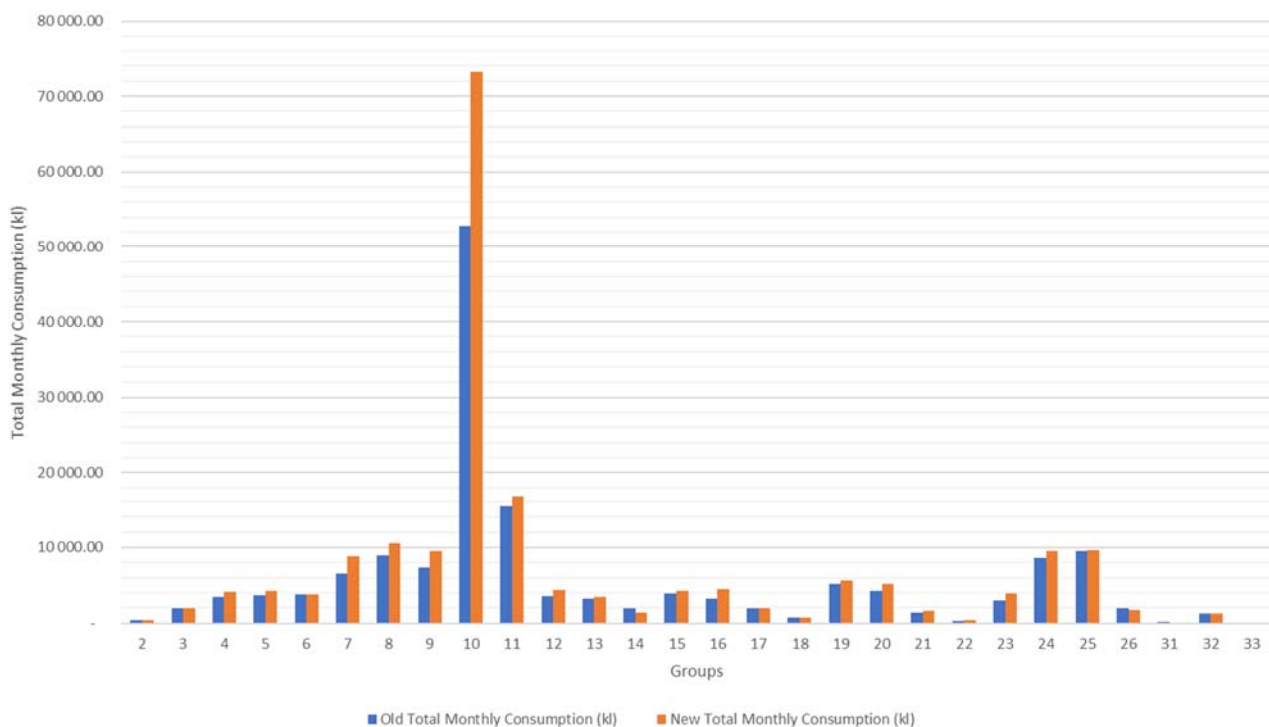


Figure 4-11: Comparison of Monthly Consumption based on Meter Age

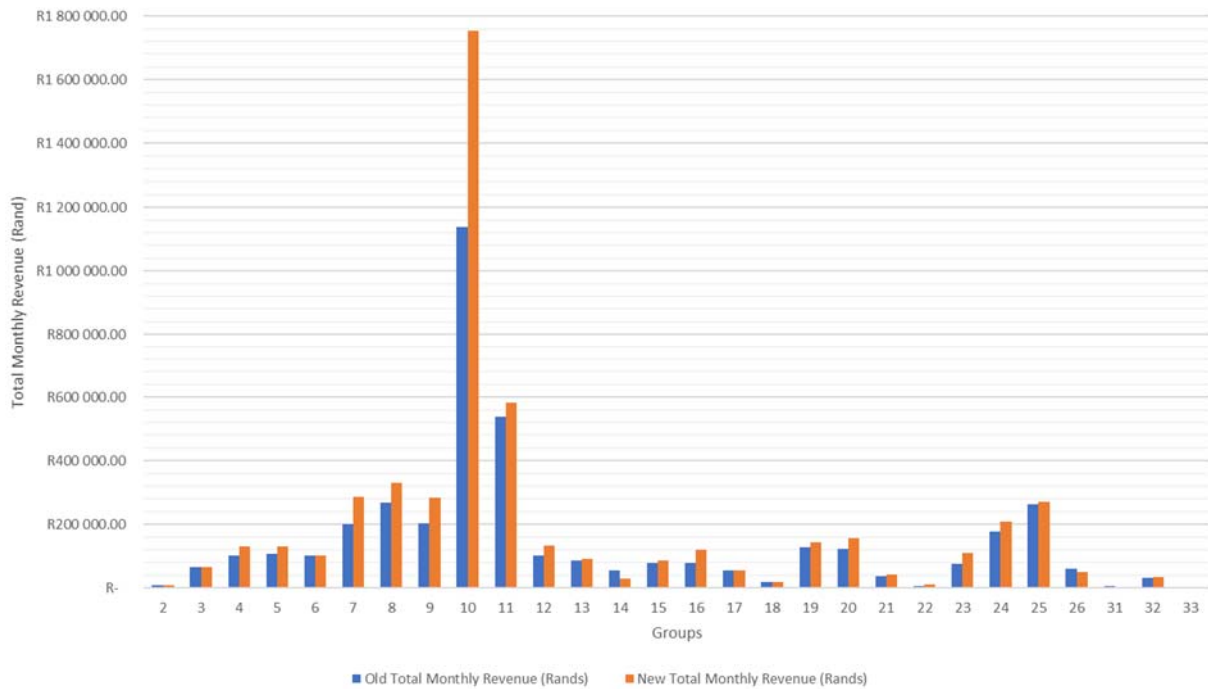


Figure 4-12: Comparison of Monthly Potential Revenue based on Meter Age

Figure 4-13 is sorted according to the overall percentage change in consumptions.

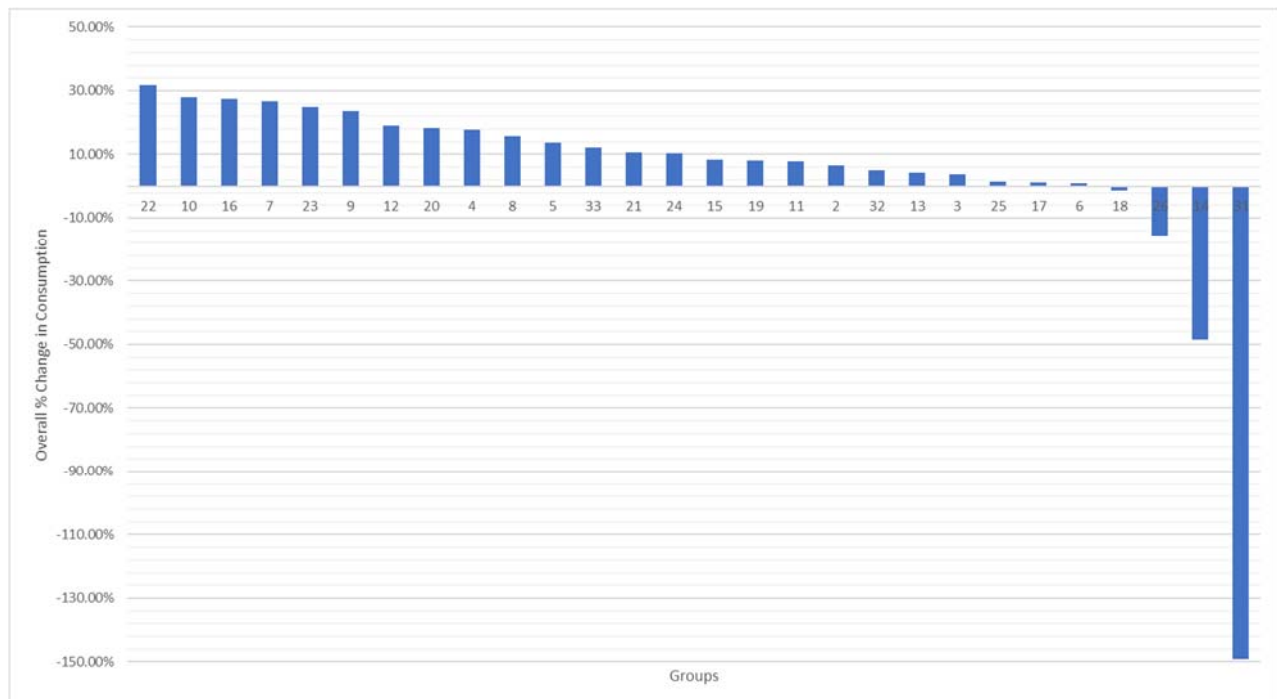


Figure 4-13: Overall Percentage Change in Consumption per chronological age grouping

The largest sample size was for 10-year-old meters. By plotting the average change in consumption across meters aged 2 to 10 years, there appears to be a general linear trendline resulting in increased consumption after meter replacement, suggesting that as meters approach 10 years of

age, accuracy deteriorates. A meter maintenance plan may therefore be required for meters older than 10 years of age (See Figure 4-14). It should be noted that the size of the data points in Figure 4-14 represents the number of meters within the sample.

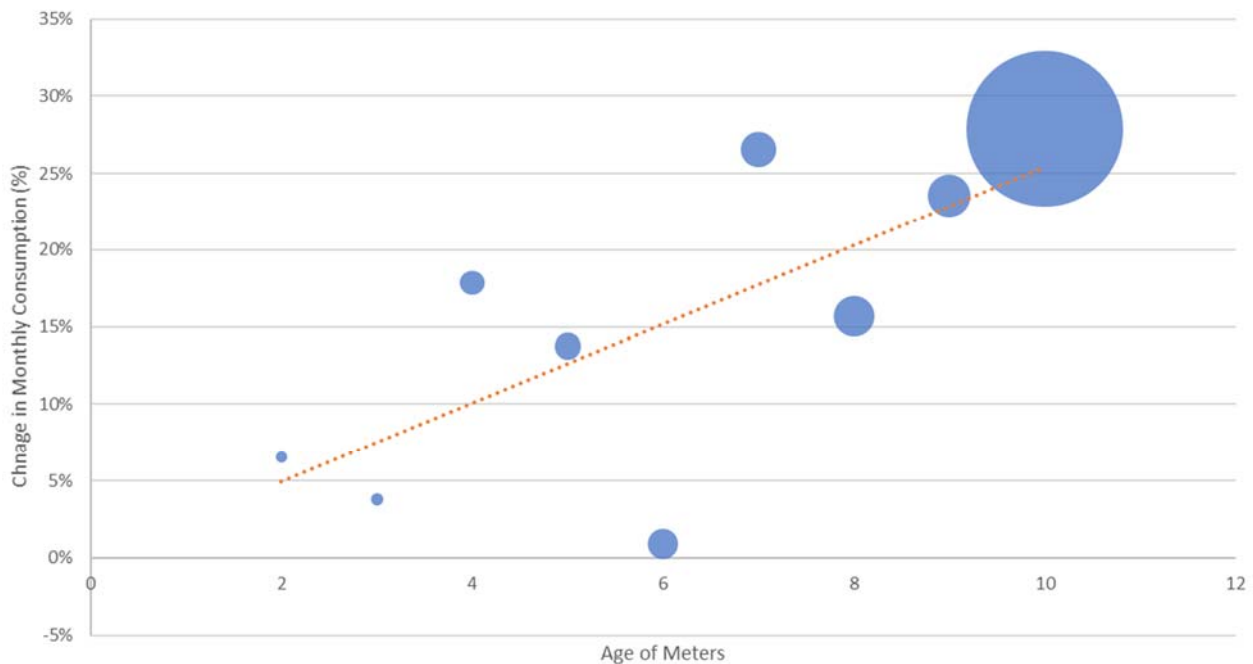


Figure 4-14: Average Change in Consumption compared to Meter Age

Table 4-15 and Figure 4-15 and Figure 4-16, indicate that the largest increase in average consumption and potential revenue was for meters aged 7 years. However, the sample size was only for 96 meter replacements.

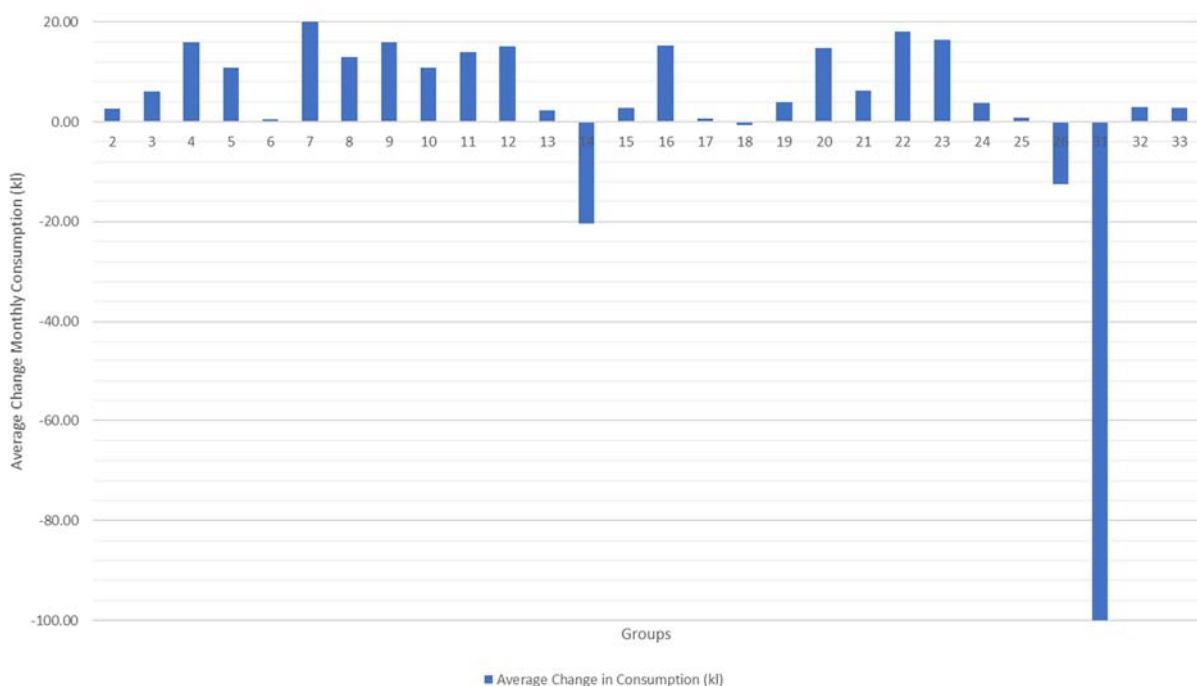
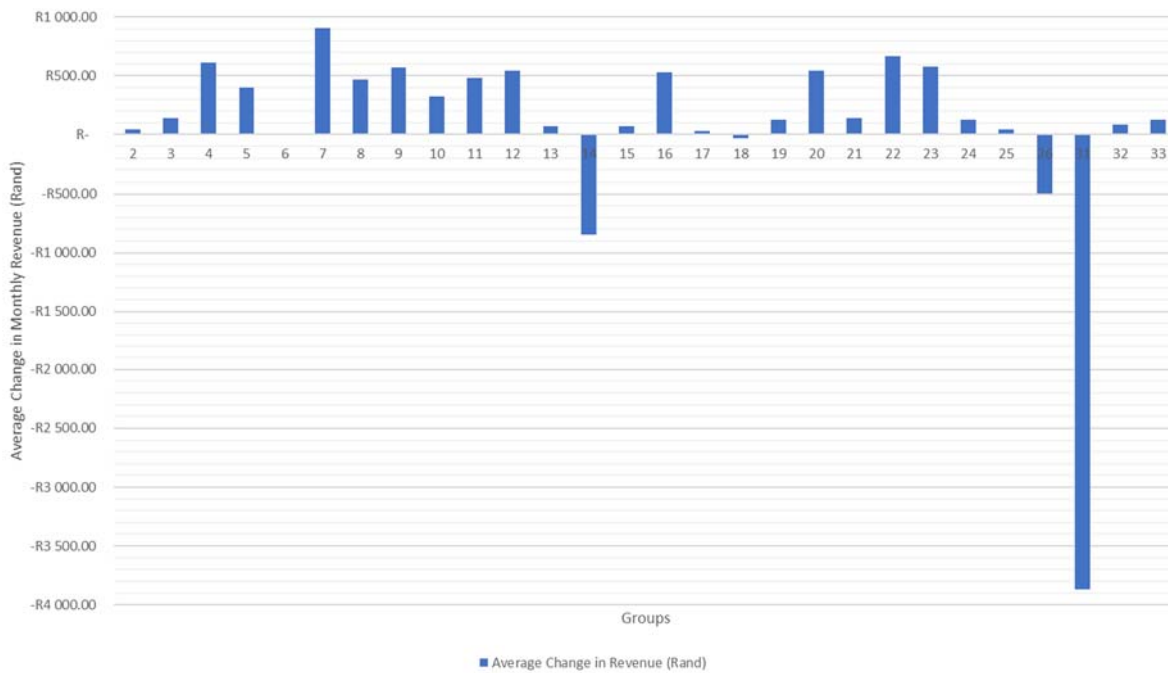


Figure 4-15: Average Change in Consumption per Age Group**Figure 4-16: Average Change in Potential Revenue per Age Group**

The following provides an indication of the Payback Periods based on age (and meter size). Age groups from 2 years to 10 years were only considered in the calculation due to the varying results as depicted in Figure 4-11 and Figure 4-12 post the 10-year mark. Monthly Potential Revenue was calculated per property and then aggregated to determine the total monthly potential revenue.

Table 4-17: Payback Periods Based on Meter Age

Meter Age	Number of Properties	15mm	40mm	50mm	80mm	100mm	Total Capital Cost (2018)	Total Increased Monthly Potential Revenue (based on 2018 Tariff)	Payback Period (Months)
		R2 708	R 6 185	R22 444	R28 291	R34 369			
2	10	10	0	0	0	0	R27 081.64	R408.70	12
3	12	10	0	0	0	2	R95 820.26	R1 661.26	12
4	46	42	0	1	1	2	R233 216.68	R28 196.74	6
5	54	49	1	1	1	2	R258 358.59	R21 558.25	8
6	70	66	2	1	1	0	R241 843.51	R319.76	16
7	96	87	1	2	1	5	R486 820.44	R86 779.18	5
8	128	119	1	4	3	1	R537 474.79	R60 102.74	7
9	141	135	2	0	2	2	R503 293.23	R80 375.00	6
10	1884	1875	3	4	0	2	R 5 254 874.96	R617 187.07	7

Refer to Annexure D

Taking into consideration the 10-year-old meter age group (as this was the largest sample size) the Payback Period is roughly 7 months.

However, considering a polynomial trendline with an order of 3, the Payback period is approximately 8 months for a meter of 10 years of age (Figure 4-17). Please note, the dataset from 6-year-old meters was excluded from the analysis due to the excessively high payback period skewing the below results.

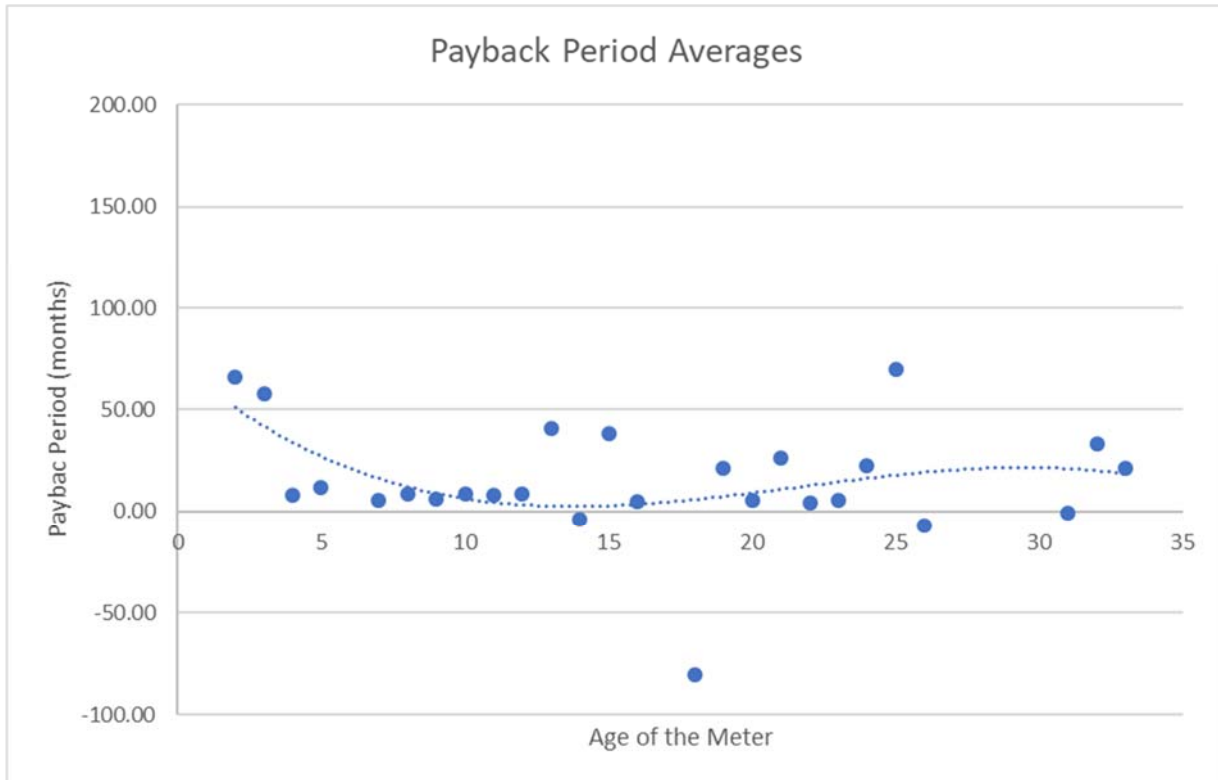


Figure 4-17: Payback Period compared to Meter Age

If meter sizes were to be considered separately in the Payback Period calculation, the following is an overview of the results.

It should be noted that the meters larger than 40 mm have only been included for information purpose, due to the low sample size being available.

Table 4-18: Payback Periods Based on Meter Age and Size

Age of the Meter	15mm				40mm				50mm				80mm				100mm			
	Number of Meters	Total Monthly Potential Revenue Change (2018 Tariff)	Total Capital Cost	Payback Period	Number of Meters	Total Monthly Potential Revenue Change (2018 Tariff)	Total Capital Cost	Payback Period	Number of Meters	Total Monthly Potential Revenue Change (2018 Tariff)	Total Capital Cost	Payback Period	Number of Meters	Total Monthly Potential Revenue Change (2018 Tariff)	Total Capital Cost	Payback Period	Number of Meters	Total Monthly Potential Revenue Change (2018 Tariff)	Total Capital Cost	Payback Period
2	10	R 408.70	R27 081.64	66.26	0				0				0				0			
3	10	-R2 437.36	R27 081.64	-11.11	0				0				0				2	R4 098.62	R68 738.62	16.77
4	42	R9 631.33	R113 742.88	11.81	0				1	R5 804.77	R22 443.69	3.87	1	-R1 810.99	R28 291.48	-15.62	2	R14 571.62	R68 738.62	4.72
5	49	R15 622.40	R132 700.03	8.49	1	-R713.39	R6 184.76	-8.67	1	-R939.09	R22 443.69	-23.90	1	-R2 984.21	R28 291.48	-9.48	2	R10 572.53	R68 738.62	6.50
6	66	-R11 372.59	R178 738.82	-15.72	2	R9 988.81	R12 369.52	1.24	1	-R1 037.42	R22 443.69	-21.63	1	R2 740.96	R28 291.48	10.32	0			
7	87	R31 498.20	R235 610.26	7.48	1	R2 380.69	R6 184.76	2.60	2	R18 876.44	R44 887.38	2.38	1	R165.98	R28 291.48	170.45	5	R33 857.87	R171 846.55	5.08
8	119	R36 795.31	R322 271.50	8.76	1	R494.99	R6 184.76	12.49	4	R22 392.19	R89 774.76	4.01	3	R1 236.30	R84 874.45	68.65	1	-R 816.05	R34 369.31	-42.12
9	135	R49 362.61	R365 602.13	7.41	2	-R3 522.15	R12 369.52	-3.51	0				2	3 901.48	R56 582.97	14.50	2	R30 633.06	R 68 738.62	2.24
10	1875	R607 995.25	R5 077 807.29	8.35	3	R2 440.08	R18 554.28	7.60	4	-R3 834.56	R 89 774.76	-23.41	0				2	R10 586.31	R68 738.62	6.49
11	86	R12 353.57	R232 902.09	18.85	3	R25 037.46	R18 554.28	0.74	2	-R1 695.96	R44 887.38	-26.47	0				2	R9 270.82	R68 738.62	7.41
12	51	R22 917.17	R138 116.36	6.03	0				2	-R3 662.42	R44 887.38	-12.26	0				2	R10 693.56	R68 738.62	6.43
13	59	R1 717.47	R159 781.67	93.03	0				1	R2 774.59	R22 443.69	8.09	0				0			
14	30	-R26 239.93	R81 244.92	-3.10	0				1	R42.02	R22 443.69	534.13	0				0			
15	123	R8 667.18	R333 104.16	38.43	0				0				0				0			
16	80	R42 457.85	R216 653.11	5.10	0				0				0				0			
17	30	R9 272.92	R81 244.92	8.76	0				1	-R8 428.86	R22 443.69	-2.66	0				0			
18	18	-R610.16	R48 746.95	-79.89	0				0				0				0			
19	114	R14 593.82	R308 730.68	21.15	0				0				0				0			
20	60	R35 085.67	R162 489.83	4.63	3	-R373.54	R18 554.28	-49.67	1	R252.14	R22 443.69	89.01	0				0			
21	25	R1 250.57	R67 704.10	54.14	0				0				1	R2 413.83	R28 291.48	11.72	0			

Impact of Water Meter Replacement on a Water Utility's Revenue

Age of the Meter	15mm				40mm				50mm				80mm				100mm			
	Number of Meters	Total Monthly Potential Revenue Change (2018 Tariff)	Total Capital Cost	Payback Period	Number of Meters	Total Monthly Potential Revenue Change (2018 Tariff)	Total Capital Cost	Payback Period	Number of Meters	Total Monthly Potential Revenue Change (2018 Tariff)	Total Capital Cost	Payback Period	Number of Meters	Total Monthly Potential Revenue Change (2018 Tariff)	Total Capital Cost	Payback Period	Number of Meters	Total Monthly Potential Revenue Change (2018 Tariff)	Total Capital Cost	Payback Period
22	8	R5 341.81	R21 665.31	4.06	0				0				0				0			
23	57	R18 506.23	R154 365.34	8.34	1	R5 210.46	R6 184.76	1.19	1	R10 555.94	R22 443.69	2.13	0				0			
24	258	R19 594.98	R698 706.28	35.66	0				1	R12 542.11	R22 443.69	1.79	0				0			
25	168	R557.03	R454 971.53	816.79	1	R14 989.25	R6 184.76	0.41	3	-R7 949.88	R67 331.07	-8.47	0				0			
26	20	-R10 506.12	R54 163.28	-5.16	0				1	R 129.89	R22 443.69	172.80	0				0			
31	1	-R3 868.77	R2 708.16	-0.70	0				0				0				0			
32	21	R1 721.78	R56 871.44	33.03	0				0				0				0			
33	2	R255.41	R5 416.33	21.21	0				0				0				0			

4.4 Volumetric age of the meter

Volumetric age data for meters was grouped as follows (please note for ease of reference Table 4-19 is a repeat of Table 3-11):

Table 4-19: Volumetric Meter Age Groups

Groups	Flow Range	Number of Properties
1	0-1000kℓ	711
2	1000-2000kℓ	629
3	2000-4000kℓ	899
4	4000-5200kℓ	348
5	5200-6750kℓ	326
6	Greater than 6750kℓ	766
Total		3679

Thereafter each Group was assessed to determine the magnitude of the deviation.

As per the meter size analysis contained in Section 4.2, each Group's total consumption pre- and post- meter replacement, as well as the average changed consumptions, were assessed (See Table 4-20).

Table 4-20: Volumetric Age Analysis

Meter Volumetric Group	Old Total Monthly Consumption (kℓ)	New Total Monthly Consumption (kℓ)	Difference in Monthly Consumption (kℓ)	Old Total Monthly Potential Revenue (Rand)	New Total Monthly Potential Revenue (Rand)	Difference in Monthly Potential Revenue (Rand)	Overall % Change in Consumption	Overall % Change in Potential Revenue	Average Change in Consumption per Property (kℓ)	Average Change in Potential Revenue per Property (Rand)	Number of Properties	% of Sample
0-1000kℓ	12 754.55	21 238.42	8 483.87	R231 843.61	R452 313.13	R220 469.52	67%	49%	11.93	R310.08	711	19%
1000-2000kℓ	14 863.13	20 092.21	5 229.08	R281 206.42	R433 081.86	R151 875.44	35%	35%	8.31	R241.46	629	17%
2000-4000kℓ	26 498.90	33 197.41	6 698.51	R531 117.01	R749 507.23	R218 390.22	25%	29%	7.45	R242.93	899	24%
4000-5200kℓ	12 479.52	16 388.80	3 909.28	R268 565.67	R406 964.53	R138 398.86	31%	34%	11.23	R397.70	348	9%
5200-6750kℓ	13 638.64	14 835.33	1 196.69	R321 794.05	R361 602.85	R39 808.80	9%	11%	3.67	R122.11	326	9%
Greater than 6750kℓ	77 564.41	86 944.83	9 380.42	R2 482 271.58	R2 834 787.32	R352 515.74	12%	12%	12.25	R460.20	766	21%
Totals	157 799.14	192 697.00	34 897.86	R 4 116 798.34	R5 238 256.92	R 1 121 458.57					3679	

Based on Table 4-20, the expectation was that the lower end volumetric groupings (meters with volumetric readings <1,000 kℓ) would yield a much smaller change in overall consumption, while the upper end (meters with volumetric readings >5,200 kℓ), where a meter is heading towards the limit of its useful lifespan, would result in a much higher change in overall consumption. However, the results indicated that the largest increase in consumption between the old meter and the new meter was where the volumetric reading of the old meter was below 1,000 kℓ. (See Figure 4-18 and Figure 4-19). When considering both the average potential revenue and average consumption, volumetric readings in excess of 6,750 kℓ yielded the highest increase. (See Figure 4-20 and Figure 4-21).

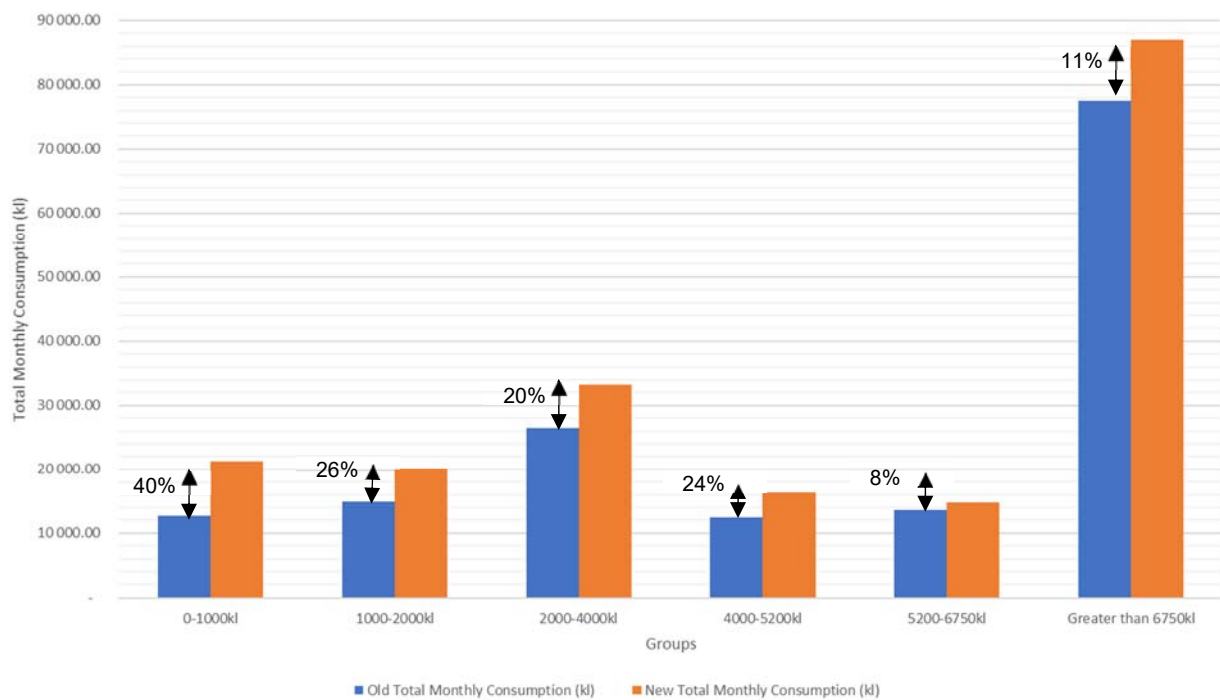


Figure 4-18: Comparison of Monthly Consumption per Volumetric Grouping

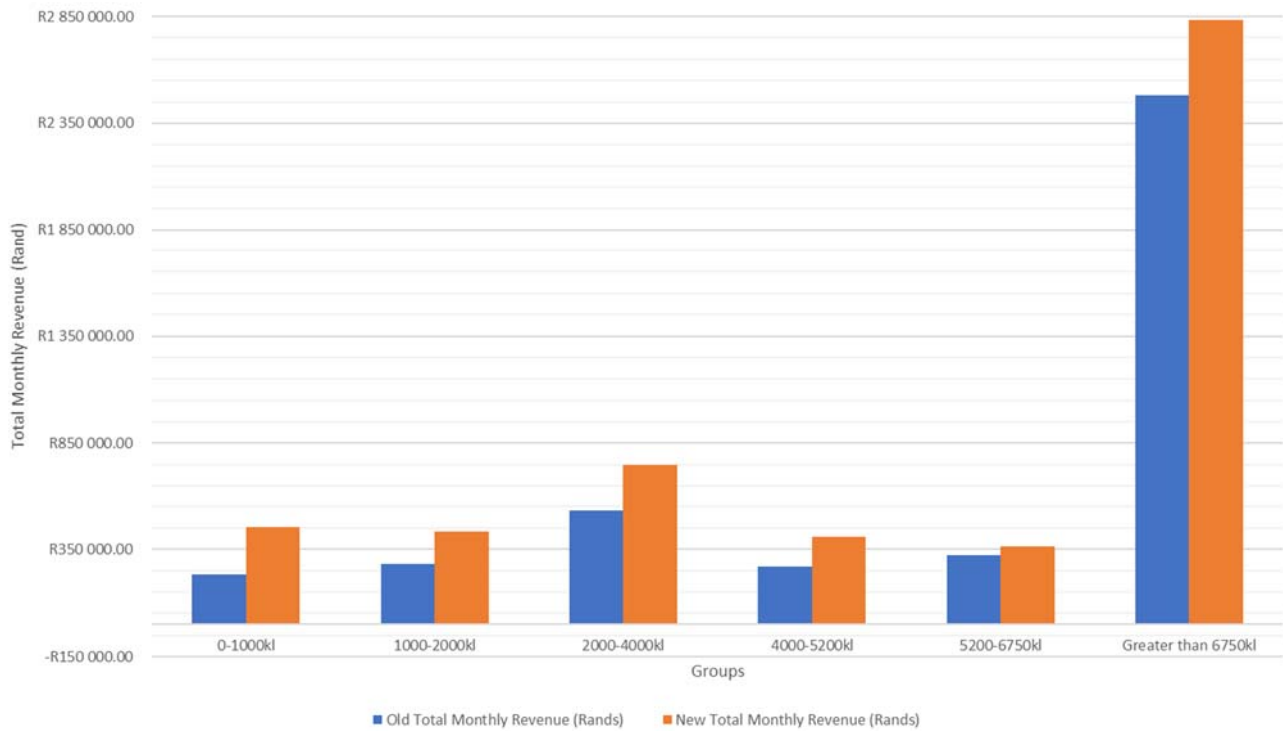


Figure 4-19: Comparison of Monthly Potential Revenue per Volumetric Grouping

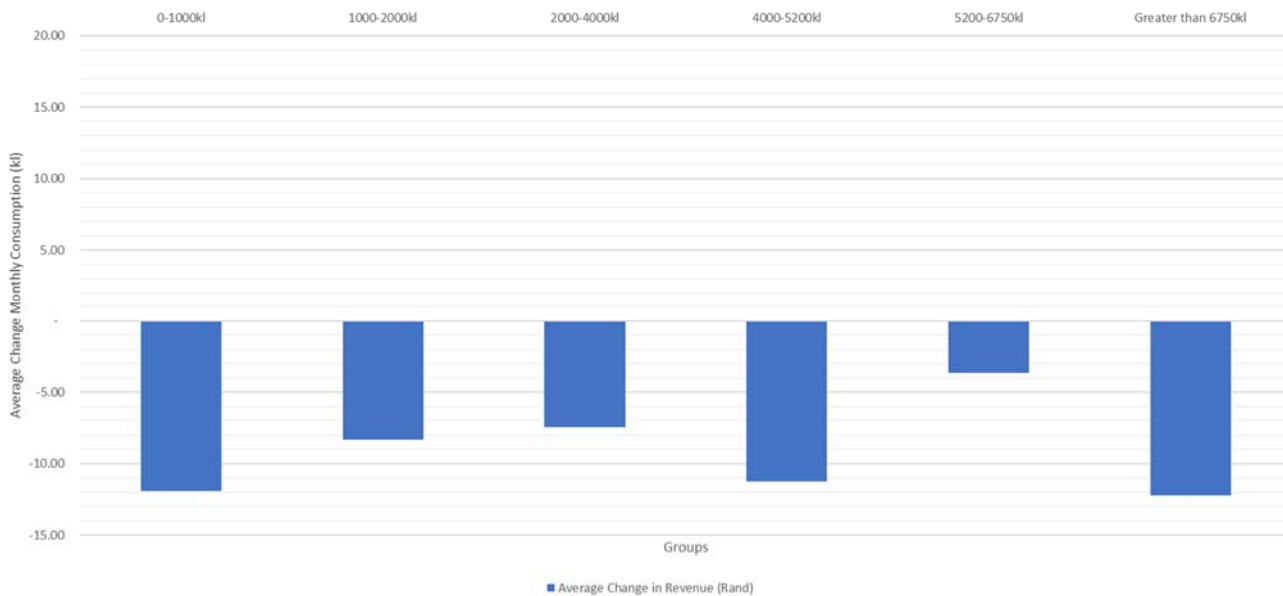


Figure 4-20: Comparison of Average Monthly Consumption per Volumetric Grouping

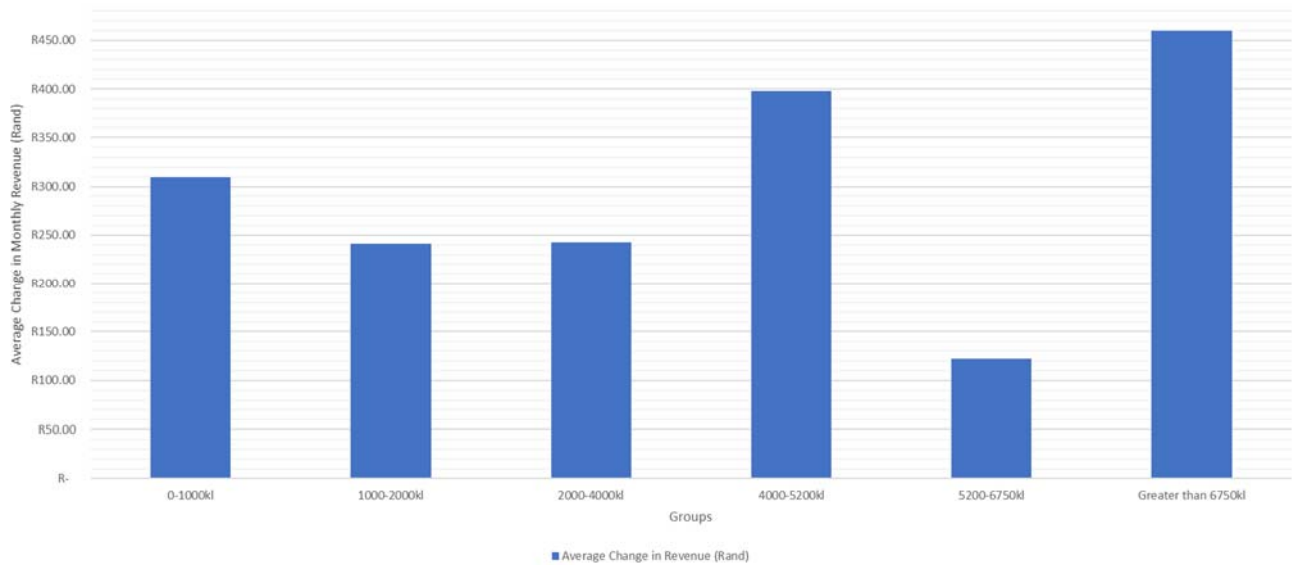


Figure 4-21: Comparison of Average Monthly Potential Revenue per Volumetric Grouping

The following provides the Payback Periods based on volumetric age (and meter size).

Table 4-21: Payback period based on Volumetric Age of the Meter

Meter Volumetric Group	Number of Properties	15mm	40mm	50mm	80mm	100mm	Total Capital Cost (2018)	Total Increased Monthly Potential Revenue	Payback Period (Months)
		R2 708	R 6 185	R22 444	R28 291	R34 369			
0-1000kl	711	711	0	0	0	0	R1 925 504.53	R220 469.52	7
1000-2000kl	629	629	0	0	0	0	R1 703 435.09	R151 875.44	7
2000-4000kl	899	894	1	2	2	0	R2 528 753.63	R218 390.22	8
4000-5200kl	348	342	1	3	0	2	R1 068 446.50	R138 398.86	6
5200-6750kl	326	320	1	2	0	3	R1 020 792.52	R39 808.80	10
Greater than 6750kl	766	707	15	20	8	15	R3 198 188.61	R352 515.74	7

Refer to Annexure E

Based on Table 4-21, the average payback period is approximately 7 months, with the shortest period being for the 4,000 to 5,200 kl volumetric reading. It should be noted that the above is based on this particular project and the total potential revenue calculated per property per month.

If meter sizes were to be considered separately in the Payback Period calculation, the following is an overview of the results (Table 4-22).

Table 4-22: Payback Period based on Volumetric Age and Size of the Meter

Volumetric Age of Meter	15mm				40mm				50mm				80mm				100mm			
	Number of Meters	Total Monthly Potential Revenue Change (2018 Tariff)	Total Capital Cost	Payback Period	Number of Meters	Total Monthly Potential Revenue Change (2018 Tariff)	Total Capital Cost	Payback Period	Number of Meters	Total Monthly Potential Revenue Change (2018 Tariff)	Total Capital Cost	Payback Period	Number of Meters	Total Monthly Potential Revenue Change (2018 Tariff)	Total Capital Cost	Payback Period	Number of Meters	Total Monthly Potential Revenue Change (2018 Tariff)	Total Capital Cost	Payback Period
0-1000kℓ	711	R220 469.52	R1 925 504.53	8.73	0				0				0				0			
1000-2000kℓ	629	R151 875.44	R1 703 435.09	11.22	0				0				0				0			
2000-4000kℓ	894	R200 523.89	R2 421 098.52	12.07	1	R494.99	R6 184.76	12.49	2	R5 846.79	R44 887.38	7.68	2	R929.98	R56 582.97	60.84	0			
4000-5200kℓ	342	R124 100.68	R926 192.05	7.46	1	-R3 945.92	R6 184.76	-1.57	3	R21 953.63	R67 331.07	3.07	0				2	-R2 123.41	R68 738.62	-32.37
5200-6750kℓ	320	R53 928.65	R866 612.44	16.07	1	R423.77	R6 184.76	14.59	2	-R1 019.59	R44 887.38	-44.03	0				3	R33 716.97	R103 107.93	3.06

An attempt was made to match the volumetric readings to the physical age of the meters (Table 4-23).

Table 4-23: Volumetric Age Groupings Compared to Chronological Age of the Meter

Meter Age	0-1000kℓ	1000-2000kℓ	2000-4000kℓ	4000-5200kℓ	5200-6750kℓ	Greater than 6750kℓ	Total
2	4	4	0	1	0	1	10
3	3	5	0	0	2	2	12
4	15	11	12	2	0	6	46
5	13	16	12	7	1	5	54
6	17	18	19	3	8	5	70
7	21	24	26	7	5	13	96
8	9	31	39	24	9	16	128
9	17	29	33	16	19	27	141
10	544	401	555	172	102	110	1884
11	7	6	21	16	10	33	93
12	8	6	12	4	7	18	55
13	8	10	14	4	6	18	60
14	3	1	11	1	4	11	31
15	8	18	57	14	11	15	123
16	5	4	13	9	9	40	80
17	1	1	11	5	3	10	31
18	0	1	2	1	5	9	18
19	2	13	6	6	14	73	114
20	3	2	2	4	1	52	64
21	0	2	3	2	4	15	26
22	0	1	0	0	1	6	8
23	1	6	7	3	9	33	59
24	7	13	22	31	63	123	259
25	12	5	18	12	29	96	172
26	2	1	2	0	2	14	21
31	0	0	0	0	0	1	1
32	1	0	2	3	2	13	21
33	0	0	0	1	0	1	2
Total	711	629	899	348	326	766	

With reference to Table 4-20, the largest increase (40 %) in total consumption was noted to have occurred in the 0-1,000 kℓ volumetric flow range. The largest increase was expected to occur in the higher volumetric regions (volumetric readings >5,200 kℓ). However, when considering Table 4-23 a large portion of the meters which are 10 years old (total number 544) occur in the low volumetric region (volumetric readings <1,000 kℓ) – it should be noted that, of these meters, only 6 were confirmed “clocked-over” meters, where the meter had started to register from zero again. This indicates that the chronological age of the meter may be contributing to the increase in total

consumption, rather than the volumetric age of the meter. Therefore, the chronological age of a meter may be a better indicator for meter replacement rather than volumetric age.

4.5 Locality of meter replacement

In order to determine whether the decrease and/or increase in consumption could potentially be linked to income levels, the location of the meters was overlaid on an aerial map of Johannesburg.

Figure 4-22 shows a graphical representation of the 3679 properties. Majority of the replacements were located in Ivory Park, which is considered to be low income.

Green dots indicate an increase in consumption

Red dots indicate a decrease in consumption

From Figure 4-22, no clear pattern can be identified that links area to consumption changes (i.e. decreases or increases were not localised to a particular area).

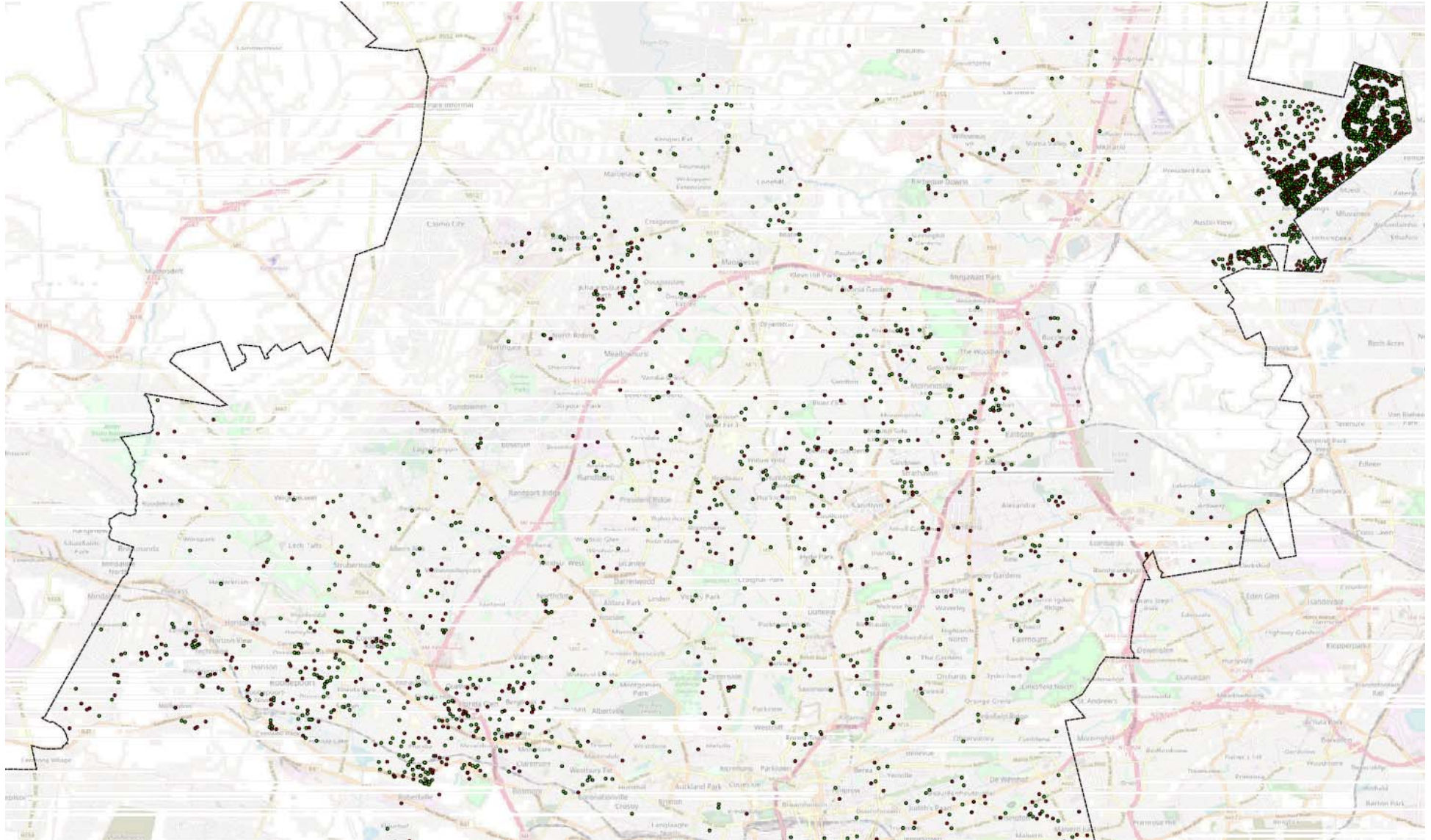


Figure 4-22: Graphical Representation of Properties Consumptions

CHAPTER 5. CONCLUSION

Water scarcity issues have traditionally been addressed through the implementation of large-scale water supply augmentation projects. However, water demand management has increasingly become a more viable and attractive alternative. Water demand management is considered a short-term project with almost immediate effects. The water demand management approach includes small changes that reduce water use for individual customers that will eventually amount to a significant reduction in the overall water demand (Friedman et al. 2011).

As a result, large-scale meter replacement or installation projects are widely recognised as an efficient means to reduce water usage. Johannesburg Water (SOC) Ltd, has the objective to ensure the effective and efficient metering of water being supplied to customers within its area of jurisdiction. Between 2013 and 2015, Johannesburg Water implemented a large-scale meter replacement project (more than 50,000 meter replacements) throughout its area of authority. In consideration of the large Capital cost of the implementation of the project, the purpose of the investigation was to determine the effect of the large-scale meter replacement on the Water Utility's overall potential revenue and whether there was a Return on Investment. Additionally, the investigation aimed to propose an optimal maintenance and replacement timeframe for meters employed by Johannesburg Water, taking into account a meter's chronological age, volumetric age, and size.

5.1 Summary of Findings

The investigation aimed to address three questions related to large-scale meter replacement projects and thereafter address some key hypotheses.

5.1.1 Impact of meter size on potential revenue generation

Current practice, with particular reference to the Johannesburg Water meter replacement project, is for meters to be replaced size-for-size (i.e. 50 mm diameter meter would be replaced with a 50 mm meter), unless there were extenuating circumstances to negate this approach. Further, with the introduction of the 15 mm diameter meter, all existing 20 mm and 25 mm meters supplying residential properties were replaced with 15 mm diameter meters. The sample did not include any meters which were replaced like-for-like (i.e. 15 mm with a 15 mm); this may be as a result of the 15 mm meter only being introduced in more recent years, with no older 15 mm meters being found in the field.

The variation in size has a direct impact on the meter's ability to measure the required flow at a particular property, and therefore the revenue generation can potentially be impacted. Therefore, the investigation aimed to quantify the overall impact that meter sizing had on the potential revenue generated by the Water Utility.

The largest sample group obtained (65 % of the sample), consisted of 20 mm meters which were replaced with 15 mm meters. This sample group indicated an increase in average monthly consumption after replacement (Table 4-10). The increase in associated potential revenue was approximately R266.70 per property per month (Table 4-10).

Similarly, when considering the 25 mm diameter old meters which were replaced with a new meter of 15 mm diameter, there was an increase in associated potential revenue. The increase in associated potential revenue was approximately R203.08 per property per month (Table 4-10), based on average monthly consumption. There appears to be a balance between the increase and decrease in average monthly consumption and potential revenue, with the average increase only slightly outweighing the average decrease. However, this may imply that, in general, the 20 mm and 25 mm meters may have been slightly oversized, and with the introduction of the 15 mm meter there is a potential to register more of the lower end user's consumption.

It should be noted, however, that this variation in consumption may also be linked to the fact that a newer meter replaced the older, less accurate, meter.

5.1.2 Meter reading accuracy

It has become a generally accepted norm that meter accuracy degrades over time (Stoker et al. 2012), as a result of mechanical wear of the moving parts. Therefore, by installing a new water meter there should be an improvement in the overall accuracy of the reading as well an increase in potential revenue. Therefore, meter accuracy is directly linked to the chronological age of a water meter.

With the premise that meter accuracy decreases over time, is there an optimal time when a meter is to be replaced. The largest sample size available for evaluation consisted of meters with a chronological age of 10 years (1,884 meters, which made up 51.21 % of the total sample available). This sample group provided the relatively largest overall increase in consumption and potential revenue with 27.9 % and 35.18 % respectively (Table 4-15). This appears to be in line with the recommendation made by Davis (2005), that water meters should be replaced after 10 years of operation.

By comparing the average change in monthly consumption, against the meter chronological age, for the sample between 2 and 10 years of age, there appears to be a general increase in monthly consumption, suggesting that the older a meter gets, the more potential there is for under-registration and thus potential revenue loss (Figure 4-14). An exact optimum age for meter replacement could not be determined based on the sample under evaluation. It should be noted that although the data included meters in excess of 12 years of age, the sample size per year was relatively small, which resulted in inconsistencies in the data.

5.1.3 Proposed maintenance plan

With reference to Table 2-5, different literature has proposed chronological age or volumetric age as potential indicators which can be used to determine the best replacement period for water meters.

Based on Table 4-20 the greatest increase in total consumption was noted to have occurred in the 0-1,000 kℓ volumetric flow range, with an increase of 40 %, where the largest increase was expected to occur in the higher volumetric regions. However, when considering Table 4-23, a large portion of the meters which are 10 years old (total number 544) occur in this volumetric region and therefore the physical age of the meter may be contributing to this greater increase in consumption, which would imply that chronological age of a meter may be a better indicator for meter replacement rather than volumetric age. It should be noted that of the 544 meters in this range, only 6 were confirmed “clock-over” meters, where the meter reading starts from zero again.

Furthermore, Table 4-13 provides an indication that the payback period for 100 mm meters was longer (12 months) when compared to the standard domestic water meter (15 mm diameter meter indicated a payback period of 8 months). Based on the above, meters in excess of 40 mm diameter see a longer return on investment when compared to the standard domestic meters (15 mm to 25 mm diameter meters), this is based on the large capital outlay for the bulk meter installations.

5.1.4 Payback periods

The assumption was made at the onset of the investigation that Capital Costs associated with the replacement of water meters exceed the increase in potential revenue associated with the installation of a new Water Meter, therefore resulting in an extended pay-back period to recover the overall capital costs.

The investigation took into account the Payback Period for various groupings, including:

- Overall impact of large-scale meter replacement project (Section 4.1)
- Meter size (Section 4.2)
- Chronological age of the meter (Section 4.3)
- Volumetric age of the meter (Section 4.4)

For the overall impact of the large-scale meter replacement project, the average monthly potential revenue increase was calculated for the entire sample (3,679 properties). This translated to an average monthly potential revenue increase per property per month of approximately R319 (Figure 4-2).

To determine an approximate Payback Period, only the newly installed 15 mm meters were taken into consideration, as this was the largest sample size (3,603 of the 3,679 properties), see Figure

4-3. This resulted in an average monthly potential revenue increase of approximately R 261/month. Payback Periods were calculated utilising the replacement costs as in 2018 for the 15 mm diameter meters, which resulted in 10.4 months payback period Equation 3-5).

Upon review of the meter sizing variations, an analysis of the Payback Period was completed for the following groupings:

- Group 1 (20 mm meter replaced by 15 mm meter);
- Group 2 (25 mm meter replaced by 15 mm meter);
- Group 6 (40 mm meter replaced by 40 mm meter);
- Group 9 (50 mm meter replaced by 50 mm meter); and
- Group 11 (100 mm meter replaced by 100 mm meter).

By applying Equation 3-5 the payback periods were determined to be (Table 4-13):

- Group 1 – 8 months
- Group 2 – 11 months
- Group 6 – 14 months
- Group 9 – 14 months
- Group 11 – 12 months

When reviewing Group 11, it should be noted that the overall replacement cost of the bulk meter (100 mm diameter meter) is significantly higher than a standard domestic (15 mm diameter meter); resulting in the higher payback periods.

As chronological age is a significant factor when considering meter accuracy degradation, the Payback Period was reviewed for the meters aged 2 years old to 10 years old (Table 4-17). Meters aged 3 and 4 years old had an average Payback period of 66.2 and 57.7 months respectively. In comparison, meters aged 7, 8, 9 and 10 years old had Payback Periods of 5.6, 8.9, 6.3 and 8.5 months respectively. Therefore, it appears that old meters are resulting in a higher inaccuracy with regards to meter readings. As a result, there is an associated increase in potential revenue post-meter replacement, as a result of the newly installed meter being more accurate. This would then reduce the Payback Period for older meters. It was noted that meters aged 6 years old provided a Payback Period of 756.3 months – however, this can be attributed to a potential meter outlier, which had a significant reduction in potential revenue. It should be noted that these results are specific to this project, taking into consideration the losses also encountered at some properties.

An alternative factor which is considered regarding meter accuracy degradation is volumetric age of the meter. The Payback Period was calculated for the following flow ranges (Table 4-21):

- 0 – 1,000 kℓ = Payback Period 7 months
- 1,000 – 2,000 kℓ = Payback Period 7 months
- 2,000 – 4,000 kℓ = Payback Period 8 months
- 4,000 – 5,200 kℓ = Payback Period 6 months
- 5,200 – 6,750 kℓ = Payback Period 10 months
- Greater than 6,750 kℓ = Payback Period 7 months

The expectation was that the higher the volumetric reading, the lower the associated Payback Period. However, flow range 5,200 – 6,750 kℓ returned a Payback Period comparable to the 0 – 1,000 kℓ range. In order to attempt to assess the reason behind this result, a further comparison was done between the chronological age of the meters within these various flow ranges. It was noted a sizeable number of meters (544 meters) aged 10 years old appeared within the 0 – 1,000 kℓ flow range (Table 4-23). Therefore, the chronological age of the meter may have a larger impact on meter accuracy when compared to the volumetric age. Therefore Ncube (2015) and Mutikanga (2012) recommendations of 8 Mℓ as an appropriate guideline for meter replacement could not be validated. However, the above appears to be in line with Viyakesparan's (2010) findings that the maximum errors in meter readings occurs at a cumulative volume of 3.9 Mℓ. Further this also validates Viyakesparan's (2010) conclusion that there is no relationship between meter chronological age and cumulative volume and that both need to be considered in order to determine an optimum meter replacement period for a specific water utility.

When comparing the various results across the separate Payback Period groupings, on average the Payback Periods are below a year. However, when considering meter chronological age, there is a significant difference between meters 2 years old when compared to meters of 10 years of age, therefore indicating that chronological age of the meter must be considered when assessing a meter's replacement potential.

5.1.5 Return on Investment

In general, large-scale meter replacement projects result in increased potential revenue generation for the Water Utility, as per Section 5.1.4. Returns on Investment can be seen on average after approximately 12 months.

Following the meter size analysis, Table 4-12 indicates that the overall (total monthly potential revenue for a particular meter size) percentage increase in potential revenue for old meters (20 mm in diameter) replaced with 15 mm new meters amounted to 30 %. Furthermore, 100 mm bulk consumer meters showed an increase of 24 % in overall potential revenue. With the payback periods being 8 and 12 months respectively (Table 4-13), the Water Utility can expect to see a Return on

Investment of approximately 30 % and 24 % on these particular sizes after their particular Payback Periods. It should be noted, that where the meter diameter was changed from an old meter of 50 mm diameter to 40 mm diameter new meters, there was a reduction in overall potential revenue of 35 % (Table 4-12). This is assumed to be directly related to the potential incorrect sizing of the new meter, based on actual consumer consumption, highlighting the importance of adequate sizing exercises occurring prior to meter replacement. It should be noted however that this sample size was only one meter, which is not significant enough to assert this conclusion with confidence.

The chronological age of the meter had a direct effect on the revenue generated per property, with one of the highest increases in average potential revenue (total monthly potential revenue for a meter of a particular age) occurring at meters which were replaced at 10 years of age (35.18 % increase in potential monthly revenue) (Table 4-15). This further suggests that targeted meter replacement, with a focus on aged meters, would result in a higher Return on Investment.

5.2 Concluding Remarks

In conclusion, based on the available sample sizes, definite answers to the proposed research questions cannot be obtained; however, some district patterns have been noted which can assist in further research. Each Water Utility is facing its own unique challenges and, therefore, unique maintenance plans need to be developed per Water Utility. There does not appear to be a one-size-fits-all type solution with regards to meter maintenance. However, in terms of the above investigation the following factors can be considered when developing a maintenance plan:

- Bulk meters can yield a higher Return on Investment, but with a larger capital outlay and a slightly longer payback period. Therefore, high-end consumers should be targeted for meter maintenance (Top 100 consumers)
- Meter sizing may impact the overall performance of the meter. This is indicative when considering the old meter size 25 mm being replaced with a new 15 mm meter, where an increase in measured consumption was noted.
- There appears to be a general increase in potential revenue as meters progress to 10 years of age. Therefore, by targeting older meters, a higher Return on Investment is envisaged.
- Volumetric age did not appear to provide a district indicator in terms of replacement period and optimum timing thereof.

5.3 Limitations and Directions for Future Research

Listed below are limitations that were encountered during this study, or that were known well in advance of the commencement of this study. Many of these limitations may provide opportunity for further research.

- The sample sizes for meter ages were very small, ranging between 1 to 1,800 properties. These sample sizes do not provide a satisfactory representation of potential changes in consumption based on meter chronological and volumetric age. Therefore, future studies need to consider a larger meter sample size per age category.
- The bulk meters' sample size was very small (75 meters). Future studies should consider a larger sample size of bulk meters.
- The study did not consider the impact of the varying classes of meters installed.
- The study did not compare the varying meter types or manufacturers.
- The study did not compare the benefits of alternative meter types (i.e. mechanical meters versus electromagnetic meters).
- The study did not quantify any forms of on-property leakage or night flows and was limited to a direct review of actual readings. Further, it should be noted that by utilising reading information there is the potential for human error.
- The study did not quantify customer awareness, which may have impacted overall consumption patterns as a result of meter replacement
- The study did not compare various property activities against consumption patterns (for example, general domestic compared to business services)
- The study did not compare meter supplier datasheets and characteristics, which may have resulted in varied meter readings based on the various manufacturer performance characteristics.

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Annexure A – NPV Calculations

SGID		Old Rev	New Rev	Change in Consumption	i = 5.3% NPV	5.3% Cost		R 2708.00		4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21																							
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TOR001150000000025800001000000000	R	428.72	396.99	-R	31.72																																													
TOR02123004000000009910000R00000000	R	2944.73	2725.90	-R	218.83																																													
TOR03450030000026800000000000000000	R	134.62	479.80	R	345.18	6	-R	2708.00	-R	2243.89	-R	1712.39	-R	1170.98	-R	671.68	-R	252.20	R	68.21	R	287.98	R	418.88	R	480.03	R	492.36	R	474.56	R	441.10	R	401.80	R	362.50	R	326.15	R	293.82	R	265.59	R	241.08	R	219.76	R	201.11	R	184.68
TOR01160000000000000000000000000000	R	1883.32	998.00	-R	885.32																																													
TOR02920590000005980000100000000000	R	1250.48	2166.22	R	915.74	3	-R	2708.00	-R	1702.05	-R	709.15	R	176.94	R	888.75	R	1393.84	R	1694.20	R	1818.16	R	1808.65	R	1711.65	R	1567.62	R	1407.11	R	1249.92	R	1106.68	R	981.46	R	874.36	R	783.47	R	706.26	R	640.24	R	583.26	R	533.62	R	489.98
TOR03580000000000767000010000000000	R	1074.97	110.64	-R	964.32																																													
TOR05140790000109700100000000000000	R	146.49	216.02	R	69.53	11	-R	2708.00	-R	2505.67	-R	2197.07	-R	1822.19	-R	1425.55	-R	1047.43	-R	717.34	-R	451.28	-R	252.55	-R	114.98	-R	27.12	R	24.03	R	50.35	R	61.26	R	63.47	R	61.30	R	57.26	R	52.70	R	48.25	R	44.15	R	40.47	R	37.19
TOR09610000000000000000000000000000	R	16.66	239.41	R	222.75	8	-R	2708.00	-R	2360.16	-R	1927.67	-R	1460.22	-R	1006.52	-R	605.41	-R	280.70	-R	40.37	R	120.65	R	215.75	R	261.62	R	274.45	R	267.54	R	250.54	R	229.68	R	208.51	R	188.75	R	171.03	R	155.43	R	141.76	R	129.76	R	119.17
TOR09670800000000029000000000000000	R	251.28	447.94	R	196.66	8	-R	2708.00	-R	2384.94	-R	1973.55	-R	1521.86	-R	1077.88	-R	680.68	-R	355.06	-R	110.35	R	57.10	R	159.43	R	212.46	R	231.81	R	230.56	R	218.31	R	201.38	R	183.44	R	166.36	R	150.88	R	137.18	R	125.14	R	114.55	R	105.21
TOR05870010000010300000000000000000	R	394.16	1153.19	R	759.03	4	-R	2708.00	-R	1850.87	-R	984.70	-R	193.28	-R	460.16	-R	914.74	R	1247.60	R	1397.87	R	1426.93	R	1373.37	R	1272.29	R	1150.97	R	1022.76	R	913.07	R	811.46	R	723.78	R	648.98	R	585.23	R	530.60	R	483.42	R	442.30	R	406.13
TOR02162002000035900000000000000000	R	500.54	650.20	R	149.67	9	-R	2708.00	-R	2429.57	-R	2056.17	-R	1632.88	-R	1206.40	-R	816.25	-R	488.97	-R	236.37	-R	57.36	R	57.99	R	123.90	R	155.00	R	163.94	R	160.26	R	150.40	R	138.29	R	126.03	R	114.59	R	104.31	R	95.20	R	87.17	R	80.07
TOR02031200000000009420000000000000	R	340.85	418.53	R	77.67	11	-R	2708.00	-R	2497.93	-R	2182.76	-R	1802.95	-R	1403.28	-R	1033.94	-R	694.13	-R	429.44	-R	232.72	-R	97.41	-R	11.77	R	37.34	R	61.89	R	71.32	R	72.31	R	69.12	R	64.25	R	58.99	R	53.94	R	49.34	R	45.21	R	41.55
TOR03450030000257200000000000000000	R	154.90	308.24	R	153.34	9	-R	2708.00	-R	2426.08	-R	2049.72	-R	1624.21	-R	1196.36	-R	805.66	-R	478.51	-R	226.53	-R	48.42	-R	65.91	R	130.81	R	161.00	R	169.14	R	164.79	R	154.38	R	141.82	R	129.18	R	117.42	R	106.87	R	97.54	R	89.31	R	82.03
TOR07071400200000942000020000000000	R	29.82	443.85	R	414.03	6	-R	2708.00	-R	2178.51	-R	1591.32	-R	1008.32	-R	483.37	-R	53.56	R	264.43	R	472.63	R	586.59	R	628.66	R	622.12	R	587.10	R	538.70	R	486.86	R	437.20	R	392.30	R	352.91	R	318.77	R	289.25	R	263.63	R	241.24	R	221.53
TOR0206001000000000033000090000000000	R	481.49	457.33	-R	24.15																																													
TOR01140000000004602000140000000000	R	1935.35	4339.57	R	2404.22	2	-R	2708.00	-R	288.49	R	1908.11	R	3693.40	R	4959.60	R	5688.03	R	5936.07	R	5810.08	R	5434.30	R	4924.69	R	4372.76	R	3839.94	R	3359.95	R	2945.56	R	2596.20	R	2304.52	R	2060.87	R	1855.87	R	1681.54	R	1531.56	R	1401.08	R	1286.45
TOR06680000000000072000000000000000	R	11826.48	5083.36	-R	6743.12																																													
TOR07670600002841000000000000000000	R	668.59	293.53	-R	375.06																																													
TOR0936002000020236000000000000000000	R	26.97	1428.19	R	1401.22	2	-R	2708.00	-R	1241.01	R	144.49	R	1323.86	R	2216.49	R	2794.42	R	3077.71	R	3120.15	R	2991.19	R	2759.61	R	2482.54	R	2200.59	R	1938.12	R	1706.44	R	1508.12	R	1340.82	R	1200.11	R	1081.22	R	979.87	R	892.56	R	816.55	R	749.76
TOR05820013000000037000010000000000	R	997.76	1102.59	R	104.82	10	-R	2708.00	-R	2472.15	-R	2135.02	-R	1738.81	-R	1329.03	-R	945.61	-R	616.77	-R	356.63	-R	166.59	-R	38.80	R	39.39	R	81.71	R	100.38	R	104.86	R	101.76	R	95.21	R	87.55	R	79.96	R	72.94	R	66.63	R	61.04	R	56.07
TOR02115000000000000000000000000000	R	1001.38	400.85	-R	600.53																																													
TOR02123002000006050000000000000000	R	3561.02	1258.06	-R	2302.96																																													
TOR01560010000066400000000000000000	R	609.73	557.90	-R	51.83																																													
TOR02160020000957800015000000000000	R	10.98	24.67	R	13.68	14	-R	2708.00	-R	2558.71	-R	2295.28	-R	1954.13	-R	1578.30	-R	1208.56	-R	876.50	-R	601.07	-R	388.59	-R	235.55	-R	132.37	-R	67.25	-R	28.83	-R	7.74	R	2.88	R	7.63	R	9.33	R	9.56	R	9.18	R	8.57	R	7.92	R	7.30
TOR02170070000333800018000000000000	R	163.55	394.02	R	230.47	8	-R	2708.00	-R	2352.83	-R	1914.09	-R	1441.98	-R	985.40	-R	583.13	-R	258.69	-R	19.66	R	139.47	R	232.42	R	276.18	R	287.08	R	278.49	R	260.08	R	238.06	R	215.93	R	195.38	R	177.00	R	160.84	R	146.68	R	134.26	R	123.30
TOR02520000000002450000500000000000	R	268.27	249.41	-R	18.85																																													
TOR02520000000034500004000000000000	R	635.94	565.20	-R	70.74																																													
TOR05110030000039300000000000000000	R	54.37	51.11	-R	3.27																																													
TOR07140020000004360000500000000000	R	68.37	41.65	-R	26.72																																													
TOR0700000000000001500000R0000000000	R	1157.69	1613.58	R	455.89	5	-R	2708.00	-R	2138.76	-R	1517.72	-R	909.43	-R	368.90	R	67.19	R	383.71	R	584.89	R	688.54	R	719.01	R	701.00	R	655.51	R	598.04	R	538.57	R	482.60	R	432.52	R	388.83	R	351.10	R	318.54	R	290.30	R	265.63	R	243.92
TOR0909000000000003650000R0000000000	R																																																	

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TOIR02760000000009390004000000000000	R	556.31	R 615.67	R	59.36	11	-R 2 708.00	-R	2 515.32	-R	2 214.95	-R	1 846.21	-R	1 453.36	-R	1 076.76	-R	746.31	-R	478.55	-R	277.32	-R	136.93	-R	46.28	7.41	R	35.93	R	48.70	R	52.44	R	51.53	R	48.53	R	44.85	R	41.13	R	37.67	R	34.54	R	31.75																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
TOIR0313640000000077000010000000000000	R	1 864.04	R 2 561.40	R	697.36	4	-R 2 708.00	-R	1 909.44	-R	1 093.14	-R	338.98	-R	291.49	-R	763.82	-R	1 071.84	-R	1 232.48	-R	1 276.71	-R	1 240.24	-R	1 156.06	R	1 050.17	R	940.34	R	836.88	R	744.55	R	664.53	R	596.05	R	537.59	R	487.46	R	444.13	R	406.35	R	373.13																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
TOIR0319000000000740000100000000000000	R	80.84	R 455.29	R	374.45	6	-R 2 708.00	-R	2 216.10	-R	1 660.93	-R	1 101.84	-R	591.63	-R	167.76	-R	151.62	-R	366.47	-R	490.17	-R	543.21	-R	547.52	R	522.40	R	482.59	R	437.96	R	394.25	R	354.27	R	318.94	R	288.20	R	261.56	R	238.41	R	218.17	R	200.34																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
TOIR0350000000000008800011000000000000	R	7.34	R 48.35	R	41.01	12	-R 2 708.00	-R	2 532.76	-R	2 247.23	-R	1 889.57	-R	1 503.56	-R	1 129.72	-R	798.62	-R	527.77	-R	322.03	-R	176.56	-R	80.87	-R	22.59	R	9.91	R	26.02	R	32.53	R	33.89	R	32.78	R	30.67	R	28.29	R	25.98	R	23.85	R	21.93																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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				7.09																					
TOHQ060400000000071700007000000000	R 437.68	R 1198.22	760.55	4 -R 2 708.00 -R	1 849.43 -R	982.04 -R	189.70	R 464.31	R 946.11	R 1251.92	R 1401.94	R 1430.62	R 1376.64	R 1275.14	R 1153.45	R 1029.91	R 914.95	R 813.10	R 725.24	R 650.28	R 586.40	R 531.67	R 484.39	R 443.18	R 406.94
TOHQ06080000000000000000000000000000	R 385.44	R 455.09	69.65	11 -R 2 708.00 -R	2 505.56 -R	2 196.87 -R	1 821.92	R 1 425.24 -R	1 047.10 -R	717.01 -R	450.97 -R	252.27 -R	114.74 -R	26.90	R 24.22	R 50.51	R 61.40	R 63.60	R 61.41	R 57.36	R 52.79	R 48.33	R 44.22	R 40.54	R 37.25
TOHQ01211030000174100000000000000000	R 764.87	R 640.69	-124.19	2 -R 2 708.00 -R	1 275.35	R 80.90	R 1 238.43	R 2 117.59	R 2 690.09	R 2 974.65	R 3 023.17	R 2 903.10	R 2 681.54	R 2 414.38	R 2 141.49	R 1 886.86	R 1 661.77	R 1 468.89	R 1 306.07	R 1 169.07	R 1 053.28	R 954.57	R 869.52	R 795.48	R 730.41
TOHQ01210550000219000000000000000000	R 1565.00	R 2 930.06	1365.06																						
TOHQ0130000000004300000R0E0000000000	R 1038.75	R 300.07	-738.68																						
TOHQ01460000000011130000000000000000	R 5661.58	R 86.33	-5575.25																						
TOHQ01260010000629000010000000000000	R 794.46	R 910.29	115.83	10 -R 2 708.00 -R	2 461.70 -R	2 115.67 -R	1 712.82	R 1 298.94	R 913.87	-R 585.41	-R 327.13	-R 139.79	-R 15.06	60.12	R 99.70	R 115.97	R 118.45	R 113.69	R 105.78	R 96.99	R 88.45	R 80.63	R 73.64	R 67.45	R 61.96
TOHQ01260130001057300000000000000000	R 640.08	R 5 763.66	5 123.58	1 -R 2 708.00 -R	2 294.00	R 668.69	R 10 117.78	R 12 396.82	R 13 533.25	R 13 685.72	R 13 103.10	R 12 058.15	R 10 794.73	R 9 497.59	R 8 284.57	R 7 214.87	R 6 305.10	R 5 546.24	R 4 917.36	R 4 394.61	R 3 956.15	R 3 583.95	R 3 264.05	R 2 985.88	R 2 741.55
TOHQ02200000000021400003000000000000	R 30.21	R 598.92	568.71	5 -R 2 708.00 -R	2 031.62 -R	1 319.35 -R	642.91	-R 60.35	R 392.67	R 705.22	R 887.45	R 963.35	R 962.54	R 913.61	R 839.90	R 757.97	R 677.95	R 604.99	R 540.92	R 485.65	R 438.23	R 397.46	R 362.17	R 331.38	R 304.29
TOHQ02670260000333200000000000000000	R 977.76	R 767.08	-210.68																						
TOHQ02700000000272500000000000000000	R 74.62	R 266.19	191.57	8 -R 2 708.00 -R	2 389.77 -R	1 982.49 -R	1 533.88	R 1 091.79 -R	695.35 -R	369.55 -R	123.99	R 44.71	R 148.45	R 202.87	R 223.50	R 223.35	R 212.03	R 195.86	R 178.55	R 161.99	R 146.96	R 133.62	R 121.90	R 111.59	R 102.49
TOHQ02760000000146900020000000000000	R 101.97	R 213.32	111.35	10 -R 2 708.00 -R	2 465.95 -R	2 123.54	R 1 723.38	R 1 311.17 -R	926.77	-R 598.15	-R 339.12	-R 150.68	-R 24.71	R 51.70	R 92.39	R 109.63	R 112.93	R 108.84	R 101.48	R 93.15	R 85.00	R 77.51	R 70.79	R 64.84	R 59.57
TOHQ02760040000081500000000000000000	R 454.53	R 412.40	-42.13																						
TOHQ02760060000126100000000000000000	R 3 632.99	R 140.65	-3 492.34																						
TOHQ02760250000337200000000000000000	R 1 430.77	R 1 170.06	-260.71																						
TOHQ02760250000340500002000000000000	R 762.44	R 1 126.77	364.33	6 -R 2 708.00 -R	2 225.71 -R	1 678.72 -R	1 125.74	-R 619.31	-R 196.95	122.78	R 339.34	R 465.52	R 521.37	R 528.45	R 505.86	R 468.25	R 425.46	R 383.28	R 344.55	R 310.25	R 280.38	R 254.48	R 231.96	R 212.27	R 194.93
TOHQ02760330000362700000000000000000	R 1 545.03	R 1 899.29	354.25	6 -R 2 708.00 -R	2 235.28 -R	1 696.43	-R 1 149.54	-R 646.86	-R 226.02	94.07	R 312.31	R 440.98	R 499.62	R 509.46	R 489.39	R 453.96	R 413.01	R 372.35	R 334.87	R 301.61	R 272.60	R 247.43	R 225.54	R 206.40	R 189.54
TOHQ02760330000367700000000000000000	R 669.56	R 1 015.44	345.88	6 -R 2 708.00 -R	2 243.23 -R	1 711.16 -R	1 169.33	-R 669.77	-R 250.18	70.20	R 289.85	R 402.58	R 481.54	R 493.67	R 475.70	R 442.09	R 402.66	R 363.26	R 326.82	R 294.42	R 266.13	R 241.57	R 220.21	R 201.52	R 185.06
TOHQ03303000000379100000000000000000	R 262.70	R 822.58	559.87	5 -R 2 708.00 -R	2 040.01	-R 1 334.88	-R 663.78	-R 84.51	-R 367.18	-R 680.04	-R 863.76	-R 941.83	-R 943.47	-R 896.96	-R 825.47	-R 745.45	-R 667.03	-R 595.41	-R 532.43	-R 478.07	-R 431.41	-R 391.28	-R 356.54	-R 326.23	-R 299.56
TOHQ03450010000079500000000000000000	R 828.65	R 1 933.90	1 105.25	3 -R 2 708.00 -R	1 522.08	R 375.92	R 634.65	R 1 407.05	R 1 940.57	R 2 334.26	R 2 326.40	R 2 270.27	R 2 120.73	R 1 904.77	R 1 716.85	R 1 518.56	R 1 340.80	R 1 187.05	R 1 056.44	R 946.11	R 852.63	R 772.81	R 704.00	R 644.07	R 591.39
TOHQ04000000000071000000000000000000	R 87.10	R 305.60	218.49	8 -R 2 708.00 -R	2 364.20 -R	1 935.15 -R	1 470.28	-R 1 018.16	-R 617.69	-R 51.78	-R 110.29	-R 206.56	-R 253.61	-R 267.50	-R 261.51	-R 245.29	-R 225.07	-R 204.42	-R 185.10	-R 167.75	-R 152.46	-R 139.05	-R 127.28	-R 116.89	-R 106.89
TOHQ0460000000001000000R0E0000000000	R 114.70	R 727.03	612.34	4 -R 2 708.00 -R	1 990.18 -R	1 242.64 -R	539.83	-R 58.97	-R 518.54	-R 829.55	-R 1 004.46	-R 1 069.62	-R 1 056.72	-R 995.84	-R 911.21	-R 819.82	-R 731.85	-R 652.32	-R 582.84	-R 523.09	-R 471.93	-R 427.98	-R 389.97	-R 356.81	-R 327.64
TOHQ047800000000140600000R0E00000000	R 565.20	R 380.95	-184.25																						
TOHQ06060000000039400000000000000000	R 4 602.59	R 1 398.86	-3 203.73																						
TOHQ06060000000058500000000000000000	R 243.32	R 93.51	-149.81																						
TOHQ06610010000010300000000000000000	R 602.77	R 526.24	-76.53																						
TOHQ06650270000008500000000000000000	R 2 892.43	R 1 625.02	-1 267.41																						
TOHQ07080000000015500000000000000000	R 72.65	R 58.00	-14.65																						
TOHQ0747000000000000300030000000000000	R 385.49	R 4 823.82	R 4 438.38	1 -R 2 708.00 -R	1 643.29	R 5 484.86	R 8 499.01	R 10 522.85	R 11 556.48	R 11 733.03	R 11 265.47	R 10 389.13	R 9 315.64	R 8 206.27	R 7 164.65	R 6 243.54	R 5 498.59	R 4 802.92	R 4 259.00	R 3 806.57	R 3 426.94	R 3 104.60	R 2 827.51	R 2 586.55	R 2 374.91
TOHQ07470300000000005100000000000000	R 736.07	R 1 821.26	1 085.24	3 -R 2 708.00 -R	1 541.09	R 4 111.12	R 5 773.36	R 1 352.30	R 1 882.82	R 2 177.22	R 2 272.72	R 2 221.51	R 2 077.52	R 1 887.04	R 1 684.14	R 1 316.07	R 1 165.33	R 1 037.21	R 928.93	R 837.17	R 758.81	R 691.25	R 632.40	R 580.68	
TOHQ08010000000001430000100000000000	R 293.92	R 612.40	318.48	7 -R 2 708.00 -R	2 269.25 -R	1 759.33	R 1 234.05	R 744.69	-R 329.22	-R 7.87	-R 216.38	-R 353.85	-R 422.40	-R 442.05	-R 430.93	-R 403.26	-R 368.82	-R 333.54	-R 300.50	-R 270.91	-R 244.98	-R 222.41	-R 202.76	-R 185.55	-R 170.40
TOHQ08010000000001430000300000000000	R 1 468.43	R 2 286.98	-R 1 818.55	4 -R 2 708.00 -R	1 794.35 -R	880.04	-R 52.66	-R 622.95	-R 1 113.45	-R 1 417.22	-R 1 557.50	-R 1 571.92	-R 1 501.85	-R 1 384.46	-R 1 248.26	-R 1 112.14	-R 986.61	-R 876.03	-R 780.97	-R 700.06	-R 631.20	-R 572.25	-R 521.34	-R 476.98	-R 437.98
TOHQ08010000000001430000400000000000	R 747.40	R 850.34	102.95	10 -R 2 708.00 -R	2 473.93 -R	2 138.32	-R 1 743.24	-R 1 334.16	-R 951.03	-R 622.11	-R 361.66	-R 171.16	-R 42.85	-R 35.86	-R 78.65	-R 97.72	-R 102.54	-R 99.72	-R 93.40	-R 85.94	-R 78.51	-R 71.62	-R 65.44	-R 59.94	-R 55.07
TOHQ08064000000000006500000000000000	R 137.25	R 42.29	-94.96																						
TOHQ08064000000000009620000000000000	R 990.08	R 565.20	-424.88																						
TOHQ08064000000001300000010000000000	R 4 671.45	R 1 260.41	-3 411.05																						
TOHQ07000000000012200003000000000000	R 1 005.99	R 2 099.34	1 093.35	3 -R 2 708.00 -R	1 533.39 -R	396.86	R 596.52	R 1 374.48	R 1 906.22	R 2 200.33	R 2 294.47	R 2 241.26	R 2 095.03	R 1 902.33	R 1 697.39	R 1 501.68	R 1 326.09	R 1 174.13	R 1 045.00	R 935.89	R 843.43	R 764.48	R 696.41	R 637.13	R 585.02
TOHQ01940040000001700000000000000000	R 4 732.30	R 67.77	-4 055.53																						
TOHQ01200000000001710000000000000000	R 218.84	R 819.20	600.36	4 -R 2 708.00 -R	2 001.55 -R	1 263.69 -R	568.12	-R 26.22	-R 483.99	-R 795.43	-R 972.35	-R 1 040.45	-R 1 030.87	-R 973.27	-R 891.64	-R 802.84	-R 717.05	-R 639.33	-R 571.33	-R 512.82	-R 462.68	-R 419.61	-R 382.34	-R 349.83	-R 321.23
TOHQ02160000000007200013000000000000	R 198.63	R 219.31	20.38	13 -R 2 708.00 -R	2 552.34 -R	2 285.50 -R	1 938.30	-R 1 559.97	-R 1 189.23	-R 857.41	-R 583.10	-R 372.27	-R 221.08	-R 119.75	-R 56.30	-R 19.33	-R 0.54	-R 10.15	-R 14.07	-R 15.08	-R 14.74	-R 13.86	-R 12.84	-R 11.83	-R 10.89
TOHQ02290010000106600000000000000000	R 858.91	R 602.39	-256.52																						
TOHQ02600020000042100000000000000000	R 529.10	R 737.86	208.76	8 -R 2 708.00 -R	2 373.45 -R	1 952.27 -R	1 493.27	-R 1 044.78	-R 645.77	-R 320.57	-R 77.89	-R 86.58	-R 185.55	-R 235.26	-R 251.59	-R 247.71	-R 233.26	-R 214.51	-R 195.07	-R 176.74	-R 160.23	-R 145.65	-R 132.85	-R 121.61	-R 111.69
TOHQ02880000000001200000000000000000	R 360.73	R 465.09	104.37	10 -R 2 708.00 -R	2 472.59 -R	2 135.82	-R 1 739.89	-R 1 330.28	-R 946																

SGID	Old Rev	New Rev	Change in		Consumption	i = 5.3% NPV	5.3% Cost	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21																										
TOIR08920020000051000000000000000000	R	3 559.31	R	506.76	-R	3 052.55																																																
TOIR08920020000051700000000000000000	R	947.40	R	876.55	-R	70.85																																																
TOIR08920020000053500000000000000000	R	113.99	R	224.67	-R	110.68																																																
TOIR08920020000054400000000000000000	R	42.84	R	71.78	-R	28.94																																																
TOIR08920020000055600000000000000000	R	1 303.59	R	2 303.59	-R	1 000.00																																																
TOIR08920020000055700000000000000000	R	176.34	R	494.51	-R	318.16																																																
TOIR08920020000055900000000000000000	R	1 324.94	R	923.78	-R	401.16																																																
TOIR08920020000056000000000000000000	R	329.59	R	318.04	-R	11.55																																																
TOIR08920020000057300000000000000000	R	70.63	R	3 602.38	-R	3 531.75		1 -R	2 708.00	-R	782.29	R	3 890.69	R	6 357.13	R	8 043.29	R	8 940.88	R	9 149.30	R	8 833.98	R	8 180.74	R	7 358.58	R	6 497.66	R	5 682.81	R	4 958.31	R	4 338.52	R	3 819.38	R	3 387.88	R	3 028.51	R	2 726.71	R	2 470.34	R	2 249.90	R	2 058.18	R	1 889.78			
TOIR08920020000057400000000000000000	R	135.72	R	278.83	-R	143.11		9 -R	2 708.00	-R	2 435.79	R	2 067.70	R	1 648.37	R	1 224.33	-R	835.17	-R	507.66	-R	253.96	-R	73.33	R	43.84	R	111.54	R	144.29	R	154.65	R	152.16	R	143.29	R	131.99	R	120.40	R	109.53	R	99.72	R	91.02	R	83.35	R	76.56			
TOIR08920020000058800000000000000000	R	64.38	R	176.49	-R	112.10		10 -R	2 708.00	-R	2 465.24	R	2 122.22	-R	1 721.62	-R	1 304.13	-R	924.62	-R	596.02	-R	337.11	-R	148.86	-R	23.09	R	53.11	R	93.61	R	110.69	R	113.85	R	109.65	R	102.20	R	93.79	R	85.58	R	78.03	R	71.27	R	65.28	R	58.97			
TOIR08920020000059100000000000000000	R	54.68	R	133.02	-R	78.34		11 -R	2 708.00	-R	2 497.30	R	2 181.59	R	1 801.38	-R	1 401.46	-R	1 022.02	-R	692.24	-R	427.66	-R	231.10	-R	95.97	-R	10.52	R	38.43	R	62.83	R	72.14	R	73.03	R	69.76	R	64.82	R	59.50	R	54.41	R	49.76	R	45.60	R	41.90			
TOIR08920020000060000000000000000000	R	83.40	R	224.67	-R	141.26		12 -R	2 708.00	-R	2 437.55	-R	2 070.94	-R	1 652.72	-R	1 229.37	-R	840.48	-R	512.91	-R	258.90	-R	77.82	R	39.86	R	108.07	R	141.27	R	152.03	R	149.88	R	141.29	R	130.22	R	118.82	R	108.10	R	98.43	R	89.85	R	82.27	R	75.57			
TOIR08920020000060300000000000000000	R	2 477.51	R	1 726.22	-R	751.29		2 -R	2 708.00	-R	409.69	R	1 683.70	R	3 391.89	R	4 610.56	R	5 359.83	R	5 772.36	R	5 467.81	R	5 123.43	R	4 649.20	R	4 132.24	R	3 631.34	R	3 179.03	R	2 787.89	R	2 457.75	R	2 181.90	R	1 951.34	R	1 757.30	R	1 592.26	R	1 450.25	R	1 326.70	R	1 218.16			
TOIR08920020000060600000000000000000	R	455.23	R	2 711.82	-R	2 256.59		2 -R	2 708.00	-R	893.40	R	7 881.10	R	2 188.60	R	3 217.56	R	3 810.41	R	4 120.84	R	4 101.81	R	3 882.77	R	3 549.73	R	3 122.24	R	2 798.85	R	2 457.00	R	2 158.64	R	1 905.21	R	1 692.51	R	1 514.23	R	1 363.92	R	1 235.94	R	1 125.75	R	1 029.87	R	945.62			
TOIR08920020000064700000000000000000	R	144.62	R	3 641.10	-R	2 196.48		2 -R	2 708.00	-R	485.77	R	1 542.83	R	3 202.63	R	4 391.46	R	5 088.71	R	5 344.05	R	5 252.95	R	4 928.29	R	4 476.26	R	3 981.26	R	3 500.40	R	3 065.47	R	2 688.92	R	2 370.84	R	2 104.92	R	1 882.59	R	1 695.43	R	1 536.21	R	1 399.21	R	1 280.01	R	1 175.29			
TOIR08920020000065700000000000000000	R	1 094.41	R	286.18	-R	808.23																																																
TOIR08920020000067800000000000000000	R	91.90	R	740.52	-R	171.38																																																
TOIR08920020000067900000000000000000	R	511.63	R	420.98	-R	90.65																																																
TOIR08920020000070100000000000000000	R	1 264.50	R	3 824.14	-R	2 559.64		2 -R	2 708.00	-R	140.89	R	2 181.39	R	4 060.58	R	5 384.67	R	6 136.41	R	6 738.99	R	6 226.91	R	5 812.88	R	5 260.18	R	4 665.66	R	4 093.96	R	3 580.28	R	3 137.57	R	2 764.81	R	2 453.86	R	2 194.25	R	1 975.91	R	1 790.27	R	1 630.58	R	1 491.66	R	1 369.62			
TOIR08920020000070300000000000000000	R	68.61	R	288.63	-R	220.02		8 -R	2 708.00	-R	2 362.76	R	1 932.47	-R	1 466.67	-R	1 013.99	-R	613.29	-R	288.48	-R	47.70	R	114.00	R	209.85	R	256.48	R	269.99	R	263.67	R	247.17	R	226.72	R	205.89	R	186.41	R	168.93	R	153.52	R	140.02	R	128.17	R	117.71			
TOIR08920020000071200000000000000000	R	6 002.32	R	977.76	-R	5 024.55																																																
TOIR08920020000072200000000000000000	R	136.82	R	91.71	-R	39.71																																																
TOIR08920020000072300000000000000000	R	2 273.58	R	1 068.85	-R	1 204.73																																																
TOIR08920020000073400000000000000000	R	246.33	R	208.61	-R	37.72																																																
TOIR08920020000073800000000000000000	R	1 033.34	R	557.23	-R	476.11																																																
TOIR08920020000073900000000000000000	R	2 512.35	R	455.29	-R	2 057.06																																																
TOIR08920020000074000000000000000000	R	68.53	R	224.67	-R	156.14		9 -R	2 708.00	-R	2 423.42	R	2 044.79	-R	1 617.58	-R	1 188.69	-R	797.57	-R	470.52	-R	219.01	-R	41.59	R	71.97	R	136.10	R	165.59	R	173.12	R	168.26	R	157.43	R	144.51	R	131.59	R	119.59	R	108.84	R	99.33	R	90.94	R	83.53			
TOIR08920020000074600000000000000000	R	134.62	R	652.86	-R	518.24		5 -R	2 708.00	-R	2 079.54	R	1 408.09	-R	762.14	-R	198.38	-R	247.07	R	561.39	R	752.10	R	840.42	R	853.60	R	818.50	R	757.42	R	686.43	R	615.60	R	550.24	R	492.43	R	442.34	R	399.25	R	362.15	R	330.02	R	301.97	R	277.29			
TOIR08920020000074900000000000000000	R	70.95	R	203.25	-R	132.30		5 -R	2 708.00	-R	2 446.06	R	2 086.71	-R	1 673.90	-R	1 253.89	-R	866.35	-R	538.46	-R	282.95	-R	99.66	R	20.50	R	91.17	R	126.62	R	139.32	R	138.80	R	131.56	R	121.60	R	111.13	R	101.18	R	92.16	R	84.14	R	77.05	R	70.77			
TOIR08920020000075000000000000000000	R	122.74	R	876.55	-R	753.81		4 -R	2 708.00	-R	1 855.83	-R	993.87	-R	205.61	-R	445.89	-R	926.69	R	1 232.73	R	1 383.88	R	1 414.23	R	1 362.11	R	1 262.45	R	1 142.45	R	1 020.37	R	906.63	R	805.80	R	718.77	R	644.50	R	581.20	R	526.96	R	480.10	R	439.26	R	403.34			
TOIR08920020000075200000000000000000	R	102.29	R	116.26	-R	13.98		14 -R	2 708.00	-R	2 558.43	-R	2 294.76	-R	1 953.44	-R	1 577.49	-R	875.66	-R	600.27	-R	387.87	-R	234.91	-R	131.82	-R	66.77	-R	28.41	R	7.38	R	3.20	R	7.92	R	9.58	R	9.79	R	9.38	R	8.76	R	8.09	R	7.46					
TOIR08920020000075500000000000000000	R	441.74	R	88.72	-R	353.01		3 -R	2 708.00	-R	1 587.70	R	497.42	R	461.41	R	2 118.07	R	1 741.23	R	2 037.35	R	2 141.09	R	2 101.96	R	1 971.57	R	1 794.55	R	1 603.92	R	1 420.61	R	1 255.44	R	1 112.09	R	990.05	R	886.81	R	799.26	R	724.48	R	659.98	R	603.80	R	554.42			
TOIR08920020000076200000000000000000	R	123.65	R	462.64	-R	339.00		6 -R	2 708.00	-R	2 249.76	-R	1 723.26	-R	1 185.59	-R	688.59	-R	270.03	-R	50.59	-R	271.40	-R	403.82	R	466.69	R	480.71	R	464.46	R	432.34	R	394.16	R	355.80	R	320.21	R	288.51	R	260.82	R	236.76	R	215.82	R	197.51	R	181.38			
TOIR0892002000007660000000000																																																						

SGID	Old Rev	New Rev	Change in Consumption	i = 5.3% NPV	5.3% Cost	2 7.08% R	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21		
				7.09																									
TOIR08920200001143000000000000000000	R	663.82	R	1136.32	R	472.51	5 - R	2 708.00 -R	2 127.98 -R	1 488.51 -R	870.18 -R	323.45 -R	115.13 -R	431.06 -R	629.45 -R	729.02 -R	754.88 -R	732.31 -R	682.67 -R	621.59 -R	559.10 -R	500.63 -R	448.48 -R	403.09 -R	363.93 -R	330.16 -R	300.88 -R	275.31 -R	252.81 -R
TOIR08920200001150000000000000000000	R	168.46	R	1097.90	R	28.45	13 - R	2 708.00 -R	2 543.74 -R	2 267.55 -R	1 916.89 -R	1 535.19 -R	1 163.08 -R	831.58 -R	558.79 -R	350.19 -R	201.52 -R	102.67 -R	41.49 -R	6.48 -R	11.74 -R	19.98 -R	22.78 -R	22.86 -R	21.74 -R	20.20 -R	18.61 -R	17.11 -R	15.74 -R
TOIR08920200001151000000000000000000	R	582.35	R	974.39	R	392.04	6 - R	2 708.00 -R	2 199.39 -R	1 630.00 -R	1 060.28 -R	543.53 -R	117.01 -R	201.74 -R	413.65 -R	533.01 -R	581.18 -R	580.67 -R	551.15 -R	507.52 -R	459.69 -R	413.34 -R	371.17 -R	334.03 -R	301.78 -R	273.87 -R	249.62 -R	228.42 -R	209.76 -R
TOIR08920200001159000000000000000000	R	3804.82	R	1190.91	-R	2 613.91																							
TOIR08920200001170000000000000000000	R	78.65	R	2 278.86	R	2 200.21	2 -R	2 708.00 -R	482.23 -R	1 549.40 -R	3 211.45 -R	4 401.66 -R	5 099.48 -R	5 354.69 -R	5 262.96 -R	4 937.38 -R	4 484.32 -R	3 988.29 -R	3 506.50 -R	3 070.76 -R	2 693.53 -R	2 374.89 -R	2 108.51 -R	1 885.79 -R	1 698.31 -R	1 538.83 -R	1 401.59 -R	1 282.19 -R	1 177.29 -R
TOIR08920200001170000000000000000000	R	197.15	R	1 955.02	-R	1 757.88	2 -R	2 708.00 -R	902.30 -R	771.61 -R	3 211.91 -R	3 823.36 -R	4 094.11 -R	4 076.66 -R	3 859.93 -R	3 529.48 -R	3 154.68 -R	2 783.53 -R	2 443.71 -R	2 147.06 -R	1 895.03 -R	1 683.50 -R	1 506.18 -R	1 356.67 -R	1 229.38 -R	1 119.78 -R	1 024.40 -R	940.60 -R	
TOIR08920200001178000000000000000000	R	121.98	R	743.18	R	621.20	4 -R	2 708.00 -R	1 981.77 -R	1 227.05 -R	518.90 -R	83.21 -R	544.10 -R	854.81 -R	1 028.23 -R	1 091.21 -R	1 075.85 -R	1 012.54 -R	925.70 -R	832.38 -R	742.80 -R	661.94 -R	591.35 -R	530.70 -R	478.77 -R	434.18 -R	395.61 -R	361.97 -R	332.38 -R
TOIR08920200001179000000000000000000	R	4 474.17	R	698.02	-R	3 776.15																							
TOIR08920200001186000000000000000000	R	466.32	R	1 652.30	-R	1 185.98	3 -R	2 708.00 -R	1 445.41 -R	233.97 -R	815.37 -R	1 627.83 -R	2 173.47 -R	2 464.32 -R	2 542.91 -R	2 466.90 -R	2 294.99 -R	2 076.90 -R	1 848.80 -R	1 633.00 -R	1 440.53 -R	1 274.63 -R	1 134.01 -R	1 015.39 -R	914.98 -R	829.29 -R	755.43 -R	691.11 -R	634.59 -R
TOIR08920200001189000000000000000000	R	2 665.18	R	2 445.51	-R	2 420.67																							
TOIR08920200001199000000000000000000	R	110.79	R	5 239.18	-R	5 128.39	1 -R	2 708.00 -R	2 298.57 -R	6 698.14 -R	10 129.13 -R	12 409.97 -R	13 547.12 -R	13 699.43 -R	13 116.00 -R	12 069.86 -R	10 805.11 -R	9 506.65 -R	8 292.43 -R	7 221.69 -R	6 311.04 -R	5 551.46 -R	4 921.98 -R	4 398.74 -R	3 959.86 -R	3 587.32 -R	3 267.11 -R	2 988.68 -R	2 744.12 -R
TOIR08920200001208000000000000000000	R	21.90	R	1 972.62	-R	1 950.72	2 -R	2 708.00 -R	719.16 -R	1 110.71 -R	2 622.04 -R	3 719.34 -R	4 379.71 -R	4 643.69 -R	4 593.86 -R	4 329.67 -R	3 945.77 -R	3 518.12 -R	3 098.73 -R	2 717.09 -R	2 385.31 -R	2 104.24 -R	1 868.79 -R	1 671.69 -R	1 505.62 -R	1 364.29 -R	1 242.64 -R	1 136.79 -R	1 043.79 -R
TOIR08920200001211000000000000000000	R	1 988.02	R	903.54	-R	1 084.48																							
TOIR08920200001218000000000000000000	R	252.33	R	203.25	-R	49.07																							
TOIR08920200001220000000000000000000	R	506.76	R	1 669.90	R	1 163.14	3 -R	2 708.00 -R	1 467.10 -R	274.14 -R	761.41 -R	1 565.37 -R	2 107.58 -R	2 399.23 -R	2 481.65 -R	2 411.27 -R	2 245.69 -R	2 033.86 -R	1 811.47 -R	1 600.62 -R	1 412.32 -R	1 249.85 -R	1 112.06 -R	995.79 -R	897.34 -R	813.31 -R	740.88 -R	677.80 -R	622.36 -R
TOIR08920200001222000000000000000000	R	1 306.01	R	1 648.78	-R	342.77	6 -R	2 708.00 -R	2 246.18 -R	1 716.63 -R	1 176.68 -R	678.27 -R	259.15 -R	61.34 -R	281.51 -R	413.00 -R	474.83 -R	487.82 -R	470.62 -R	437.68 -R	398.82 -R	359.89 -R	323.83 -R	291.75 -R	263.73 -R	239.40 -R	218.23 -R	199.71 -R	183.39 -R
TOIR08920200001247000000000000000000	R	2 342.72	R	2 884.30	-R	541.58	5 -R	2 708.00 -R	2 057.38 -R	1 367.06 -R	707.00 -R	134.55 -R	314.40 -R	627.90 -R	814.69 -R	897.26 -R	903.98 -R	862.48 -R	795.56 -R	719.51 -R	644.43 -R	575.56 -R	514.85 -R	462.37 -R	417.28 -R	378.48 -R	344.89 -R	315.57 -R	289.77 -R
TOIR08920200001264000000000000000000	R	373.76	R	863.06	-R	489.30	5 -R	2 708.00 -R	2 107.03 -R	1 458.97 -R	830.50 -R	277.52 -R	163.59 -R	478.93 -R	674.50 -R	769.93 -R	791.13 -R	763.97 -R	710.12 -R	645.40 -R	579.85 -R	518.85 -R	464.62 -R	417.50 -R	376.90 -R	341.91 -R	311.58 -R	285.10 -R	261.80 -R
TOIR08920200001267000000000000000000	R	72.04	R	413.63	-R	341.59	6 -R	2 708.00 -R	2 247.30 -R	1 718.71 -R	1 179.47 -R	681.50 -R	262.56 -R	57.97 -R	278.35 -R	410.13 -R	472.28 -R	485.59 -R	468.69 -R	436.01 -R	397.36 -R	358.61 -R	322.70 -R	290.74 -R	262.82 -R	238.57 -R	217.47 -R	199.02 -R	182.76 -R
TOIR08920200001275000000000000000000	R	2 513.64	R	812.45	-R	1 701.19																							
TOIR08920200001276000000000000000000	R	1 675.53	R	1 180.62	-R	494.91																							
TOIR08920200001284000000000000000000	R	700.99	R	825.09	-R	758.06	1 -R	2 708.00 -R	4 605.94 -R	10 970.33 -R	15 869.11 -R	19 054.89 -R	20 556.59 -R	20 623.50 -R	19 632.09 -R	17 988.07 -R	16 049.81 -R	14 085.52 -R	12 263.58 -R	10 665.94 -R	9 312.68 -R	8 187.23 -R	7 256.46 -R	6 483.86 -R	5 836.39 -R	5 287.06 -R	4 815.03 -R	4 404.64 -R	4 044.21 -R
TOIR08920200001294000000000000000000	R	41.54	R	944.03	-R	902.48	3 -R	2 708.00 -R	1 714.64 -R	732.46 -R	145.62 -R	852.50 -R	1 355.60 -R	1 656.42 -R	1 782.60 -R	1 776.36 -R	1 683.03 -R	1 542.64 -R	1 385.44 -R	1 231.12 -R	1 090.30 -R	967.08 -R	861.62 -R	772.09 -R	696.02 -R	630.96 -R	574.82 -R	525.90 -R	482.89 -R
TOIR08920200001326000000000000000000	R	374.03	R	167.56	-R	206.47																							
TOIR08920200001327000000000000000000	R	90.72	R	2 856.14	-R	2 765.42	1 -R	2 708.00 -R	54.53 -R	2 543.22 -R	4 546.72 -R	5 947.46 -R	6 730.07 -R	6 965.42 -R	6 778.78 -R	6 314.12 -R	5 704.38 -R	5 053.47 -R	4 430.30 -R	3 871.98 -R	3 391.79 -R	2 988.04 -R	2 651.57 -R	2 370.85 -R	2 134.84 -R	1 934.23 -R	1 761.68 -R	1 611.58 -R	1 479.72 -R
TOIR08920200001328000000000000000000	R	2 895.87	R	626.08	-R	2 269.79																							
TOIR08920200001331000000000000000000	R	809.73	R	2 278.86	-R	1 469.13	2 -R	2 708.00 -R	1 197.52 -R	263.89 -R	1 484.29 -R	2 402.21 -R	2 990.33 -R	3 271.23 -R	3 302.27 -R	3 156.59 -R	2 906.19 -R	2 610.51 -R	2 311.58 -R	2 034.38 -R	1 790.34 -R	1 581.79 -R	1 406.06 -R	1 258.38 -R	1 133.66 -R	1 027.37 -R	935.82 -R	856.13 -R	786.09 -R
TOIR08920200001332000000000000000000	R	1 063.37	R	1 768.46	-R	705.09	4 -R	2 708.00 -R	1 902.10 -R	1 079.54 -R	320.71 -R	312.64 -R	786.13 -R	1 093.88 -R	1 253.22 -R	1 295.55 -R	1 256.94 -R	1 170.64 -R	1 062.81 -R	951.30 -R	846.44 -R	752.94 -R	671.96 -R	602.69 -R	543.57 -R	492.87 -R	449.06 -R	410.86 -R	377.24 -R
TOIR08920200001346000000000000000000	R	539.06	R	1 078.97	-R	539.92	5 -R	2 708.00 -R	2 058.96 -R	1 369.98 -R	710.93 -R	139.09 -R	309.61 -R	623.17 -R	810.24 -R	893.21 -R	900.39 -R	859.35 -R	792.85 -R	717.15 -R	642.38 -R	573.76 -R	513.25 -R	460.94 -R	416.00 -R	377.32 -R	343.83 -R	314.60 -R	288.88 -R
TOIR08920200001391000000000000000000	R	490.58	R	1 024.99	-R	534.41	5 -R	2 708.00 -R	2 064.19 -R	1 379.66 -R	723.94 -R	154.15 -R	293.72 -R	607.47 -R	795.47 -R	879.80 -R	888.50 -R	848.97 -R	783.85 -R	709.35 -R	635.58 -R	567.78 -R	507.96 -R	456.21 -R	411.74 -R	373.47 -R	340.32 -R	311.39 -R	285.94 -R
TOIR08920200001391000000000000000000	R	1 877.12	R	1 166.69	-R	710.43																							
TOIR08920200001394000000000000000000	R	383.51	R	674.11	-R	290.60	7 -R	2 708.00 -R	2 295.73 -R	1 808.37 -R	1 299.93 -R	820.96 -R	409.67 -R	87.34 -R	141.59 -R	285.92 -R	362.21 -R	389.49 -R	385.35 -R	363.72 -R	334.37 -R	303.29 -R	273.70 -R	246.98 -R	223.44 -R	202.90 -R	184.99 -R	169.30 -R	155.48 -R
TOIR08920200001400000000000000000000	R	20.37	R	62.13	-R	41.76	12 -R	2 708.00 -R	2 532.04 -R	2 245.90 -R	1 887.79 -R	1 501.50 -R	1 127.54 -R	796.48 -R	525.76 -R	320.19 -R	174.93 -R	79.45 -R	21.36 -R	10.98 -R	26.95 -R	33.35 -R	34.61 -R	33.43 -R	31.25 -R	28.82 -R	26.46 -R	24.29 -R	22.33 -R
TOIR08920200001406000000000000000000	R	100.55	R	2 314.06	-R	2 213.51	2 -R	2 708.00 -R	460.60 -R	1 572.77 -R	3 242.85 -R	4 438.02 -R	5 137.83 -R	5 392.57 -R	5 298.61 -R	4 969.76 -R	4 513.01 -R	4 013.35 -R	3 528.23 -R	3 089.60 -R	2 709.95 -R	2 389.31 -R	2 121.28 -R	1 897.20 -R	1 708.58 -R	1 548.13 -R	1 410.06 -R	1 289.94 -R	1 184.40 -R
TOIR08920200001413000000000000000000	R	700.80	R	1 184.14	-R	483.34	5 -R	2 708.00 -R	2 112.69 -R	1 469.46 -R	844.58 -R	293.82 -R	146.39 -R	461.94 -R	658.51 -R	755.41 -R	778.27 -R	752.73 -R	700.38 -R	636.95 -R	572.48 -R	512.38 -R	458.90 -R	412.39 -R	372.30 -R	337.74 -R</			

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SGID	Old Rev	New Rev	Change in Consumption		i = 5.3% NPV																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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TOIR08920020000225500000000000000000	R	705.89	R	575.83	-R	130.06																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
TOIR08920020000225600000000000000000	R	21.30	R	255.13	-R	233.83		8	-R	2708.00	-R	2349.63	-R	1908.17	-R	1434.03	-R	976.20	-R	573.42	-R	249.11	-R	10.64	-R	147.66	-R	239.68	-R	282.52	-R	292.57	-R	283.26	-R	264.24	-R	241.71	-R	219.16	-R	198.26	-R	179.60	-R	163.19	-R	148.83	-R	136.22	-R	125.10	-R	115.68	-R	78.65	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115.68	-R	115

SGID	Change in			i = 5.3% NPV	5.3% Cost																																														
	Old Rev	New Rev	Consumption		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21																										
7.09																																																			
TOIR08920500003096900000000000000000	R	75.19	R	185.41	R	110.22	10	-R	2708.00	-R	2467.03	-R	2125.53	-R	1726.06	-R	1314.27	-R	930.04	-R	601.38	-R	342.15	-R	153.44	-R	27.15	R	49.56	R	90.54	R	108.03	R	111.53	R	107.61	R	100.39	R	92.18	R	84.13	R	76.71	R	70.07	R	64.18	R	58.96
TOIR08920500003072000000000000000000	R	226.79	R	201.47	R	25.32	13	-R	2708.00	-R	2541.13	-R	2262.74	-R	1910.41	-R	1527.68	-R	1155.16	-R	823.76	-R	551.43	-R	343.51	-R	195.59	-R	97.49	-R	37.00	-R	2.59	R	15.13	R	22.96	R	25.42	R	25.21	R	23.86	R	22.12	R	20.36	R	18.71	R	17.21
TOIR08920500003109000000000000000000	R	1773.45	R	1729.92	R	1600.53	9	-R	2708.00	-R	2448.29	-R	2090.83	-R	1679.44	-R	1260.30	-R	873.11	-R	545.14	-R	289.23	-R	105.37	-R	15.45	R	86.75	R	122.79	R	136.00	R	135.91	R	129.02	R	119.35	R	109.11	R	99.37	R	90.52	R	82.64	R	75.68	R	69.52
TOIR08920500003176000000000000000000	R	252.14	R	283.73	R	31.59	13	-R	2708.00	-R	2541.70	-R	2263.79	-R	1911.82	-R	1529.32	-R	1156.89	-R	825.46	-R	553.04	-R	344.97	-R	196.89	-R	98.62	-R	37.98	-R	3.44	R	14.38	R	22.31	R	24.84	R	24.70	R	23.40	R	21.70	R	19.98	R	18.36	R	16.89
TOIR08920500003170000000000000000000	R	386.83	R	538.64	R	151.80	9	-R	2708.00	-R	2427.54	-R	2052.42	-R	1627.83	-R	1200.55	-R	810.08	-R	482.88	-R	230.64	-R	52.16	-R	62.60	-R	127.92	-R	158.50	-R	166.97	-R	162.90	-R	152.72	-R	140.34	-R	127.86	-R	116.24	-R	105.80	-R	96.56	-R	88.41	-R	81.21
TOIR08920500003202000000000000000000	R	39.72	R	75.55	R	35.84	12	-R	2708.00	-R	2537.67	-R	2256.32	-R	1901.79	-R	1517.70	-R	1144.63	-R	813.36	-R	541.64	-R	334.62	-R	187.72	-R	90.62	-R	31.04	-R	2.58	R	19.63	-R	26.92	-R	28.92	-R	28.34	-R	26.68	-R	24.68	-R	22.68	-R	20.83	-R	19.16
TOIR08920500003225000000000000000000	R	17.61	R	115.06	R	97.45	10	-R	2708.00	-R	2479.15	-R	2147.98	-R	1756.23	-R	1349.19	-R	966.88	-R	637.77	-R	376.40	-R	184.54	-R	54.72	-R	25.50	-R	69.67	-R	89.93	-R	95.75	-R	93.76	-R	88.12	-R	81.22	-R	74.26	-R	67.78	-R	61.94	-R	56.74	-R	52.13
TOIR08920500003232000000000000000000	R	235.65	R	318.04	R	82.39	11	-R	2708.00	-R	2493.46	-R	2174.47	-R	1791.81	-R	1390.39	-R	1010.33	-R	680.69	-R	416.80	-R	221.23	-R	87.23	-R	2.89	-R	45.05	-R	68.57	-R	77.14	-R	77.42	-R	73.65	-R	68.29	-R	62.63	-R	57.24	-R	52.34	-R	47.96	-R	44.07
TOIR08920500003259000000000000000000	R	50.42	R	281.28	R	230.86	8	-R	2708.00	-R	2352.46	-R	1913.41	-R	1441.07	-R	984.34	-R	582.02	-R	257.59	-R	18.63	-R	140.40	-R	233.25	-R	276.91	-R	287.71	-R	279.04	-R	260.56	-R	238.48	-R	216.30	-R	195.71	-R	177.30	-R	161.11	-R	146.93	-R	134.49	-R	123.51
TOIR08920500003260000000000000000000	R	409.70	R	160.42	R	249.28	6	-R	2708.00	-R	2249.81	-R	1723.35	-R	1185.71	-R	688.73	-R	270.18	-R	50.44	-R	271.26	-R	403.69	-R	466.57	-R	480.61	-R	464.37	-R	432.26	-R	394.10	-R	355.74	-R	320.16	-R	288.47	-R	260.78	-R	236.72	-R	215.79	-R	197.48	-R	181.35
TOIR08920500003266000000000000000000	R	226.25	R	565.20	R	338.95	6	-R	2708.00	-R	2249.81	-R	1723.35	-R	1185.71	-R	688.73	-R	270.18	-R	50.44	-R	271.26	-R	403.69	-R	466.57	-R	480.61	-R	464.37	-R	432.26	-R	394.10	-R	355.74	-R	320.16	-R	288.47	-R	260.78	-R	236.72	-R	215.79	-R	197.48	-R	181.35
TOIR08920500003270000000000000000000	R	413.24	R	4341.58	R	3928.34	1	-R	2708.00	-R	1158.92	-R	4588.03	-R	7294.06	-R	1127.93	-R	1080.03	-R	10279.51	-R	9897.59	-R	9146.76	-R	8214.66	-R	7245.06	-R	6331.01	-R	5520.51	-R	4828.48	-R	4249.61	-R	3768.94	-R	3368.86	-R	3033.01	-R	2747.78	-R	2502.56	-R	2289.31	-R	2101.99
TOIR08920500003284000000000000000000	R	41.52	R	278.83	R	237.31	8	-R	2708.00	-R	2346.34	-R	1902.07	-R	1425.83	-R	966.70	-R	563.40	-R	239.21	-R	1.32	-R	156.12	-R	247.18	-R	289.07	-R	298.25	-R	288.18	-R	268.53	-R	245.48	-R	222.50	-R	201.24	-R	182.28	-R	165.62	-R	151.04	-R	138.25	-R	126.96
TOIR08920500003285000000000000000000	R	241.31	R	575.83	R	334.52	6	-R	2708.00	-R	2254.02	-R	1731.14	-R	1196.17	-R	700.84	-R	282.96	-R	37.82	-R	259.38	-R	392.90	-R	457.02	-R	472.26	-R	457.13	-R	425.98	-R	388.63	-R	350.94	-R	315.90	-R	284.67	-R	257.36	-R	233.63	-R	212.97	-R	194.90	-R	178.98
TOIR08920500003297000000000000000000	R	347.07	R	2038.03	R	1690.96	2	-R	2708.00	-R	965.85	-R	653.95	-R	3008.90	-R	3630.31	-R	3903.42	-R	3897.20	-R	3696.94	-R	3385.04	-R	3028.57	-R	2674.16	-R	2348.85	-R	2064.39	-R	1822.44	-R	1619.21	-R	1448.76	-R	1304.99	-R	1182.56	-R	1077.15	-R	985.41	-R	904.79		
TOIR08920500003297000000000000000000	R	77.21	R	136.82	R	59.60	11	-R	2708.00	-R	2515.10	-R	2124.53	-R	1845.65	-R	1452.71	-R	1076.07	-R	745.63	-R	477.91	-R	276.74	-R	136.42	-R	45.83	-R	7.80	-R	36.27	-R	48.99	-R	52.70	-R	51.76	-R	48.74	-R	45.03	-R	41.30	-R	37.82	-R	34.68	-R	31.87
TOIR08920500003328000000000000000000	R	596.37	R	1239.20	R	642.83	4	-R	2708.00	-R	1961.22	-R	1189.01	-R	467.79	-R	142.38	-R	606.52	-R	916.47	-R	1086.25	-R	1143.91	-R	1122.55	-R	1053.31	-R	961.06	-R	863.05	-R	769.52	-R	685.41	-R	612.14	-R	549.26	-R	495.48	-R	449.32	-R	409.40	-R	374.58	-R	343.96
TOIR08920500003333000000000000000000	R	280.36	R	1847.66	R	1567.30	2	-R	2708.00	-R	1083.29	-R	436.52	-R	1716.22	-R	2670.70	-R	3273.55	-R	3551.01	-R	3565.56	-R	3395.72	-R	3118.11	-R	2795.53	-R	2472.04	-R	2173.55	-R	1911.62	-R	1688.29	-R	1500.39	-R	1342.63	-R	1209.49	-R	1096.05	-R	998.37	-R	913.34	-R	838.62
TOIR08920500003334000000000000000000	R	73.46	R	63.69	-R	9.77	10	-R	2708.00	-R	2515.12	-R	2124.53	-R	1845.65	-R	1452.71	-R	1076.07	-R	745.63	-R	477.91	-R	276.74	-R	136.42	-R	45.83	-R	7.80	-R	36.27	-R	48.99	-R	52.70	-R	51.76	-R	48.74	-R	45.03	-R	41.30	-R	37.82	-R	34.68	-R	31.87
TOIR08920500003337000000000000000000	R	232.70	R	1071.10	-R	161.60	16	-R	2708.00	-R	2567.32	-R	2311.22	-R	1975.55	-R	1603.09	-R	1234.71	-R	902.33	-R	625.38	-R	410.67	-R	255.11	-R	149.46	-R	82.07	-R	41.68	-R	18.94	-R	6.95	-R	1.08	-R	1.55	-R	2.56	-R	2.83	-R	2.79	-R	2.64	-R	2.45
TOIR08920500003356000000000000000000	R	1332.70	R	1071.10	-R	161.60	16	-R	2708.00	-R	2567.32	-R	2311.22	-R	1975.55	-R	1603.09	-R	1234.71	-R	902.33	-R	625.38	-R	410.67	-R	255.11	-R	149.46	-R	82.07	-R	41.68	-R	18.94	-R	6.95	-R	1.08	-R	1.55	-R	2.56	-R	2.83	-R	2.79	-R	2.64	-R	2.45
TOIR08920500003357000000000000000000	R	2171.18	R	1031.21	R	741.99	1	-R	2708.00	-R	34.18	-R	2505.54	-R	4496.10	-R	5888.85	-R	6668.25	-R	6904.35	-R	6721.31	-R	6261.92	-R	5658.12	-R	5013.08	-R	4395.27	-R	3841.61	-R	3365.32	-R	2964.80	-R	2630.98	-R	2352.										

SGID	Old Rev	New Rev	Change in		i = 5.3% NPV	5.3% Cost	R		2 708.00	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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S/GID	Old Rev	New Rev	Change in		Consumption	i = 5.3%																						
			NPV	5.3% Cost																								
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7.09																												
T0R0892080000064114000000000000000000	R	66.84	411.17	R	344.33	6 -R	2 708.00 -R	2 244.70 -R	1 713.88 -R	1 172.99 -R	674.00 -R	254.65 -R	65.79 -R	285.70 -R	416.81 -R	478.20 -R	60.76 -R	473.17 -R	439.90 -R	400.75 -R	361.58 -R	325.33 -R	293.09 -R	264.94 -R	240.49 -R	219.22 -R	200.62 -R	184.23 -R
T0R0892080000064114000000000000000000	R	61.03	112.67	R	51.64	12 -R	2 708.00 -R	2 522.66 -R	2 228.54 -R	1 864.46 -R	1 474.49 -R	1 095.05 -R	768.33 -R	499.27 -R	296.14 -R	153.61 -R	49.84 -R	5.21 -R	24.98 -R	39.15 -R	44.06 -R	44.10 -R	41.90 -R	38.88 -R	35.73 -R	32.75 -R	30.04 -R	27.61 -R
T0R0892080000064520000000000000000000	R	51.35	530.67	R	15.31	14 -R	2 708.00 -R	2 557.16 -R	2 292.41 -R	1 950.28 -R	1 573.84 -R	1 203.85 -R	871.85 -R	596.69 -R	384.62 -R	232.02 -R	129.30 -R	64.59 -R	26.51 -R	5.72 -R	4.65 -R	9.20 -R	10.73 -R	10.82 -R	10.32 -R	9.61 -R	8.87 -R	8.18 -R
T0R0892080000064670000000000000000000	R	24.48	450.39	R	425.91	6 -R	2 708.00 -R	2 167.23 -R	1 570.44 -R	980.26 -R	450.89 -R	19.30 -R	298.27 -R	504.48 -R	615.52 -R	654.29 -R	644.50 -R	665.51 -R	555.54 -R	501.53 -R	450.08 -R	403.71 -R	363.10 -R	327.94 -R	297.56 -R	271.19 -R	248.16 -R	227.88 -R
T0R0892080000064720000000000000000000	R	35.70	105.68	R	35.70	11 -R	2 708.00 -R	2 504.29 -R	2 194.52 -R	1 818.76 -R	1 421.58 -R	1 043.24 -R	70.96 -R	447.39 -R	249.01 -R	111.85 -R	24.38 -R	26.40 -R	52.40 -R	63.05 -R	65.05 -R	62.69 -R	58.51 -R	53.82 -R	49.26 -R	45.07 -R	41.32 -R	37.96 -R
T0R0892080000064740000000000000000000	R	346.62	1 497.42	R	150.80	3 -R	2 708.00 -R	1 478.62 -R	294.83 -R	732.26 -R	1 531.62 -R	2 071.98 -R	2 364.07 -R	2 448.56 -R	2 381.22 -R	2 219.05 -R	2 010.61 -R	1 791.30 -R	1 583.13 -R	1 397.07 -R	1 236.46 -R	1 100.21 -R	985.20 -R	887.81 -R	804.68 -R	733.02 -R	670.61 -R	615.76 -R
T0R0892080000065010000000000000000000	R	629.87	1 510.27	R	117.79																							
T0R0892080000065150000000000000000000	R	199.41	259.22	R	59.81	11 -R	2 708.00 -R	2 514.90 -R	2 214.17 -R	1 845.16 -R	1 452.15 -R	1 075.48 -R	745.05 -R	477.36 -R	276.24 -R	135.97 -R	45.44 -R	8.14 -R	36.56 -R	49.25 -R	52.92 -R	51.95 -R	48.91 -R	45.19 -R	41.44 -R	37.95 -R	34.80 -R	31.98 -R
T0R0892080000065160000000000000000000	R	532.33	295.98	R	236.35																							
T0R0892080000065170000000000000000000	R	91.03	107.88	R	16.85	14 -R	2 708.00 -R	2 555.70 -R	2 289.71 -R	1 946.65 -R	1 569.64 -R	1 199.42 -R	867.48 -R	592.57 -R	380.88 -R	228.71 -R	126.41 -R	62.08 -R	3.83 -R	6.32 -R	10.68 -R	12.05 -R	12.01 -R	11.39 -R	10.58 -R	9.77 -R	9.00 -R	
T0R0892080000065190000000000000000000	R	55.29	92.32	R	30.92	12 -R	2 708.00 -R	2 536.54 -R	2 254.24 -R	1 898.99 -R	1 514.46 -R	1 141.21 -R	809.98 -R	538.46 -R	331.74 -R	185.16 -R	88.38 -R	21.90 -R	4.26 -R	21.10 -R	28.21 -R	30.06 -R	29.36 -R	27.59 -R	25.51 -R	23.44 -R	21.52 -R	19.79 -R
T0R0892080000065360000000000000000000	R	109.79	1 483.34	R	1 373.55	2 -R	2 708.00 -R	1 267.18 -R	95.84 -R	1 258.50 -R	2 140.82 -R	2 714.60 -R	2 998.86 -R	3 045.95 -R	2 923.79 -R	2 699.88 -R	2 430.39 -R	2 155.37 -R	1 898.90 -R	1 672.26 -R	1 478.11 -R	1 314.23 -R	1 176.36 -R	1 059.85 -R	960.51 -R	874.93 -R	800.43 -R	734.95 -R
T0R0892080000065420000000000000000000	R	74.26	206.81	R	134.35	9 -R	2 708.00 -R	2 444.11 -R	2 083.10 -R	1 669.06 -R	1 248.28 -R	826.43 -R	532.62 -R	277.44 -R	94.67 -R	24.93 -R	95.03 -R	129.97 -R	141.34 -R	143.79 -R	123.58 -R	112.89 -R	102.76 -R	93.59 -R	85.44 -R	78.24 -R	71.87 -R	
T0R0892080000065630000000000000000000	R	17.58	107.70	R	83.11	11 -R	2 708.00 -R	2 492.77 -R	2 173.19 -R	1 790.10 -R	1 388.41 -R	1 008.25 -R	678.63 -R	414.85 -R	219.47 -R	85.67 -R	1.52 -R	46.23 -R	69.60 -R	78.04 -R	78.21 -R	74.35 -R	68.92 -R	63.19 -R	57.75 -R	52.80 -R	48.84 -R	44.46 -R
T0R0892080000065640000000000000000000	R	181.04	235.04	R	23.57	13 -R	2 708.00 -R	2 549.22 -R	2 277.72 -R	1 930.54 -R	1 550.98 -R	1 179.74 -R	848.04 -R	574.28 -R	364.26 -R	213.99 -R	113.55 -R	50.93 -R	14.67 -R	4.60 -R	13.72 -R	17.23 -R	17.90 -R	17.28 -R	16.16 -R	14.93 -R	13.78 -R	12.65 -R
T0R0892080000065660000000000000000000	R	42.19	101.89	R	16.97																							
T0R0892080000065680000000000000000000	R	118.94	172.92	R	90.98	10 -R	2 708.00 -R	2 485.30 -R	2 159.37 -R	1 771.53 -R	1 366.90 -R	985.56 -R	656.22 -R	393.77 -R	200.32 -R	68.69 -R	13.29 -R	59.08 -R	80.75 -R	87.75 -R	86.74 -R	81.90 -R	75.66 -R	69.26 -R	63.25 -R	57.81 -R	52.97 -R	48.66 -R
T0R0892080000066070000000000000000000	R	374.66	39.59	R	335.06																							
T0R0892080000066200000000000000000000	R	678.18	168.46	R	509.73																							
T0R0892080000066340000000000000000000	R	48.55	162.21	R	113.66	10 -R	2 708.00 -R	2 463.76 -R	2 119.48 -R	1 717.94 -R	1 304.87 -R	920.12 -R	591.58 -R	332.93 -R	145.06 -R	19.73 -R	56.04 -R	96.16 -R	112.90 -R	115.77 -R	111.34 -R	103.70 -R	95.13 -R	86.78 -R	79.12 -R	72.26 -R	66.19 -R	60.80 -R
T0R0892080000066360000000000000000000	R	275.46	1 458.70	R	1 183.24	3 -R	2 708.00 -R	1 448.01 -R	238.78 -R	808.91 -R	1 620.35 -R	1 265.58 -R	2 456.53 -R	2 535.57 -R	2 460.24 -R	2 289.08 -R	2 071.75 -R	1 844.33 -R	1 629.12 -R	1 437.15 -R	1 271.66 -R	1 113.38 -R	1 013.04 -R	912.86 -R	827.38 -R	753.69 -R	689.52 -R	633.12 -R
T0R0892080000066470000000000000000000	R	7.14	110.28	R	103.14	10 -R	2 708.00 -R	2 473.76 -R	2 137.99 -R	1 742.80 -R	1 333.65 -R	950.48 -R	621.57 -R	361.16 -R	170.70 -R	42.45 -R	36.21 -R	78.95 -R	97.98 -R	102.77 -R	99.93 -R	93.58 -R	86.10 -R	78.65 -R	71.76 -R	65.56 -R	60.05 -R	55.17 -R
T0R0892080000066590000000000000000000	R	77.55	189.02	R	77.55	8 -R	2 708.00 -R	2 466.69 -R	2 138.77 -R	1 539.90 -R	1 098.76 -R	702.71 -R	373.62 -R	130.82 -R	38.50 -R	142.94 -R	198.07 -R	219.33 -R	215.73 -R	208.88 -R	193.10 -R	176.10 -R	155.80 -R	144.99 -R	131.84 -R	120.28 -R	110.11 -R	101.12 -R
T0R0892080000067070000000000000000000	R	150.00	150.00	R	81.15	11 -R	2 708.00 -R	2 494.45 -R	2 176.30 -R	1 798.28 -R	1 393.24 -R	1 013.35 -R	683.67 -R	419.60 -R	223.78 -R	80.48 -R	43.34 -R	75.85 -R	76.29 -R	75.85 -R	72.65 -R	61.82 -R	51.68 -R	47.45 -R	43.35 -R	39.82 -R	36.15 -R	33.51 -R
T0R0892080000067340000000000000000000	R	52.32	236.62	R	2 184.31	2 -R	2 708.00 -R	497.34 -R	1 521.42 -R	3 173.87 -R	4 358.16 -R	5 053.58 -R	5 309.35 -R	5 220.30 -R	4 899.63 -R	4 449.98 -R	3 958.32 -R	3 480.50 -R	3 048.21 -R	2 673.88 -R	2 357.64 -R	2 093.22 -R	1 872.14 -R	1 686.02 -R	1 527.70 -R	1 391.45 -R	1 272.92 -R	1 168.78 -R
T0R0892080000067400000000000000000000	R	309.05	708.64	R	399.59	6 -R	2 708.00 -R	2 192.22 -R	1 616.72 -R	1 042.44 -R	522.87 -R	95.23 -R	223.27 -R	433.90 -R	551.41 -R	597.48 -R	594.90 -R	563.49 -R	518.23 -R	469.02 -R	421.53 -R	378.43 -R	340.51 -R	307.62 -R	279.15 -R	254.43 -R	232.82 -R	213.80 -R
T0R0892080000067530000000000000000000	R	252.26	118.66	R	133.60																							
T0R0892080000067500000000000000000000	R	38.08	1 384.78	R	1 346.70	2 -R	2 708.00 -R	1 292.78 -R	48.63 -R	1 195.06 -R	2 067.39 -R	2 637.14 -R	2 922.34 -R	2 973.94 -R	2 858.39 -R	2 641.92 -R	2 379.79 -R	2 111.49 -R	1 860.83 -R	1 639.09 -R	1 448.98 -R	1 288.43 -R	1 153.32 -R	1 039.11 -R	941.73 -R	857.82 -R	784.78 -R	720.59 -R
T0R0892080000067760000000000000000000	R	2 776.06	1 038.49	R	1 737.57																							
T0R0892080000067770000000000000000000	R	39.87	125.84	R	85.98	10 -R	2 708.00 -R	2 490.05 -R	2 168.16 -R	1 783.34 -R	1 380.58 -R	999.99 -R	670.48 -R	407.18 -R	212.50 -R	79.49 -R	3.87 -R	50.91 -R	73.66 -R	81.57 -R	81.31 -R	77.10 -R	71.37 -R	65.40 -R	59.75 -R	54.63 -R	50.05 -R	45.99 -R
T0R0892080000067890000000000000000000	R	128.55	261.87	R	133.32	9 -R	2 708.00 -R	2 445.09 -R	2 084.91 -R	1 671.49 -R	1 251.09 -R	863.40 -R	535.55 -R	280.20 -R	97.17 -R	22.71 -R	93.10 -R	128.29 -R	140.77 -R	140.07 -R	132.67 -R	122.59 -R	112.00 -R	101.97 -R	92.87 -R	84.79 -R	77.64 -R	71.32 -R
T0R0892080000067930000000000000000000	R	73.16	50.42	R	436.26	5 -R	2 708.00 -R	2 157.40 -R	1 552.25 -R	95.82 -R	422.59 -R	10.55 -R	327.76 -R	532.23 -R	640.72 -R	676.63 -R	664.00 -R	623.42 -R	570.21 -R	514.32 -R	461.30 -R	413.66 -R	371.98 -R	335.94 -R	304.80 -R	277.79 -R	254.19 -R	233.42 -R
T0R0892080000067950000000000000000000	R	466.86	206.82	R	260.04																							
T0R0892080000067950000000000000000000	R	216.13	1 444.62	R	1 228.49	3 -R	2 708.00 -R	1 403.94 -R	159.22 -R	915.80 -R	1 744.10 -R	2 296.11 -R	2 585.47 -R	2 656.92 -R	2 570.45 -R	2 386.76 -R	2 157.02 -R	1 918.28 -R	1 693.27 -R	1 493.05 -R	1 320.74 -R	1 174.86 -R	1 051.87 -R	947.81 -R	859.03 -R	782.51 -R	715.89 -R	657.33 -R
T0R0892080000067970000000000000000000	R	73.16	123.45	R	50.29	12 -R	2 708.00 -R	2 505.05 -R	2 230.92 -R	1 867.66 -R	1 478.19 -R	1 102.95 -R	772.18 -R	502.90 -R	299.43 -R	156.53 -R	63.39 -R	7.43 -R	23.06 -R	37.48 -R	42.59 -R	42.80 -R	40.74 -R	37.83 -R	34.78 -R	31.89 -R	29.25 -R	26.89 -R
T0R0892080000068120000000000000000000	R	136.78	264.12	R	127.34	9 -R	2 708.00 -R	2 450.77 -R	2 095.42 -R	1 685.61 -R	1 267.45 -R	880.65 -R																

[illegible]

SGID	Old Rev	New Rev	Change in Consumption		i = 5.3% NPV	5.3% Cost		R	2 708.00																																									
			7.09	7.09		1	2		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21																							
TOIR08920090000865000000000000000000	R	197.30	R	199.68	R	1.78	17 -R	2 708.00	-R	2 570.01	-R	2 316.20	-R	1 982.24	-R	1 610.84	-R	1 242.88	-R	910.40	-R	632.97	-R	417.57	-R	261.22	-R	154.79	-R	86.70	-R	45.69	-R	22.44	-R	10.02	-R	3.80	-R	0.88	R	0.38	R	0.85	R	0.99	R	0.99	R	0.94
TOIR08920090000865000000000000000000	R	228.31	R	1356.12	R	1128.31	3 -R	2 708.00	-R	1 500.18	-R	335.37	R	679.13	R	1 470.12	R	2 299.98	R	2 388.25	R	2 326.44	R	1 968.23	R	1 754.54	R	1 551.25	R	1 369.29	R	1 212.07	R	1 076.60	R	965.90	R	870.44	R	788.95	R	718.69	R	657.51	R	603.73				
TOIR0892009000086610000000000000000000	R	309.53	R	745.83	R	436.31	5 -R	2 708.00	-R	2 157.35	-R	1 552.16	-R	955.70	-R	422.46	R	10.70	R	327.90	R	532.37	R	640.84	R	676.74	R	664.09	R	623.50	R	570.28	R	514.38	R	461.36	R	413.70	R	372.02	R	335.97	R	304.83	R	277.82	R	254.22	R	233.44
TOIR0892009000086700000000000000000000	R	243.25	R	281.28	R	38.03	12 -R	2 708.00	-R	2 535.59	-R	2 252.47	-R	1 896.61	-R	1 511.71	-R	1 138.31	-R	807.11	-R	535.77	-R	329.29	-R	182.99	-R	86.49	-R	27.46	R	22.34	R	29.30	R	31.03	R	30.22	R	28.37	R	26.21	R	24.08	R	22.11	R	20.33		
TOIR0892009000086640000000000000000000	R	45.46	R	89.92	R	44.46	12 -R	2 708.00	-R	2 529.47	-R	2 241.15	-R	1 881.41	-R	1 494.11	-R	1 119.75	-R	788.77	-R	518.51	-R	313.61	-R	169.09	-R	74.36	-R	16.94	R	14.81	R	30.29	R	36.28	R	37.21	R	35.75	R	33.34	R	30.71	R	28.18	R	25.86	R	23.77
TOIR0892009000086700000000000000000000	R	34.51	R	772.40	R	737.89	4 -R	2 708.00	-R	1 870.95	-R	1 021.88	-R	243.23	R	402.34	R	880.74	R	1 187.34	R	1 341.17	R	1 375.43	R	1 327.73	R	1 232.44	R	1 116.42	R	997.79	R	886.95	R	788.52	R	703.47	R	630.84	R	568.90	R	515.81	R	469.95	R	429.97	R	394.82
TOIR0892009000086810000000000000000000	R	106.37	R	772.40	R	666.03	4 -R	2 708.00	-R	1 939.20	-R	1 148.23	-R	413.00	R	205.80	R	673.42	R	982.55	R	1 148.45	R	1 200.39	R	1 172.61	R	1 097.01	R	998.96	R	895.92	R	798.17	R	710.56	R	634.42	R	569.17	R	513.40	R	465.54	R	424.17	R	388.09	R	356.36
TOIR0892009000087060000000000000000000	R	3 211.41	R	1 082.35	-R	2 129.07	10 -R	2 708.00	-R	2 461.06	-R	2 114.48	-R	1 711.22	-R	1 297.09	-R	911.92	-R	583.48	-R	325.31	-R	138.14	-R	13.59	R	61.40	R	100.80	R	116.93	R	119.29	R	114.43	R	106.43	R	97.57	R	88.98	R	81.11	R	74.07	R	67.84	R	62.32
TOIR0892009000087160000000000000000000	R	103.75	R	318.04	R	214.29	8 -R	2 708.00	-R	2 368.19	-R	1 942.54	-R	1 480.20	-R	1 029.65	-R	629.80	-R	304.80	-R	63.05	R	100.06	R	197.49	R	245.69	R	260.63	R	255.55	R	240.10	R	220.51	R	200.39	R	181.49	R	164.50	R	149.52	R	136.38	R	124.83	R	114.65
TOIR0892009000087230000000000000000000	R	1 886.38	R	650.20	R	1 236.18	4 -R	2 708.00	-R	1 896.89	-R	1 069.91	-R	307.76	R	327.63	R	801.94	R	1 109.50	R	1 267.91	R	1 308.90	R	1 268.77	R	1 180.96	R	1 071.77	R	959.07	R	853.21	R	758.89	R	677.22	R	607.39	R	547.80	R	496.70	R	452.55	R	414.05	R	380.20
TOIR0892009000087270000000000000000000	R	2 412.33	R	2 012.22	-R	400.11	3 -R	2 708.00	-R	1 709.93	-R	1 273.73	R	157.35	R	866.07	R	1 369.91	R	1 670.55	R	1 795.91	R	1 788.45	R	1 693.74	R	1 551.99	R	1 393.55	R	1 238.16	R	1 096.43	R	972.46	R	866.39	R	776.35	R	699.85	R	634.43	R	577.98	R	528.79	R	485.55
TOIR0892009000087340000000000000000000	R	218.76	R	1 126.20	R	907.45	3 -R	2 708.00	-R	1 709.93	-R	1 273.73	R	157.35	R	866.07	R	1 369.91	R	1 670.55	R	1 795.91	R	1 788.45	R	1 693.74	R	1 551.99	R	1 393.55	R	1 238.16	R	1 096.43	R	972.46	R	866.39	R	776.35	R	699.85	R	634.43	R	577.98	R	528.79	R	485.55
TOIR0892009000088030000000000000000000	R	449.30	R	118.66	-R	330.65	3 -R	2 708.00	-R	1 709.93	-R	1 273.73	R	157.35	R	866.07	R	1 369.91	R	1 670.55	R	1 795.91	R	1 788.45	R	1 693.74	R	1 551.99	R	1 393.55	R	1 238.16	R	1 096.43	R	972.46	R	866.39	R	776.35	R	699.85	R	634.43	R	577.98	R	528.79	R	485.55
TOIR0892009000088040000000000000000000	R	119.26	R	1 089.09	R	969.84	3 -R	2 708.00	-R	1 650.68	-R	614.03	R	304.74	R	1 036.70	R	1 549.91	R	1 848.36	R	1 963.24	R	1 940.42	R	1 828.42	R	1 669.57	R	1 495.53	R	1 326.60	R	1 173.51	R	1 040.15	R	926.33	R	829.90	R	748.04	R	678.08	R	617.73	R	565.15	R	518.93
TOIR0892009000088240000000000000000000	R	325.23	R	256.77	-R	68.46	3 -R	2 708.00	-R	1 650.68	-R	614.03	R	304.74	R	1 036.70	R	1 549.91	R	1 848.36	R	1 963.24	R	1 940.42	R	1 828.42	R	1 669.57	R	1 495.53	R	1 326.60	R	1 173.51	R	1 040.15	R	926.33	R	829.90	R	748.04	R	678.08	R	617.73	R	565.15	R	518.93
TOIR0892009000088300000000000000000000	R	3 140.48	R	423.43	-R	2 717.05	3 -R	2 708.00	-R	1 650.68	-R	614.03	R	304.74	R	1 036.70	R	1 549.91	R	1 848.36	R	1 963.24	R	1 940.42	R	1 828.42	R	1 669.57	R	1 495.53	R	1 326.60	R	1 173.51	R	1 040.15	R	926.33	R	829.90	R	748.04	R	678.08	R	617.73	R	565.15	R	518.93
TOIR0892009000088380000000000000000000	R	2 131.61	R	1 344.06	-R	697.55	3 -R	2 708.00	-R	1 319.68	-R	1.18	R	1 128.15	R	1 989.92	R	2 555.42	R	2 841.62	R	2 897.98	R	2 789.39	R	2 580.78	R	2 326.41	R	2 065.19	R	1 820.68	R	1 604.10	R	1 418.25	R	1 261.22	R	1 129.01	R	1 017.23	R	921.91	R	839.78	R	768.27	R	705.43
TOIR0892009000088400000000000000000000	R	1 741.92	R	3 060.30	R	1 318.38	3 -R	2 708.00	-R	1 319.68	-R	1.18	R	1 128.15	R	1 989.92	R	2 555.42	R	2 841.62	R	2 897.98	R	2 789.39	R	2 580.78	R	2 326.41	R	2 065.19	R	1 820.68	R	1 604.10	R	1 418.25	R	1 261.22	R	1 129.01	R	1 017.23	R	921.91	R	839.78	R	768.27	R	705.43
TOIR0892009000088490000000000000000000	R	1 525.71	R	376.86	-R	1 148.85	14 -R	2 708.00	-R	2 560.17	-R	1 957.77	-R	1 582.51	-R	1 213.00	-R	880.89	-R	605.20	-R	392.35	-R	238.87	-R	135.28	-R	69.77	-R	31.01	-R	9.64	R	1.21	R	6.15	R	8.01	R	8.37	R	8.10	R	7.59	R	7.02	R	6.48		
TOIR0892009000088490000000000000000000	R	89.75	R	101.89	R	12.14	14 -R	2 708.00	-R	2 560.17	-R	1 957.77	-R	1 582.51	-R	1 213.00	-R	880.89	-R	605.20	-R	392.35	-R	238.87	-R	135.28	-R	69.77	-R	31.01	-R	9.64	R	1.21	R	6.15	R	8.01	R	8.37	R	8.10	R	7.59	R	7.02	R	6.48		
TOIR0892009000088540000000000000000000	R	264.12	R	230.02	-R	34.10	6 -R	2 708.00	-R	2 198.51	-R	1 628.36	-R	540.98	-R	114.33	R	204.40	R	416.15	R	535.28	R	583.19	R	582.42	R	552.67	R	508.85	R	460.84	R	414.35	R	372.06	R	334.83	R	302.50	R	274.52	R	250.21	R	228.96	R	210.26		
TOIR0892009000088560000000000000000000	R	84.38	R	477.35	R	392.97	6 -R	2 708.00	-R	2 198.51	-R	1 628.36	-R	540.98	-R	114.33	R	204.40	R	416.15	R	535.28	R	583.19	R	582.42	R	552.67	R	508.85	R	460.84	R	414.35	R	372.06	R	334.83	R	302.50	R	274.52	R	250.21	R	228.96	R	210.26		
TOIR0892009000088640000000000000000000	R	102.94	R	181.84	R	78.90	11 -R	2 708.00	-R	2 496.77	-R	2 180.60	-R	1 800.05	-R	1 399.92	-R	1 020.39	-R	690.63	-R	426.15	-R	229.72	-R	94.76	-R	9.46	R	39.35	R	63.63	R	72.84	R	73.64	R	70.30	R	65.30	R	59.94	R	54.80	R	50.12	R	45.93	R	42.20
TOIR0892009000088720000000000000000000	R	485.98	R	239.61	-R	246.37	6 -R	2 708.00	-R	2 121.21	-R	1 651.87	-R	1 089.67	-R	577.55	-R	152.90	R	166.30	R	380.29	R	502.71	R	554.33	R	557.22	R	530.82	R	489.89	R	444.32	R	399.84	R	359.22	R	323.36	R	292.18	R	265.16	R	241.69	R	221.17	R	203.10
TOIR0892009000088750000000000000000000	R	297.17	R	676.77	R	379.60	4 -R	2 708.00	-R	1 942.81	-R	1 651.87	-R	1 089.67	-R	577.55	-R	152.90	R	166.30	R	380.29	R	502.71	R	554.33	R	557.22	R	530.82	R	489.89	R	444.32	R	399.84	R	359.22	R	323.36	R	292.18	R	265.16	R	241.69	R	221.17	R	203.10
TOIR0892009000088760000000000000000000	R	372.89	R	1 035.11	R	662.22	4 -R	2 708.00	-R	2 121.21	-R	1 651.87	-R	1 089.67	-R	577.55	-R	152.90	R	166.30	R	380.29	R	502.71	R	554.33																								

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SOLD		Old Rev	New Rev	Change in		Consumption	NPV	i = 5.3%																			
				5.3% Cost																							
				1	2			3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
TOR08921000001161900000000000000000		R 88.36	R 147.93	R 59.58	11 -R	2 2708.00 -R	2 515.12 -R	2 214.58 -R	1 845.71 -R	1 452.78 -R	1 076.15 -R	745.71 -R	477.98 -R	276.80 -R	136.47 -R	45.88 R	7.76 R	36.23 R	48.96 R	52.67 R	51.73 R	48.72 R	45.01 R	41.28 R	37.81 R	34.67 R	31.86 R
TOR08921000001162000000000000000000		R 96.21	R 62.13	-R 34.07																							
TOR08921000001162200000000000000000		R 102.32	R 48.35	-R 53.97																							
TOR08921000001163700000000000000000		R 21.93	R 574.8	-R 556.55	5 -R	2 2708.00 -R	2 043.16 -R	1 340.73 -R	673.16 -R	93.60 R	357.60 R	670.58 R	854.85 R	933.74 R	936.30 R	890.70 R	820.04 R	740.74 R	662.93 R	591.80 R	529.24 R	475.22 R	428.84 R	388.96 R	354.43 R	324.30 R	297.79 R
TOR08921000001164000000000000000000		R 64.74	R 140.74	-R 175.48	2 -R	2 2708.00 -R	1 241.29 R	143.96 R	1 321.15 R	2 215.67 R	2 793.55 R	3 076.85 R	3 119.34 R	2 990.45 R	2 758.95 R	2 481.97 R	2 200.10 R	1 937.69 R	1 708.07 R	1 507.80 R	1 340.53 R	1 199.85 R	1 080.98 R	979.66 R	892.37 R	816.38 R	749.60 R
TOR08921000001164100000000000000000		R 54.79	R 139.01	-R 84.22	10 -R	2 2708.00 -R	2 491.72 R	1 21.75 R	1 787.50 R	1 385.39 R	1 005.06 R	675.49 R	411.90 R	216.78 R	83.29 R	0.56 R	48.03 R	71.16 R	79.40 R	75.41 R	69.86 R	58.52 R	53.51 R	49.03 R	45.05 R		
TOR08921000001164500000000000000000		R 27.13	R 910.29	-R 1803.16	3 -R	2 2708.00 -R	1 732.99 R	766.44 R	99.97 R	799.64 R	1 299.84 R	1 601.34 R	1 730.77 R	1 729.29 R	1 641.31 R	1 506.21 R	1 353.85 R	1 203.73 R	1 066.42 R	946.12 R	843.05 R	755.51 R	681.10 R	617.44 R	562.50 R	514.64 R	472.55 R
TOR08921000001164600000000000000000		R 66.84	R 283.73	-R 216.88	8 -R	2 2708.00 -R	2 365.73 R	1 937.98 R	1 474.08 R	1 022.56 R	622.33 R	297.41 R	56.10 R	106.37 R	203.09 R	250.58 R	264.87 R	259.23 R	243.30 R	223.32 R	202.88 R	183.72 R	166.51 R	151.33 R	138.03 R	126.34 R	116.03 R
TOR08921000001165400000000000000000		R 1518.54	R 1464.44	-R 372.10																							
TOR08921000001165500000000000000000		R 219.60	R 221.10	-R 1.50	17 -R	2 2708.00 -R	2 570.27 R	2 316.69 R	1 982.90 R	1 611.61 R	1 243.69 R	911.21 R	633.73 R	418.26 R	261.83 R	155.32 R	87.16 R	46.09 R	22.78 R	10.33 R	4.07 R	1.12 R	0.16 R	0.66 R	0.81 R	0.82 R	0.79 R
TOR08921000001166500000000000000000		R 2 047.71	R 465.09	-R 1 582.62																							
TOR08921000001166800000000000000000		R 366.81	R 3 690.38	-R 3 323.57	1 -R	2 2708.00 -R	584.59 R	3 524.64 R	8 565.33 R	7 443.94 R	8 340.30 R	8 556.04 R	8 275.67 R	7 673.66 R	6 909.21 R	6 105.34 R	5 342.56 R	4 663.21 R	4 081.34 R	3 593.54 R	3 187.86 R	2 849.85 R	2 565.92 R	2 324.70 R	2 117.27 R	1 936.86 R	1 778.38 R
TOR08921000001167200000000000000000		R 49.41	R 97.11	-R 47.70	12 -R	2 2708.00 -R	2 526.40 R	2 235.47 R	1 873.77 R	1 485.27 R	1 110.42 R	777.56 R	509.84 R	305.74 R	1												

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S/GID	Old Rev	New Rev	Consumption	Change in																																															
				NPV	i = 5.3%																																														
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21																										
7.09																																																			
T0R08920120001408000000000000000000	R	196.26	R	1529.10	R	1332.84	-2	-R	2708.00	-R	1305.95	R	24.25	R	1162.31	R	2029.47	R	2597.14	R	2882.83	R	2936.76	R	2824.62	R	2611.99	R	2253.66	R	2088.83	R	1841.18	R	1621.96	R	1433.94	R	1275.11	R	1141.42	R	1028.40	R	932.03	R	848.99	R	776.70	R	713.17
T0R13192	R	113.925	R	1001.03	-3	-R	2708.00	-R	1621.05	-R	955.18	R	378.44	R	1122.01	R	1639.90	R	1937.26	R	2046.90	R	2016.40	R	1895.76	R	2153.66	R	1546.51	R	1370.82	R	1212.05	R	1073.99	R	956.31	R	856.67	R	772.13	R	699.90	R	637.60	R	583.33	R	535.62		
T0R08920120001409900000000000000000	R	324.8	R	2317.58	R	2302.75	-2	-R	2708.00	-R	384.85	R	1729.69	R	3453.69	R	4682.10	R	5395.29	R	5646.90	R	5537.96	R	5187.14	R	4705.66	R	4181.53	R	3674.09	R	3216.11	R	2820.21	R	2486.13	R	2207.03	R	1973.79	R	1777.50	R	1610.56	R	1466.92	R	1341.95	R	1232.16
T0R18920120001410000000000000000000	R	148.76	R	931.955	R	3586.19	-1	-R	2708.00	-R	833.99	R	3986.42	R	6485.76	R	8192.19	R	9097.96	R	9304.46	R	8980.00	R	8313.36	R	7476.10	R	6600.27	R	5771.80	R	5035.49	R	4405.79	R	3878.44	R	3340.19	R	3075.23	R	2768.76	R	2508.43	R	2284.59	R	2089.91	R	1918.91
T0R18920120001410000000000000000000	R	100.76	R	100.76	-1	-R	2708.00	-R	2490.80	-R	2169.55	R	1785.21	R	1382.75	R	1002.27	R	677.73	R	409.30	R	214.43	R	81.20	R	2.38	R	49.61	R	72.53	R	80.60	R	90.45	R	76.34	R	70.69	R	64.79	R	59.20	R	54.12	R	49.59	R	45.56		
T0R08920120001411000000000000000000	R	136.38	R	623.66	R	487.26	-10	-R	2708.00	-R	2108.96	R	1462.56	R	835.31	R	283.09	R	157.71	R	47.12	R	66.03	R	76.96	R	78.73	R	760.13	R	706.79	R	642.52	R	577.33	R	516.64	R	462.46	R	415.75	R	375.33	R	340.48	R	310.28	R	283.92	R	260.71
T0R08920120001412000000000000000000	R	747.01	R	5879.82	R	5132.81	-8	-R	2708.00	-R	2302.76	R	7605.90	R	12422.04	R	13559.86	R	13712.01	R	13127.84	R	12080.62	R	10814.64	R	9514.97	R	8299.65	R	7227.95	R	6316.49	R	5556.25	R	4926.22	R	4402.53	R	3963.27	R	3590.40	R	3269.92	R	2991.25	R	2746.48		
T0R08920120001413000000000000000000	R	112.14	R	318.04	R	205.90	-8	-R	2708.00	-R	2376.17	R	1957.30	R	1500.03	R	1052.61	R	654.02	R	328.72	R	85.56	R	79.61	R	137.37	R	229.87	R	246.91	R	243.65	R	229.73	R	211.40	R	192.32	R	174.29	R	158.02	R	143.65	R	131.03	R	119.94	R	110.16
T0R08920120001415600000000000000000	R	98.23	R	5682.43	R	5584.11	-8	-R	2708.00	-R	2731.34	R	11205.74	R	13566.30	R	14861.83	R	14998.12	R	14338.17	R	13179.90	R	11788.81	R	10365.47	R	9037.27	R	7867.70	R	6874.03	R	6045.83	R	5359.84	R	4789.83	R	4318.12	R	3906.12	R	3557.44	R	3254.26	R	2987.97		
T0R08920120001417900000000000000000	R	382.07	R	1388.30	R	1006.23	-3	-R	2708.00	-R	1616.12	-R	550.04	R	390.72	R	1136.23	R	1654.90	R	1952.07	R	2060.84	R	2029.07	R	1906.98	R	1738.15	R	1555.01	R	1378.19	R	1218.47	R	1079.63	R	961.30	R	861.13	R	776.15	R	703.54	R	640.91	R	586.36	R	538.40
T0R08920120001421300000000000000000	R	395.13	R	5811.14	R	186.01	-8	-R	2708.00	-R	2395.05	R	1992.27	R	1547.01	R	1107.00	R	711.40	R	385.40	R	138.90	R	31.17	R	136.44	R	192.39	R	214.41	R	215.46	R	205.16	R	189.83	R	173.21	R	157.22	R	142.66	R	129.73	R	118.36	R	108.35	R	99.51
T0R08920120001421500000000000000000	R	1378.81	R	421.39	R	957.42	-8	-R	2708.00	-R	2403.85	-R	2008.56	R	1568.90	R	1132.34	R	738.13	R	411.80	R	163.75	R	8.60	R	116.44	R	174.93	R	199.26	R	202.33	R	193.71	R	179.78	R	164.31	R	149.27	R	135.50	R	123.25	R	112.45	R	102.95	R	94.56
T0R08920120001422300000000000000000	R	58.63	R	235.38	R	176.74	-8	-R	2708.00	-R	2403.85	-R	2008.56	R	1568.90	R	1132.34	R	738.13	R	411.80	R	163.75	R	8.60	R	116.44	R	174.93	R	199.26	R	202.33	R	193.71	R	179.78	R	164.31	R	149.27	R	135.50	R	123.25	R	112.45	R	102.95	R	94.56
T0R08920120001423300000000000000000	R	140.65	R	110.28	-R	30.37	-10	-R	2708.00	-R	2403.85	-R	2008.56	R	1568.90	R	1132.34	R	738.13	R	411.80	R	163.75	R	8.60	R	116.44	R	174.93	R	199.26	R	202.33	R	193.71	R	179.78	R	164.31	R	149.27	R	135.50	R	123.25	R	112.45	R	102.95	R	94.56
T0R08920120001423600000000000000000	R	1251.19	R	1046.61	-R	202.58	-10	-R	2708.00	-R	2403.85	-R	2008.56	R	1568.90	R	1132.34	R	738.13	R	411.80	R	163.75	R	8.60	R	116.44	R	174.93	R	199.26	R	202.33	R	193.71	R	179.78	R	164.31	R	149.27	R	135.50	R	123.25	R	112.45	R	102.95	R	94.56
T0R08920120001425200000000000000000	R	422.43	R	163.99	R	258.44	-10	-R	2708.00	-R	2403.85	-R	2008.56	R	1568.90	R	1132.34	R	738.13	R	411.80	R	163.75	R	8.60	R	116.44	R	174.93	R	199.26	R	202.33	R	193.71	R	179.78	R	164.31	R	149.27	R	135.50	R	123.25	R	112.45	R	102.95	R	94.56
T0R08920120001425500000000000000000	R	160.93	R	192.55	R	31.61	-13	-R	2708.00	-R	2541.68	-R	2263.75	R	1911.77	R	1529.26	R	1156.83	R	825.40	R	552.98	R	344.92	R	196.84	-R	98.58	-R	37.95	-R	3.41	R	14.41	R	22.34	R	24.86	R	24.72	R	23.41	R	21.72	R	19.99	R	18.37	R	16.90
T0R08920120001426100000000000000000	R	42.27	R	418.53	R	376.26	-6	-R	2708.00	-R	2214.38	R	1657.74	R	1097.56	R	586.68	R	125.64	R	156.77	R	371.93	R	494.58	R	547.12	R	550.93	R	525.36	R	485.16	R	440.19	R	396.22	R	356.01	R	320.49	R	289.60	R	262.83	R	239.56	R	219.22	R	201.31
T0R08920120001428200000000000000000	R	327.03	R	777.71	R	450.68	-5	-R	2708.00	-R	2145.70	R	1526.88	R	921.74	R	383.14	R	52.17	R	368.87	R	570.92	R	675.86	R	707.77	R	691.18	R	647.00	R	590.66	R	532.14	R	476.96	R	427.52	R	384.36	R	347.08	R	314.89	R	286.98	R	262.60	R	241.14
T0R08920120001428400000000000000000	R	378.12	R	1416.46	R	1038.34	-3	-R	2708.00	-R	1583.62	-R	493.58	R	466.57	R	1224.04	R	1747.53	R	2043.57	R	2146.95	R	2107.27	R	1976.29	R	1798.66	R	1607.49	R	1493.71	R	1258.13	R	1114.46	R	992.15	R	888.68	R	800.95	R	726.00	R	661.37	R	605.07	R	555.58
T0R08920120001428700000000000000000	R	305.68	R	487.15	R	181.47	-8	-R	2708.00	-R	2393.36	-R	2000.25	R	1557.74	R	1119.41	R	724.49	R	398.34	R	151.08	R	20.11	R	126.64	R	183.83	R	206.99	R	209.03	R	199.55	R	184.90	R	168.85	R	153.32	R	139.15	R	126.56	R	115.46	R	105.70	R	97.08
T0R08920120001429300000000000000000	R	130.06	R	286.18	R	156.11	-9	-R	2708.00	-R	2423.44	R	2044.83	-R	1617.64	R	1188.76	R	797.64	R	470.59	R	219.08	R	41.65	R	71.91	R	136.05	R	165.54	R	173.08	R	168.22	R	157.40	R	144.49	R	131.56	R	119.57	R	108.82	R	99.31	R	90.93	R	83.52
T0R08920120001433000000000000000000	R	308.74	R	450.59	R	141.85	-9	-R	2708.00	-R	2436.99	-R	2069.91	R	1651.34	R	1227.77	R	838.79	R	511.24	R	257.33	R	76.40	R	112.17	R	100.17	R	142.23	R	152.86	R	160.60	R	141.92	R	130.78	R	119.32	R	108.55	R	98.84	R	90.22	R	82.61	R	75.88
T0R08920120001434800000000000000000	R	299.89	R	261.17	R	225.67	-10	-R	2708.00	-R	2436.99	-R	2069.91	R	1651.34	R	1227.77	R	838.79	R	511.24	R	257.33	R	76.40	R	112.17	R	100.17	R	142.23	R	152.86	R	160.60	R	141.92	R	130.78	R	119.32	R	108.55	R	98.84	R	90.22	R	82.61	R	75.88
T0R08920120001435100000000000000000	R	112.37	R	695.36	R	582.99	-5	-R	2708.00	-R	2018.05	R	1294.24	R	609.16	R	21.29	R	433.88	R	75.92	R	925.76	R	998.14	R	913.37	R	940.53	R	863.25	R	778.22	R	695.59	R	620.49	R	554.64	R	497.91	R	449.26	R	404.45	R	371.27	R	339.70	R	311.93
T0R08920120001436100000000000000000	R	114.43	R	455.29	R	340.86	-6	-R	2708.00	-R	2247.99	R	1719.98	R	1181.18	R	683.48	R	264.65	R	55.91	R	276.40	R	408.36	R	407.72	R	484.23	R	467.51	R	434.98	R	396.47	R	357.82	R	322.00	R	290.12	R	262.26	R	238.07	R	217.01	R	198.60	R	182.37
T0R08920120001436400000000000000000	R	80.63	R	623.64	R	543.01	-5	-R	2708.00	-R	2056.03	R	1364.55	R	703.63	R	130.65	R	318.52	R	631.97	R	818.52	R	900.74	R	907.06	R	865.17	R	797.89	R																			

SGID	Old Rev	New Rev	Change in Consumption	5.3% Cost																								
				i = 5.3% NPV																								
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21				
TOIR08920130001478200000000000000000	R 699.40	R 671.45	-R 27.94	7.09																								
TOIR08920130001478700000000000000000	R 228.95	R 271.47	R 42.52		12 -R	2 708.00 -R	2 531.32 -R	2 244.57 -R	1 886.00 -R	1 499.42 -R	1 125.35 -R	794.31 -R	523.72 -R	318.34 -R	173.29 -R	78.02 -R	20.12 -R	12.06 -R	27.89 -R	34.17 -R	35.34 -R	34.08 -R	31.84 -R	29.35 -R	26.94 -R	24.73 -R	22.73 -R	
TOIR08920130001479200000000000000000	R 31.17	R 455.29	R 424.12		6 -R	2 708.00 -R	2 168.93 -R	1 573.59 -R	984.49 -R	455.79 -R	24.46 -R	293.17 -R	499.68 -R	611.15 -R	650.43 -R	644.12 -R	603.58 -R	553.00 -R	499.32 -R	448.14 -R	401.99 -R	361.56 -R	326.56 -R	296.31 -R	270.05 -R	247.12 -R	226.92 -R	
TOIR08920130001479300000000000000000	R 57.17	R 551.92	R 494.75		5 -R	2 708.00 -R	2 101.85 -R	1 449.40 -R	817.63 -R	262.62 -R	179.30 -R	494.45 -R	689.10 -R	774.23 -R	802.89 -R	774.23 -R	719.02 -R	653.13 -R	586.58 -R	524.76 -R	469.86 -R	422.18 -R	381.11 -R	345.72 -R	315.05 -R	288.28 -R	264.72 -R	
TOIR08920130001479400000000000000000	R 31.35	R 910.29	R 878.94		3 -R	2 708.00 -R	1 737.00 -R	773.85 -R	90.01 -R	788.11 -R	1 287.68 -R	1 589.33 -R	1 719.47 -R	1 719.02 -R	1 632.22 -R	1 498.27 -R	1 346.97 -R	1 197.75 -R	1 061.22 -R	941.54 -R	839.00 -R	751.89 -R	677.84 -R	614.49 -R	559.82 -R	512.18 -R	470.29 -R	
TOIR08920130001479500000000000000000	R 17.76	R 684.74	R 666.97		4 -R	2 708.00 -R	1 938.30 -R	1 146.57 -R	410.76 -R	208.40 -R	676.16 -R	985.26 -R	1 150.99 -R	1 202.70 -R	1 174.66 -R	1 098.80 -R	1 000.51 -R	897.27 -R	799.35 -R	711.59 -R	635.33 -R	569.98 -R	514.13 -R	466.20 -R	424.78 -R	388.65 -R	356.87 -R	
TOIR08920130001479700000000000000000	R 1 441.10	R 581.14	R 859.96																									
TOIR08920130001479800000000000000000	R 41.06	R 56.62	R 15.57		14 -R	2 708.00 -R	2 556.92 -R	2 291.96 -R	1 949.68 -R	1 573.14 -R	1 203.11 -R	871.13 -R	596.01 -R	384.00 -R	231.47 -R	128.82 -R	64.17 -R	26.15 -R	5.41 -R	4.93 -R	9.45 -R	10.95 -R	11.02 -R	10.49 -R	9.77 -R	9.02 -R	8.31 -R	
TOIR08920130001481500000000000000000	R 392.41	R 425.88	R 33.47		13 -R	2 708.00 -R	2 539.92 -R	2 260.49 -R	1 907.39 -R	1 524.18 -R	1 151.47 -R	820.11 -R	548.00 -R	340.40 -R	192.83 -R	95.08 -R	34.91 -R	0.78 -R	16.70 -R	24.35 -R	26.65 -R	26.31 -R	24.85 -R	23.02 -R	21.17 -R	19.45 -R	17.89 -R	
TOIR08920130001481700000000000000000	R 416.89	R 775.05	R 358.16		6 -R	2 708.00 -R	2 231.57 -R	1 689.57 -R	1 140.32 -R	636.18 -R	214.75 -R	105.20 -R	322.79 -R	450.49 -R	508.05 -R	516.82 -R	495.78 -R	459.50 -R	417.83 -R	376.58 -R	338.62 -R	304.96 -R	275.62 -R	250.16 -R	228.03 -R	208.68 -R	191.63 -R	
TOIR08920130001485200000000000000000	R 140.41	R 454.51	R 354.09		6 -R	2 708.00 -R	2 235.43 -R	1 696.72 -R	1 149.92 -R	647.30 -R	226.48 -R	93.61 -R	311.88 -R	440.59 -R	499.27 -R	509.16 -R	489.13 -R	453.73 -R	412.81 -R	372.17 -R	334.71 -R	301.47 -R	272.48 -R	247.32 -R	225.44 -R	206.31 -R	189.45 -R	
TOIR08920130001486000000000000000000	R 20.66	R 53.87	R 33.21		13 -R	2 708.00 -R	2 540.16 -R	2 260.94 -R	1 908.00 -R	1 524.89 -R	1 152.21 -R	820.85 -R	548.69 -R	341.02 -R	193.39 -R	95.57 -R	35.33 -R	1.14 -R	16.39 -R	24.07 -R	26.40 -R	26.09 -R	24.65 -R	22.84 -R	21.01 -R	19.30 -R	17.75 -R	
TOIR08920130001486200000000000000000	R 42.84	R 230.02	R 187.18		8 -R	2 708.00 -R	2 393.94 -R	1 990.21 -R	1 103.79 -R	708.01 -R	382.06 -R	135.76 -R	34.02 -R	138.98 -R	159.16 -R	216.32 -R	217.12 -R	206.61 -R	191.10 -R	174.34 -R	158.23 -R	143.57 -R	130.55 -R	119.10 -R	109.03 -R	100.14 -R		
TOIR08920130001488800000000000000000	R 40.78	R 91.12	R 50.34		12 -R	2 708.00 -R	2 523.89 -R	2 230.82 -R	1 867.52 -R	1 478.04 -R	1 102.79 -R	772.02 -R	502.74 -R	299.29 -R	156.41 -R	63.28 -R	7.33 -R	23.14 -R	37.55 -R	42.65 -R	42.86 -R	40.79 -R	37.88 -R	34.82 -R	31.92 -R	29.29 -R	26.92 -R	
TOIR08920130001489100000000000000000	R 295.89	R 3 303.18	R 3 007.29		1 -R	2 708.00 -R	2 84.22 -R	2 968.51 -R	5 118.12 -R	6 608.94 -R	7 427.84 -R	7 654.69 -R	7 427.44 -R	6 903.26 -R	6 226.47 -R	5 509.28 -R	4 825.61 -R	4 214.85 -R	3 690.60 -R	3 250.43 -R	2 883.97 -R	2 578.42 -R	2 321.64 -R	2 103.44 -R	1 915.77 -R	1 752.54 -R	1 609.14 -R	
TOIR08920130001489700000000000000000	R 127.07	R 244.51	R 117.44		10 -R	2 708.00 -R	2 460.17 -R	2 112.84 -R	1 709.01 -R	1 294.53 -R	909.22 -R	580.81 -R	322.80 -R	135.86 -R	11.57 -R	63.16 -R	102.33 -R	118.26 -R	120.44 -R	115.44 -R	107.33 -R	98.37 -R	89.70 -R	81.76 -R	74.67 -R	68.39 -R	62.82 -R	
TOIR08920130001490500000000000000000	R 1 186.36	R 676.77	R 509.60																									
TOIR08920130001491000000000000000000	R 100.82	R 163.99	R 63.18		11 -R	2 708.00 -R	2 511.70 -R	2 208.25 -R	1 837.20 -R	1 442.93 -R	1 065.76 -R	735.45 -R	468.32 -R	268.03 -R	128.70 -R	39.10 -R	13.64 -R	41.34 -R	53.41 -R	56.58 -R	55.19 -R	51.81 -R	47.79 -R	43.80 -R	40.10 -R	36.77 -R	33.79 -R	
TOIR08920130001491100000000000000000	R 184.09	R 369.51	R 185.42		8 -R	2 708.00 -R	2 395.61 -R	1 993.30 -R	1 548.40 -R	1 108.60 -R	713.09 -R	387.07 -R	140.47 -R	29.74 -R	135.18 -R	191.29 -R	213.45 -R	204.43 -R	189.19 -R	172.65 -R	156.72 -R	142.21 -R	129.32 -R	117.98 -R	108.01 -R		99.20 -R	
TOIR08920130001492000000000000000000	R 1 173.86	R 153.29	R 1 020.57																									
TOIR08920130001492800000000000000000	R 575.83	R 53.87	R 521.96																									
TOIR08920130001492900000000000000000	R 545.41	R 484.70	R 60.70																									
TOIR08920130001493400000000000000000	R 728.00	R 300.88	R 427.11																									
TOIR08920130001493600000000000000000	R 750.26	R 599.73	R 150.53																									
TOIR08920130001493700000000000000000	R 131.48	R 713.74	R 582.25			5 -R	2 708.00 -R	2 018.76 -R	1 295.54 -R	610.91 -R	23.31 -R	431.74 -R	743.81 -R	923.77 -R	996.33 -R	991.77 -R	939.13 -R	862.04 -R	777.17 -R	694.68 -R	619.68 -R	553.93 -R	497.27 -R	448.69 -R	406.93 -R	370.80 -R	339.27 -R	311.54 -R
TOIR08920130001493800000000000000000	R 645.69	R 691.82	R 46.13		12 -R	2 708.00 -R	2 527.89 -R	2 238.23 -R	1 877.48 -R	1 489.56 -R	1 114.95 -R	784.04 -R	514.05 -R	309.56 -R	165.51 -R	71.23 -R	14.22 -R	17.17 -R	32.34 -R	38.08 -R	38.81 -R	37.17 -R	34.62 -R	31.87 -R	29.24 -R	26.83 -R	24.66 -R	
TOIR08920130001494700000000000000000	R 621.12	R 364.61	R 256.51																									
TOIR08920130001495300000000000000000	R 538.16	R 256.77	R 281.39																									
TOIR08920130001495500000000000000000	R 512.91	R 487.15	R 25.76																									
TOIR08920130001495700000000000000000	R 558.46	R 1 166.69	R 608.23		4 -R	2 708.00 -R	1 994.08 -R	1 249.86 -R	549.54 -R	47.74 -R	506.69 -R	817.85 -R	993.45 -R	1 059.61 -R	1 047.85 -R	988.09 -R	904.50 -R	813.99 -R	726.77 -R	647.87 -R	578.89 -R	519.57 -R	468.76 -R	425.11 -R	387.35 -R	354.41 -R	325.44 -R	
TOIR08920130001495800000000000000000	R 121.79	R 118.66	R 3.13																									
TOIR08920130001498100000000000000000	R 756.75	R 313.14	R 443.62																									
TOIR08920130001500400000000000000000	R 46.12	R 1 515.02	R 1 468.90		2 -R	2 708.00 -R	1 176.74 -R	263.49 -R	1 483.74 -R	2 401.58 -R	2 989.66 -R	3 270.58 -R	3 301.65 -R	3 156.03 -R	2 905.69 -R	2 610.08 -R	2 311.21 -R	2 034.06 -R	1 790.05 -R	1 581.54 -R	1 405.84 -R	1 258.18 -R	1 133.48 -R	1 027.21 -R	935.67 -R	855.99 -R	785.97 -R	
TOIR08920130001500500000000000000000	R 319.84	R 264.12	R 55.72																									

SGID	Old Rev	New Rev	Change in Consumption		i = 5.3% NPV	5.3% Cost		R 2 708.00																						
			1	2		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21						
TOIR0892013000155170000000000000000000	R 28.56	R 67.65	R 39.09	12 -R 2 708.00 -R	2 534.58 -R	2 250.61 -R	1 894.11 -R	1 508.82 -R	1 135.26 -R	804.10 -R	532.93 -R	326.71 -R	180.70 -R	84.49 -R	25.73 R	7.19 R	23.65 R	30.44 R	32.04 R	31.13 R	29.19 R	26.95 R	24.75 R	22.73 R	20.90					
TOIR0892013000155360000000000000000000	R 24.43	R 1835.34	R 1810.91	2 -R 2 708.00 -R	851.93 -R	864.87 -R	2 291.75 -R	3 336.97 -R	3 976.37 R	4 245.26 R	4 218.91 R	3 989.12 R	3 643.97 R	3 254.63 R	2 870.21 R	2 518.89 R	2 212.58 R	1 952.57 R	1 734.46 R	1 551.70 R	1 397.64 R	1 266.48 R	1 153.57 R	1 055.31 R	968.96					
TOIR0892013000155460000000000000000000	R 31.00	R 724.58	R 693.58	4 -R 2 708.00 -R	1 913.03 -R	1 099.78 -R	347.89 R	281.17 R	752.93 R	1 061.09 R	1 222.36 R	1 267.52 R	1 232.10 R	1 148.95 R	1 044.01 R	934.99 R	832.22 R	740.46 R	660.90 R	592.82 R	534.68 R	484.82 R	441.73 R	404.15 R	371.11					
TOIR0892013000155540000000000000000000	R 37.92	R 62.13	R 24.22	13 -R 2 708.00 -R	2 548.70 -R	2 276.75 -R	1 929.24 R	1 549.48 -R	1 178.15 -R	846.47 -R	572.80 -R	362.93 -R	212.80 -R	112.52 -R	50.03 -R	13.89 R	5.28 R	14.31 R	17.76 R	18.37 R	17.70 R	16.55 R	15.28 R	14.06 R	12.94					
TOIR0892013000155550000000000000000000	R 116.68	R 181.84	R 65.16	11 -R 2 708.00 -R	2 509.82 -R	2 204.76 -R	1 832.51 -R	1 437.51 -R	1 060.04 R	729.79 R	463.00 -R	263.20 -R	124.42 -R	35.36 R	16.89 R	44.15 R	55.86 R	58.73 R	57.10 R	53.51 R	49.32 R	45.19 R	41.37 R	37.92 R	34.85					
TOIR0892013000155540000000000000000000	R 13.88	R 163.99	R 150.11	9 -R 2 708.00 -R	2 429.15 -R	2 055.39 -R	1 631.82 -R	1 205.18 -R	814.96 -R	487.70 -R	235.18 -R	56.28 R	58.95 R	124.74 R	155.73 R	164.57 R	160.81 R	150.89 R	138.72 R	126.41 R	114.93 R	104.62 R	95.49 R	87.43 R	80.30					
TOIR0892013000155550000000000000000000	R 74.17	R 135.42	R 61.25	11 -R 2 708.00 -R	2 513.54 -R	2 211.65 -R	1 841.76 -R	1 448.22 -R	1 071.34 R	740.95 -R	473.50 -R	272.74 -R	132.87 -R	42.74 R	10.49 R	38.60 R	51.02 R	54.48 R	53.33 R	50.15 R	46.30 R	42.45 R	38.87 R	35.64 R	32.75					
TOIR0892013000155560000000000000000000	R 105.14	R 169.35	R 64.20	11 -R 2 708.00 -R	2 510.73 -R	2 206.44 -R	1 834.78 -R	1 440.13 -R	1 062.80 -R	732.52 -R	465.57 -R	265.53 -R	126.49 -R	37.16 R	15.32 R	42.79 R	54.68 R	57.69 R	56.18 R	52.69 R	48.58 R	44.52 R	40.75 R	37.36 R	34.34					
TOIR0892013000155630000000000000000000	R 67.791	R 381.76	R 296.14																											
TOIR0892013000155640000000000000000000	R 122.88	R 106.68	R 16.19																											
TOIR0892013000155710000000000000000000	R 22.02	R 94.71	R 72.70	11 -R 2 708.00 -R	2 502.66 -R	2 191.51 -R	1 814.71 -R	1 416.90 -R	1 038.30 -R	708.32 -R	442.79 -R	244.84 -R	108.16 -R	21.16 R	29.20 R	54.83 R	65.17 R	66.90 R	64.34 R	59.98 R	55.14 R	50.46 R	46.17 R	42.31 R	38.88					
TOIR0892013000155860000000000000000000	R 17.04	R 679.65	R 502.60	5 -R 2 708.00 -R	2 094.40 -R	1 435.59 -R	799.08 R	241.15 R	201.96 R	516.83 R	710.16 R	802.32 R	819.84 R	789.03 R	731.86 R	664.26 R	596.28 R	533.28 R	477.40 R	428.92 R	387.18 R	351.21 R	320.06 R	292.85 R	268.92					
TOIR0892013000155880000000000000000000	R 177.08	R 1 363.66	R 1 186.58	3 -R 2 708.00 -R	1 444.84 -R	232.92 R	816.79 R	1 629.47 R	2 175.20 R	2 466.03 R	2 544.51 R	2 468.36 R	2 296.28 R	2 078.03 R	1 849.78 R	1 633.85 R	1 441.27 R	1 275.28 R	1 134.58 R	1 015.90 R	915.44 R	829.71 R	755.81 R	691.46 R	634.91					
TOIR0892013000155900000000000000000000	R 334.52	R 210.39	R 124.12																											
TOIR0892013000155950000000000000000000	R 15.32	R 226.45	R 211.13	8 -R 2 708.00 -R	2 371.20 -R	1 948.10 -R	1 487.67 -R	1 038.30 -R	638.93 -R	313.82 -R	71.54 R	92.35 R	190.67 R	239.73 R	255.46 R	251.07 R	236.19 R	217.08 R	197.35 R	178.78 R	162.06 R	147.30 R	134.36 R	122.99 R	112.95					
TOIR0892013000156000000000000000000000	R 27.17	R 69.03	R 41.85	12 -R 2 708.00 -R	2 531.95 -R	2 245.74 -R	1 887.58 -R	1 501.25 -R	1 127.28 -R	796.21 -R	525.51 -R	319.97 -R	174.73 -R	79.28 -R	21.21 R	11.11 R	27.07 R	33.45 R	34.70 R	33.51 R	31.32 R	28.88 R	26.52 R	24.34 R	22.38					
TOIR0892013000156100000000000000000000	R 22.56	R 130.30	R 127.74	3 -R 2 708.00 -R	1 358.27 -R	72.62 R	1 032.16 R	1 878.80 R	2 438.20 R	2 725.83 R	2 789.01 R	2 690.42 R	2 493.07 R	2 249.84 R	1 998.78 R	1 763.08 R	1 553.90 R	1 374.17 R	1 222.18 R	1 094.14 R	985.85 R	893.49 R	813.89 R	744.59 R	683.69					
TOIR0892013000156170000000000000000000	R 14.45	R 261.67	R 247.21	7 -R 2 708.00 -R	2 336.93 -R	1 884.65 -R	1 402.42 -R	939.61 -R	534.82 -R	210.97 R	25.25 R	180.25 R	268.56 R	307.74 R	314.44 R	302.23 R	280.77 R	256.23 R	232.02 R	209.75 R	189.93 R	172.55 R	157.35 R	144.02 R	132.26					
TOIR0892013000156210000000000000000000	R 36.10	R 1 229.90	R 1 193.80	3 -R 2 708.00 -R	1 437.98 -R	220.22 R	833.85 R	1 649.23 R	2 196.04 R	2 486.62 R	2 563.89 R	2 485.96 R	2 311.88 R	2 091.65 R	1 861.58 R	1 644.09 R	1 450.20 R	1 283.11 R	1 141.53 R	1 022.10 R	921.02 R	834.76 R	760.41 R	695.67 R	638.77					
TOIR0892013000156270000000000000000000	R 42.723	R 332.75	R 94.48																											
TOIR0892013000156280000000000000000000	R 10.22	R 788.33	R 778.11	4 -R 2 708.00 -R	1 833.75 -R	951.15 -R	148.20 R	512.35 R	996.79 R	1 301.98 R	1 449.05 R	1 474.31 R	1 414.56 R	1 308.25 R	1 182.16 R	1 054.81 R	936.65 R	832.16 R	742.12 R	665.36 R	599.96 R	543.95 R	495.58 R	453.42 R	416.34					
TOIR0892013000156290000000000000000000	R 103.26	R 130.63	R 27.37	13 -R 2 708.00 -R	2 545.71 -R	2 271.22 -R	1 921.80 -R	1 540.87 -R	1 169.07 -R	837.50 -R	1 449.05 R	1 474.31 R	1 414.56 R	1 308.25 R	1 182.16 R	1 054.81 R	936.65 R	832.16 R	742.12 R	665.36 R	599.96 R	543.95 R	495.58 R	453.42 R	416.34					
TOIR0892013000156320000000000000000000	R 35.50	R 512.07	R 476.57	5 -R 2 708.00 -R	2 119.12 -R	1 481.36 -R	860.58 R	312.34 R	126.86 R	442.65 R	640.35 R	738.92 R	763.65 R	739.97 R	689.31 R	627.36 R	564.12 R	505.04 R	452.39 R	406.58 R	367.07 R	333.00 R	303.47 R	277.68 R	254.99					
TOIR0892013000156340000000000000000000	R 8.97	R 374.41	R 365.44	6 -R 2 708.00 -R	2 224.65 -R	1 676.76 -R	1 123.11 -R	616.26 -R	193.74 R	125.96 R	342.32 R	530.55 R	507.68 R	469.83 R	426.83 R	384.49 R	345.62 R	311.21 R	281.24 R	255.26 R	232.67 R	212.92 R	195.53 R							
TOIR0892013000156410000000000000000000	R 17.17	R 95.91	R 78.74	11 -R 2 708.00 -R	2 409.92 -R	2 180.89 -R	1 800.44 -R	1 400.37 -R	1 020.87 -R	691.10 -R	426.59 -R	230.13 -R	95.11 -R	9.77 R	39.08 R	63.40 R	72.63 R	73.46 R	70.14 R	65.16 R	59.81 R	54.69 R	50.02 R	45.83 R	42.11					
TOIR0892013000156430000000000000000000	R 67.02	R 1 500.94	R 1 433.92	2 -R 2 708.00 -R	1 296.96 -R	201.98 R	1 401.11 R	2 305.91 R	2 888.75 R	3 170.89 R	3 207.84 R	3 070.83 R	2 830.19 R	2 544.16 R	2 254.03 R	1 984.47 R	1 746.84 R	1 543.59 R	1 372.23 R	1 228.16 R	1 106.47 R	1 002.74 R	913.39 R	835.61 R	767.25					
TOIR0892013000156550000000000000000000	R 122.33	R 237.16	R 114.83	10 -R 2 708.00 -R	2 462.65 -R	2 117.42 -R	1 715.17 -R	1 301.66 -R	916.74 -R	588.24 -R	329.79 -R	142.21 -R	17.20 R	58.25 R	98.07 R	114.56 R	117.22 R	112.61 R	104.82 R	96.14 R	87.69 R	79.94 R	73.01 R	66.87 R	61.43					
TOIR0892013000156560000000000000000000	R 31.92	R 163.99	R 132.07	9 -R 2 708.00 -R	2 446.27 -R	2 087.10 -R	1 674.44 -R	1 254.51 -R	867.00 -R	539.10 -R	283.55 -R	100.21 -R	20.02 R	90.74 R	126.25 R	139.00 R	138.52 R	131.32 R	110.93 R	101.00 R	92.00 R	83.99 R	76.92 R	70.65						
TOIR0892013000156640000000000000000000	R 21.77	R 167.56	R 145.79	9 -R 2 708.00 -R	2 483.24 -R	2 062.98 -R	1 642.02 -R	1 216.98 -R	827.41 -R	500.00 -R	246.75 -R	66.79 R	49.64 R	116.60 R	148.68 R	158.45 R	155.47 R	146.20 R	134.57 R	122.71 R	111.60 R	101.60 R	92.74 R	84.91 R	77.99					
TOIR0892013000156730000000000000000000	R 77.55	R 903.54	R 825.99	4 -R 2 708.00 -R	1 787.28 -R	866.96 -R	35.08 R	643.30 R	1 134.92 R	1 438.43 R	1 577.46 R	1 590.04 R	1 517.92 R	1 338.48 R	1 260.42 R	1 122.69 R	995.80 R	884.10 R	788.12 R	706.45 R	636.94 R	577.45 R	526.08 R	481.32 R	441.96					
TOIR0892013000156800000000000000000000	R 16.02	R 35.05	R 19.03	14 -R 2 708.00 -R	2 553.62 -R	2 285.87 -R	1 941.49 -R	1 563.66 -R	1 193.11 -R	861.24 -R	586.71 -R	375.55 -R	223.99 R	122.29 R	58.50 R	1.13 R	8.69 R	12.78 R	13.92 R	13.70 R	12.92 R	11.98 R	11.04 R	10.17						
TOIR0892013000156830000000000000000000	R 12.58	R 42.19	R 29.61	13 -R 2 708.00 -R	2 543.58 -R	2 267.27 -R	1 916.50 -																							

SGID	Old Rev	New Rev	Change in		i = 5.3% NPV	5.3% Cost																																													
			Consumption																																																
							1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21																								
7.09																																																			
TOIR052400000000164000010000000000	R	360.17	R	2 074.70	R	1 714.54		2	- R 208.00	- R	943.46	R	695.41	R	2 064.06	R	3 073.38	R	3 698.32	R	3 970.60	R	3 960.43	R	3 754.36	R	3 435.93	R	3 073.00	R	2 712.69	R	2 382.27	R	2 093.52	R	1 848.02	R	1 641.86	R	1 468.99	R	1 323.20	R	1 199.06	R	1 092.17	R	999.15	R	917.41
TOIR05340040000153000000000000000000	R	88.41	R	3 778.70	R	290.29		7	- R 208.00	- R	2 296.02	- R	1 808.90	- R	1 300.66	- R	821.80	- R	410.55	- R	88.22	- R	140.77	- R	285.17	- R	361.55	- R	388.92	- R	384.85	- R	363.29	- R	333.99	- R	302.96	- R	273.41	- R	246.71	- R	223.20	- R	202.69	- R	184.79	- R	169.12	- R	155.31
TOIR05340040000154900000000000000000	R	468.82	R	188.09	R	280.73		1	- R 208.00	- R	688.67	R	3 717.36	R	6 124.26	R	7 773.70	R	8 656.51	R	8 868.38	R	8 569.62	R	7 940.64	R	7 145.80	R	6 311.89	R	5 521.70	R	4 818.58	R	4 216.75	R	3 712.44	R	3 293.17	R	2 943.91	R	2 650.57	R	2 401.38	R	2 187.10	R	2 000.74	R	1 837.03
TOIR05340040000178200000000000000000	R	314.99	R	640.69	R	325.70		6	- R 208.00	- R	2 262.40	- R	1 746.65	- R	1 217.01	- R	724.96	- R	308.41	- R	12.68	- R	235.73	- R	371.42	- R	437.98	- R	455.64	- R	442.72	- R	413.48	- R	377.73	- R	341.37	- R	307.43	- R	277.10	- R	250.55	- R	227.45	- R	207.35	- R	189.76	- R	174.26
TOIR05340040000214800000000000000000	R	673.73	R	300.07	- R	373.66		4	- R 208.00	- R	1 875.86	- R	1 030.96	- R	255.43	- R	388.21	- R	865.84	- R	1 172.62	- R	1 327.32	- R	1 362.85	- R	1 316.58	- R	1 222.71	- R	1 107.97	- R	990.47	- R	880.57	- R	782.92	- R	698.51	- R	626.40	- R	564.91	- R	512.20	- R	466.66	- R	426.96	- R	392.05
TOIR05340040000218200000000000000000	R	740.52	R	990.70	R	250.18		7	- R 208.00	- R	2 334.12	- R	1 879.44	- R	1 395.43	- R	931.51	- R	526.28	- R	202.54	- R	33.18	- R	187.46	- R	274.95	- R	313.31	- R	319.28	- R	306.42	- R	284.43	- R	259.44	- R	234.86	- R	212.29	- R	192.22	- R	174.62	- R	159.24	- R	145.74	- R	133.85
TOIR05340040000219100000000000000000	R	379.19	R	455.09	R	75.89		11	- R 208.00	- R	2 499.63	- R	2 185.89	- R	1 807.16	- R	1 408.15	- R	1 029.08	- R	699.21	- R	434.22	- R	237.06	- R	101.25	- R	15.13	- R	34.43	- R	59.36	- R	69.12	- R	70.37	- R	67.41	- R	62.72	- R	57.61	- R	52.70	- R	48.20	- R	44.18	- R	40.59
TOIR05340050000247200000000000000000	R	174.14	R	297.82	R	123.68		9	- R 208.00	- R	2 454.24	- R	2 101.86	- R	1 694.26	- R	1 277.46	- R	891.21	- R	563.02	- R	306.05	- R	120.65	- R	1.91	- R	74.93	- R	112.54	- R	127.11	- R	128.16	- R	122.22	- R	113.33	- R	103.73	- R	94.52	- R	86.13	- R	78.65	- R	72.03	- R	66.16
TOIR05340050000259040000000000000000	R	1 465.99	R	1 222.86	- R	243.13		4	- R 208.00	- R	1 875.86	- R	1 030.96	- R	255.43	- R	388.21	- R	865.84	- R	1 172.62	- R	1 327.32	- R	1 362.85	- R	1 316.58	- R	1 222.71	- R	1 107.97	- R	990.47	- R	880.57	- R	782.92	- R	698.51	- R	626.40	- R	564.91	- R	512.20	- R	466.66	- R	426.96	- R	392.05
TOIR05340050000261300000000000000000	R	61.37	R	794.09	R	732.72		4	- R 208.00	- R	1 875.86	- R	1 030.96	- R	255.43	- R	388.21	- R	865.84	- R	1 172.62	- R	1 327.32	- R	1 362.85	- R	1 316.58	- R	1 222.71	- R	1 107.97	- R	990.47	- R	880.57	- R	782.92	- R	698.51	- R	626.40	- R	564.91	- R	512.20	- R	466.66	- R	426.96	- R	392.05
TOIR05340050000263950000000000000000	R	756.88	R	972.14	R	215.26		8	- R 208.00	- R	2 367.28	- R	1 940.84	- R	1 477.92	- R	1 027.01	- R	627.02	- R	302.05	- R	60.46	- R	102.41	- R	199.58	- R	247.51	- R	262.21	- R	256.92	- R	241.29	- R	221.56	- R	201.31	- R	182.32	- R	165.25	- R	150.19	- R	136.99	- R	125.39	- R	115.16
TOIR05340050000300500000000000000000	R	375.33	R	669.91	R	294.58		7	- R 208.00	- R	2 291.95	- R	1 801.37	- R	1 290.53	- R	810.08	- R	398.19	- R	76.01	- R	152.26	- R	295.61	- R	370.79	- R	396.99	- R	391.85	- R	369.36	- R	339.28	- R	307.60	- R	277.52	- R	250.39	- R	226.51	- R	205.68	- R	187.52	- R	171.62	- R	157.61
TOIR05340050000312900000000000000000	R	1 032.75	R	894.83	- R	137.93		2	- R 208.00	- R	320.31	- R	1 849.19	- R	3 614.24	- R	4 867.97	- R	5 591.36	- R	5 840.58	- R	5 720.22	- R	5 352.68	- R	4 852.36	- R	4 309.61	- R	3 785.17	- R	3 312.45	- R	2 904.17	- R	2 559.85	- R	2 272.33	- R	2 032.12	- R	1 829.99	- R	1 658.10	- R	1 510.21	- R	1 381.55	- R	1 268.52
TOIR05340050000313100000000000000000	R	370.73	R	2 741.45	R	2 370.71		2	- R 208.00	- R	320.31	- R	1 849.19	- R	3 614.24	- R	4 867.97	- R	5 591.36	- R	5 840.58	- R	5 720.22	- R	5 352.68	- R	4 852.36	- R	4 309.61	- R	3 785.17	- R	3 312.45	- R	2 904.17	- R	2 559.85	- R	2 272.33	- R	2 032.12	- R	1 829.99	- R	1 658.10	- R	1 510.21	- R	1 381.55	- R	1 268.52
TOIR054500000000035700000R0000000000	R	649.21	R	698.02	- R	48.81		12	- R 208.00	- R	2 525.35	- R	2 233.51	- R	1 871.14	- R	1 482.22	- R	1 107.21	- R	776.39	- R	506.85	- R	303.02	- R	159.71	- R	66.17	- R	9.84	- R	20.97	- R	35.66	- R	40.99	- R	41.39	- R	39.48	- R	36.70	- R	33.75	- R	30.95	- R	28.39	- R	26.10
TOIR05670000000000100000000000000000	R	66.34	R	44.91	- R	21.43		10	- R 208.00	- R	2 473.23	- R	2 137.02	- R	1 741.50	- R	1 332.14	- R	948.89	- R	620.00	- R	359.68	- R	169.36	- R	41.26	- R	37.25	- R	79.86	- R	98.76	- R	103.45	- R	100.52	- R	94.11	- R	86.57	- R	79.08	- R	72.14	- R	65.91	- R	60.37	- R	55.46
TOIR05900000000000000000000000000000	R	7 802.80	R	7 301.90	- R	500.90		9	- R 208.00	- R	2 525.35	- R	2 233.51	- R	1 871.14	- R	1 482.22	- R	1 107.21	- R	776.39	- R	506.85	- R	303.02	- R	159.71	- R	66.17	- R	9.84	- R	20.97	- R	35.66	- R	40.99	- R	41.39	- R	39.48	- R	36.70	- R	33.75	- R	30.95	- R	28.39	- R	26.10
TOIR05970040000047600000000000000000	R	1 023.48	R	528.01	- R	495.46		12	- R 208.00	- R	2 525.35	- R	2 233.51	- R	1 871.14	- R	1 482.22	- R	1 107.21	- R	776.39	- R	506.85	- R	303.02	- R	159.71	- R	66.17	- R	9.84	- R	20.97	- R	35.66	- R	40.99	- R	41.39	- R	39.48	- R	36.70	- R	33.75	- R	30.95	- R	28.39	- R	26.10
TOIR06680000000000000000000000000000	R	39.98	R	3 092.23	R	3 052.25		1	- R 208.00	- R	326.92	- R	3 047.57	- R	5 224.34	- R	6 731.90	- R	7 557.55	- R	7 782.82	- R	7 548.02	- R	7 012.77	- R	6 323.53	- R	5 594.01	- R	4 899.10	- R	4 278.59	- R	3 746.14	- R	3 299.20	- R	2 927.17	- R	2 617.01	- R	2 356.37	- R	2 134.89	- R	1 944.41	- R	1 778.74	- R	1 633.20
TOIR07180000000001290000000000000000	R	2 347.15	R	2 468.94	- R	121.79		10	- R 208.00	- R	2 456.04	- R	2 105.18	- R	1 698.73	- R	1 282.63	- R	896.66	- R	568.41	- R	311.12	- R	125.26	- R	2.18	- R	71.37	- R	109.45	- R	124.43	- R	125.82	- R	120.16	- R	111.51	- R	102.11	- R	93.06	- R	84.81	- R	77.44	- R	70.93	- R	65.15
TOIR07320030000010800000000000000000	R	659.12	R	573.17	- R	85.95		1	- R 208.00	- R	242.45	- R	2 891.16	- R	5 014.20	- R	6 488.63	- R	7 300.94	- R	7 529.33	- R	7 309.47	- R	6 796.11	- R	6 131.52	- R	5 426.38	- R	4 753.72	- R	4 152.49	- R	3 636.26	- R	3 202.71	- R	2 841.70	- R	2 540.67	- R	2 287.67	- R	2 072.66	- R	1 887.75	- R	1 726.90	- R	1 585.61
TOIR07630020000186000020000000000000	R	1 139.91	R	1 163.88	- R	23.97		13	- R 208.00	- R	2 548.94	- R																																							

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SGID		Old Rev	New Rev	Change in Consumption	i = 5.3% NPV	5.3% Cost																																															
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7.09																																																					
TOIR07670050000022000000000000000000	R	74.81	R	371.96	R	297.15	7 - R	2 708.00	-R	2 289.50	-R	1 796.84	-R	1 284.44	-R	803.03	-R	390.75	-R	68.66	-R	159.18	R	301.89	R	376.36	R	401.85	R	396.07	R	373.02	R	342.47	R	310.40	R	280.00	R	252.60	R	228.50	R	207.49	R	189.17	R	173.12	R	158.99			
TOIR07670050000023540000000000000000	R	33.78	R	991.21	R	957.48	3 - R	2 708.00	-R	1 662.41	-R	635.76	-R	275.55	-R	1 002.90	-R	1 813.14	-R	1 930.09	R	1 910.32	R	1 635.74	R	1 646.28	R	1 475.33	R	1 309.08	R	1 158.24	R	1 026.74	R	914.46	R	819.29	R	738.50	R	669.44	R	609.85	R	557.95	R	513.32					
TOIR07670050000024600000000000000000	R	430.03	R	663.49	R	233.46	8 - R	2 708.00	-R	2 349.99	-R	1 908.84	-R	1 434.92	-R	977.23	-R	574.51	-R	250.18	-R	11.65	R	146.74	R	238.87	R	281.81	R	291.96	R	282.72	R	263.78	R	241.30	R	218.80	R	197.94	R	179.31	R	162.93	R	148.59	R	136.00	R	124.90			
TOIR09300010000011200000000000000000	R	248.58	R	266.06	R	2 417.48	2 - R	2 708.00	-R	275.90	R	1 931.42	R	3 724.72	R	4 995.86	R	5 726.27	R	5 973.85	R	5 845.64	R	5 466.59	R	4 953.31	R	4 397.74	R	3 861.60	R	3 378.75	R	2 961.94	R	2 610.59	R	2 317.26	R	2 072.25	R	1 866.11	R	1 690.82	R	1 540.01	R	1 408.81	R	1 293.54			
TOIR09300010000040500000000000000000	R	3 244.81	R	1 884.62	R	1 360.19																																															
TOIR09300010000067600000000000000000	R	144.62	R	47.66	R	96.95																																															
TOIR09300070000351800000000000000000	R	1 493.53	R	615.67	R	877.86																																															
TOIR09360000000000046000000000000000	R	433.58	R	613.01	R	179.43	8 - R	2 708.00	-R	2 401.30	-R	2 003.83	-R	1 562.55	-R	1 124.99	-R	730.37	-R	404.14	-R	156.54	R	15.14	R	122.25	R	179.99	R	203.66	R	206.14	R	197.03	R	182.69	R	166.89	R	151.57	R	137.58	R	125.13	R	114.17	R	104.52	R	95.99			
TOIR04800200004796000000000000000000	R	69.08	R	76.75	R	7.67	15 - R	2 708.00	-R	2 564.41	-R	2 305.84	-R	1 968.33	-R	1 594.73	-R	1 225.89	-R	893.62	-R	617.18	-R	403.23	-R	248.51	-R	143.70	-R	77.07	-R	37.34	-R	15.16	-R	3.63	R	1.86	R	4.17	R	4.92	R	4.97	R	4.74	R	4.42	R	4.09			
TOIR02850000000000180001000000000000	R	1 304.56	R	1 735.97	R	431.41	6 - R	2 708.00	-R	2 162.01	-R	1 560.77	-R	967.28	-R	435.86	-R	3.44	R	313.94	R	519.23	R	628.91	R	666.16	R	654.86	R	615.49	R	563.33	R	508.32	R	456.04	R	409.00	R	367.82	R	332.19	R	301.41	R	274.70	R	251.36	R	230.82			
TOIR04403400000089400000000000000000	R	1 174.36	R	839.44	-R	334.92																																															
TOIR04403400000090000000000000000000	R	630.95	R	1 111.30	R	480.36	5 - R	2 708.00	-R	2 115.52	-R	1 474.70	-R	851.63	-R	301.98	R	137.78	R	452.44	R	650.51	R	748.14	R	771.83	R	747.11	R	695.50	R	632.72	R	568.80	R	509.15	R	456.03	R	409.83	R	370.00	R	335.65	R	305.88	R	279.89	R	257.02			
TOIR04403400000090400000000000000000	R	156.91	R	602.39	R	445.48	5 - R	2 708.00	-R	2 148.64	-R	1 536.03	-R	934.03	-R	397.37	R	37.17	R	354.05	R	556.97	R	663.19	R	696.54	R	681.38	R	638.50	R	583.28	R	525.71	R	471.31	R	422.52	R	379.90	R	343.06	R	311.25	R	283.66	R	259.57	R	238.35			
TOIR04403400000102400000000000000000	R	593.59	R	1 546.70	R	953.11	3 - R	2 708.00	-R	1 666.56	-R	643.43	R	265.24	R	990.97	R	1 501.66	R	1 800.70	R	1 918.39	R	1 899.69	R	1 792.32	R	1 638.05	R	1 468.19	R	1 302.98	R	1 152.85	R	1 022.01	R	910.27	R	815.54	R	735.13	R	666.38	R	607.07	R	555.40	R	509.98			
TOIR04403400000107700000000000000000	R	225.71	R	615.67	R	389.96	6 - R	2 708.00	-R	2 201.37	-R	1 633.65	-R	1 065.19	-R	549.21	-R	123.00	R	195.83	R	408.08	R	527.96	R	576.70	R	576.75	R	547.75	R	504.58	R	457.12	R	411.08	R	369.17	R	332.25	R	300.18	R	272.41	R	248.29	R	227.21	R	208.65			
TOIR04403400000109400000000000000000	R	66.97	R	42.84	-R	24.13																																															
TOIR04403400000110000000000000000000	R	4 893.29	R	406.27	-R	4 487.02																																															
TOIR04403400000110200000000000000000	R	643.56	R	465.09	-R	178.47																																															
TOIR04403400000118900000000000000000	R	533.89	R	1 233.42	R	699.53	4 - R	2 708.00	-R	1 907.38	-R	1 089.33	-R	333.85	R	297.43	R	770.08	R	1 078.03	R	1 238.30	R	1 282.00	R	1 244.93	R	1 160.15	R	1 053.72	R	943.42	R	839.56	R	746.91	R	666.61	R	597.92	R	539.27	R	488.98	R	445.51	R	407.62	R	374.29			
TOIR04403400000120600000000000000000	R	65.04	R	293.53	R	228.49	8 - R	2 708.00	-R	2 354.71	-R	1 917.57	-R	1 446.65	-R	990.81	-R	588.84	-R	264.33	-R	24.97	R	134.65	R	228.15	R	272.45	R	283.84	R	275.69	R	257.64	R	235.92	R	214.03	R	193.68	R	175.47	R	159.45	R	145.42	R	133.11	R	122.25			
TOIR04403400000127600000000000000000	R	531.11	R	163.99	-R	367.12																																															
TOIR04403400000138600000000000000000	R	1 438.12	R	918.85	-R	519.27																																															
TOIR04403400000141800000000000000000	R	580.93	R	1 997.26	-R	1 416.33	2 - R	2 708.00	-R	1 226.66	R	171.05	R	1 359.55	R	2 257.81	R	2 838.00	R	3 120.76	R	3 160.67	R	3 027.98	R	2 792.22	R	2 511.01	R	2 225.28	R	1 959.54	R	1 725.11	R	1 524.51	R	1 355.33	R	1 213.07	R	1 092.88	R	990.44	R	902.18	R	825.36	R	757.84			
TOIR04403400000142300000000000000000	R	1 089.29	R	137.81	-R	951.48																																															
TOIR04403400000142900000000000000000	R	691.82	R	974.39	R	282.57	7 - R	2 708.00	-R	2 303.35	-R	1 822.48	-R	1 318.90	-R	842.92	-R	432.83	-R	110.22	R	120.06	R	266.37	R	344.88	R	374.36	R	372.23	R	352.34	R	324.45	R	294.58	R	265.99	R	240.09	R	217.24	R	197.28	R	179.87	R	164.62	R	151.18			
TOIR04403400000144100000000000000000	R	549.47	R	174.70	-R	374.77																																															

SGID	Old Rev	New Rev	Change in		i = 5.3% NPV	5.3% Cost	R 2 7.08.00																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
			Consumption				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
TOIR01440340000023170000000000000000	R	292.88	R	745.83	R	452.96	5 -R	2 7.08.00 -R	-	2 141.54 -R	-	1 522.88 -R	-	9 163.37 -R	-	3 76.92 R	-	58.73 R	-	3 75.35 R	-	5 77.02 R	-	6 81.40 R	-	7 712.68 R	-	8 695.47 R	-	9 650.71 R	-	10 593.88 R	-	11 534.95 R	-	12 479.42 R	-	13 429.70 R	-	14 386.31 R	-	15 348.83 R	-	16 316.48 R	-	17 288.43 R	-	18 263.92 R	-	19 242.35 R	-	20 224.25 R	-	21 207.35 R																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
TOIR01440340000023200000000000000000	R	126.32	R	228.24	R	101.97	10 -R	2 7.08.00 -R	-	2 474.86 -R	-	2 310.03 -R	-	1 745.55 -R	-	1 336.83 -R	-	9 953.84 R	-	3 64.28 R	-	5 173.53 R	-	6 44.96 R	-	7 34.02 R	-	8 77.05 R	-	9 96.33 R	-	10 101.34 R	-	11 98.66 R	-	12 92.47 R	-	13 85.10 R	-	14 77.75 R	-	15 70.94 R	-	16 64.82 R	-	17 59.37 R	-	18 54.55 R	-	19 50.37 R	-	20 46.82 R	-	21 43.55 R																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
TOIR01440340000023370000000000000000	R	223.73	R	332.75	R	109.02	10 -R	2 7.08.00 -R	-	2 468.17 -R	-	2 127.65 -R	-	1 1728.91 -R	-	1 1317.57 -R	-	9 933.52 -R	-	6 604.81 -R	-	5 345.39 -R	-	4 156.37 -R	-	3 29.75 R	-	2 47.29 R	-	1 88.57 R	-	10 106.32 R	-	11 110.04 R	-	12 106.31 R	-	13 99.23 R	-	14 91.15 R	-	15 83.20 R	-	16 75.87 R	-	17 69.31 R	-	18 63.48 R	-	19 58.32 R	-	20 53.82 R	-	21 49.32 R																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
TOIR01440340000023520000000000000000	R	146.24	R	130.63	-	15.61																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													

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SGID		Old Rev	New Rev	Change in		Consumption	i = 5.3% NPV	5.3% Cost		R 2708.00																																								
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7.09																																																		
TOIC0362060000000145000000000000000000	R	3446.80	R	6513.42	R	3066.62	1 - R	2708.00	R	340.57	R	3072.84	R	5258.30	R	6771.22	R	7599.03	R	7823.79	R	7586.58	R	7047.79	R	6354.56	R	5621.11	R	4922.60	R	4298.97	R	3763.91	R	3314.80	R	2940.98	R	2629.34	R	2367.47	R	2144.95	R	1953.57	R	1787.12	R	1640.90
TOIC0394007000000000000000000000000000	R	486.02	R	2518.22	R	2032.20	2 - R	2708.00	-R	641.79	R	2159.77	R	2814.52	R	3942.16	R	4614.76	R	4875.88	R	4812.37	R	4528.13	R	4121.64	R	3671.66	R	3231.89	R	2832.58	R	2485.96	R	2192.63	R	1947.08	R	1741.61	R	1568.55	R	1421.29	R	1294.55	R	1184.27	R	1087.39
TOIC0467029000000000000000000000000000	R	270.86	R	506.76	R	235.90	8 - R	2708.00	-R	2347.67	-R	1904.54	-R	1429.15	-R	970.55	-R	567.46	-R	243.22	-R	5.10	-R	152.69	-R	244.14	-R	286.41	-R	295.95	-R	286.19	-R	266.79	-R	243.95	-R	221.15	-R	200.04	-R	181.19	-R	164.63	-R	150.14	-R	137.43	-R	126.21
TOIC0490000000000000000000000000000000	R	5637.92	R	4287.02	-R	1350.90																																												
TOIC0490000000000000000000000000000000	R	9640.52	R	7871.39	-R	1769.14																																												
TOIC0490000000000000000000000000000000	R	7098.30	R	4181.92	-R	2916.37																																												
TOIC049701001000003030000000000000000000	R	72.74	R	796.71	R	723.97	4 - R	2708.00	-R	1884.17	-R	1046.34	-R	276.10	R	364.29	R	840.60	R	1147.69	R	1303.86	R	1341.54	R	1297.70	R	1206.22	R	1093.68	R	978.07	R	869.76	R	773.43	R	690.10	R	618.90	R	558.15	R	506.08	R	461.09	R	421.87	R	387.37
TOIC006100000000000000000000000000000000	R	215.35	R	3198.39	R	2983.04	1 - R	2708.00	-R	261.20	R	2925.88	R	5060.85	R	6542.64	R	7357.90	R	7585.60	R	7362.42	R	6844.21	R	6174.14	R	5463.59	R	4785.99	R	4180.48	R	3660.65	R	3224.13	R	2860.67	R	2557.62	R	2302.92	R	2086.48	R	1900.32	R	1738.41	R	1596.17
TOIC011400770000316700000000000000000000	R	448.69	R	1412.06	R	963.37	3 - R	2708.00	-R	1656.82	-R	625.40	-R	289.46	-R	1019.01	-R	1531.24	-R	1829.92	-R	1945.89	-R	1924.66	-R	1814.46	-R	1657.38	-R	1484.95	-R	1317.43	-R	1165.52	-R	1033.13	-R	920.12	-R	824.34	-R	743.04	-R	673.56	-R	613.61	-R	561.38	-R	515.47
TOIC021000000000000000000000000000000000	R	672.34	R	642.23	-R	30.11																																												
TOIC021000000000000000000000000000000000	R	1607.04	R	1673.42	R	66.38	11 - R	2708.00	-R	2508.66	-R	2202.62	-R	1829.64	-R	1434.18	-R	1056.53	-R	726.33	-R	459.74	-R	260.24	-R	121.79	-R	33.06	-R	18.88	-R	45.87	-R	57.36	-R	60.05	-R	58.27	-R	54.55	-R	50.26	-R	46.04	-R	42.14	-R	38.63	-R	35.50
TOIC031900000000000000000000000000000000	R	1360.14	R	581.14	-R	779.00																																												
TOIC032900000000000000000000000000000000	R	1860.91	R	1222.86	-R	638.05																																												
TOIC035900000000000000000000000000000000	R	1278.84	R	3254.98	R	1976.14	2 - R	2708.00	-R	695.03	R	1155.40	R	2682.08	R	3788.84	R	4453.03	R	4716.12	R	4662.02	R	4391.58	R	4000.63	R	3566.01	R	3140.26	R	2753.11	R	2416.71	R	2131.81	R	1893.21	R	1693.50	R	1525.25	R	1382.07	R	1258.83	R	1151.60	R	1057.39
TOIC040400000000000000000000000000000000	R	134.96	R	1746.49	R	41.53	12 - R	2708.00	-R	2532.26	-R	246.32	-R	1888.35	-R	1502.14	-R	1128.22	-R	797.14	-R	526.38	-R	320.76	-R	175.43	-R	79.90	-R	21.74	-R	10.65	-R	26.66	-R	33.09	-R	34.39	-R	33.23	-R	31.07	-R	28.66	-R	26.31	-R	24.15	-R	22.20
TOIC045102600000336000000000000000000000	R	1553.89	R	1395.34	-R	158.55																																												
TOIC049600000000000000000000000000000000	R	2115.50	R	1610.87	-R	604.63																																												
TOIC050700000000000000000000000000000000	R	3864.33	R	2546.38	-R	1317.95																																												
TOIC062900700000000000000000000000000000	R	3022.17	R	3348.94	R	326.77	6 - R	2708.00	-R	2261.37	-R	1744.76	-R	1214.47	-R	722.02	-R	305.30	-R	15.75	-R	238.61	-R	374.04	-R	440.30	-R	457.67	-R	444.48	-R	415.01	-R	379.06	-R	342.53	-R	308.46	-R	278.02	-R	251.38	-R	228.21	-R	208.04	-R	190.38	-R	174.83
TOIC062903500000000000000000000000000000	R	161.09	R	337.65	-R	176.55	8 - R	2708.00	-R	2404.03	-R	2008.89	-R	1569.35	-R	1132.86	-R	738.68	-R	412.35	-R	164.26	-R	8.13	-R	116.03	-R	174.57	-R	198.95	-R	202.06	-R	193.48	-R	179.57	-R	164.13	-R	149.10	-R	135.36	-R	123.12	-R	112.33	-R	102.84	-R	94.45
TOIC071800000000000000000000000000000000	R	340.51	R	504.31	-R	163.80	9 - R	2708.00	-R	2416.14	-R	2031.31	-R	1599.48	-R	1167.73	-R	775.46	-R	448.68	-R	198.46	-R	22.93	-R	85.51	-R	150.54	-R	178.11	-R	183.98	-R	177.72	-R	165.74	-R	151.87	-R	138.16	-R	125.51	-R	114.20	-R	104.21	-R	95.41	-R	87.63
TOIC071800000000000000000000000000000000	R	431.95	R	5566.54	R	2134.59	2 - R	2708.00	-R	544.55	-R	1434.00	-R	3056.41	-R	4222.18	-R	4910.15	-R	5167.67	-R	5086.96	-R	4777.53	-R	4342.66	-R	3864.62	-R	3399.24	-R	2977.73	-R	2612.45	-R	2303.70	-R	2045.45	-R	1829.48	-R	1647.62	-R	1492.91	-R	1359.78	-R	1243.94	-R	1142.17
TOIC074007000000000000000000000000000000	R	974.61	R	1099.21	-R	124.60	9 - R	2708.00	-R	2453.37	-R	2100.25	-R	1692.09	-R	1274.95	-R	888.56	-R	560.40	-R	303.59	-R	118.42	-R	3.88	-R	76.66	-R	114.04	-R	128.41	-R	129.29	-R	123.21	-R	114.21	-R	104.52	-R	95.23	-R	86.77	-R	79.23	-R	72.56	-R	66.65
TOIC074702400000000000000000000000000000	R	109.74	R	1610.06	R	1500.32	2 - R	2708.00	-R	1146.90	-R	318.74	-R	1557.98	-R	2487.51	-R	3080.31	-R	3360.12	-R	385.92	-R	232.57	-R	2973.52	-R	2669.29	-R	2362.56	-R	2078.60	-R	1828.87	-R	1615.63	-R	1436.03	-R	1285.15	-R	1157.75	-R	1049.19	-R	955.69	-R	874.30	-R	802.78
TOIC009009100000133000000000000000000000	R	30.21	R	19.77	-R	10.44																																												
TOIC013100000000000000000000000000000000	R	318.04	R	3077.90	R	2759.86	1 - R	2708.00	-R	49.25	R	2533.45	R	4533.59	R	5932.25	R	6714.03	R	6949.57	R	6763.87	R	6300.57	R	5692.38	R	5042.99	R	4421.21	R	3864.10	R	3384.93	R	2982.01	R	2646.23	R	2366.08	R	2130.55	R	1930.34	R	1758.14	R	1608.34	R	1476.75
TOIC030310080000000000000000000000000000	R	285.30	R	318.04	-R	32.74	13 - R	2708.00	-R	2540.61	-R	2261.77	-R	1909.11	-R	1526.18	-R	1153.58	-R	822.19	-R	549.96	-R	342.18	-R	194.41	-R	96.46	-R	36.11	-R	1.81	-R	15.80	-R	23.56	-R	25.94	-R	25.68	-R	24.28	-R	22.51	-R	20.71	-R	19.03	-R	17.50
TOIC030330000000000000000000000000000000	R	65.94	R	440.40	-R	374.46	6 - R	2708.00	-R	2216.09	-R	1660.91	-R	1101.82	-R	591.61	-R	167.74	-R	151.64	-R	366.49	-R	490.19	-R	543.23	-R	547.53	-R	522.41	-R	482.60	-R	437.97	-R	394.26	-R	354.28	-R	318.94	-R	288.20	-R	261.57	-R	238.41	-R	218.17	-R	200.35
TOIC030330000000000343000000000000000000	R	450.00	R	625.89	-R	175.89	8 - R	2708.00	-R	2404.67	-R	2101.07	-R	1570.93	-R	1134.68	-R	740.60	-R	414.25	-R	166.05	-R	6.51	-R	114.59	-R	173.31	-R	197.86	-R	201.11	-R	192.65	-R	178.85	-R	163.48	-R	148.53	-R	134.84	-R	122.65	-R	111.91	-R	102.45	-R	94.10
TOIC030330000000029000000000000000000000	R	373.31	R	571.46	-R	198.15	8 - R	2708.00	-R	2383.52	-R	1970.91	-R	1518.33	-R	1073.78	-R	676.36	-R	350.79	-R	106.33	-R	60.75	-R	162.66	-R	215.28	-R	234.26	-R	232.68	-R	220.16	-R	203.00	-R	184.88	-R	167.64	-R	152.04	-R	138.23	-R	126.09	-R	115.43	-R	106.01
TOIC0303600300001489000230000000000000000	R	49.88	R	1550.22	-R	1500.34	2 - R	2708.00	-R	1146.87	-R	318.78	-R	1558.03	-R	2487.58	-R	3080.38	-R	3360.19	-R	3385.99	-R	3232.63	-R	2973.57	-R	2669.34	-R	2362.60	-R	2078.63	-R	1828.90	-R	1615.65	-R	1436.06	-R	1285.17	-R	1157.77	-R	1049.21	-R	955.71	-R	874.32	-R	802.80
TOIC0303600300001489000350000000000000000	R	486.89	R	557.23	-R	70.34	11 - R	2708.00	-R	2504.90	-R	2195.66	-R	1820.29	-R	1423.35	-R	1045.11	-R	715.04	-R	449.12	-R	250.59	-R	113.25	-R	25.60	-R	25.35	-R	51.49	-R	62.25	-R	64.34	-R	62.07	-R	57.95	-R	53.32	-R	48.81	-R	44.66	-R	40.94	-R	37.62
TOIC0303600300001489000400000000000000000	R	305.35	R	214.00	-R	91.35	8 - R	2708.00	-R	2367.82	-R	1941.94	-R	1479.26	-R	1028.56	-R	628.66	-R	303.67	-R	61.98	-R	101.02	-R	198.35	-R	246.44	-R	261.28	-R	256.12	-R	240.59	-R	220.94	-R	200.77	-R	181.83	-R	164.81	-R	149.80	-R	136.63	-R	125.06		
TOIC030360120000141500000000000000000000	R	415.65	R	579.83	-R	64.15	11 - R	2708.00	-R	2510.78	-R	2206.54	-R	1																																				

SGID	Old Rev	New Rev	Change in		Consumption	i = 5.3% NPV	5.3% Cost	R 2 708.00																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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TOIC01770000000013500000000000000000	R	8 654.08	R	6 087.50	-R	2 566.58																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													

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SGID	Old Rev	New Rev	Change in Consumption	i = 5.3% NPV	5.3% Cost 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
				7.09																					
TOIR036100000000025400000RE00000000	R	664.55	R	822.58	R	158.03																			
TOIR0361000000000082500000RE00000000	R	10 650.59	R	3 243.34	R	7 407.16																			
TOIR0402000000000001000000RE00000000	R	3 148.01	R	1 205.26	-R	1 942.75																			
TOIR04060000000000001900000RE00000000	R	4 902.67	R	4 007.18	-R	895.49																			
TOIR0406000000000000199000360000000000	R	2 462.71	R	1 915.42	-R	547.29																			
TOIR0406000000000000730000000000000000	R	6 131.75	R	3 081.42	-R	3 050.33																			
TOIR0475000000000000820000000000000000	R	1 753.63	R	790.99	-R	962.63																			
TOIR0491000000000000440000000000000000	R	1 219.84	R	2 441.37	R	1 221.52																			
TOIR049300000000000021200000100000000000	R	2 154.19	R	1 655.82	-R	498.37																			
TOIR0547000000000001010000000000000000	R	2 583.34	R	1 881.10	-R	702.24																			
TOIR0547005000000000799000000000000000	R	531.81	R	255.13	-R	276.67																			
TOIR0574000000000001510000100000000000	R	693.04	R	2 067.07	R	1 374.04																			
TOIR0593000000000000090000000000000000	R	413.90	R	917.04	R	503.14																			
TOIR0593000000000000090000000000000000	R	5 697.07	R	1 828.30	-R	3 868.77																			
TOIR0026000000000000015000080000000000	R	2 245.92	R	1 905.74	-R	340.18																			
TOIR0026001000001380000700000000000000	R	97.85	R	1 733.26	R	1 635.41																			
TOIR0116000000000000780001200000000000	R	284.34	R	465.09	R	180.75																			
TOIR0350000000000001500002000000000000	R	479.80	R	416.08	-R	63.72																			
TOIR0350000000000000390000800000000000	R	2 578.06	R	3 243.34	R	665.28																			
TOIR0350000000000000780000300000000000	R	713.13	R	2 384.46	R	1 671.33																			
TOIR0392000000000000170000000000000000	R	1 253.31	R	379.31	-R	874.00																			
TOIR0451009000000000345000000000000000	R	267.33	R	352.35	R	85.02																			
TOIR04510370000036900000RE0000000000	R	1 051.77	R	732.55	-R	319.22																			
TOIR0507000000000000040000000000000000	R	1 213.62	R	1 490.38	R	276.76																			
TOIR0507000000000000204000000000000000	R	257.38	R	386.67	R	129.29																			
TOIR0507000000000000526000000000000000	R	678.43	R	1 233.42	R	554.99																			
TOIR0540000000000000200000000000000000	R	127.87	R	386.67	R	258.80																			
TOIR0557000000000000030000000000000000	R	4 457.89	R	634.27	-R	3 823.63																			
TOIR0591011000005340000700000000000000	R	153.19	R	67.65	-R	85.54																			
TOIR0718000000000001600000000000000000	R	327.75	R	753.80	R	426.06																			
TOIR0718000000000231000000000000000000	R	635.82	R	1 143.07	R	507.26																			
TOIR0718004000000688000000000000000000	R	228.57	R	342.55	R	113.98																			
TOIR0718008000000003160000000000000000	R	646.12	R	846.19	R	200.07																			
TOIR0744000000000319000000000000000000	R	13 318.46	R	11 230.81	-R	2 087.65																			
TOIR0744003000004480000000000000000000	R	1 009.25	R	3 619.98	R	2 610.73																			
TOIR0392000000000053000000000000000000	R	128.70	R	62.13	-R	66.57																			
TOIR0507000000000038400000000000000000	R	405.26	R	727.24	R	321.97																			

Annexure B – Individual Monthly Billing Calculations

SGID	Old Meter	New Meter	Old Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	New Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	% Loss	Monthly Bill Old	Monthly Bill New	Change on Revenue	Increase / Decrease	
				R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72						
1	TOIQ011500000000258000100000000	505173	13056488	27	6	4	5	5	7	0	0	0	26	6	4	5	5	6	0	0	0	-4% R	428.72	R	396.99 -R	31.72 Decrease
2	TOIQ01230040000006100000RE0000000	UKL7882	13032407	96	6	4	5	5	10	10	10	46	90	6	4	5	5	10	10	10	40	-6% R	2,944.73	R	2,725.90 -R	218.83 Decrease
3	TOIQ03450030000268000000000000000	BSRA0952	GKLD485	15	6	4	5	0	0	0	0	29	6	4	5	5	5	9	0	0	0	49% R	134.62	R	479.80 R	345.18 Increase
4	TOIR01160000000002400008000000000	EXK0028	13039632	68	6	4	5	5	10	10	10	18	45	6	4	5	5	10	10	5	0	-34% R	1,883.32	R	998.00 -R	885.32 Decrease
5	TOIR02920590000059800010000000000	C-DJAZ214	13055739	52	6	4	5	5	10	10	10	2	76	6	4	5	5	10	10	10	26	31% R	1,250.48	R	2,166.22 R	915.74 Increase
6	TOIR03580000000767000100000000000	CPKG8734	GKG4943	47	6	4	5	5	10	10	7	0	13	6	4	3	0	0	0	0	0	-73% R	1,074.97	R	110.64 -R	964.32 Decrease
7	TOIR05140790000109700100000000000	URL9545	13057377	15	6	4	5	0	0	0	0	19	6	4	5	4	0	0	0	0	0	19% R	146.49	R	216.02 R	69.53 Increase
8	TOIR09610000000073000000000000000	CDRA8003	13033196	2	2	0	0	0	0	0	0	20	6	4	5	5	0	0	0	0	0	88% R	16.66	R	239.41 R	222.75 Increase
9	TOIR09670080000002900000000000000	ERK0052	13018429	21	6	4	5	5	1	0	0	0	28	6	4	5	5	8	0	0	0	26% R	251.28	R	447.94 R	196.66 Increase
10	TOIR05870010000010300000000000000	38232812	GKH0091	26	6	4	5	5	6	0	0	0	50	6	4	5	5	10	10	10	0	48% R	394.16	R	1,153.19 R	759.03 Increase
11	TOIQ02160020000359600000000000000	URM4428	13013075	30	6	4	5	5	10	0	0	0	35	6	4	5	5	10	5	0	0	15% R	500.54	R	650.20 R	149.67 Increase
12	TOIQ03120000000042000000000000000	URM3782	13032859	24	6	4	5	5	4	0	0	0	27	6	4	5	5	7	0	0	0	11% R	340.85	R	418.53 R	77.67 Increase
13	TOIQ03450030000257200000000000000	TRA7109	GKF8225	16	6	4	5	1	0	0	0	0	23	6	4	5	5	3	0	0	0	30% R	154.90	R	308.24 R	153.34 Increase
14	TOIQ04870290001450000000000000000	9499367	13050879	730	6	4	5	5	10	10	10	680	739	6	4	5	5	10	10	10	689	1% R	27,507.40	R	27,837.58 R	330.18 Increase
15	TOIQ07140020000942000200000000000	39110900	13038924	4	4	0	0	0	0	0	0	0	28	6	4	5	5	8	0	0	0	85% R	29.82	R	443.85 R	414.03 Increase
16	TOIR00260010000030300090000000000	URM5917	13032410	29	6	4	5	5	9	0	0	0	28	6	4	5	5	8	0	0	0	-3% R	481.49	R	457.33 -R	24.15 Decrease
17	TOIR01140000000460200014000000000	CUJA4790	13015196	70	6	4	5	5	10	10	10	20	132	6	4	5	5	10	10	10	82	47% R	1,935.35	R	4,339.57 R	2,404.22 Increase
18	TOIR06680000000072000000000000000	DRA2232	GKH4276	325	6	4	5	5	10	10	10	275	151	6	4	5	5	10	10	10	101	-54% R	11,826.48	R	5,083.36 -R	6,743.12 Decrease
19	TOIR06680000000078000050000000000	70105113	13068847	544	6	4	5	5	10	10	10	494	641	6	4	5	5	10	10	10	591	15% R	20,293.44	R	24,061.88 R	3,768.44 Increase
20	TOIR07670060000284100000000000000	UKK3180	13037593	36	6	4	5	5	10	6	0	0	22	6	4	5	5	2	0	0	0	-38% R	668.59	R	293.53 -R	375.06 Decrease
21	TOIR09360020000203600000000000000	33091707	GKH0016	4	4	0	0	0	0	0	0	0	57	6	4	5	5	10	10	7	93% R	1428.19	R	1,401.22 Increase	140.82 Increase	
22	TOIR05820130000063700010000000000	CRRL2357	GKG2248	45	6	4	5	5	10	10	5	0	48	6	4	5	5	10	10	8	0	6% R	997.76	R	1,102.59 R	104.83 Increase
23	TOIQ00870830000236000000000000000	#070122186	13051051	948	6	4	5	5	10	10	10	898	1292	6	4	5	5	10	10	10	1242	27% R	35,922.75	R	49,253.26 R	13,330.51 Increase
24	TOIQ01150000000093800000000000000	CTRL9957	GKIO923	45	6	4	5	5	10	10	5	0	26	6	4	5	5	6	0	0	0	-43% R	1,001.38	R	400.85 -R	600.53 Decrease
25	TOIQ01230020000060500000000000000	736395	13055393	112	6	4	5	5	10	10	10	62	52	6	4	5	5	10	10	10	2	-53% R	3,561.02	R	1,258.06 -R	2,302.96 Decrease
26	TOIQ01560010000066400000000000000	CULK7888	13012075	34	6	4	5	5	10	4	0	0	32	6	4	5	5	10	2	0	0	-5% R	609.73	R	557.90 -R	51.83 Decrease
27	TOIQ02160020000957800015000000000	CTRK3944	13035708	2	2	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	55% R	10.98	R	24.67 R	13.68 Increase
28	TOIQ02170070003338000180000000000	TRL4399HWD1	13012837	16	6	4	5	1	0	0	0	0	26	6	4	5	5	6	0	0	0	37% R	163.55	R	394.02 R	230.47 Increase
29	TOIQ02520000000024500005000000000	URL0403HWD1	13058843	21	6	4	5	5	1	0	0	0	20	6	4	5	5	0	0	0	0	-3% R	268.27	R	249.41 -R	18.85 Decrease
30	TOIQ02520000000034500004000000000	BZUN564HWD1	13055584	34	6	4	5	5	10	4	0	0	32	6	4	5	5	10	2	0	0	-7% R	635.94	R	565.20 -R	70.74 Decrease
31	TOIQ05110030000039300000000000000	CTRL6382	GKH4582	8	6	2	0	0	0	0	0	0	7	6	1	0	0	0	0	0	0	-6% R	54.37	R	51.11 -R	3.27 Decrease
32	TOIQ07140020000436000050000000000	URAI336HWD1	13039275	9	6	3	0	0	0	0	0	0	6	6	0	0	0	0	0	0	0	-38% R	68.37	R	41.65 -R	26.72 Decrease
33	TOIR00700000000001500000RE0000000	TRK6517	13033194	50	6	4	5	5	10	10	10	0	61	6	4	5	5	10	10	10	11	19% R	1,157.69	R	1,613.58 R	455.89 Increase
34	TOIR009900000000036500000RE0000000	BTRA0515	13039636	45	6	4	5	5	10	10	5	0	71	6	4	5	5	10	10	10	21	37% R	990.70	R	1,993.74 R	1,003.05 Increase
35	TOIR01140000000003200005000000000	#080070723	13022440	158	6	4	5	5	10	10	10	108	308	6	4	5	5	10	10	10	258	49% R	5,342.14	R	11,146.91 R	5,804.77 Increase
36	TOIR01140000000051800000700000000	URM0914	13031480	89	6	4	5	5	10	10	10	39	137	6	4	5	5	10	10	10	87	35% R	2,680.14	R	4,521.10 R	1,840.96 Increase
37	TOIR01140080000355800000RE0000000	C-URM5429	13056476	47	6	4	5	5	10	10	7	0	269	6	4	5	5	10	10	10	219	83% R	1,056.67	R	9,663.82 R	8,607.15 Increase
38	TOIR01160000000032400001000000000	URK2855	GKG2176	71	6	4	5	5	10	10	10	21	43	6	4	5	5	10	10	3	0	-40% R	1,983.18	R	906.92 -R	1,076.26 Decrease
39	TOIR01800000000011800000000000000	URAI1859	GKF9691	6	6	0	0	0	0	0	0	0	9	6	3	0	0	0	0	0	0	33% R	42.84	R	65.58 R	22.74 Increase
40	TOIR02920000000003000025000000000	CRRL3137	GKH0076	29	6	4	5	5	9	0	0	0	241	6	4	5	5	10	10	10	191	88% R	468.57	R	8,576.14 R	8,107.57 Increase
41	TOIR03231100000064500005000000000	URM8466	13038915	82	6	4	5	5	10	10	10	32	100	6	4	5	5	10	10	50	18% R	2,427.62	R	3,120.14 R	692.52 Increase	
42	TOIR03500000000006000001000000000	GKH4510	13033398	199	6	4	5	5	10	10	10	149	181	6	4	5	5	10	10	10	131	-9% R	6,955.64	R	6,259.98 -R	695.66 Decrease
43	TOIR03620500000072000000000000000	C-TJA1930	GKF4422	113	6	4	5	5	10	10	10	63	88	6	4	5	5	10	10	10	38	-22% R	3,612.40	R	2,648.46 -R	963.94 Decrease
44	TOIR04020000000035700150000000000	URRB8111	13015488	27	6	4	5	5	7	0	0	0	27	6	4	5	5	7	0	0	0	0% R	433.97	R	430.78 -R	3.19 Decrease
45	TOIR04510100000015000005000000000	DRK7754	13039005	24	6	4	5	5	4	0	0	0	26	6	4	5	5	6	0	0	0	8% R	353.51	R	411.17 R	57.66 Increase
46	TOIR04510210000027900003000000000	URM6819	GKG3327	53	6	4	5	5	10	10	10	3	75	6	4	5	5	10	10	25	30% R	1,266.86	R	2,138.06 R	871.20 Increase	
47	TOIR05200000000012900005000000000	C-URK3198	GKF2633	46	6	4	5	5	10	10	6	0	21	6	4	5	5	1	0	0	0	-55% R	1,007.70	R	254.32 -R	753.39 Decrease
48	TOIR05340050000244000000000000000	CUKH3196	13057668	15	6	4	5	0	0	0	0	0	31	6	4	5	5	10	1	0	0	53% R	134.31	R	538.42 R	404.11 Increase
49	TOIR05630010000043100010000000000	C-TJA2035	13036403	340	6	4	5	5	10	10	10	290	296	6	4	5	5	10	10	10	246	-13% R	12,405.31	R	10,691.66 -R	1,713.65 Decrease
50	TOIR0590000000000400002RE0000000	URM5761	13033079	80	6	4	5	5	10	10	10	30	111	6	4	5	5	10	10	10	61	28% R	2,328.43	R	3,512.62 R	1,184.19 Increase

SGID	Old Meter	New Meter	Old Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	New Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	% Loss	Monthly Bill Old	Monthly Bill New	Change on Revenue	Increase / Decrease
				R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72					
79	TOIQ0506000000007590000000000000	#00207106	13049883	36	6	4	5	5	10	6	0	0	74	6	4	5	5	10	10	10	24	51% R	691.07 R	2 099.34 R	1 408.27 Increase
80	TOIQ051100300000155000000000000000	BORG218	13039143	15	6	4	5	0	0	0	0	18	6	4	5	3	0	0	0	0	18% R	140.52 R	206.82 R	66.30 Increase	
81	TOIQ051100300000487000000000000000	CSRK2700	13037264	44	6	4	5	5	10	10	4	0	35	6	4	5	5	10	5	0	-19% R	935.03 R	658.17 -R	276.86 Decrease	
82	TOIQ051501000000122000000000000000	990910006	13022458	84	6	4	5	5	10	10	10	34	60	6	4	5	5	10	10	10	-29% R	2 489.31 R	1 550.22 -R	939.09 Decrease	
83	TOIQ060600000000532000000000000000	C-TRK7847	130092244	33	6	4	5	5	10	3	0	0	22	6	4	5	5	2	0	0	-32% R	596.86 R	303.33 -R	293.52 Decrease	
84	TOIQ071400200000397000130000000000	TRA7331#WD1	13038910	10	6	4	0	0	0	0	0	0	9	6	3	0	0	0	0	0	-11% R	78.10 R	67.48 -R	10.62 Decrease	
85	TOIQ071400200000397000210000000000	TRB1882#WD1	13012807	40	6	4	5	5	10	10	0	0	39	6	4	5	5	10	9	0	-2% R	804.53 R	779.48 -R	25.05 Decrease	
86	TOIQ071400200000836000120000000000	TRA7636#WD1	GKH3989	12	6	4	2	0	0	0	0	0	26	6	4	5	5	6	0	0	0	53% R	103.26 R	398.92 R	295.66 Increase
87	TOIR003100000000053000000000000000	C-URK3195	30046056	42	6	4	5	5	10	2	0	0	63	6	4	5	5	10	10	10	13	33% R	871.00 R	1 666.97 R	795.97 Increase
88	TOIR00580000000151400000RE00000000	CTXA746	GZK393	189	6	4	5	5	10	10	10	139	171	6	4	5	5	10	10	10	121	-10% R	6 565.05 R	5 851.66 -R	713.39 Decrease
89	TOIR00640000000161800000RE00000000	BSRB3134	GK11219	60	6	4	5	5	10	10	10	10	66	6	4	5	5	10	10	10	16	9% R	1 567.36 R	1 802.49 R	235.13 Increase
90	TOIR010300200000337000000000000000	551031	GKF8070	12	6	4	2	0	0	0	0	0	14	6	4	4	0	0	0	0	15% R	97.62 R	124.64 R	27.02 Increase	
91	TOIR018000000000046100000000000000	TRA7627	13055402	49	6	4	5	5	10	9	0	0	75	6	4	5	5	10	10	10	25	34% R	1 132.95 R	2 123.98 R	991.03 Increase
92	TOIR021000000000026000070000000000	CTRK1128	GKF3030	13	6	4	3	0	0	0	0	0	17	6	4	5	2	0	0	0	22% R	118.09 R	181.84 R	63.75 Increase	
93	TOIR021000000000025200160000000000	CTRK4268	13032212	42	6	4	5	5	10	2	0	0	17	6	4	5	2	0	0	0	-58% R	855.86 R	185.41 -R	670.45 Decrease	
94	TOIR021600000000716000080000000000	CTRA8389	GKH4050	20	6	4	5	5	0	0	0	0	38	6	4	5	5	10	8	0	48% R	230.88 R	740.52 R	509.64 Increase	
95	TOIR021800000000029000000000000000	BSRA3407	GKH4234	66	6	4	5	5	10	10	10	16	260	6	4	5	5	10	10	10	210	75% R	1 798.52 R	9 304.78 R	7 506.26 Increase
96	TOIR025600000000730000020000000000	BSRA8791	GKH3183	29	6	4	5	5	9	0	0	0	22	6	4	5	5	2	0	0	-22% R	466.32 R	295.57 -R	170.75 Decrease	
97	TOIR027600000000093000040000000000	TKOR928	30046450	32	6	4	5	5	10	2	0	0	34	6	4	5	5	10	4	0	0	6% R	556.31 R	615.67 R	59.36 Increase
98	TOIR031600000002077000100000000000	CTRK6468	GKF7928	68	6	4	5	5	10	10	18	86	6	4	5	5	10	10	10	36	21% R	1 864.04 R	2 561.40 R	697.36 Increase	
99	TOIR031900000000074000100000000000	CSRM4935	13058838	11	6	4	1	0	0	0	0	0	28	6	4	5	5	8	0	0	62% R	80.84 R	455.29 R	374.45 Increase	
100	TOIR035000000000080000110000000000	C-TRK5998	GKH4459	1	1	0	0	0	0	0	0	0	7	6	1	0	0	0	0	0	85% R	7.34 R	48.35 R	41.01 Increase	
101	TOIR04060000000001950000RE00000000	B-SRA7768	13012183	38	6	4	0	5	10	8	0	0	37	6	4	5	5	10	7	0	-5% R	750.83 R	699.13 -R	51.71 Decrease	
102	TOIR041900000000946000000000000000	CSRL2483	13014957	167	6	4	5	5	10	10	10	117	120	6	4	5	5	10	10	10	70	-28% R	5 701.51 R	3 894.54 -R	1 806.97 Decrease
103	TOIR045115000014050001800000000000	URK3160	130111271	44	6	4	5	5	10	10	4	0	66	6	4	5	5	10	10	10	16	32% R	958.82 R	1 775.50 R	816.68 Increase
104	TOIR04830000000004170000500000000000	C-TRL8514	30046447	2	2	0	0	0	0	0	0	0	12	6	4	2	0	0	0	0	85% R	13.04 R	102.79 R	89.75 Increase	
105	TOIR05090000000003950000100000000000	C-SRM3497	13031653	19	6	4	5	4	0	0	0	0	21	6	4	5	5	1	0	0	8% R	222.44 R	264.12 R	41.68 Increase	
106	TOIR05090000000005970003100000000000	CMXM939	13014966	11	6	4	1	0	0	0	0	0	17	6	4	5	2	0	0	0	35% R	91.82 R	187.19 R	95.38 Increase	
107	TOIR050900000000029000060000000000	C-SJA2355	GKH4649	148	6	4	5	5	10	10	10	98	140	6	4	5	5	10	10	10	90	-5% R	4 956.88 R	4 664.54 -R	292.34 Decrease
108	TOIR064209100001256000300000000000	CURKY161	130109963	20	6	4	5	5	0	0	0	0	64	6	4	5	5	10	10	10	14	69% R	235.76 R	1 701.58 R	1 465.82 Increase
109	TOIR074003800001004000000000000000	TRKS853	13009960	22	6	4	5	5	2	0	0	0	25	6	4	5	5	5	0	0	15% R	278.50 R	379.31 R	100.81 Increase	
110	TOIR074400000000025900000000000000	TRL7909	130107463	87	6	4	5	5	10	10	10	37	69	6	4	5	5	10	10	10	19	-21% R	2 611.50 R	1 888.14 -R	723.36 Decrease
111	TOIR076700000000492000000000000000	BTRA5085	13019503	29	6	4	5	5	9	0	0	0	53	6	4	5	5	10	10	10	3	46% R	469.43 R	1 296.78 R	827.35 Increase
112	TOIR076700300001766000000000000000	TKI7153	GK11258	106	6	4	5	5	10	10	10	56	72	6	4	5	5	10	10	10	22	-32% R	3 345.83 R	2 032.46 -R	1 313.37 Decrease
113	TOIR076700400002171000000000000000	BTRA5058	30007830	6	6	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	-42% R	39.46 R	23.07 -R	16.39 Decrease	
114	TOIR089200500002733000000000000000	TKI7221	13015383	27	6	4	0	5	7	0	0	0	31	6	4	5	5	10	1	0	0	13% R	430.64 R	538.64 R	108.00 Increase
115	TOIR089201300015325000000000000000	CTKI7219	HKC3003	34	6	4	5	5	10	4	0	0	33	6	4	5	5	10	3	0	-1% R	613.90 R	607.70 -R	6.20 Decrease	
116	TOIR093000200001117000000000000000	TRA5019	13046143	17	6	4	5	2	0	0	0	0	13	6	4	3	0	0	0	0	-26% R	177.78 R	107.88 -R	69.90 Decrease	
117	TOIR093001700004807000000000000000	TRA7818	13032356	11	6	4	1	0	0	0	0	0	14	6	4	4	0	0	0	0	23% R	88.21 R	131.83 R	43.61 Increase	
118	TOIR095300000000013000220000000000	950899403	GZT7272	119	6	4	5	5	10	10	10	69	29	6	4	5	5	9	0	0	-76% R	3 844.32 R	4 799.80 R	3 364.52 Decrease	
119	TOIR096702700001476000000000000000	TRKS420	120038244	51	6	4	5	5	10	10	10	1	26	6	4	5	5	6	0	0	-50% R	1 226.20 R	385.44 -R	840.76 Decrease	
120	TOIR055001000000046200000000000000	37209004	30007982	10	6	4	0	0	0	0	0	0	7	6	1	0	0	0	0	0	-34% R	72.08 R	46.97 -R	25.10 Decrease	
121	TOIR056601900002016000030000000000	80055471	GZT182	698	6	4	5	5	10	10	648	1058	6	4	5	5	10	10	10	10	1008	34% R	26 262.77 R	40 199.82 R	13 937.05 Increase
122	TOIR059501900002300000000000000000	CTKC9004	13035017	24	6	4	5	5	4	0	0	0	21	6	4	5	5	1	0	0	-15% R	355.37 R	256.77 -R	98.60 Decrease	
123	TOIQ003200200000273000020000000000	E065004333	13120226	380	6	4	5	5	10	10	330	386	6	4	5	5	10	10	10	336	1% R	13 947.66 R	14 165.90 R	218.24 Increase	
124	TOIQ006400000000243000040000000000	C-TRK6489	30039876	31	6	4	5	5	10	1	0	0	22	6	4	5	5	2	0	0	-28% R	534.15 R	300.88 -R	233.27 Decrease	
125	TOIQ011500000001875000030000000000	CRRK6041	13011716	119	6	4	5	5	10	10	10	69	42	6	4	5	5	10	2	0	-65% R	3 845.82 R	862.58 -R	2 983.24 Decrease	
126	TOIQ018400000000422000030000000000	CRRL0888	13035983	80	6	4	5	5	10	10	10	30	58	6	4	5	5	10	10	10	8	-27% R	2 314.72 R	1 472.78 -R	841.94 Decrease
127	TOIQ021601000008678000000000000000	CSRK2875	GKG4686	203	6	4	5	5	10	10	10	153	46	6	4	5	5	10	6	0	-77% R	7 094.22 R	1 028.37 R	6 065.85 Decrease	
128	TOIQ021601100010144000000000000000	CRRL5723	13039266	17	6	4	5	2	0	0	0	0	5	5	0	0	0	0	0	0	-72% R	173.36 R	33.75 -R	139.61 Decrease	
129	TOIQ021700300003097000000000000000	CSRK3384	13031181	28	6	4	5	5	8	0	0	0	27	6	4	5	5	7	0	0	-3% R	440.15 R	420.98 -R	19.17 Decrease	
130	TOIQ026702600003232000000000000000	BLMD362	GKG4306	56	6	4	5	5	10	10	6														

SGID	Old Meter	New Meter	Old Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	New Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	% Loss						
				R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		Monthly Bill Old	Monthly Bill New	Change on Revenue	Increase / Decrease		
157	T0IR0430000000011200011000000000	BTRA0483	13038344	50	6	4	5	5	10	10	10	0	51	6	4	5	5	10	10	10	1	2%	R 1186.65	R 1224.91	R 38.26	Increase	
158	T0IR0433002000001580001000000000	B-RR43821	GKH4706	28	6	4	5	5	8	0	0	0	23	6	4	5	5	3	0	0	0	-17%	R 450.14	R 325.39	-R 124.75	Decrease	
159	T0IR0451001000000310000200000000	C-SRM2453	13035702	89	6	4	5	5	10	10	10	39	104	6	4	5	5	10	10	10	54	14%	R 2687.88	R 3267.98	R 580.10	Increase	
160	T0IR0451032000011050002300000000	CSRK5466	130083700	5	5	0	0	0	0	0	0	0	24	6	4	5	5	4	0	0	0	81%	R 33.92	R 357.25	R 323.34	Increase	
161	T0IR0451157000013840004400000000	CTRM0097	130109962	8	6	2	0	0	0	0	0	0	16	6	4	5	1	0	0	0	0	52%	R 56.92	R 165.78	R 108.86	Increase	
162	T0IR0474003000001660000000000000	CRRL4132	13058622	60	6	4	5	5	10	10	10	10	29	6	4	5	5	9	0	0	0	-52%	R 1557.26	R 482.25	-R 1075.01	Decrease	
163	T0IR0488000000002930004400000000	BRRA3870	GKH4881	52	6	4	5	5	10	10	10	2	72	6	4	5	5	10	10	10	22	28%	R 1242.45	R 2025.42	R 782.97	Increase	
164	T0IR050600000000218500011000000000	B-SRA7678	GKF4460	49	6	4	5	5	10	10	9	0	31	6	4	5	5	10	1	0	0	-38%	R 1150.27	R 522.70	-R 627.57	Decrease	
165	T0IR05110000000086700000RE00000000	B-RR44424	13038412	74	6	4	5	5	10	10	10	24	78	6	4	5	5	10	10	10	28	5%	R 2085.26	R 2244.54	R 159.28	Increase	
166	T0IR053400500002550000000000000000	BXFJ986	13031843	8	6	2	0	0	0	0	0	0	14	6	4	4	0	0	0	0	0	43%	R 55.98	R 121.05	R 65.07	Increase	
167	T0IR056303900000921000040000000000	C-SJA0315	13009441	70	6	4	5	5	10	10	10	20	41	6	4	5	5	10	10	1	0	-42%	R 1939.90	R 829.32	-R 1110.58	Decrease	
168	T0IR062903400000247000110000000000	CRRL3879	13032866	63	6	4	5	5	10	10	10	13	74	6	4	5	5	10	10	10	24	15%	R 1666.59	R 2109.90	R 443.31	Increase	
169	T0IR064600000000040000400000000000	CSRK1222	13034204	25	6	4	5	5	5	0	0	0	34	6	4	5	5	10	4	0	0	28%	R 359.38	R 628.95	R 269.57	Increase	
170	T0IR074003800000981000000000000000	C-SJA0135	13030867	13	6	4	3	0	0	0	0	0	17	6	4	5	2	0	0	0	0	22%	R 114.22	R 172.92	R 58.70	Increase	
171	T0IR089201200138270000000000000000	CSKL8987	30049176	2	2	0	0	0	0	0	0	0	24	6	4	5	5	4	0	0	0	90%	R 17.21	R 340.10	R 322.89	Increase	
172	T0IR089201300014484000000000000000	CTKA731	13037348	49	6	4	5	5	10	10	9	0	11	6	4	1	0	0	0	0	0	-77%	R 1126.20	R 88.72	-R 1037.48	Decrease	
173	T0IR093000440000179900000000000000	BSRA3597	13009497	32	6	4	5	5	10	2	0	0	82	6	4	5	5	10	10	10	32	61%	R 557.08	R 2396.19	R 1839.11	Increase	
174	T0IR093000500000240500000000000000	CSRM0493	13046053	8	6	2	0	0	0	0	0	0	14	6	4	4	0	0	0	0	0	41%	R 60.92	R 129.43	R 68.52	Increase	
175	T0IR093001100004232000000000000000	32184911	13056375	24	6	4	5	5	4	0	0	0	22	6	4	5	5	2	0	0	0	-7%	R 341.32	R 298.43	-R 42.89	Decrease	
176	T0IR093001600004724000000000000000	CSRK2265	13037336	81	6	4	5	5	10	10	10	31	64	6	4	5	5	10	10	14	-21%	R 2355.63	R 1698.06	-R 657.57	Decrease		
177	T0IR095001300008800000000000000000	BLKU726	GKH9418	32	6	4	5	5	10	2	0	0	11	6	4	1	0	0	0	0	0	-65%	R 558.85	R 88.72	-R 470.12	Decrease	
178	T0IR096700900000136000000000000000	C-RLR3747	13019269	82	6	4	5	5	10	10	10	32	30	6	4	5	5	10	0	0	0	-63%	R 2421.33	R 517.39	-R 1903.94	Decrease	
179	T0IR096701100001363000000000000000	C-SRK0398	13037622	182	6	4	5	5	10	10	10	132	53	6	4	5	5	10	10	10	3	-71%	R 6278.78	R 1295.90	-R 4982.88	Decrease	
180	T0IR00004050000040500175RE00000000	CTKR0909	30046283	21	6	4	5	5	1	0	0	0	25	6	4	5	5	5	0	0	0	15%	R 260.53	R 358.48	R 97.95	Increase	
181	T0IR000040600000406006160000000000	984300206	13068559	9	6	3	0	0	0	0	0	0	92	6	4	5	5	10	10	10	42	90%	R 65.90	R 2806.86	R 2740.96	Increase	
182	T0IR007908100000627000000000000000	36218889	13030866	19	6	4	5	4	0	0	0	0	24	6	4	5	5	4	0	0	0	18%	R 224.07	R 332.75	R 108.67	Increase	
183	T0IR009503000004380000200000000000	CSRM4349	GKH0010	28	6	4	5	5	8	0	0	0	27	6	4	5	5	7	0	0	0	-3%	R 452.84	R 427.95	-R 24.89	Decrease	
184	T0IR018704700002285000000000000000	36204587	13035039	25	6	4	5	5	5	0	0	0	16	6	4	5	1	0	0	0	0	-37%	R 371.96	R 155.07	-R 216.89	Decrease	
185	T0IR030101400000663000000000000000	36107919	13055904	16	6	4	5	1	0	0	0	0	12	6	4	2	0	0	0	0	0	-26%	R 164.53	R 100.70	-R 63.83	Decrease	
186	T0IR030201600001860000050000000000	C-SRM1364	13063201	9	6	3	0	0	0	0	0	0	20	6	4	5	5	0	0	0	0	54%	R 68.11	R 245.46	R 177.35	Increase	
187	T0IR031106900001036000000000000000	C-SRK4869	13045467	35	6	4	5	5	10	5	0	0	48	6	4	5	5	5	10	10	8	0	27%	R 652.86	R 1092.47	R 439.61	Increase
188	T0IR058201300000604000000000000000	36204569	GKG2240	68	6	4	5	5	10	10	10	18	77	6	4	5	5	10	10	10	27	13%	R 1854.79	R 2229.58	R 374.79	Increase	
189	T0IR058700100000024000000000000000	36193382	GKH0084	36	6	4	5	5	10	6	0	0	29	6	4	5	5	9	0	0	0	-20%	R 686.58	R 482.25	-R 204.32	Decrease	
190	T0IR058700100000012000000000000000	361200827	GKH0096	16	6	4	5	1	0	0	0	0	43	6	4	5	5	10	10	3	0	62%	R 166.78	R 896.80	R 730.02	Increase	
191	T0IR058700100000013200000000000000	36237062	GKH0079	26	6	4	5	5	6	0	0	0	20	6	4	5	5	0	0	0	0	-22%	R 391.73	R 237.16	-R 154.57	Decrease	
192	T0IR058700100000023600000000000000	GKH0154	13060154	27	6	4	5	5	7	0	0	0	21	6	4	5	5	1	0	0	0	-23%	R 431.02	R 261.67	-R 169.35	Decrease	
193	T0IQ006300000000025800118000000000	C-SRK0516	13012085	7	6	1	0	0	0	0	0	0	36	6	4	5	5	10	6	0	0	81%	R 49.25	R 682.08	R 632.83	Increase	
194	T0IQ008713100002078000120000000000	CPRL1701	13013025	40	6	4	5	5	10	10	0	0	45	6	4	5	5	10	10	5	0	12%	R 796.53	R 994.63	R 198.11	Increase	
195	T0IQ010100900008190000000000000000	33093916	13039342	14	6	4	4	0	0	0	0	0	4	4	0	0	0	0	0	0	0	-69%	R 125.84	R 30.51	-R 95.33	Decrease	
196	T0IQ011500000002111000000000000000	978704305	GZT203	2130	6	4	5	5	10	10	10	2080	2483	6	4	5	5	10	10	10	2433	14%	R 81715.40	R 95365.49	R 13650.09	Increase	
197	T0IQ014807200000081700000000000000	CPRL1314	13032279	181	6	4	5	3	0	0	0	0	31	6	4	5	5	10	1	0	0	42%	R 199.58	R 538.64	R 339.05	Increase	
198	T0IQ018300000000095400000000000000	JW04000023	13068338	201	6	4	5	5	10	10	10	151	263	6	4	5	5	10	10	10	213	23%	R 7019.13	R 9399.82	R 2380.69	Increase	
199	T0IQ021601300011853000000000000000	CPRK12209	13056338	23	6	4	5	5	3	0	0	0	56	6	4	5	5	10	10	10	6	59%	R 305.60	R 1388.30	R 1082.70	Increase	
200	T0IQ021701000000750000000000000000	CM00006225	13019565	23	6	4	5	5	3	0	0	0	23	6	4	5	5	3	0	0	0	2%	R 319.54	R 330.29	R 10.76	Increase	
201	T0IQ022000000000021000020000000000	BPRA1861	130094429	5	5	0	0	0	0	0	0	0	8	6	2	0	0	0	0	0	0	37%	R 33.92	R 54.84	R 20.93	Increase	
202	T0IQ02200000000031500000RE00000000	BPRA7291	13055547	73	6	4	5	5	10	10	10	23	95	6	4	5	5	10	10	10	45	22%	R 2074.45	R 2894.86	R 820.41	Increase	
203	T0IQ024303600012280000000000000000	CRRL0370	GKI1014	40	6	4	5	5	10	10	0	0	45	6	4	5	5	10	10	5	0	11%	R 795.06	R 974.39	R 179.33	Increase	
204	T0IQ024304000001617000000000000000	CPRK8983	13012534	21	6	4	5	5	1	0	0	0	14	6	4	4	0	0	0	0	0	-32%	R 269.51	R 131.83	-R 137.69	Decrease	
205	T0IQ024304000001640000000000000000	CPRL6743	13039791	10	6	4	0	0	0	0	0	0	11	6	4	1	0	0	0	0	0	5%	R 76.92	R 83.94	R 7.01	Increase	
206	T0IQ025700000000001000000000000000	CRKH2514	13013339	5	5	0	0	0	0	0	0	0	7	6	1	0	0	0	0	0	0	29%	R 37.80	R 53.58	R 15.78	Increase	
207	T0IQ027000000001441000000000000000																										

[illegible]

SGID	Old Meter	New Meter	Old Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	New Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	% Loss							
				R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		Monthly Bill Old	Monthly Bill New	Change on Revenue	Increase / Decrease			
313	TOIQ0504090000000700000000000000	CPRK3272	13015189	15	6	4	5	0	0	0	0	25	6	4	5	5	5	0	0	0	38% R	143.14	R	359.71	R	216.56	Increase	
314	TOIQ052403000000241000000000000000	97338405	90008005	94	6	4	5	5	10	10	10	44	121	6	4	5	5	10	10	10	71	23% R	2,867.93	R	3,935.31	R	1,067.38	Increase
315	TOIQ060600000000028000000000000000	COCE454	130074358	27	6	4	5	5	7	0	0	0	25	6	4	5	5	5	0	0	0	-6% R	424.38	R	381.76	-R	42.62	Decrease
316	TOIQ060600000000049000000000000000	CPRL7429	PM130935041	12	6	4	2	0	0	0	0	12	6	4	2	0	0	0	0	0	0	-5% R	103.66	R	95.91	-R	7.75	Decrease
317	TOIQ066204000000011400000000000000	BPR48084	GKF9611	5	5	0	0	0	0	0	0	10	6	4	4	0	0	0	0	0	0	51% R	33.82	R	70.63	R	36.81	Increase
318	TOIQ066206000000051000000000000000	BPR48193	13045772	47	6	4	5	5	10	10	7	0	26	6	4	5	5	6	0	0	0	-44% R	1,041.41	R	401.17	-R	640.25	Decrease
319	TOIQ068203400000187500000000000000	CPRL1707	13037290	20	6	4	5	5	0	0	0	0	28	6	4	5	5	8	0	0	0	31% R	230.62	R	462.64	R	232.03	Increase
320	TOIR002600000000014800015R000000000	CPRK7189	GKG6087	92	6	4	5	5	10	10	10	42	44	6	4	5	5	10	10	4	0	-52% R	2,787.01	R	960.89	-R	1,826.11	Decrease
321	TOIR0047000000000003001020000000000	CPIA3473	13034054	29	6	4	5	5	9	0	0	0	75	6	4	5	5	10	10	10	25	61% R	475.65	R	2,127.50	R	1,651.85	Increase
322	TOIR0047003000000101000000000000000	CPRL6119	130085906	22	6	4	5	5	2	0	0	0	55	6	4	5	5	10	10	10	5	59% R	300.71	R	1,353.10	R	1,052.39	Increase
323	TOIR0058000000000567000000000000000	CORR510	13055792	3	3	0	0	0	0	0	0	126	6	4	5	5	10	10	10	10	76	98% R	22.44	R	4,103.84	R	4,081.40	Increase
324	TOIR0060000000000204000000000000000	CPRK3854	GKH0979	7	6	1	0	0	0	0	0	0	23	6	4	5	5	3	0	0	0	72% R	48.05	R	330.62	R	282.57	Increase
325	TOIR0112000000000050000000000000000	959914404	13120487	432	6	4	5	5	10	10	10	382	589	6	4	5	5	10	10	10	539	27% R	15,955.57	R	22,043.66	R	6,088.09	Increase
326	TOIR0146000000000078000260000000000	BRRA3984	13010859	20	6	4	5	5	0	0	0	0	16	6	4	5	1	0	0	0	0	-20% R	234.85	R	158.64	-R	76.21	Decrease
327	TOIR0241002000000460000100000000000	CPIA407	GK11058	76	6	4	5	5	10	10	10	26	75	6	4	5	5	10	10	10	25	-1% R	2,188.17	R	2,144.51	-R	43.65	Decrease
328	TOIR0271000000000270000000000000000	CPRK1387	130555556	55	6	4	5	5	10	10	10	5	45	6	4	5	5	10	10	5	0	-18% R	1,346.83	R	984.51	-R	362.32	Decrease
329	TOIR0286991000010110000000000000000	BPR43135	GKF2689	44	6	4	5	5	10	10	4	0	26	6	4	5	5	6	0	0	0	-41% R	944.75	R	398.92	-R	545.83	Decrease
330	TOIR0316000000012500000R00000000000	BORK104	13039332	75	6	4	5	5	10	10	10	25	84	6	4	5	5	10	10	10	34	11% R	2,123.00	R	2,489.12	R	366.12	Increase
331	TOIR0316000000014040000100000000000	CPIA083	GKF7986	19	6	4	5	4	0	0	0	15	6	4	5	0	0	0	0	0	0	-21% R	225.61	R	145.55	-R	80.06	Decrease
332	TOIR0319000000001460003000000000000	CPRK1522	13012879	88	6	4	5	5	10	10	10	38	69	6	4	5	5	10	10	10	19	-22% R	2,637.34	R	1,891.66	-R	745.68	Decrease
333	TOIR0323032000003670002000000000000	VKR778	13056309	21	6	4	5	5	1	0	0	0	160	6	4	5	5	10	10	10	110	87% R	274.49	R	5,429.26	R	5,154.77	Increase
334	TOIR0358000000000393000000000000000	CPKG7388	GKH3924	69	6	4	5	5	10	10	10	19	81	6	4	5	5	10	10	10	31	15% R	1,889.15	R	2,361.44	R	472.30	Increase
335	TOIR0358000000000734000010000000000	RMCPKG7250	GK11304	12	6	4	2	0	0	0	0	18	6	4	5	3	0	0	0	0	0	34% R	100.75	R	205.45	R	104.70	Increase
336	TOIR0358000000014810000000000000000	CPKG8486	GKF9750	35	6	4	5	5	10	5	0	0	103	6	4	5	5	10	10	10	53	66% R	650.43	R	3,207.33	R	2,556.90	Increase
337	TOIR0358000000014900000100000000000	RMCPKG7267	GKF2977	25	6	4	5	5	5	0	0	0	23	6	4	5	5	3	0	0	0	-8% R	377.64	R	320.11	-R	57.52	Decrease
338	TOIR0358000000016920000000000000000	CPRK2380	GKG6272	71	6	4	5	5	10	10	10	21	44	6	4	5	5	10	10	4	0	-37% R	1,971.08	R	955.96	-R	1,015.12	Decrease
339	TOIR0358000000027690000000000000000	CPRK4891	GK17093	55	6	4	5	5	10	10	10	5	50	6	4	5	5	10	10	10	0	-9% R	1,352.90	R	1,155.79	-R	197.12	Decrease
340	TOIR0358000000027830000000000000000	CPRK4563	GK12175	12	6	4	2	0	0	0	0	0	24	6	4	5	5	4	0	0	0	51% R	97.03	R	347.07	R	250.04	Increase
341	TOIR0358000000028320000000000000000	CORP530	GKF9770	23	6	4	5	5	3	0	0	0	83	6	4	5	5	10	10	10	33	73% R	305.46	R	2,441.86	R	2,136.40	Increase
342	TOIR0358000000035510000000000000000	CPKG5327	GKH2267	33	6	4	5	5	10	3	0	0	6	6	0	0	0	0	0	0	0	-83% R	589.55	R	39.54	-R	550.01	Decrease
343	TOIR0358000000037030000000000000000	CPRK2438	GKF9752	25	6	4	5	5	5	0	0	32	6	4	5	5	5	10	2	0	0	23% R	369.89	R	571.94	R	202.06	Increase
344	TOIR0358000000037960000000000000000	CPRK4467	GKF9714	45	6	4	5	5	10	10	5	0	9	6	3	0	0	0	0	0	0	-80% R	989.46	R	66.16	-R	923.29	Decrease
345	TOIR0358000000040450000000000000000	CPRK5271	GKH0864	20	6	4	5	5	0	0	0	0	14	6	4	4	0	0	0	0	0	-31% R	232.63	R	121.79	-R	110.84	Decrease
346	TOIR0358000000045960000000000000000	CPRK5529	13015317	33	6	4	5	5	10	3	0	0	32	6	4	5	5	10	2	0	0	-5% R	606.11	R	560.70	-R	45.40	Decrease
347	TOIR0358000000049720000000000000000	CPK12009	GKH3230	147	6	4	5	5	10	10	10	97	49	6	4	5	5	10	10	9	0	-67% R	4,932.73	R	1,138.66	-R	3,794.07	Decrease
348	TOIR0358000000050540000000000000000	CPRK3871	GKH2324	33	6	4	5	5	10	3	0	0	35	6	4	5	5	10	5	0	0	7% R	587.12	R	657.36	R	70.24	Increase
349	TOIR0358000000073990000000000000000	CPRK4276	GKH2361	171	6	4	5	5	10	10	121	34	6	4	5	5	5	10	4	0	0	-80% R	5,857.46	R	616.90	-R	5,240.56	Decrease
350	TOIR0358000000076150000000000000000	CPKG8691	GKH4475	45	6	4	5	5	10	10	5	0	41	6	4	5	5	10	1	0	0	-8% R	976.44	R	836.07	-R	140.37	Decrease
351	TOIR0358000000079520000000000000000	PKMG8772	13049842	25	6	4	5	5	5	0	0	16	6	4	5	1	0	0	0	0	0	-34% R	360.28	R	161.44	-R	198.83	Decrease
352	TOIR0361000000000810000600000000000	BORH718	13033177	47	6	4	5	5	10	10	7	0	66	6	4	5	5	10	10	10	16	29% R	1,058.73	R	1,783.13	R	724.40	Increase
353	TOIR0361000000008330000000000000000	BORH633	13039308	65	6	4	5	5	10	10	10	15	429	6	4	5	5	10	10	10	379	85% R	1,735.71	R	15,862.81	R	14,127.10	Increase
354	TOIR0404021000006330001100000000000	CPRL4722	130094244	85	6	4	5	5	10	10	10	35	19	6	4	5	4	0	0	0	0	-78% R	2,535.59	R	219.31	-R	2,316.27	Decrease
355	TOIR0404024000012530000000000000000	CPRL5046	13013090	39	6	4	5	5	10	9	0	0	32	6	4	5	5	10	2	0	0	-17% R	763.10	R	565.20	-R	197.90	Decrease
356	TOIR0404024000012700000000000000000	CPRL5047	130111279	33	6	4	5	5	10	3	0	0	42	6	4	5	5	10	2	0	0	21% R	592.17	R	869.81	R	277.63	Increase
357	TOIR0423000000000740000100000000000	BORH838	GKF7927	2	2	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	47% R	12.38	R	23.37	R	10.99	Increase
358	TOIR0451001000015890001300000000000	CPRK1526	GKF9710	18	6	4	5	3	0	0	0	0	28	6	4	5	5	8	0	0	0	35% R	202.43	R	455.29	R	252.86	Increase
359	TOIR0491000000005200040000000000000	95254386	GK11137	7	6	1	0	0	0	0	0	0	7	6	1	0	0	0	0	0	0	4% R	48.15	R	50.42	R	2.27	Increase
360	TOIR0506000000002005000040000000000	BORJ060	GK11047	71	6	4	5	5	10	10	21	42	6	4	5	5	10	10	2	0	0	-41% R	1,972.85	R	860.81	-R	1,112.04	Decrease
361																												

SGID	Old Meter	New Meter	Old Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	New Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	% Loss							
				R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		Monthly Bill Old	Monthly Bill New	Change on Revenue	Increase / Decrease			
391	T0IR0892008000830400000000000000	BRRA1907	30046503	59	6	4	5	5	10	10	10	9	100	6	4	5	5	10	10	10	50	42% R	1 500.94	R 3 123.66	R	1 622.72	Increase	
392	T0IR0892008000834500000000000000	CRKC0256	30048149	6	6	0	0	0	0	0	0	9	6	3	0	0	0	0	0	0	0	36% R	42.62	R	68.34	R	25.72	Increase
393	T0IR0892008000836400000000000000	KGK2485	BRRA1777	12	6	4	2	0	0	0	0	32	6	4	5	5	10	2	0	0	0	63% R	96.06	R	554.57	R	458.51	Increase
394	T0IR0892008000839400000000000000	CLNA315	30037787	10	6	4	0	0	0	0	0	24	6	4	5	5	4	0	0	0	0	58% R	72.78	R	340.10	R	267.32	Increase
395	T0IR0892008000844700000000000000	BRRA1769	30039608	8	6	2	0	0	0	0	0	51	6	4	5	5	10	10	10	1	84% R	60.84	R	1 222.86	R	1 162.02	Increase	
396	T0IR0892009000896700000000000000	33093259	30046327	5	5	0	0	0	0	0	0	10	6	4	0	0	0	0	0	0	0	47% R	38.79	R	75.55	R	36.76	Increase
397	T0IR0892009000967700000000000000	WPH185	KGK3097	33	6	4	5	5	10	3	0	14	6	4	4	0	0	0	0	0	0	-57% R	608.26	R	129.13	-R	479.13	Decrease
398	T0IR0892009000100970000000000000	CRKC0427	HKF6028	6	6	0	0	0	0	0	0	10	6	4	0	0	0	0	0	0	0	38% R	44.10	R	73.16	R	29.06	Increase
399	T0IR0892009000101570000000000000	CRKC0182	30037026	29	6	4	5	5	9	0	0	10	6	4	0	0	0	0	0	0	0	-67% R	488.38	R	71.78	-R	416.60	Decrease
400	T0IR0892009000115180000000000000	CRKC0185	30037148	14	6	4	4	0	0	0	0	10	6	4	0	0	0	0	0	0	0	-30% R	128.47	R	72.47	-R	56.00	Decrease
401	T0IR0892009000102140000000000000	CRKC0271	130086689	18	6	4	5	3	0	0	0	25	6	4	5	5	5	0	0	0	0	28% R	194.88	R	367.06	R	172.18	Increase
402	T0IR0892012000139550000000000000	WPH289	30046608	93	6	4	5	5	10	10	10	43	28	6	4	5	5	8	0	0	0	-69% R	2 832.60	R	465.09	-R	2 367.51	Decrease
403	T0IR0892013000148610000000000000	CRKC0887	13035913	10	6	4	0	0	0	0	0	39	6	4	5	5	10	9	0	0	0	75% R	71.68	R	772.40	R	700.72	Increase
404	T0IR09130020000000700017RE00000000	961241704	120092955	187	6	4	5	5	10	10	10	137	166	6	4	5	5	10	10	10	116	-11% R	6 481.15	R	5 665.10	-R	816.05	Decrease
405	T0IR0930004000015480000000000000	BPEA8731	13039384	37	6	4	5	5	10	7	0	50	6	4	5	5	10	10	10	0	0	25% R	722.99	R	1 153.19	R	430.20	Increase
406	T0IR0930007000035190000000000000	CPKR7597	13058126	12	6	4	2	0	0	0	0	37	6	4	5	5	10	7	0	0	0	67% R	100.60	R	696.69	R	596.09	Increase
407	T0IR0930007000037520000000000000	CPKR7482	13058377	36	6	4	5	5	10	6	0	282	6	4	5	5	10	10	10	232	87% R	676.51	R	10 149.58	R	9 473.07	Increase	
408	T0IR0930016000046520000000000000	32185378	13015892	28	6	4	5	5	8	0	0	28	6	4	5	5	8	0	0	0	0	1% R	452.84	R	462.64	R	9.80	Increase
409	T0IR0930018000049440000000000000	CONV054	13037607	43	6	4	5	5	10	10	3	0	21	6	4	5	5	1	0	0	0	-52% R	926.08	R	256.77	-R	669.31	Decrease
410	T0IR0936002000188200000000000000	BPA0396	GKH0165	19	6	4	5	4	0	0	0	9	6	3	0	0	0	0	0	0	0	-51% R	219.84	R	69.03	-R	150.81	Decrease
411	T0IR0971000000000840000000000000	BPA8078	GKH9432	6	6	0	0	0	0	0	0	34	6	4	4	5	5	10	4	0	0	81% R	45.73	R	634.27	R	588.54	Increase
412	T0IR097100002000020500002000000000	CPRL0098	13032005	37	6	4	5	5	10	7	0	34	6	4	5	5	10	4	0	0	0	-7% R	701.56	R	631.61	-R	69.95	Decrease
413	T0IR094580000000000210000000000000	CPKR8933	GKH0141	53	6	4	5	5	10	10	3	24	6	4	5	5	4	0	0	0	0	-55% R	1 284.54	R	337.65	-R	946.89	Decrease
414	T0IR095430090000007500000000000000	CPJA2932	13034131	6	6	0	0	0	0	0	0	51	6	4	5	5	10	10	10	1	87% R	45.62	R	1 199.84	R	1 154.23	Increase	
415	T0IR095820130000059100000000000000	CPRL0107	GKH0005	44	6	4	5	5	10	10	4	0	47	6	4	5	5	10	10	7	0	6% R	945.08	R	1 041.86	R	96.78	Increase
416	T0IR095879010000011400000000000000	CPJA2938	GKH0071	25	6	4	5	5	5	0	0	59	6	4	5	5	10	10	10	9	58% R	373.50	R	1 529.10	R	1 155.60	Increase	
417	T0IQ006000400000600000000000000000	NOX175	13032540	16	6	4	5	1	0	0	0	13	6	4	3	0	0	0	0	0	0	-19% R	152.51	R	107.88	-R	44.62	Decrease
418	T0IQ0061000000000565000000RE00000000	CNGE056	13032366	29	6	4	5	5	9	0	0	27	6	4	5	5	7	0	0	0	0	-7% R	479.09	R	423.43	-R	55.66	Decrease
419	T0IQ006600000000023000000000000000	CONV562	13031589	18	6	4	5	3	0	0	0	17	6	4	5	2	0	0	0	0	0	-4% R	197.90	R	183.62	-R	14.28	Decrease
420	T0IQ012100000000206000000000000000	CONV554	GKF4353	28	6	4	5	5	8	0	0	53	6	4	5	5	10	10	10	3	48% R	450.91	R	1 296.78	R	845.87	Increase	
421	T0IQ012100000004420000000000000000	LSJ209	13031647	17	6	4	5	2	0	0	0	21	6	4	5	5	1	0	0	0	0	19% R	178.27	R	266.57	R	88.30	Increase
422	T0IQ012101100002304000000000000000	COJE744	13011704	81	6	4	5	5	10	10	10	31	57	6	4	5	5	10	10	7	-29% R	2 375.22	R	1 451.66	-R	923.56	Decrease	
423	T0IQ018300000003499000000000000000	JW0400029	GZK172	414	6	4	5	5	10	10	10	364	312	6	4	5	5	10	10	262	-25% R	15 264.14	R	11 318.22	-R	3 945.92	Decrease	
424	T0IQ018400000000041700001000000000	CORS284	13037660	59	6	4	5	5	10	10	10	9	95	6	4	5	5	10	10	45	38% R	1 526.28	R	2 915.98	R	1 389.70	Increase	
425	T0IQ021600100006050000000000000000	30266331	13012817	45	6	4	5	5	10	10	5	0	61	6	4	5	5	10	10	11	27% R	976.56	R	1 595.98	R	619.42	Increase	
426	T0IQ021601100009878000000000000000	3026786	13009403	76	6	4	5	5	10	10	10	26	40	6	4	5	5	10	10	0	0	-48% R	2 170.33	R	785.68	-R	1 384.65	Decrease
427	T0IQ021601300010870000000000000000	30267524	13015291	84	6	4	5	5	10	10	10	34	54	6	4	5	5	10	10	4	-35% R	2 469.33	R	1 328.46	-R	1 140.87	Decrease	
428	T0IQ026702100003034000080000000000	33163267	GKG2019	27	6	4	5	5	7	0	0	19	6	4	5	4	0	0	0	0	0	-31% R	432.62	R	216.02	-R	216.60	Decrease
429	T0IQ026900000000031000000000000000	33163262	13015599	35	6	4	5	5	10	5	0	52	6	4	5	5	10	10	10	2	32% R	651.53	R	1 236.94	R	585.41	Increase	
430	T0IQ026900000000049200000000000000	CONX952	13055495	13	6	4	3	0	0	0	0	15	6	4	5	0	0	0	0	0	0	16% R	109.74	R	142.28	R	32.54	Increase
431	T0IQ027601200002479000020000000000	BORH376	13038332	32	6	4	5	5	10	2	0	0	44	6	4	5	5	10	10	4	0	26% R	570.36	R	928.85	R	358.49	Increase
432	T0IQ027601900001803000000000000000	32204841	GKH3177	26	6	4	5	5	6	0	0	29	6	4	5	5	9	0	0	0	0	10% R	406.62	R	486.54	R	79.92	Increase
433	T0IQ030200100000630000100000000000	BORG290	GKH2374	23	6	4	5	5	3	0	0	23	6	4	5	5	3	0	0	0	0	1% R	327.03	R	330.29	R	3.27	Increase
434	T0IQ03450010000076300000RE00000000	33174952	130107937	8	6	2	0	0	0	0	0	8	6	2	0	0	0	0	0	0	0	5% R	57.62	R	60.76	R	3.14	Increase
435	T0IQ046700500000130000500000000000	ORV020	GKT8923	19	6	4	5	5	4	0	0	15	6	4	5	0	0	0	0	0	0	-20% R	212.62	R	139.01	-R	73.61	Decrease
436	T0IQ047800000001281000000000000000	CONR113	GKH4229	26	6	4	5	5	6	0	0	31	6	4	5	5	10	1	0	0	0	15% R	406.91	R	533.73	R	126.82	Increase
437	T0IQ048701300013860000000000000000	9589370	13068581	379	6	4	5	5	10	10	10	329	402	6	4	5	5	10	10	352	6% R	13 896.71	R	14 788.94	R	892.23	Increase	
438	T0IQ048701900001415000000000000000	9499343	13050882	526	6	4	5	5	10	10	10	476	459	6	4	5	5	10	10	409	-13% R	19 615.05	R	16 995.98	-R	2 619.07	Decrease	
439	T0IQ048703200014640000000000000000	953675604	GZR410	989	6	4	5	5	10	10	10	939	1067	6	4	5	5	10	10	1017	7% R	37						

SGID	Old Meter	New Meter	Old Cons	O-6		6-10		10-15		15-20		20-30		30-40		40-50		+50		New Cons	O-6		6-10		10-15		15-20		20-30		30-40		40-50		+50		% Loss	Monthly Bill Old	Monthly Bill New	Change on Revenue	Increase / Decrease
				R	7.14	R	7.58	R	13.17	R	19.63	R	26.96	R	29.22	R	37.11	R	38.72		R	7.14	R	7.58	R	13.17	R	19.63	R	26.96	R	29.22	R	37.11	R	38.72					
469	TOIR04320000000002200003000000000	39092416	13055809	35		6	4	5	5	10	5	10	5	0	0	38	6	4	5	5	10	8	0	0	8%	R	643.12	R	733.22	R	90.10	Increase									
470	TOIR04510200000011700000RE000000000	CPRK1593	130111002	70	6	4	5	5	10	10	10	20	83	6	4	5	5	10	10	33	16%	R	1,925.10	R	2,451.34	R	526.24	Increase													
471	TOIR0451103000015860000300000000000	CMWB792	13038082	183	6	4	5	5	10	10	10	133	191	6	4	5	5	10	10	141	4%	R	6,337.03	R	6,619.02	R	281.99	Increase													
472	TOIR0451132000012700000000000000000	CORL310	13055673	6	6	0	0	0	0	0	0	0	14	6	4	4	0	0	0	58%	R	43.60	R	131.83	R	88.23	Increase														
473	TOIR0454000000000093000000000000000	CORO544	13012064	32	6	4	5	5	10	2	0	0	49	6	4	5	5	10	10	9	0	34%	R	569.70	R	1,132.95	R	563.25	Increase												
474	TOIR0460000000000160000000000000000	BORH125	GKH4170	84	6	4	5	5	10	10	10	34	64	6	4	5	5	10	10	14	-24%	R	2,502.67	R	1,715.66	-R	787.01	Decrease													
475	TOIR048700000000018000000RE000000000	BYNC108	GKH4611	63	6	4	5	5	10	10	10	10	13	96	6	4	5	5	10	10	46	34%	R	1,675.84	R	2,938.27	R	1,262.43	Increase												
476	TOIR0511000000000480000000000000000	CPAC1679	13015454	82	6	4	5	5	10	10	10	10	32	62	6	4	5	5	10	10	12	-24%	R	2,416.36	R	1,650.83	-R	765.53	Decrease												
477	TOIR0511000000000219000000000000000	BORG289	13015323	5	5	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	-47%	R	33.32	R	17.58	-R	15.74	Decrease												
478	TOIR0534004000019000000000000000000	WBY635	130081030	9	6	3	0	0	0	0	0	0	0	10	6	4	0	0	0	0	8%	R	68.80	R	76.45	R	7.65	Increase													
479	TOIR0534004000020400000000000000000	BXFJ487	130084380	26	6	4	5	5	10	6	0	0	0	25	6	4	5	5	5	0	0	0	-7%	R	406.89	R	360.73	-R	46.16	Decrease											
480	TOIR0534005000024560000000000000000	BXFJ896	30004864	41	6	4	5	5	10	10	1	0	44	6	4	5	5	10	10	4	0	6%	R	844.63	R	941.22	R	96.58	Increase												
481	TOIR0534005000030860000000000000000	BXFP322	13058204	70	6	4	5	5	10	10	10	20	49	6	4	5	5	10	10	9	0	-30%	R	1,947.04	R	1,126.77	-R	820.28	Decrease												
482	TOIR0534005000031520000000000000000	BXFJ938	13062028	18	6	4	5	3	0	0	0	0	0	44	6	4	5	5	10	10	4	0	58%	R	201.83	R	938.12	R	736.30	Increase											
483	TOIR0534005000031740000000000000000	BXFJ789	13031716	8	6	2	0	0	0	0	0	0	0	9	6	3	0	0	0	0	0	0	14%	R	55.16	R	64.20	R	9.04	Increase											
484	TOIR0534005000032150000000000000000	BZKR183	13032064	18	6	4	5	3	0	0	0	0	0	13	6	4	3	0	0	0	0	0	-27%	R	202.46	R	116.26	-R	86.20	Decrease											
485	TOIR0534005000032560000000000000000	BXFJ732	13014132	61	6	4	5	5	10	10	10	11	56	6	4	5	5	10	10	6	-8%	R	1,586.76	R	1,399.15	-R	187.61	Decrease													
486	TOIR0534005000032580000000000000000	BXFJ554	13063423	13	6	4	3	0	0	0	0	0	0	22	6	4	5	5	2	0	0	0	40%	R	112.04	R	277.60	R	165.56	Increase											
487	TOIR0563004000008910001000000000000	COJA746	13011501	84	6	4	5	5	10	10	10	34	87	6	4	5	5	10	10	37	3%	R	2,480.58	R	2,588.62	R	108.04	Increase													
488	TOIR0615000000003890000000000000000	CNGD765	GKH4154	39	6	4	5	5	10	9	0	0	60	6	4	5	5	10	10	10	35%	R	769.74	R	1,553.74	R	784.00	Increase													
489	TOIR0712001000002740000000000000000	CNGE009	GKF2619	57	6	4	5	5	10	10	10	7	40	6	4	5	5	10	10	0	-29%	R	1,421.74	R	802.33	-R	619.41	Decrease													
490	TOIR0727010000000059002800000000000	COOI709	13012845	10	6	4	0	0	0	0	0	0	0	10	6	4	0	0	0	0	0	0	-1%	R	71.99	R	71.27	-R	0.73	Decrease											
491	TOIR0727010000000670040000000000000	BORG 560	13031972	20	6	4	5	5	10	0	0	0	0	20	6	4	5	5	0	0	0	0	3%	R	228.75	R	244.51	R	15.77	Increase											
492	TOIR0732001000018500000000000000000	953684704	GZT7281	356	6	4	5	5	10	10	10	10	306	1215	6	4	5	5	10	10	10	1165	71%	R	13,013.82	R	46,265.95	R	33,252.13	Increase											
493	TOIR0740038000010110000000000000000	CORW248	13014963	41	6	4	5	5	10	10	1	0	37	6	4	5	5	10	7	0	0	0	-8%	R	818.61	R	719.27	-R	99.34	Decrease											
494	TOIR0763002000001570002300000000000	722083	13045587	12	6	4	2	0	0	0	0	0	0	9	6	3	0	0	0	0	0	0	-22%	R	101.26	R	69.03	-R	32.23	Decrease											
495	TOIR0767006000025680012100000000000	32185443	13032018	17	6	4	5	2	0	0	0	0	0	10	6	4	0	0	0	0	0	0	-44%	R	186.78	R	71.09	-R	115.68	Decrease											
496	TOIR0892002000008450000000000000000	COOR922	13038008	16	6	4	5	1	0	0	0	0	0	41	6	4	5	5	10	10	1	0	62%	R	151.73	R	841.78	R	690.05	Increase											
497	TOIR0892002000016000000000000000000	CLLX375	GKG3151	36	6	4	5	5	10	6	0	0	0	32	6	4	5	5	10	2	0	0	-12%	R	690.60	R	562.54	-R	128.06	Decrease											
498	TOIR0892002000011881000000000000000	COPU136	GKG4575	12	6	4	2	0	0	0	0	0	0	13	6	4	3	0	0	0	0	0	11%	R	98.68	R	118.66	R	19.98	Increase											
499	TOIR0892002000019090000000000000000	CONY024	GKG3315	9	6	3	0	0	0	0	0	0	0	28	6	4	5	5	8	0	0	0	67%	R	68.44	R	457.74	R	389.31	Increase											
500	TOIR0892002000019350000000000000000	CONX964	GKG4548	27	6	4	5	5	7	0	0	0	0	42	6	4	5	5	10	10	2	0	34%	R	435.59	R	854.63	R	419.04	Increase											
501	TOIR0892002000019980000000000000000	CONR888	130091960	20	6	4	5	5	10	0	0	0	0	21	6	4	5	5	1	0	0	0	4%	R	233.89	R	256.77	R	22.88	Increase											
502	TOIR0892002000021020000000000000000	BPPA0335	13055902	15	6	4	5	0	0	0	0	0	0	15	6	4	5	0	0	0	0	0	-5%	R	146.56	R	133.02	-R	13.54	Decrease											
503	TOIR0892002000022040000000000000000	BPPA0333	GKG4610	82	6	4	5	5	10	10	10	10	32	19	6	4	5	4	0	0	0	0	-77%	R	2,409.10	R	210.39	-R	2,198.71	Decrease											
504	TOIR0892002000022860000000000000000	BORH253	13057773	29	6	4	5	5	9	0	0	0	0	39	6	4	5	5	10	9	0	0	25%	R	476.43	R	759.11	R	282.68	Increase											
505	TOIR0892002000022910000000000000000	CORH351	13062575	6	6	0	0	0	0	0	0	0	0	7	6	1	0	0	0	0	0	0	10%	R	42.84	R	47.66	R	4.82	Increase											
506	TOIR0892002000023330000000000000000	BORI838	13037500	24	6	4	5	5	4	0	0	0																													

SGiD	Old Meter	New Meter	Old Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	New Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	% Loss				
				R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		Monthly Bill Old	Monthly Bill New	Change on Revenue	Increase / Decrease
547	TOIR093000500002961000000000000000	BXOK784	13057792	44	6	4	5	5	10	10	4	0	56	6	4	5	5	10	10	10	6	20% R	964.53 R	1388.30 R	423.77 Increase
548	TOIR093000500003045000000000000000	BORH157	13046107	7	6	1	0	0	0	0	0	43	6	4	5	5	10	10	3	0	84% R	50.42 R	913.66 R	863.24 Increase	
549	TOIR093000700003535000000000000000	30001855		13	6	4	3	0	0	0	0	33	6	4	5	5	10	3	0	0	60% R	113.77 R	584.68 R	470.91 Increase	
550	TOIR00004050000040500124RE00000000	CPJA0025	30048115	11	6	4	1	0	0	0	0	38	6	4	5	5	10	8	0	0	72% R	82.82 R	753.80 R	670.98 Increase	
551	TOIR013100000000700002000000000000	CNIJ301	13057566	79	6	4	5	5	10	10	10	29	84	6	4	5	5	10	10	34	6%	2 282.84 R	2 483.02 R	200.18 Increase	
552	TOIR013100100000188000000000000000	NSE435	KGK2168	122	6	4	5	5	10	10	10	72	101	6	4	5	5	10	10	51	-17% R	3 947.48 R	3 127.18 -R	820.30 Decrease	
553	TOIR032019000020310000000000000000	CORS023	13032638	91	6	4	5	5	10	10	10	41	62	6	4	5	5	10	10	12	-32% R	2 760.81 R	1 649.59 -R	1 111.21 Decrease	
554	TOIR054300800000330000000000000000	CNWC980	13046411	26	6	4	5	5	6	0	0	51	6	4	5	5	10	10	10	1	49% R	390.99 R	1 194.70 R	803.71 Increase	
555	TOIR058700100000100000000000000000	COJA908	KGK6147	57	6	4	5	5	10	10	10	7	76	6	4	5	5	10	10	26	25% R	1 450.78 R	2 189.69 R	738.91 Increase	
556	TOIR058700100000122000000000000000	COJD189	GKH0083	18	6	4	5	3	0	0	0	20	6	4	5	5	0	0	0	0	12% R	189.18 R	237.16 R	47.98 Increase	
557	TOIR058700100000173000000000000000	COHV433	GKH0177	22	6	4	5	5	2	0	0	21	6	4	5	5	1	0	0	0	-7% R	302.63 R	259.22 -R	43.42 Decrease	
558	TOIR000310090000051200009000000000	CNGE097	GKT8874	19	6	4	5	4	0	0	0	19	6	4	5	4	0	0	0	0	1% R	214.91 R	219.31 R	4.40 Increase	
559	TOIR003300000000190000000000000000	CNRL011	13039315	13	6	4	3	0	0	0	0	30	6	4	5	5	10	0	0	0	57% R	111.85 R	513.50 R	401.66 Increase	
560	TOIR003600200000877000000000000000	32204896	13035966	29	6	4	5	5	9	0	0	45	6	4	5	5	10	10	5	0	36% R	482.80 R	991.26 R	508.46 Increase	
561	TOIR006005000000926000090000000000	30277363	120039063	6	6	0	0	0	0	0	0	7	6	1	0	0	0	0	0	0	16% R	44.46 R	53.18 R	8.71 Increase	
562	TOIR006400000000717000700000000000	CMAI981	GKF9631	27	6	4	5	5	7	0	0	51	6	4	5	5	10	10	10	1	46% R	437.68 R	1 198.22 R	760.55 Increase	
563	TOIR006800000000083200000000000000	BNRD222	13045722	26	6	4	5	5	6	0	0	28	6	4	5	5	8	0	0	0	9% R	385.44 R	455.09 R	69.65 Increase	
564	TOIR001010000000143600000000000000	BMKA793	120114695	587	6	4	5	5	10	10	10	537	492	6	4	5	5	10	10	10	442	-16% R	21 959.47 R	18 277.26 -R	3 682.21 Decrease
565	TOIR001210000000140000000000000000	9466975	13128412	71	6	4	5	5	10	10	10	21	72	6	4	5	5	10	10	10	22	1% R	1 993.51 R	2 011.34 R	17.83 Increase
566	TOIR001210030001741000000000000000	CMCF432	120040080	39	6	4	5	5	10	9	0	35	6	4	5	5	10	5	0	0	-11% R	764.87 R	640.69 -R	124.19 Decrease	
567	TOIR001210050002190000000000000000	MRC539	13019323	60	6	4	5	5	10	10	10	95	6	4	5	5	10	10	45	37% R	1 565.00 R	2 930.06 R	1 365.06 Increase		
568	TOIR001230040000069200000000000000	946700203	13057133	172	6	4	5	5	10	10	10	122	208	6	4	5	5	10	10	158	17% R	5 881.67 R	7 287.82 R	1 406.15 Increase	
569	TOIR0013000000000004300000RE000000	21376482	13011797	46	6	4	5	5	10	6	0	22	6	4	5	5	2	0	0	0	-52% R	1 038.75 R	300.37 -R	738.68 Decrease	
570	TOIR001460000000111300000000000000	CMMF393	GKH3338	166	6	4	5	5	10	10	10	116	11	6	4	1	0	0	0	0	0	-93% R	5 661.58 R	86.33 -R	5 575.25 Decrease
571	TOIR001770000000080000000000000000	BR13676375	CUXA775	41	6	4	5	5	10	10	1	0	40	6	4	5	5	10	10	0	0	-2% R	830.36 R	802.33 -R	28.03 Decrease
572	TOIR002160010000662900001000000000	123994	13055755	40	6	4	5	5	10	10	0	43	6	4	5	5	10	10	3	0	7% R	794.46 R	910.29 R	115.83 Increase	
573	TOIR002160130001057300000000000000	KLD115	13034151	35	6	4	5	0	10	5	0	169	6	4	5	5	10	10	10	119	80% R	640.08 R	5 763.66 R	5 123.58 Increase	
574	TOIR002200000000021400003000000000	CKMH403	GKH4173	4	4	0	0	0	0	0	0	33	6	4	5	5	10	3	0	0	87% R	30.21 R	598.92 R	568.71 Increase	
575	TOIR002200000000033500005000000000	32184816	GKH1007	45	6	4	5	5	10	10	5	0	39	6	4	5	5	10	9	0	0	-13% R	977.76 R	767.08 R	210.68 Decrease
576	TOIR002670260003332000000000000000	CNSB195	13034158	13	6	4	3	0	0	0	0	4	4	0	0	0	0	0	0	0	-71% R	114.52 R	27.54 -R	86.98 Decrease	
577	TOIR002700000000272500000000000000	BNRA804	13031471	10	6	4	0	0	0	0	0	21	6	4	5	5	1	0	0	0	52% R	74.62 R	266.19 R	191.57 Increase	
578	TOIR002760000000146900020000000000	CMNH275	13009954	12	6	4	2	0	0	0	0	19	6	4	5	4	0	0	0	0	35% R	101.97 R	213.32 R	111.35 Increase	
579	TOIR002760040000081500000000000000	CMSH435	KGK6084	28	6	4	5	5	8	0	0	27	6	4	5	5	7	0	0	0	0	-6% R	454.53 R	412.40 -R	42.13 Decrease
580	TOIR002760060000126100000000000000	CNRL235	13058427	114	6	4	5	5	10	10	10	64	15	6	4	5	0	0	0	0	-87% R	3 632.99 R	140.65 -R	3 492.34 Decrease	
581	TOIR002760250000337200000000000000	CMWC798	GKI2121	57	6	4	5	5	10	10	10	7	50	6	4	5	5	10	10	10	-12% R	1 430.77 R	1 170.06 -R	260.71 Decrease	
582	TOIR002760250000340500002000000000	CZUI562	13055657	39	6	4	5	5	10	9	0	49	6	4	5	5	10	10	9	0	21% R	762.44 R	1 126.77 R	364.33 Increase	
583	TOIR002760330000362700000000000000	CMIC977	13055499	60	6	4	5	5	10	10	10	69	6	4	5	5	10	10	10	19	13% R	1 545.03 R	1 899.29 R	354.25 Increase	
584	TOIR002760330000367700000000000000	CKUM833	13032362	36	6	4	5	5	10	6	0	46	6	4	5	5	10	10	6	0	22% R	669.56 R	1 015.44 R	345.88 Increase	
585	TOIR003330290000379700000000000000	32204942	GKH4169	21	6	4	5	5	1	0	0	41	6	4	5	5	10	10	1	0	48% R	262.70 R	822.58 R	559.87 Increase	
586	TOIR003345001000007950000000000000	33163583	13057733	41	6	4	5	5	10	10	1	0	70	6	4	5	5	10	10	20	41% R	828.65 R	1 933.90 R	1 105.25 Increase	
587	TOIR004090000000170100000000000000	BNRB917	13018528	11	6	4	1	0	0	0	0	23	6	4	5	5	3	0	0	0	51% R	87.10 R	305.60 R	218.49 Increase	
588	TOIR004660000000010000000RE000000	BNRE349	13031447	13	6	4	0	0	0	0	0	38	6	4	5	5	10	8	0	0	65% R	114.70 R	727.03 R	612.34 Increase	
589	TOIR004670010000338300000000000000	13733952	13005284	318	6	4	5	5	10	10	10	268	311	6	4	5	5	10	10	261	-2% R	11 539.64 R	11 258.38 -R	281.26 Decrease	
590	TOIR004780000000140600000RE000000	BNRO342	13015449	32	6	4	0	0	0	2	0	25	6	4	5	5	5	0	0	0	0	-21% R	565.20 R	380.95 -R	184.25 Decrease
591	TOIR004870290001455000000000000000	949937103	13050878	181	6	4	5	5	10	10	10	131	365	6	4	5	5	10	10	315	51% R	6 230.15 R	13 377.42 R	7 147.27 Increase	
592	TOIR006060000000039400000000000000	300147	KGK3386	139	6	4	5	5	10	10	10	89	56	6	4	5	5	10	10	10	6	-60% R	4 602.59 R	1 398.86 -R	3 203.73 Decrease
593	TOIR006060000000058500000000000000	LLV973	PM130935044	20	6	4	5	5	0	0	0	12	6	4	2	0	0	0	0	0	-43% R	243.32 R	93.51 -R	149.81 Decrease	
594	TOIR006610010000010300000000000000	32156791	13034510	33	6	4	5	5	10	3	0	31	6	4	5	5	10	1	0	0	0	-8% R	602.77 R	526.24 R	76.53 Decrease
595	TOIR006650270000085000000000000000	MUN909	13058422	94	6	4	5	5	10	10	10	44	62	6	4	5	5	10	10	12	-35% R	2 892.43 R	1 625.02 -R	1 267.41 Decrease	
596	TOIR007080000000015500000000000000	32166532	13031528	10	6	4	0	0	0	0	0	8	6	2	0	0	0	0	0	0	0	-19% R	72.65 R	58.00 -R	14.65 Decrease
597	TOIR007400000000030003000000000000	COWB609	130110070	26	6	4	5	5	6	0	0	144	6	4	5	5	10	10	10	94	82% R	385.44 R	4 823.82 R	4 438.38 Increase	
598	TOIR007400300000051000000000000000	CNRL054	130106155	38	6	4	5	5	10	8	0	0	67	6	4	5	5	10	10	17	43% R	736.			

SGID	Old Meter	New Meter	Old Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	New Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	% Loss	Monthly Bill Old	Monthly Bill New	Change on Revenue	Increase / Decrease	
				R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72						
625	TOIR051400200000005000060000000000	LIF908	13030682	28	6	4	5	5	8	0	0	24	6	4	5	5	4	0	0	0	-13% R	440.40	345.00	-R	95.40 Decrease	
626	TOIR052400000000096000100000000000	CNRL151	13057685	10	6	4	0	0	0	0	0	39	6	4	5	5	10	9	0	0	75% R	712.7	757.57	R	686.30 Increase	
627	TOIR052400000000014600000000000000	3312213	30007022	62	6	4	5	5	10	10	12	65	6	4	5	5	10	10	10	15	5% R	1,631.18	1,764.94	R	133.76 Increase	
628	TOIR053400400001577000000000000000	WBY582	130076025	37	6	4	5	5	10	7	0	169	6	4	5	5	10	10	10	119	78% R	722.78	5,777.74	R	5,054.96 Increase	
629	TOIR053400400001774000000000000000	BXFO930	30002497	5	5	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	-41% R	32.84	19.47	-R	13.37 Decrease	
630	TOIR053400400002209000000000000000	NCB551	130074783	30	6	4	5	5	10	0	0	36	6	4	5	5	10	6	0	0	18% R	499.57	691.82	R	192.25 Increase	
631	TOIR053400500002402000000000000000	BWST002	13058301	27	6	4	5	5	7	0	0	27	6	4	5	5	7	0	0	0	-1% R	434.87	425.88	-R	8.99 Decrease	
632	TOIR053400500002424000000000000000	BXFK027	13032024	21	6	4	5	5	1	0	0	20	6	4	5	5	0	0	0	0	-5% R	263.55	237.16	-R	26.39 Decrease	
633	TOIR053400500002641000000000000000	WBY655	13045771	119	6	4	5	5	10	10	10	69	77	6	4	5	5	10	10	10	27	-35% R	3,836.46	2,228.41	-R	1,608.05 Decrease
634	TOIR053400500002952000000000000000	BXBS783	13030212	46	6	4	5	5	10	10	6	0	16	6	4	5	1	0	0	0	-66% R	1,033.28	152.10	-R	881.19 Decrease	
635	TOIR053400500003055000000000000000	CXFO795	13045966	34	6	4	5	5	10	4	0	22	6	4	5	5	2	0	0	0	-35% R	616.90	288.83	-R	328.06 Decrease	
636	TOIR056100000000022000000000000000	CNKG300	13036004	19	6	4	5	4	0	0	0	23	6	4	5	5	3	0	0	0	20% R	212.08	327.84	R	115.77 Increase	
637	TOIR056601200000205000110000000000	CLII877	13015514	34	6	4	5	5	10	4	0	35	6	4	5	5	10	5	0	0	3% R	628.14	660.83	R	32.69 Increase	
638	TOIR059000000000004200004000000000	CNJD468	13032809	136	6	4	5	5	10	10	10	86	95	6	4	5	5	10	10	45	-30% R	4,487.07	2,896.33	-R	1,590.75 Decrease	
639	TOIR059100000000052900004000000000	CNU8777	13038929	840	6	4	5	5	10	10	10	790	941	6	4	5	5	10	10	10	891	11% R	31,740.22	35,676.03	R	3,935.82 Increase
640	TOIR059300000000013600000000000000	EO35001794	13068368	522	6	4	5	5	10	10	10	472	393	6	4	5	5	10	10	10	343	-25% R	19,445.90	14,468.62	-R	4,977.28 Decrease
641	TOIR059400000000002520000000000000	CM00058711	13019369	43	6	4	5	5	10	10	3	0	65	6	4	5	5	10	10	10	15	34% R	895.45	1,743.82	R	848.37 Increase
642	TOIR064203800000603000000000000000	CLIS773	13055923	44	6	4	5	5	10	10	4	0	45	6	4	5	5	10	10	5	0	2% R	941.54	967.64	R	26.10 Increase
643	TOIR064210100001526000000000000000	CNJD106	GKF4419	89	6	4	5	5	10	10	10	39	43	6	4	5	5	10	10	3	0	-52% R	2,689.82	896.80	-R	1,793.02 Decrease
644	TOIR064214900010509000000000000000	9356989-02	13051065	2091	6	4	5	5	10	10	10	2041	2180	6	4	5	5	10	10	10	2130	4% R	80,197.58	83,636.62	R	3,439.04 Increase
645	TOIR066990000000002100000000000000	CNKF510	GKH4880	26	6	4	5	5	6	0	0	0	71	6	4	5	5	10	10	10	21	63% R	405.34	1,990.22	R	1,584.88 Increase
646	TOIR071800000000122000000000000000	CNRL079	13012225	88	6	4	5	5	10	10	10	38	33	6	4	5	5	10	3	0	0	-62% R	2,634.74	594.42	-R	2,040.32 Decrease
647	TOIR072800000000002500000R60000000	M9506617	13038483	123	6	4	5	5	10	10	73	147	6	4	5	5	10	10	10	97	16% R	4,011.87	4,932.94	R	921.07 Increase	
648	TOIR076300200000300000190000000000	CMG68833	13033152	16	6	4	5	1	0	0	0	20	6	4	5	5	0	0	0	0	18% R	166.19	237.16	R	70.97 Increase	
649	TOIR076700000000136000000000000000	WPJ083	13063411	131	6	4	5	5	10	10	10	81	70	6	4	5	5	10	10	10	20	-47% R	4,319.93	1,940.94	-R	2,378.99 Decrease
650	TOIR076700000000086700000000000000	BXBR795	130107994	35	6	4	5	5	10	5	0	40	6	4	5	5	10	10	0	0	12% R	662.94	805.71	R	142.77 Increase	
651	TOIR076700600002568000690000000000	32183474	30007688	36	6	4	5	5	10	6	0	47	6	4	5	5	10	10	7	0	24% R	675.20	1,072.22	R	397.02 Increase	
652	TOIR076700600002568000940000000000	33175439	13036599	61	6	4	5	5	10	10	11	8	6	2	0	0	0	0	0	0	-86% R	1,610.18	60.76	-R	1,549.42 Decrease	
653	TOIR076700600002741000000000000000	CNOI726	13056404	42	6	4	5	5	10	2	0	52	6	4	5	5	10	10	2	20%	860.42	1,247.50	R	387.08 Increase		
654	TOIR089200200000047900000000000000	WXX667	130091982	34	6	4	5	5	10	4	0	45	6	4	5	5	10	10	5	0	24% R	634.16	996.88	R	362.72 Increase	
655	TOIR089200200000480000000000000000	WOXR824	HKB7701	52	6	4	5	5	10	10	2	20	6	4	5	5	0	0	0	0	-62% R	1,261.58	231.81	-R	1,029.77 Decrease	
656	TOIR089200200000049200000000000000	WOXS91	GKG0454	9	6	3	0	0	0	0	0	61	6	4	5	5	10	10	10	11	85% R	66.66	1,613.58	R	1,546.92 Increase	
657	TOIR089200200000049400000000000000	WNH361	30050146	31	6	4	5	5	10	1	0	33	6	4	5	5	10	3	0	0	5% R	535.98	583.79	R	47.81 Increase	
658	TOIR089200200000051000000000000000	WGO283	GKG2078	112	6	4	5	5	10	10	10	62	30	6	4	5	5	10	0	0	-73% R	3,559.31	506.76	-R	3,052.55 Decrease	
659	TOIR089200200000051700000000000000	IWOP538	13038498	44	6	4	5	5	10	10	4	0	42	6	4	5	5	10	2	0	-4% R	947.40	876.55	-R	70.85 Decrease	
660	TOIR089200200000053500000000000000	WOPF531	30037789	13	6	4	3	0	0	0	0	19	6	4	5	4	0	0	0	0	32% R	113.99	224.67	R	110.68 Increase	
661	TOIR089200200000054400000000000000	WOPF278	GKG0309	6	6	0	0	0	0	0	0	10	6	4	0	0	0	0	0	0	39% R	42.84	71.78	R	28.94 Increase	
662	TOIR089200200000055600000000000000	WOO353	13055796	23	6	4	5	5	3	0	0	79	6	4	5	5	10	10	10	29	71% R	316.04	2,303.50	R	1,987.46 Increase	
663	TOIR089200200000055700000000000000	WOO352	13039320	17	6	4	5	2	0	0	0	30	6	4	5	5	10	0	0	0	43% R	174.34	494.51	R	320.16 Increase	
664	TOIR089200200000055900000000000000	WOO848	GKG0459	54	6	4	5	5	10	10	10	4	43	6	4	5	5	10	3	0	-20% R	1,324.94	923.78	-R	401.16 Decrease	
665	TOIR089200200000056000000000000000	WOO0355	13035483	23	6	4	5	5	3	0	0	23	6	4	5	5	3	0	0	0	-2% R	329.59	318.04	-R	11.55 Decrease	
666	TOIR089200200000057300000000000000	WON958	EKV6151	10	6	4	0	0	0	0	0	113	6	4	5	5	10	10	63	91% R	70.63	3,602.38	R	3,531.75 Increase		
667	TOIR089200200000057400000000000000	LLZ852	30049908	15	6	4	5	0	0	0	0	22	6	4	5	5	2	0	0	0	32% R	135.72	278.83	R	143.11 Increase	
668	TOIR089200200000058800000000000000	WOO223	13039500	9	6	3	0	0	0	0	0	17	6	4	5	2	0	0	0	0	48% R	64.38	176.49	R	112.10 Increase	
669	TOIR089200200000059100000000000000	WOO140	13037367	8	6	2	0	0	0	0	0	15	6	4	5	0	0	0	0	0	48% R	54.68	133.02	R	78.34 Increase	
670	TOIR089200200000060000000000000000	WOO066	GKG0421	11	6	4	1	0	0	0	0	19	6	4	5	4	0	0	0	0	44% R	83.40	224.67	R	141.26 Increase	
671	TOIR089200200000063000000000000000	WOO153	130090305	84	6	4	5	5	10	10	10	34	64	6	4	5	5	10	10	14	-23% R	2,477.51	1,726.22	-R	751.29 Decrease	
672	TOIR089200200000063500000000000000	WON772	13035490	27	6	4	5	5	7	0	0	90	6	4	5	5	10	10	10	40	70% R	435.23	2,711.82	R	2,276.59 Increase	
673	TOIR089200200000063600000000000000	WON796	13012203	10	6	4	0	0	0	0	0	67	6	4	5	5	10	10	10	17	85% R	78.65	1,845.90	R	1,767.25 Increase	
674	TOIR089200200000064700000000000000	WON885	130103739	57	6	4	5	5	10	10	7	114	6	4	5	5	10	10	10	64	50% R	1,444.62	3,641.10	R	2,196.48 Increase	
675	TOIR089200200000067500000000000000	WRA430	13058233	48	6	4	5	5	10	10	8	0	22	6	4	5	5	2	0	0	-55% R	1,094.41	286.18	-R	808	

SGID	Old Meter	New Meter	Old Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	New Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	% Loss	Monthly Bill Old	Monthly Bill New	Change on Revenue	Increase / Decrease	
				R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72						
703	TOIR089200200000807000000000000000	WOO236	13037651	39	6	4	5	5	10	9	0	0	47	6	4	5	5	10	10	7	0	18%	R 766.09	R 1072.22	R 306.14	Increase
704	TOIR089200200000808000000000000000	LMA367	30046519	19	6	4	5	4	0	0	0	0	49	6	4	5	5	10	10	9	0	62%	R 207.72	R 1129.58	R 921.86	Increase
705	TOIR089200200000815000000000000000	WOP273	KGK0443	17	6	4	5	2	0	0	0	0	35	6	4	5	5	10	5	0	0	51%	R 179.91	R 642.23	R 462.33	Increase
706	TOIR089200200000822000000000000000	WOO259	KGK3478	37	6	4	5	5	10	7	0	0	38	6	4	5	5	10	8	0	0	1%	R 712.76	R 727.24	R 14.48	Increase
707	TOIR089200200000838000000000000000	WON786	130108254	26	6	4	5	5	6	0	0	0	41	6	4	5	5	10	10	1	0	37%	R 394.69	R 839.44	R 444.75	Increase
708	TOIR089200200000841000000000000000	WON973	KGK0441	12	6	4	2	0	0	0	0	0	25	6	4	5	5	5	0	0	0	52%	R 102.13	R 379.31	R 277.18	Increase
709	TOIR089200200000842000000000000000	WOO155	KGK0434	12	6	4	2	0	0	0	0	0	26	6	4	5	5	6	0	0	0	55%	R 93.55	R 389.12	R 295.56	Increase
710	TOIR089200200000846000000000000000	WOP448	KGK2054	7	6	1	0	0	0	0	0	0	47	6	4	5	5	10	10	7	0	86%	R 47.49	R 1065.48	R 1017.99	Increase
711	TOIR089200200000847000000000000000	WOP452	13011348	21	6	4	5	5	1	0	0	0	24	6	4	5	5	4	0	0	0	13%	R 251.68	R 332.75	R 81.07	Increase
712	TOIR089200200000849000000000000000	WOO272	KGK2080	59	6	4	5	5	10	10	10	9	33	6	4	5	5	10	3	0	0	-43%	R 1504.02	R 599.73	-R 904.29	Decrease
713	TOIR089200200000895000000000000000	WPA539	KGK3243	23	6	4	5	5	3	0	0	0	9	6	3	0	0	0	0	0	0	-61%	R 307.93	R 64.89	-R 243.04	Decrease
714	TOIR089200200000896000000000000000	WON592	130074799	45	6	4	5	5	10	10	5	0	25	6	4	5	5	5	0	0	0	-45%	R 983.40	R 367.06	-R 616.34	Decrease
715	TOIR089200200000899000000000000000	WON890	13011382	32	6	4	5	5	10	2	0	0	16	6	4	5	1	0	0	0	0	-50%	R 564.69	R 156.86	-R 407.83	Decrease
716	TOIR089200200000902000000000000000	WON564	13037426	12	6	4	2	0	0	0	0	0	33	6	4	5	5	10	3	0	0	64%	R 101.97	R 607.70	R 505.73	Increase
717	TOIR089200200000903000000000000000	WON870	13011377	19	6	4	5	4	0	0	0	0	23	6	4	5	5	3	0	0	0	18%	R 213.40	R 315.59	R 102.19	Increase
718	TOIR089200200000905000000000000000	WON878	KGK0460	41	6	4	5	5	10	10	1	0	27	6	4	5	5	7	0	0	0	-35%	R 828.65	R 413.63	-R 415.02	Decrease
719	TOIR089200200000907000000000000000	WON575	13055979	59	6	4	5	5	10	10	10	9	32	6	4	5	5	10	2	0	0	-46%	R 1499.99	R 557.23	-R 942.76	Decrease
720	TOIR089200200000913000000000000000	IWON571	KGK9332	31	6	4	5	5	10	1	0	0	84	6	4	5	5	10	10	10	34	63%	R 528.68	R 2479.50	R 1950.83	Increase
721	TOIR089200200000919000000000000000	WON881	130074731	20	6	4	5	5	0	0	0	0	33	6	4	5	5	10	3	0	0	39%	R 246.88	R 602.39	R 355.51	Increase
722	TOIR089200200000930000000000000000	WOO065	GKF1276	22	6	4	5	5	2	0	0	0	26	6	4	5	5	6	0	0	0	16%	R 287.23	R 398.92	R 111.69	Increase
723	TOIR089200200000946000000000000000	LLZ 851	HKC3005	10	6	4	0	0	0	0	0	0	52	6	4	5	5	10	10	10	2	81%	R 70.63	R 1240.46	R 1169.83	Increase
724	TOIR089200200000948000000000000000	WON771	KGK0440	23	6	4	5	5	3	0	0	0	23	6	4	5	5	3	0	0	0	2%	R 306.97	R 318.04	R 11.07	Increase
725	TOIR089200200000950000000000000000	WOP466	KGK0449	53	6	4	5	5	10	10	10	3	32	6	4	5	5	10	2	0	0	-41%	R 1298.80	R 554.57	-R 744.23	Decrease
726	TOIR089200200000963000000000000000	WON759	130080932	51	6	4	5	5	10	10	10	1	25	6	4	5	5	5	0	0	0	-52%	R 1222.45	R 364.61	-R 857.84	Decrease
727	TOIR089200200000970000000000000000	WON769	KGK0466	13	6	4	3	0	0	0	0	0	32	6	4	5	5	10	2	0	0	58%	R 116.18	R 551.92	R 435.74	Increase
728	TOIR089200200000971000000000000000	WON891	KGK2077	12	6	4	2	0	0	0	0	0	6	6	0	0	0	0	0	0	0	-50%	R 105.26	R 44.91	-R 60.35	Decrease
729	TOIR089200200000976000000000000000	WON794	KGK0430	26	6	4	5	5	6	0	0	0	25	6	4	5	5	5	0	0	0	-2%	R 390.99	R 379.31	-R 11.68	Decrease
730	TOIR089200200000984000000000000000	WON868	13055744	37	6	4	5	5	10	7	0	0	34	6	4	5	5	10	4	0	0	-6%	R 702.31	R 634.27	-R 68.04	Decrease
731	TOIR089200200001002000000000000000	WON830	13055759	28	6	4	5	5	8	0	0	0	37	6	4	5	5	10	7	0	0	24%	R 446.42	R 703.33	R 256.91	Increase
732	TOIR089200200001018000000000000000	WPB813	HKD3770	2	2	0	0	0	0	0	0	0	10	6	4	0	0	0	0	0	0	79%	R 14.57	R 72.47	R 57.91	Increase
733	TOIR089200200001022000000000000000	LLZ861	HKC2540	55	6	4	5	5	10	10	10	5	471	6	4	5	5	10	10	10	421	88%	R 1355.36	R 17457.10	R 16101.74	Increase
734	TOIR089200200001038000000000000000	WPB144	KGK3260	25	6	4	5	5	5	0	0	0	24	6	4	5	5	4	0	0	0	-5%	R 375.55	R 342.55	-R 33.01	Decrease
735	TOIR089200200001047000000000000000	WPB407	130074810	22	6	4	5	5	2	0	0	0	18	6	4	5	3	0	0	0	0	-18%	R 296.22	R 203.25	-R 92.96	Decrease
736	TOIR089200200001054000000000000000	WOO399	130093806	36	6	4	5	5	10	6	0	0	96	6	4	5	5	10	10	10	46	62%	R 693.12	R 2961.74	R 2268.62	Increase
737	TOIR089200200001057000000000000000	WOO491	HKC0766	23	6	4	5	5	3	0	0	0	31	6	4	5	5	10	1	0	0	26%	R 319.48	R 546.61	R 227.13	Increase
738	TOIR089200200001087000000000000000	WOO420	KGK3259	25	6	4	5	5	5	0	0	0	30	6	4	5	5	10	0	0	0	18%	R 363.66	R 506.76	R 143.10	Increase
739	TOIR089200200001101000000000000000	WOT013	130104263	17	6	4	5	2	0	0	0	0	68	6	4	5	5	10	10	10	18	75%	R 181.07	R 1881.10	R 1700.03	Increase
740	TOIR089200200001114000000000000000	WPB141	30050923	64	6	4	5	5	10	10	10	14	21	6	4	5	5	1	0	0	0	-67%	R 1699.23	R 269.02	-R 1430.21	Decrease
741	TOIR089200200001121000000000000000	WOO021	KGK2034	23	6	4	5	5	3	0	0	0	20	6	4	5	5	0	0	0	0	-9%	R 306.06	R 249.41	-R 56.64	Decrease
742	TOIR089200200001127000000000000000	WON922	130074631	60	6	4	5	5	10	10	10	10	12	6	4	2	0	0	0	0	0	-81%	R 1568.71	R 95.91	-R 1472.80	Decrease
743	TOIR089200200001132000000000000000	WOO206	KGK3269	26	6	4	5	5	6	0	0	0	120	6	4	5	5	10	10	10	70	78%	R 392.18	R 3866.38	R 3474.20	Increase
744	TOIR089200200001138000000000000000	WON925	KGK3473	14	6	4	4	0	0	0	0	0	46	6	4	5	5	10	10	6	0	70%	R 124.56	R 1008.13	R 883.57	Increase
745	TOIR089200200001143000000000000000	WOO320	130084096	35	6	4	5	5	10	5	0	0	49	6	4	5	5	10	10	9	0	28%	R 663.82	R 1136.32	R 472.51	Increase
746	TOIR089200200001150000000000000000	WOO087	KGK3475	17	6	4	5	2	0	0	0	0	18	6	4	5	3	0	0	0	0	8%	R 168.46	R 197.90	R 29.45	Increase
747	TOIR089200200001151000000000000000	WOO082	130102899	33	6	4	5	5	10	3	0	0	45	6	4	5	5	10	5	0	0	27%	R 582.35	R 974.39	R 392.04	Increase
748	TOIR089200200001159000000000000000	WPB420	13057472	118	6	4	5	5	10	10	10	68	51	6	4	5	5	10	10	10	1	-57%	R 3804.82	R 1190.91	-R 2613.91	Decrease
749	TOIR089200200001170000000000000000	WOO536	KGK3477	10	6	4	0	0	0	0	0	0	79	6	4	5	5	10	10	10	29	87%	R 78.65	R 2278.86	R 2200.21	Increase
750	TOIR089200200001176000000000000000	WON921	KGK0392	18	6	4	5	3	0	0	0	0	70	6	4	5	5	10	10	10	20	74%	R 197.15	R 1955.02	R 1757.88	Increase
751	TOIR089200200001178000000000000000	WOO224	130100875	14	6	4	4	0	0	0	0	0	38	6	4	5	5	10	8	0	0	64%	R 121.98	R 743.18	R 621.20	Increase
752	TOIR089200200001179000000000000000	WOO226	KGK0445	135	6	4	5	5	10	10	85	37	6	4	5	5	5	10	7	0	0	-73%	R 4474.17	R 698.02	-R 3776.15	Decrease
753	TOIR089200200001186000000000000000	WOO342	KGK0481																							

SGID		Old Meter	New Meter	Old Cons	O-6								New Cons	O-6								% Loss	Increase / Decrease										
					R	7.14	R	7.58	R	13.17	R	19.63		R	26.96	R	29.22	R	37.11	R	38.72			R	7.14	R	7.58	R	13.17	R	19.63	R	26.96
781	T0IR08920020000014320000000000000000	WOT020	1303788	11	6			1	0	0	0	0	0	121	6		4	5	5	10	10			71	91%	R	86.84	R	3936.78	R	3849.94	Increase	
782	T0IR08920020000014350000000000000000	WOT113	GKG2084	7	6			1	0	0	0	0	0	31	6		4	5	5	10	1	0	0		79%	R	48.15	R	546.61	R	498.46	Increase	
783	T0IR08920020000014410000000000000000	WP4A12	GKG3412	43	6				5	5	10	10	3	0	30	6		4	5	5	10	0	0					895.66	R	514.73	-R	380.93	Decrease
784	T0IR08920020000014540000000000000000	WOT111	GKG3258	15	6			4	5	0	0	0	0	45	6		4	5	5	10	10			0	66%	R	143.92	R	991.26	R	847.34	Increase	
785	T0IR08920020000014550000000000000000	WOT098	GKG3252	26	6			4	5	5	6	0	0	45	6		4	5	5	10	10	5	0		42%	R	398.92	R	967.64	R	568.72	Increase	
786	T0IR08920020000014900000000000000000	WO0484	30050648	37	6			4	5	5	10	7	0	42	6		4	5	5	10	10	2	0		13%	R	702.00	R	886.67	R	184.67	Increase	
787	T0IR08920020000015130000000000000000	LY663	130087826	28	6				5	5	8	0	0	0	41	6		4	5	5	10	10	1	0		32%	R	455.09	R	839.44	R	384.36	Increase
788	T0IR08920020000015140000000000000000	BLLY947	130074867	27	6			4	5	5	7	0	0	80	6		4	5	5	10	10	10	30		66%	R	417.11	R	2315.53	R	1898.42	Increase	
789	T0IR08920020000015160000000000000000	LY672	130088665	35	6			4	5	5	5	10	5	0	43	6		4	5	5	10	10	3	0		18%	R	654.81	R	893.42	R	238.61	Increase
790	T0IR08920020000015250000000000000000	LY685	13037669	58	6			4	5	5	10	10	10	8	80	6		4	5	5	10	10	10	30		27%	R	1470.14	R	2315.53	R	845.39	Increase
791	T0IR08920020000015260000000000000000	LY653	30050122	10	6			4	5	0	0	0	0	31	6		4	5	5	10	1	0	0		67%	R	78.58	R	538.64	R	460.05	Increase	
792	T0IR08920020000015300000000000000000	LSL864	GKG3112	33	6				5	5	10	3	0	0	33	6		4	5	5	10	3	0	0		1%	R	581.90	R	594.42	R	12.52	Increase
793	T0IR08920020000015310000000000000000	LY1787	130093066	31	6			4	5	5	10	1	0	112	6		4	5	5	10	10	10	62		73%	R	525.02	R	3588.30	R	3063.28	Increase	
794	T0IR08920020000015430000000000000000	LSL589	GKG4677	21	6			4	5	5	1	0	0	87	6		4	5	5	10	10	10	37		76%	R	257.78	R	2620.30	R	2362.52	Increase	
795	T0IR08920020000015560000000000000000	LY1946	HKC3018	29	6			4	5	5	9	0	0	18									0	0		-37%	R	471.57	R	201.47	-R	270.10	Decrease
796	T0IR08920020000015600000000000000000	LY693	13056302	3	3	0		0	0	0	0	0	0	90	6		4	5	5	10	10	10	40		97%	R	19.91	R	2728.54	R	2708.63	Increase	
797	T0IR08920020000015630000000000000000	LY1769	GKG3316	15	6			4	5	0	0	0	0	42	6		4	5	5	10	10	2	0		65%	R	133.52	R	879.93	R	746.40	Increase	
798	T0IR08920020000015640000000000000000	LY1737	GKI0944	16	6			4	5	1	0	0	0	18	6		4	5	3	0	0	0	0		9%	R	163.00	R	196.12	R	33.11	Increase	
799	T0IR08920020000015680000000000000000	LSL875	30049951	29	6			4	5	5	9	0	0	20	6		4	5	5	0	0	0	0		-32%	R	488.31	R	235.38	-R	252.94	Decrease	
800	T0IR08920020000015700000000000000000	LY1753	GKG3235	35	6			4	5	5	10	5	0	46	6		4	5	5	10	10	6	0		23%	R	658.95	R	1004.75	R	345.80	Increase	
801	T0IR08920020000015770000000000000000	LSL901	13046018	16	6			4	5	1	0	0	0	22	6		4	5	5	2	0	0	0		26%	R	157.33	R	278.83	R	121.49	Increase	
802	T0IR08920020000015840000000000000000	LY684	130093863	46	6			4	5	5	10	10	6	146	6		4	5	5	10	10	10	96		68%	R	1025.69	R	4897.74	R	3872.05	Increase	
803	T0IR08920020000015850000000000000000	LZ066	HKB7738	25	6			4	5	5	5	0	0	200	6		4	5	5	10	10	10	150		87%	R	384.40	R	6988.62	R	6604.22	Increase	
804	T0IR08920020000015870000000000000000	LY945	130102567	18	6			4	5	3	0	0	0	15	6		4	5	0	0	0	0	0		-15%	R	192.38	R	139.01	-R	53.37	Decrease	
805	T0IR08920020000015890000000000000000	LY994	30046016	77	6			4	5	5	10	10	10	27	100	6		4	5	5	10	10	50		23%	R	2220.34	R	3102.54	R	882.20	Increase	
806	T0IR08920020000015920000000000000000	LY1727	13038494	29	6			4	5	5	9	0	0	42	6		4	5	5	10	10	2	0		31%	R	478.21	R	876.55	R	398.34	Increase	
807	T0IR08920020000015950000000000000000	LYX843	GKG2029	23	6			4	5	5	3	0	0	31	6		4	5	5	10	1	0	0		23%	R	330.17	R	522.70	R	192.53	Increase	
808	T0IR08920020000016040000000000000000	LY1962	30037228	50	6			4	5	5	10	10	10	26	6		4	5	5	6	0	0	0		-47%	R	1177.32	R	411.17	-R	766.15	Decrease	
809	T0IR08920020000016210000000000000000	LSL857	130078573	164	6			4	5	5	10	10	10	114	127	6		4	5	5	10	10	77		-23%	R	5603.12	R	4144.46	-R	1458.66	Decrease	
810	T0IR08920020000016290000000000000000	LY677	130089184	271	6			4	5	5	10	10	10	221	192	6		4	5	5	10	10	142		-29%	R	9718.24	R	6654.22	-R	3064.02	Decrease	
811	T0IR08920020000016320000000000000000	LZ201	HKC2629	11	6			4	1	0	0	0	0	17	6		4	5	2	0	0	0	0		36%	R	87.79	R	183.62	R	95.83	Increase	
812	T0IR08920020000016490000000000000000	LY1756	130074681	6	6	0		0	0	0	0	0	0	2	2	0		0	0	0	0	0	0		-58%	R	41.89	R	17.53	-R	24.36	Decrease	
813	T0IR08920020000016580000000000000000	LY966	HKF5314	12	6			4	2	0	0	0	0	27	6		4	5	5	7	0	0	0		54%	R	101.38	R	413.63	R	312.24	Increase	
814	T0IR08920020000016640000000000000000	CLLS677	GKG3158	27	6			4	5	5	7	0	0	31	6		4	5	5	10	1	0	0		12%	R	425.88	R	522.70	R	96.82	Increase	
815	T0IR08920020000016650000000000000000	LY953	HKB7721	19	6			4	5	4	0	0	0	73	6		4	5	5	10	10	10	23		75%	R	209.68	R	2078.22	R	1868.54	Increase	
816	T0IR08920020000016660000000000000000	LY973	13037544	11	6			4	1	0	0	0	0	10	6		4	0	0	0	0	0	0		-1%	R	79.88	R	78.65	-R	1.23	Decrease	
817	T0IR08920020000016670000000000000000	LY686	13058201	10	6			4	0	0	0	0	0	12	6		4	4	2	0	0	0	0		13%	R	79.36	R	99.50	R	20.14	Increase	
818	T0IR08920020000016730000000000000000	CMOM931	GKG4570	12	6			4	2	0	0	0	0	18	6		4	5	3	0	0	0	0		30%	R	104.99	R	194.33	R	89.34	Increase	
819	T0IR08920020000016740000000000000000	LSL893	GKI0487	6	6	0		0	0	0	0	0	0	15	6		4	5	0	0	0	0	0		58%	R	45.19	R	142.58	R	97.39	Increase	
820	T0IR08920020000016760000000000000000	LSL529	130078735	22	6			4	5	5	2	0	0	27	6		4	5	5	7	0	0	0		16%	R	301.19	R	418.53	R	117.34	Increase	
821	T0IR08920020000016800000000000000000	LZ043	HKC2993	19	6			4	5	4	0	0	0	169	6		4	5	5	10	10	10	119		89%	R	217.53	R	5774.22	R	5556.69	Increase	
822	T0IR08920020000016910000000000000000	LY885	13039305	11	6			4	1	0	0	0	0	50	6		4	5	5	10	10	10	0		79%	R	80.17	R	1187.66	R	1107.49	Increase	
823	T0IR08920020000016970000000000000000	LY892	130107960	32	6			4	5	5	10	2	0	13	6		4	3	0	0	0	0	0		-59%	R	578.69	R	116.26	-R	462.42	Decrease	
824	T0IR08920020000017010000000000000000	LY689	GKH9349	38	6			4	5	5	10	8	0	13	6		4	3	0	0	0	0	0		-66%	R	748.78	R	113.77	-R	635.01	Decrease	
825	T0IR08920020000017080000000000000000	LY1762	GKG3331	26	6			4	5	5	6	0	0	37	6		4	5	5	10	7	0	0		29%	R	409.70	R	721.93	R	312.22	Increase	
826	T0IR08920020000017170000000000000000	LY513	GKG3335	109	6			4	5	5	10	10	10	59	17	6		4	5	2	0	0	0		-84%	R	3448.67	R	187.19	-R	3261.48	Decrease	
827	T0IR08920020000017260000000000000000	LY1736	GKG3149	62	6			4	5	5	10	10	10	12	28	6		4	5	5	8	0	0		-55%	R	1633.09						

SGID	Old Meter	New Meter	Old Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	New Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	% Loss						
				R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		Monthly Bill Old	Monthly Bill New	Change on Revenue	Increase / Decrease		
859	TOIR089200200001849000000000000000	LLY500	GKG3184	13	6	4	3	0	0	0	0	73	6	4	5	5	10	10	10	23	82% R	114.87	R	2 071.18	R	1 956.32	Increase
860	TOIR089200200001855000000000000000	LLY880	30046510	22	6	4	5	5	2	0	0	22	6	4	5	5	2	0	0	0	-2% R	291.08	R	281.28	-R	9.80	Decrease
861	TOIR089200200001860000000000000000	LLY895	HKC2834	21	6	4	5	5	1	0	0	52	6	4	5	5	10	10	10	2	59% R	274.49	R	1 234.59	R	960.10	Increase
862	TOIR089200200001861000000000000000	LLX040	HKC2468	12	6	4	2	0	0	0	0	15	6	4	5	0	0	0	0	0	21% R	94.43	R	134.62	R	40.19	Increase
863	TOIR089200200001862000000000000000	LLX426	GKG2416	21	6	4	5	5	1	0	0	41	6	4	5	5	10	10	1	0	49% R	269.14	R	852.94	R	583.80	Increase
864	TOIR089200200001864000000000000000	LLY881	HKC2528	19	6	4	5	4	0	0	0	29	6	4	5	5	9	0	0	0	33% R	225.53	R	484.70	R	259.17	Increase
865	TOIR089200200001870000000000000000	LLY668	13009997	31	6	4	5	5	10	1	0	45	6	4	5	5	10	10	5	0	31% R	538.07	R	987.88	R	449.82	Increase
866	TOIR089200200001878000000000000000	LLY697	GKIO507	19	6	4	5	4	0	0	0	12	6	4	2	0	0	0	0	0	-35% R	220.80	R	104.29	-R	116.51	Decrease
867	TOIR089200200001879000000000000000	LLY671	13058073	15	6	4	5	0	0	0	0	20	6	4	5	5	0	0	0	0	25% R	140.04	R	237.16	R	97.12	Increase
868	TOIR089200200001880000000000000000	LLY658	GKG4559	10	6	4	0	0	0	0	0	150	6	4	5	5	10	10	10	100	94% R	70.40	R	5 056.14	R	4 985.74	Increase
869	TOIR089200200001887000000000000000	LLS896	30046314	46	6	4	5	5	10	10	6	65	6	4	5	5	10	10	10	15	29% R	1 012.71	R	1 743.82	R	731.11	Increase
870	TOIR089200200001891000000000000000	LLX335	GKG2014	13	6	4	3	0	0	0	0	24	6	4	5	5	4	0	0	0	46% R	113.99	R	349.90	R	235.91	Increase
871	TOIR089200200001892000000000000000	LLY636	GKG4486	33	6	4	5	5	10	3	0	25	6	4	5	5	5	0	0	0	-24% R	602.21	R	381.76	-R	220.45	Decrease
872	TOIR089200200001893000000000000000	LLY791	GKG4550	4	4	0	0	0	0	0	0	7	6	1	0	0	0	0	0	0	42% R	29.99	R	51.80	R	21.81	Increase
873	TOIR089200200001897000000000000000	LLX324	13037577	14	6	4	4	0	0	0	0	19	6	4	5	4	0	0	0	0	24% R	131.31	R	215.75	R	84.43	Increase
874	TOIR089200200001899000000000000000	LLY790	30037046	11	6	4	1	0	0	0	0	19	6	4	5	4	0	0	0	0	41% R	90.98	R	221.10	R	130.12	Increase
875	TOIR089200200001910000000000000000	LLY660	GKG4574	23	6	4	5	5	3	0	0	37	6	4	5	5	10	7	0	0	37% R	325.30	R	713.96	R	388.66	Increase
876	TOIR089200200001913000000000000000	LLS676	GKG3150	26	6	4	5	5	6	0	0	42	6	4	5	5	10	10	2	0	38% R	408.55	R	879.93	R	471.38	Increase
877	TOIR089200200001940000000000000000	LLY674	13038481	25	6	4	5	5	5	0	0	40	6	4	5	5	10	10	0	0	36% R	378.70	R	788.33	R	409.63	Increase
878	TOIR089200200001941000000000000000	LLY694	130078701	78	6	4	5	5	10	10	10	28	50	6	4	5	5	10	10	0	-35% R	2 238.33	R	1 187.66	-R	1 050.67	Decrease
879	TOIR089200200001947000000000000000	LMP110	130093869	5	5	0	0	0	0	0	0	7	6	1	0	0	0	0	0	0	40% R	32.13	R	53.87	R	21.74	Increase
880	TOIR089200200001961000000000000000	LMP716	30037834	22	6	4	5	5	2	0	0	62	6	4	5	5	10	10	10	12	64% R	301.19	R	1 641.74	R	1 340.55	Increase
881	TOIR089200200001962000000000000000	LMP123	13056382	58	6	4	5	5	10	10	10	8	59	6	4	5	5	10	10	9	1% R	1 493.90	R	1 515.02	R	21.12	Increase
882	TOIR089200200001978000000000000000	LMP181	30039811	24	6	4	5	5	4	0	0	20	6	4	5	5	0	0	0	0	-20% R	353.76	R	228.24	-R	125.52	Decrease
883	TOIR089200200001984000000000000000	LMP323	130081712	7	6	1	0	0	0	0	0	153	6	4	5	5	10	10	10	103	95% R	51.68	R	5 147.66	R	5 095.98	Increase
884	TOIR089200200001991000000000000000	LMO982	130075270	17	6	4	5	2	0	0	0	22	6	4	5	5	2	0	0	0	22% R	181.29	R	291.08	R	109.79	Increase
885	TOIR089200200002003000000000000000	LMP638	130081038	30	6	4	5	5	10	0	0	23	6	4	5	5	3	0	0	0	-24% R	520.67	R	320.49	-R	200.18	Decrease
886	TOIR089200200002006000000000000000	LMP011	30046512	59	6	4	5	5	10	10	10	9	18	6	4	5	3	0	0	0	-70% R	1 528.22	R	197.90	-R	1 330.32	Decrease
887	TOIR089200200002009000000000000000	LMP510	30037550	5	5	0	0	0	0	0	0	34	6	4	5	5	10	4	0	0	86% R	34.72	R	615.67	R	580.96	Increase
888	TOIR089200200002052000000000000000	LMP240	HKC2473	9	6	3	0	0	0	0	0	25	6	4	5	5	5	0	0	0	66% R	62.17	R	376.86	R	314.69	Increase
889	TOIR089200200002057000000000000000	LMP501	HKC2936	18	6	4	5	3	0	0	0	19	6	4	5	4	0	0	0	0	3% R	206.49	R	217.53	R	11.04	Increase
890	TOIR089200200002059000000000000000	LMP251	HKC2628	26	6	4	5	5	6	0	0	25	6	4	5	5	5	0	0	0	-1% R	386.08	R	379.31	-R	6.77	Decrease
891	TOIR089200200002060000000000000000	LMP255	HKC2623	39	6	4	5	5	10	9	0	50	6	4	5	5	10	10	10	0	22% R	765.57	R	1 156.57	R	391.00	Increase
892	TOIR089200200002064000000000000000	LMP236	HKC2526	6	6	0	0	0	0	0	0	16	6	4	5	1	0	0	0	0	66% R	39.74	R	161.91	R	122.18	Increase
893	TOIR089200200002065000000000000000	LMP325	13038500	40	6	4	5	5	10	10	0	18	6	4	5	3	0	0	0	0	-54% R	790.99	R	203.25	-R	587.74	Decrease
894	TOIR089200200002074000000000000000	LMO602	30049976	16	6	4	5	1	0	0	0	18	6	4	5	3	0	0	0	0	12% R	153.03	R	194.33	R	41.30	Increase
895	TOIR089200200002105000000000000000	LMO896	130107938	24	6	4	5	5	4	0	0	13	6	4	3	0	0	0	0	0	-45% R	345.00	R	116.26	-R	228.74	Decrease
896	TOIR089200200002108000000000000000	LMO313	30037252	14	6	4	4	0	0	0	0	192	6	4	5	5	10	10	10	142	93% R	125.84	R	6 653.41	R	6 527.57	Increase
897	TOIR089200200002109000000000000000	LMO957	130084144	13	6	4	3	0	0	0	0	19	6	4	5	4	0	0	0	0	32% R	109.16	R	213.96	R	104.80	Increase
898	TOIR089200200002110000000000000000	LMO468	130082190	25	6	4	5	5	5	0	0	50	6	4	5	5	10	10	10	0	51% R	360.41	R	1 166.69	R	806.28	Increase
899	TOIR089200200002111000000000000000	LMP261	130080924	17	6	4	5	2	0	0	0	27	6	4	5	5	7	0	0	0	37% R	180.72	R	428.33	R	247.61	Increase
900	TOIR089200200002128000000000000000	LMO145	HKC2635	11	6	4	1	0	0	0	0	20	6	4	5	5	0	0	0	0	45% R	87.43	R	242.06	R	154.63	Increase
901	TOIR089200200002132000000000000000	LMP220	30048126	7	6	1	0	0	0	0	0	39	6	4	5	5	10	9	0	0	82% R	49.58	R	775.05	R	725.47	Increase
902	TOIR089200200002134000000000000000	LMO170	HKF5233	13	6	4	3	0	0	0	0	17	6	4	5	2	0	0	0	0	23% R	114.87	R	178.27	R	63.41	Increase
903	TOIR089200200002146000000000000000	CLMP293	13039150	24	6	4	5	5	4	0	0	49	6	4	5	5	10	10	9	0	50% R	357.89	R	1 126.20	R	768.31	Increase
904	TOIR089200200002152000000000000000	LMP150	130089182	7	6	1	0	0	0	0	0	153	6	4	5	5	10	10	10	103	95% R	49.89	R	5 168.78	R	5 118.89	Increase
905	TOIR089200200002162000000000000000	LMP655	30049917	30	6	4	5	5	10	0	0	171	6	4	5	5	10	10	10	121	83% R	501.18	R	5 872.78	R	5 371.60	Increase
906	TOIR089200200002175000000000000000	LMP306	HKC2489	14	6	4	4	0	0	0	0	39	6	4	5	5	10	9	0	0	64% R	129.89	R	783.02	R	653.13	Increase
907	TOIR089200200002187000000000000000	LMP263	30046316	40	6	4	5	5	10	10	0	38	6	4	5	5	10	8	0	0	-5% R	785.21	R	727.24	-R	57.97	Decrease
908	TOIR089200200002192000000000000000	LMO668	30046439	30	6	4	5	5	10	0	0	71	6	4	5	5	10	10	10	21	58% R	502.61	R	1 972.62	R	1 470.01	Increase
909	TOIR089200200002193000000000000000	CLMO666</																									

SGID	Old Meter	New Meter	Old Cons	0-6		6-10		10-15		15-20		20-30		30-40		40-50		+50		% Loss	Monthly Bill Old	Monthly Bill New	Change on Revenue	Increase / Decrease		
				R	7.14	R	7.58	R	13.17	R	19.63	R	26.96	R	29.22	R	37.11	R	38.72							
937	TOIR089200200002332000000000000000	LMO157	HKC2571	9	6	3	0	0	0	0	0	0	0	0	0	0	0	0	52% R	69.21	R	231.81	R	162.60 Increase		
938	TOIR089200200002339000000000000000	LMO366	13035343	29	6	4	5	5	5	9	0	0	0	0	0	0	0	4	47% R	466.57	R	1,310.86	R	844.29 Increase		
939	TOIR089200200002351000000000000000	LMO586	13037351	24	6	4	5	5	5	4	0	0	0	0	0	0	0	10	70% R	334.41	R	2,321.10	R	1,986.69 Increase		
940	TOIR089200200002365000000000000000	LMO159	130082188	24	6	4	5	5	5	4	0	0	0	0	0	0	0	0	-15% R	338.81	R	239.61 -R	99.20 Decrease			
941	TOIR089200200002371000000000000000	CLMO517	KGK3429	32	6	4	5	5	5	10	2	0	0	0	0	0	0	74	75% R	552.42	R	4,038.86	R	3,486.44 Increase		
942	TOIR089200200002372000000000000000	CLMP317	KGK2359	19	6	4	5	4	0	0	0	0	23	6	4	5	5	3	0	18% R	219.31	R	325.39	R	106.08 Increase	
943	TOIR089200200002376000000000000000	LMO188	13057480	15	6	4	5	0	0	0	0	0	18	6	4	5	3	0	0	15% R	144.10	R	196.12	R	52.02 Increase	
944	TOIR089200200002381000000000000000	LMP238	HKF5137	80	6	4	5	5	5	10	10	10	30	39	6	4	5	5	10	-52% R	2,347.79	R	756.46 -R	1,591.34 Decrease		
945	TOIR089200200002383000000000000000	LMP248	HKF5036	33	6	4	5	5	5	10	3	0	0	33	6	4	5	5	10	1% R	589.55	R	594.42	R	4.87 Increase	
946	TOIR089200200002384000000000000000	LMP157	HKF5226	12	6	4	2	0	0	0	0	0	24	6	4	5	5	4	0	50% R	95.84	R	335.20	R	239.35 Increase	
947	TOIR089200200002389000000000000000	LMP076	HKF5047	34	6	4	5	5	5	10	4	0	0	318	6	4	5	5	10	89% R	635.91	R	11,564.62	R	10,928.71 Increase	
948	TOIR089200200002390000000000000000	LMO322	130101205	26	6	4	5	5	5	6	0	0	0	36	6	4	5	5	10	28% R	394.43	R	682.08	R	287.65 Increase	
949	TOIR089200200002418000000000000000	LMO977	130090131	29	6	4	5	5	5	9	0	0	0	46	6	4	5	5	10	36% R	484.45	R	1,012.34	R	527.89 Increase	
950	TOIR089200200002426000000000000000	LMO964	HKC2773	31	6	4	5	5	5	10	1	0	0	27	6	4	5	5	7	0	-12% R	529.16	R	425.88 -R	103.28 Decrease	
951	TOIR089200200002431000000000000000	LMP020	HKC3008	7	6	1	0	0	0	0	0	0	0	11	6	4	1	0	0	0	39% R	48.53	R	86.33	R	37.81 Increase
952	TOIR089200200002433000000000000000	LMO979	30046383	3	3	0	0	0	0	0	0	0	0	13	6	4	3	0	0	0	77% R	21.81	R	112.67	R	90.86 Increase
953	TOIR089200200002436000000000000000	LMP216	130088769	61	6	4	5	5	5	10	10	10	11	48	6	4	5	5	10	-21% R	1,580.92	R	1,102.59 -R	478.33 Decrease		
954	TOIR089200200002439000000000000000	LMP039	HKC3026	12	6	4	2	0	0	0	0	0	0	20	6	4	5	5	0	0	42% R	92.92	R	233.59	R	140.68 Increase
955	TOIR089200200002452000000000000000	LMP231	13039309	32	6	4	5	5	5	10	2	0	0	9	6	3	0	0	0	-72% R	577.07	R	66.27 -R	510.80 Decrease		
956	TOIR089200200002453000000000000000	LMO980	HKC2575	16	6	4	5	1	0	0	0	0	0	21	6	4	5	5	1	0	26% R	155.18	R	273.92	R	118.75 Increase
957	TOIR089200200002455000000000000000	LMO981	HKC2907	26	6	4	5	5	5	6	0	0	0	53	6	4	5	5	10	51% R	389.93	R	1,268.62	R	878.69 Increase	
958	TOIR089200200002456000000000000000	LMP227	HKC2775	18	6	4	5	3	0	0	0	0	0	99	6	4	5	5	10	82% R	193.77	R	3,074.38	R	2,880.61 Increase	
959	TOIR089200200002459000000000000000	LMP038	30046412	9	6	3	0	0	0	0	0	0	0	5	5	0	0	0	0	-44% R	64.06	R	35.05 -R	29.01 Decrease		
960	TOIR089200200002461000000000000000	LMP154	13046168	20	6	4	5	5	0	0	0	0	0	20	6	4	5	5	0	0	-2% R	249.85	R	237.16 -R	12.69 Decrease	
961	TOIR089200200002475000000000000000	LMP225	HKC2767	7	6	1	0	0	0	0	0	0	0	20	6	4	5	5	0	0	65% R	48.53	R	228.24	R	179.71 Increase
962	TOIR089200200002476000000000000000	LMP223	HKB7596	11	6	4	1	0	0	0	0	0	0	27	6	4	5	5	7	0	58% R	91.60	R	428.33	R	336.73 Increase
963	TOIR089200200002482000000000000000	LMP214	HKC2493	18	6	4	5	3	0	0	0	0	0	26	6	4	5	5	6	0	33% R	190.35	R	406.27	R	215.92 Increase
964	TOIR089200200002484000000000000000	LMP029	13046011	19	6	4	5	4	0	0	0	0	0	21	6	4	5	5	1	0	9% R	226.59	R	271.47	R	44.88 Increase
965	TOIR089200200002485000000000000000	LMO998	HKC2772	19	6	4	5	4	0	0	0	0	0	38	6	4	5	5	10	50% R	225.08	R	753.80	R	528.72 Increase	
966	TOIR089200200002486000000000000000	LMP221	HKC3024	19	6	4	5	4	0	0	0	0	0	287	6	4	5	5	10	93% R	226.04	R	10,343.18	R	10,117.14 Increase	
967	TOIR089200200002487000000000000000	LMW820	130074632	36	6	4	5	5	5	10	6	0	0	29	6	4	5	5	9	0	-20% R	686.58	R	477.35 -R	209.23 Decrease	
968	TOIR089200200002489000000000000000	LMP048	HKB7672	18	6	4	5	3	0	0	0	0	0	34	6	4	5	5	10	47% R	197.90	R	623.64	R	425.74 Increase	
969	TOIR089200200002493000000000000000	LMP109	HKC2968	7	6	1	0	0	0	0	0	0	0	14	6	4	4	0	0	50% R	49.25	R	121.05	R	71.80 Increase	
970	TOIR089200200002498000000000000000	LMP003	130078955	36	6	4	5	5	5	10	6	0	0	15	6	4	5	5	0	0	-59% R	683.47	R	135.42 -R	548.05 Decrease	
971	TOIR089200200002506000000000000000	LMP024	HKC3009	10	6	4	0	0	0	0	0	0	0	36	6	4	5	5	10	72% R	73.60	R	671.45	R	597.86 Increase	
972	TOIR089200200002513000000000000000	LMP237	13055978	18	6	4	5	3	0	0	0	0	0	19	6	4	5	4	0	0	4% R	195.22	R	208.61	R	13.38 Increase
973	TOIR089200200002540000000000000000	LMO597	130074682	31	6	4	5	5	5	10	1	0	0	18	6	4	5	3	0	0	-42% R	537.75	R	199.68 -R	338.07 Decrease	
974	TOIR089200200002541000000000000000	LMO211	30037486	11	6	4	1	0	0	0	0	0	0	14	6	4	4	0	0	0	26% R	79.75	R	128.23	R	48.49 Increase
975	TOIR089200200002542000000000000000	LMO348	30046302	22	6	4	5	5	5	2	0	0	0	26	6	4	5	5	6	0	15% R	293.33	R	396.47	R	103.14 Increase
976	TOIR089200200002543000000000000000	LMO286	30046095	13	6	4	3	0	0	0	0	0	0	19	6	4	5	4	0	0	31% R	115.96	R	221.10	R	105.14 Increase
977	TOIR089200200002549000000000000000	LMO186	30037191	33	6	4	5	5	5	10	3	0	0	58	6	4	5	5	10	44% R	579.81	R	1,465.74	R	885.93 Increase	
978	TOIR089200200002552000000000000000	LMO474	13038457	16	6	4	5	1	0	0	0	0	0	20	6	4	5	5	0	0	17% R	163.17	R	228.10	R	64.93 Increase
979	TOIR089200200002563000000000000000	LMO271	HKF5268	9	6	3	0	0	0	0	0	0	0	43	6	4	5	5	10	79% R	64.95	R	927.16	R	862.21 Increase	
980	TOIR0>																									

SGID	Old Meter	New Meter	Old Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	New Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	% Loss	Monthly Bill Old	Monthly Bill New	Change on Revenue	Increase / Decrease	
				R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72						
1015	TOIR089200500003232000000000000000	LM0707	GKG2318	20	6	4	5	5	0	0	0	23	6	4	5	5	3	0	0	0	13% R	235.65	318.04	82.39	Increase	
1016	TOIR089200500003259000000000000000	LLS558	13035808	7	6	1	0	0	0	0	0	22	6	4	5	5	2	0	0	0	68% R	50.42	281.28	230.86	Increase	
1017	TOIR089200500003260000000000000000	LLS733	13010887	26	6	4	5	5	6	0	0	16	6	4	5	1	0	0	0	0	-39% R	409.70	160.42	-249.28	Decrease	
1018	TOIR089200500003266000000000000000	LMN276	HKC2525	19	6	4	5	4	0	0	0	32	6	4	5	5	10	2	0	0	39% R	226.25	565.20	338.95	Increase	
1019	TOIR089200500003267000000000000000	LMN524	13035994	27	6	4	5	5	7	0	0	132	6	4	5	5	10	10	10	82	80% R	413.24	4,341.58	3,928.34	Increase	
1020	TOIR089200500003284000000000000000	LMN454	13018364	6	6	0	0	0	0	0	0	22	6	4	5	5	2	0	0	0	73% R	41.52	278.83	237.31	Increase	
1021	TOIR089200500003285000000000000000	LMN320	130086847	20	6	4	5	5	0	0	0	32	6	4	5	5	10	2	0	0	38% R	241.31	575.83	334.52	Increase	
1022	TOIR089200500003297000000000000000	LM0265	130081231	24	6	4	5	5	4	0	0	72	6	4	5	5	10	10	10	22	67% R	347.07	2,038.03	1,690.96	Increase	
1023	TOIR089200500003327000000000000000	LMN119	13037306	10	6	4	0	0	0	0	0	15	6	4	5	0	0	0	0	0	31% R	77.21	136.82	59.60	Increase	
1024	TOIR089200500003328000000000000000	LMN298	13018401	33	6	4	5	5	10	3	0	52	6	4	5	5	10	10	10	2	36% R	596.37	1,239.20	642.83	Increase	
1025	TOIR089200500003333000000000000000	LMN129	13038223	22	6	4	5	5	2	0	0	68	6	4	5	5	10	10	10	18	68% R	280.36	1,847.66	1,567.30	Increase	
1026	TOIR089200500003334000000000000000	CLMN487	13011376	10	6	4	0	0	0	0	0	9	6	3	0	0	0	0	0	0	-13% R	73.46	63.69	-9.77	Decrease	
1027	TOIR089200500003337000000000000000	LMN088	13037863	52	6	4	5	5	10	10	10	2	47	6	4	5	5	10	10	7	0	-8% R	1,232.70	1,071.10	-161.60	Decrease
1028	TOIR089200500003375000000000000000	LMN139	13039204	46	6	4	5	5	10	10	6	117	6	4	5	5	10	10	10	67	61% R	1,033.22	3,777.21	2,743.99	Increase	
1029	TOIR089200500003385000000000000000	LMN132	13056524	8	6	2	0	0	0	0	0	8	6	2	0	0	0	0	0	0	-2% R	61.57	60.07	-1.50	Decrease	
1030	TOIR089200500003418000000000000000	LMN091	13039349	20	6	4	5	5	0	0	0	36	6	4	5	5	10	6	0	0	44% R	234.98	671.45	436.48	Increase	
1031	TOIR089200500003433000000000000000	LMN499	13013116	29	6	4	5	5	9	0	0	12	6	4	2	0	0	0	0	0	-59% R	476.96	95.91	-381.05	Decrease	
1032	TOIR089200500003461000000000000000	LMN440	13015844	19	6	4	5	4	0	0	0	61	6	4	5	5	10	10	10	11	68% R	223.84	1,603.02	1,379.18	Increase	
1033	TOIR089200500003506000000000000000	LMN433	GKG4565	4	4	0	0	0	0	0	0	74	6	4	5	5	10	10	10	24	94% R	30.03	2,088.78	2,058.75	Increase	
1034	TOIR089200500003507000000000000000	LMN053	GKG4613	6	6	0	0	0	0	0	0	8	6	2	0	0	0	0	0	0	23% R	44.36	58.69	14.33	Increase	
1035	TOIR089200500003533000000000000000	LMN348	130083378	11	6	4	1	0	0	0	0	128	6	4	5	5	10	10	10	78	91% R	87.27	4,193.74	4,106.47	Increase	
1036	TOIR089200500003549000000000000000	LMN435	13012680	40	6	4	5	5	10	10	0	53	6	4	5	5	10	10	10	3	25% R	809.08	1,303.82	494.74	Increase	
1037	TOIR089200500003560000000000000000	LMN517	130082209	3	3	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	16% R	24.59	29.21	4.62	Increase	
1038	TOIR089200500003569000000000000000	LMN097	GKG4620	148	6	4	5	5	10	10	10	98	16	6	4	5	1	0	0	0	-89% R	4,950.10	149.72	-4,800.38	Decrease	
1039	TOIR089200500003575000000000000000	LMN279	13037874	29	6	4	5	5	9	0	0	70	6	4	5	5	10	10	10	20	59% R	475.31	1,951.50	1,476.19	Increase	
1040	TOIR089200500003581000000000000000	LLS742	13012522	7	6	1	0	0	0	0	0	31	6	4	5	5	10	1	0	0	78% R	49.25	528.01	478.77	Increase	
1041	TOIR089200500003582000000000000000	LLS803	13013064	28	6	4	5	5	8	0	0	46	6	4	5	5	10	6	0	0	40% R	439.55	1,028.37	588.82	Increase	
1042	TOIR089200500003584000000000000000	LLS666	13013120	25	6	4	5	5	5	0	0	75	6	4	5	5	10	10	10	25	67% R	361.18	2,120.46	1,759.28	Increase	
1043	TOIR089200500003599000000000000000	LMN538	13012855	80	6	4	5	5	10	10	10	30	51	6	4	5	5	10	10	1	-36% R	2,348.25	1,212.30	-1,135.95	Decrease	
1044	TOIR089200500003600000000000000000	LMN400	13013338	16	6	4	5	1	0	0	0	11	6	4	1	0	0	0	0	0	-32% R	157.33	83.94	-73.40	Decrease	
1045	TOIR089200500003606000000000000000	LMN092	13012565	13	6	4	3	0	0	0	0	13	6	4	3	0	0	0	0	0	1% R	114.75	116.26	1.51	Increase	
1046	TOIR089200500003607000000000000000	LMN534	13011130	17	6	4	5	2	0	0	0	55	6	4	5	5	10	10	10	5	69% R	182.48	1,370.70	1,188.22	Increase	
1047	TOIR089200500003614000000000000000	LMN059	HKB7716	12	6	4	2	0	0	0	0	24	6	4	5	5	4	0	0	0	49% R	101.82	337.65	235.82	Increase	
1048	TOIR089200500003643000000000000000	LMN055	GKG4647	11	6	4	1	0	0	0	0	115	6	4	5	5	10	10	10	65	90% R	92.57	3,686.86	3,594.29	Increase	
1049	TOIR089200500003644000000000000000	LMN345	13015262	27	6	4	5	5	7	0	0	91	6	4	5	5	10	10	10	41	71% R	417.16	2,751.62	2,334.47	Increase	
1050	TOIR089200600003672000000000000000	LMX213	30048847	4	4	0	0	0	0	0	0	7	6	1	0	0	0	0	0	0	44% R	27.20	48.53	21.33	Increase	
1051	TOIR089200600003679000000000000000	LXZ366	140006136	10	6	4	0	0	0	0	0	24	6	4	5	5	4	0	0	0	57% R	77.55	352.35	274.80	Increase	
1052	TOIR089200600003681000000000000000	LXZ526	130090697	27	6	4	5	5	7	0	0	29	6	4	5	5	9	0	0	0	8% R	424.56	489.60	65.04	Increase	
1053	TOIR089200600003685000000000000000	LXZ389	140001834	69	6	4	5	5	10	10	10	19	22	6	4	5	5	2	0	0	-68% R	1,889.61	298.43	-1,591.17	Decrease	
1054	TOIR089200600003689000000000000000	LXZ364	13013192	15	6	4	5	0	0	0	0	16	6	4	5	1	0	0	0	0	9% R	136.38	163.99	27.62	Increase	
1055	TOIR089200600003691000000000000000	LXZ401	130101182	5	5	0	0	0	0	0	0	13	6	4	3	0	0	0	0	0	59% R	37.90	112.67	74.77	Increase	
1056	TOIR089200600003698000000000000000	LMX153	130089602	11	6	4	1	0	0	0	0	40	6	4	5	5	10	10	0	0	74% R	82.17	812.45	730.28	Increase	
1057	TOIR089200600003703000000000000000	LXZ355	130091987	14	6	4	4	0	0	0	0	15	6	4	5	0	0	0	0	0	3% R	129.13	135.42	6.29	Increase	
1058	TOIR089200600003707000000000000000	LXZ401	HKE7183	9	6	3	0	0	0	0	0	19	6	4	5	4	0	0	0	0	55% R	61.79	213.96	152.17	Increase	
1059	TOIR089200600003708000000000000000	LXZ365	140000259	25	6	4	5	5	5	0	0	34	6	4	5	5	10	4	0	0	26% R	378.70	631.61	252.91	Increase	
1060	TOIR089200600003717000000000000000	LXZ226	HKE7082	10	6	4	0	0	0	0	0	14	6	4	4	0	0	0	0	0	27% R	76.20	127.04	50.84	Increase	
1061	TOIR089200600003719000000000000000	LXZ109	140006466	7	6	1	0	0	0	0	0	18	6	4	5	3	0	0	0	0	59% R	53.99	205.04	151.05	Increase	
1062	TOIR089200600003720000000000000000	LXZ692	13019371	33	6	4	5	5	10	3	0	48	6	4	5	5	10	10	8	0	33% R	583.98	1,112.71	528.72	Increase	
1063	TOIR089200600003722000000000000000	LXZ307	HKE9985	8	6	2	0	0	0	0	0	17	6	4	5	2	0	0	0	0	54% R	55.47	174.70	119.23	Increase	
1064	TOIR089200600003727000000000000000	LMX323	140006469	11	6	4	1	0	0	0	0	32	6	4	5	5	10	2	0	0	67% R	80.69	562.54	481.86	Increase	
1065	TOIR089200600003729000000000000000	LXZ251	140001739	18	6	4	5	3	0	0	0	14	6	4	4	0	0	0	0	0	-19% R	190.35	129.43	-60.92	Decrease	
1066	TOIR089200600003731000000000000000	LXZ349	HKF5025	15	6	4	5	0	0	0	0	15	6	4	5	0	0	0	0	0	0% R	137.69	137.8			

SGID	Old Meter	New Meter	Old Cons	0-6										New Cons										0-6										% Loss	Monthly Bill Old	Monthly Bill New	Change on Revenue	Increase / Decrease																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
				6-10	10-15	15-20	20-30	30-40	40-50	+50	6-10	10-15	15-20	20-30	30-40	40-50	+50	6-10	10-15	15-20	20-30	30-40	40-50	+50																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
				R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								</

SGID	Old Meter	New Meter	Old Cons	New Cons											% Loss	Monthly Bill				Change on Revenue	Increase / Decrease										
				0-6 R 7.14	6-10 R 7.58	10-15 R 13.17	15-20 R 19.63	20-30 R 26.96	30-40 R 29.22	40-50 R 37.11	+50 R 38.72	0-6 R 7.14	6-10 R 7.58	10-15 R 13.17		15-20 R 19.63	20-30 R 26.96	30-40 R 29.22	40-50 R 37.11			+50 R 38.72									
1171	TOIR089200600004677000000000000000	LMV466	30048939	6	6	0	0	0	0	0	0	12	6	4	2	0	0	0	0	47% R	46.00	R	100.70	R					54.70	Increase	
1172	TOIR089200600004714000000000000000	LMW503	13018665	11	6	4	1	0	0	0	0	25	6	4	5	5	5	0	0	55% R	89.99	R	369.51	R					279.52	Increase	
1173	TOIR089200600004722000000000000000	LMW553	30037211	20	6	4	5	5	0	0	0	28	6	4	5	5	8	0	0	27% R	239.86	R	440.59	R					200.73	Increase	
1174	TOIR089200600004733000000000000000	LMW919	KGK0436	13	6	4	3	0	0	0	0	18	6	4	5	3	0	0	0	28% R	113.68	R	199.68	R					86.00	Increase	
1175	TOIR089200600004734000000000000000	LMV805	30045252	76	6	4	5	5	10	10	10	26	34	6	4	5	5	10	4	0	-55% R	2 159.95	R	618.33	-R					1 541.62	Decrease
1176	TOIR089200600004737000000000000000	LMW805	30048890	21	6	4	5	5	1	0	0	33	6	4	5	5	10	3	0	37% R	259.36	R	602.39	R					343.03	Increase	
1177	TOIR089200600004740000000000000000	LMW555	30045257	39	6	4	5	5	10	9	0	115	6	4	5	5	10	10	10	65	66% R	781.43	R	3 704.46	R					2 923.03	Increase
1178	TOIR089200600004741000000000000000	LMW546	30045266	21	6	4	5	5	1	0	0	59	6	4	5	5	10	10	10	9	64% R	271.47	R	1 518.54	R					1 247.07	Increase
1179	TOIR089200600004747000000000000000	LMW511	13018443	16	6	4	5	1	0	0	0	10	6	4	0	0	0	0	0	-37% R	152.60	R	72.47	-R					80.13	Decrease	
1180	TOIR089200600004760000000000000000	LMV763	30036179	63	6	4	5	5	10	10	10	13	90	6	4	5	5	10	10	40	30% R	1 678.07	R	2 736.46	R					1 058.39	Increase
1181	TOIR089200600004773000000000000000	LMW727	30049133	28	6	4	5	5	8	0	0	52	6	4	5	5	10	10	10	2	45% R	461.83	R	1 229.90	R					768.07	Increase
1182	TOIR089200600004863000000000000000	LMV810	30045954	5	5	0	0	0	0	0	0	96	6	4	5	5	10	10	10	46	95% R	32.58	R	2 951.18	R					2 918.60	Increase
1183	TOIR089200600004881000000000000000	LMV704	13013055	13	6	4	3	0	0	0	0	28	6	4	5	5	8	0	0	0	53% R	113.36	R	452.84	R					339.48	Increase
1184	TOIR089200600004885000000000000000	LMV941	13018550	65	6	4	5	5	10	10	10	15	15	6	4	5	0	0	0	0	-77% R	1 753.63	R	140.79	-R					1 612.83	Decrease
1185	TOIR089200600004905000000000000000	LMV799	30045237	13	6	4	3	0	0	0	0	23	6	4	5	5	3	0	0	0	43% R	115.12	R	322.94	R					207.83	Increase
1186	TOIR089200600004908000000000000000	LMW741	30046181	21	6	4	5	5	1	0	0	21	6	4	5	5	1	0	0	0	-2% R	275.67	R	264.12	-R					11.55	Decrease
1187	TOIR089200700004931000000000000000	LMO683	HKD3823	12	6	4	2	0	0	0	0	23	6	4	5	5	3	0	0	0	49% R	93.96	R	313.14	R					219.17	Increase
1188	TOIR089200700004932000000000000000	LMP438	HKD2892	9	6	3	0	0	0	0	0	62	6	4	5	5	10	10	10	12	86% R	65.72	R	1 648.78	R					1 583.06	Increase
1189	TOIR089200700004945000000000000000	LMO532	30053223	43	6	4	5	5	10	10	3	0	9	6	3	0	0	0	0	0	-79% R	910.74	R	66.96	-R					843.78	Decrease
1190	TOIR089200700004971000000000000000	LMF524	13018347	14	6	4	4	0	0	0	0	14	6	4	4	0	0	0	0	0	-5% R	129.35	R	119.85	-R					9.50	Decrease
1191	TOIR089200700004992000000000000000	LMP439	HKD2814	7	6	1	0	0	0	0	0	27	6	4	5	5	7	0	0	0	75% R	48.10	R	428.33	R					380.23	Increase
1192	TOIR089200700005008000000000000000	LMF444	13038333	25	6	4	5	5	5	0	0	19	6	4	5	4	0	0	0	0	-24% R	382.58	R	222.88	-R					159.70	Decrease
1193	TOIR089200700005013000000000000000	LMF601	13019581	42	6	4	5	5	10	10	2	55	6	4	5	5	10	10	10	5	24% R	882.46	R	1 381.26	R					498.80	Increase
1194	TOIR089200700005017000000000000000	LMO808	HKD4368	8	6	2	0	0	0	0	0	6	6	0	0	0	0	0	0	0	-31% R	59.41	R	40.24	-R					19.17	Decrease
1195	TOIR089200700005018000000000000000	LMO799	130086753	18	6	4	5	3	0	0	0	33	6	4	5	5	10	3	0	0	46% R	196.59	R	607.70	R					411.11	Increase
1196	TOIR089200700005042000000000000000	MS115	HKD4083	5	5	0	0	0	0	0	0	12	6	4	2	0	0	0	0	0	58% R	36.18	R	101.89	R					65.72	Increase
1197	TOIR089200700005049000000000000000	LMO842	HKD3958	14	6	4	4	0	0	0	0	15	6	4	5	0	0	0	0	0	3% R	128.66	R	135.42	R					6.76	Increase
1198	TOIR089200700005050500000000000000	MS107	HKD4460	32	6	4	5	5	10	2	0	134	6	4	5	5	10	10	10	84	76% R	567.09	R	4 433.10	R					3 866.01	Increase
1199	TOIR089200700005056000000000000000	LMF459	HKD4037	14	6	4	4	0	0	0	0	26	6	4	5	5	6	0	0	0	46% R	121.75	R	386.67	R					264.91	Increase
1200	TOIR089200700005080000000000000000	LMF750	13018560	23	6	4	5	5	3	0	0	5	5	0	0	0	0	0	0	0	-77% R	323.62	R	38.30	-R					285.32	Decrease
1201	TOIR089200700005089000000000000000	LMO546	HKD4282	15	6	4	5	0	0	0	0	18	6	4	5	3	0	0	0	0	15% R	139.01	R	188.98	R					49.97	Increase
1202	TOIR089200700005090000000000000000	MS138	HKD3963	7	6	1	0	0	0	0	0	108	6	4	5	5	10	10	10	58	93% R	52.27	R	3 433.42	R					3 381.15	Increase
1203	TOIR089200700005093000000000000000	LMF567	30050839	13	6	4	3	0	0	0	0	22	6	4	5	5	2	0	0	0	40% R	110.32	R	278.83	R					168.51	Increase
1204	TOIR089200700005098000000000000000	LMF686	13039209	32	6	4	5	5	10	2	0	30	6	4	5	5	10	0	0	0	-6% R	572.02	R	514.73	-R					57.29	Decrease
1205	TOIR089200700005099000000000000000	LMF589	HKD4028	9	6	3	0	0	0	0	0	13	6	4	3	0	0	0	0	0	31% R	68.19	R	118.66	R					50.46	Increase
1206	TOIR089200700005117000000000000000	LMF607	HKD4038	23	6	4	5	5	3	0	0	49	6	4	5	5	10	10	9	0	53% R	315.51	R	1 139.70	R					824.18	Increase
1207	TOIR089200700005118000000000000000	LMO850	13011834	28	6	4	5	5	8	0	0	35	6	4	5	5	10	5	0	0	22% R	443.21	R	660.83	R					217.62	Increase
1208	TOIR089200700005132000000000000000	MS464	HKD4012	24	6	4	5	5	4	0	0	69	6	4	5	5	10	10	10	19	66% R	334.22	R	1 905.74	R					1 571.52	Increase
1209	TOIR089200700005134000000000000000	LMF578	13018572	14	6	4	4	0	0	0																					

SGID	Old Meter	New Meter	Old Cons	O-6											New Cons	O-6											% Loss	Monthly Bill Old	Monthly Bill New	Change on Revenue	Increase / Decrease
				R	7.14	6-10	10-15	15-20	20-30	30-40	40-50	+50				R	7.14	6-10	10-15	15-20	20-30	30-40	40-50	+50							
1249	TOIR089200700005592000000000000000	LMW497	HKD4160	31	6	4	5	5	10	1	0	0	75	6	4	5	5	10	10	10	25	59%	R	525.21	R	2138.06	R	1 612.85	Increase		
1250	TOIR089200700005618000000000000000	CLMW475	HKD4023	27	6	4	5	5	7	0	0	0	18	6	4	5	3	0	0	0	0	-35%	R	423.95	R	190.76	-R	233.19	Decrease		
1251	TOIR089200700005624000000000000000	LMU382	HKD4104	13	6	4	3	0	0	0	0	0	30	6	4	5	5	10	0	0	0	57%	R	111.57	R	504.31	R	392.74	Increase		
1252	TOIR089200700005628000000000000000	LMU358	HKD4042	70	6	4	5	5	10	10	10	20	83	6	4	5	5	10	10	10	33	15%	R	1 959.95	R	2 447.82	R	487.87	Increase		
1253	TOIR089200700005629000000000000000	LMU353	HKE9988	24	6	4	5	5	4	0	0	0	17	6	4	5	2	0	0	0	0	-26%	R	334.43	R	187.19	-R	147.24	Decrease		
1254	TOIR089200700005643000000000000000	LM5746	13037561	12	6	4	2	0	0	0	0	0	24	6	4	5	5	4	0	0	0	51%	R	96.68	R	342.55	R	245.87	Increase		
1255	TOIR089200700005652000000000000000	LMT240	13010844	11	6	4	1	0	0	0	0	0	7	6	1	0	0	0	0	0	0	-40%	R	89.00	R	48.35	-R	40.65	Decrease		
1256	TOIR089200700005654000000000000000	LMT 326	HKD3839	15	6	4	5	0	0	0	0	0	24	6	4	5	5	4	0	0	0	36%	R	139.48	R	332.75	R	193.27	Increase		
1257	TOIR089200700005690000000000000000	LMT339	30037237	15	6	4	5	0	0	0	0	0	33	6	4	5	5	10	3	0	0	55%	R	137.49	R	589.11	R	451.62	Increase		
1258	TOIR089200700005707000000000000000	LMT037	HKD2949	33	6	4	5	5	10	3	0	0	22	6	4	5	5	2	0	0	0	-34%	R	589.92	R	281.28	-R	308.65	Decrease		
1259	TOIR089200700005711000000000000000	LMT239	30045610	18	6	4	5	3	0	0	0	0	18	6	4	5	3	0	0	0	0	1%	R	193.97	R	196.12	R	2.14	Increase		
1260	TOIR089200700005717000000000000000	LMP613	13056405	56	6	4	5	5	10	10	10	6	26	6	4	5	5	6	0	0	0	-53%	R	1 387.45	R	398.92	-R	988.53	Decrease		
1261	TOIR089200700005718000000000000000	LM5772	HKD4366	30	6	4	5	5	10	0	0	0	27	6	4	5	5	7	0	0	0	-11%	R	510.93	R	418.53	-R	92.41	Decrease		
1262	TOIR089200700005726000000000000000	LMT299	30037490	23	6	4	5	5	3	0	0	0	24	6	4	5	5	4	0	0	0	6%	R	312.18	R	349.90	R	37.72	Increase		
1263	TOIR089200700005733000000000000000	LM5774	HKD3887	20	6	4	5	5	0	0	0	0	20	6	4	5	5	0	0	0	0	-1%	R	233.89	R	228.24	-R	5.65	Decrease		
1264	TOIR089200700005741000000000000000	LMT001	13034177	17	6	4	5	2	0	0	0	0	14	6	4	4	0	0	0	0	0	-17%	R	173.15	R	123.45	-R	49.70	Decrease		
1265	TOIR089200700005757000000000000000	LMT162	13018624	15	6	4	5	0	0	0	0	0	18	6	4	5	3	0	0	0	0	16%	R	140.65	R	196.26	R	55.62	Increase		
1266	TOIR089200700005761000000000000000	LMT312	30049829	11	6	4	1	0	0	0	0	0	26	6	4	5	5	6	0	0	0	57%	R	85.64	R	389.12	R	303.48	Increase		
1267	TOIR089200700005764000000000000000	CLMT308	13039102	10	6	4	0	0	0	0	0	0	30	6	4	5	5	10	0	0	0	65%	R	78.03	R	496.96	R	418.93	Increase		
1268	TOIR089200700005765000000000000000	LMP436	HKD4423	51	6	4	5	5	10	10	10	1	13	6	4	3	0	0	0	0	0	-74%	R	1 222.61	R	116.26	-R	1 106.35	Decrease		
1269	TOIR089200700005790000000000000000	LM5854	13055882	15	6	4	5	0	0	0	0	0	32	6	4	5	5	10	2	0	0	52%	R	144.90	R	569.70	R	424.80	Increase		
1270	TOIR089200700005795000000000000000	LM5765	13055644	8	6	2	0	0	0	0	0	0	22	6	4	5	5	2	0	0	0	63%	R	57.28	R	279.85	R	222.57	Increase		
1271	TOIR089200700005813000000000000000	LM5524	HKD2875	13	6	4	3	0	0	0	0	0	34	6	4	5	5	10	4	0	0	62%	R	112.67	R	618.33	R	505.66	Increase		
1272	TOIR089200700005842000000000000000	CLMT134	30050136	18	6	4	5	3	0	0	0	0	51	6	4	5	5	10	10	10	1	64%	R	203.07	R	1 208.78	R	1 005.71	Increase		
1273	TOIR089200700005843000000000000000	LMT198	HKE9991	7	6	1	0	0	0	0	0	0	20	6	4	5	5	0	0	0	0	65%	R	49.34	R	230.02	R	180.68	Increase		
1274	TOIR089200700005860000000000000000	LMT056	HKD4278	7	6	1	0	0	0	0	0	0	9	6	3	0	0	0	0	0	0	22%	R	48.67	R	62.82	R	14.15	Increase		
1275	TOIR089200700005862000000000000000	LMT319	HKD4277	5	5	0	0	0	0	0	0	0	29	6	4	5	5	9	0	0	0	82%	R	36.89	R	474.90	R	438.01	Increase		
1276	TOIR089200700005888000000000000000	LM5859	HKD2815	37	6	4	5	5	10	7	0	0	139	6	4	5	5	10	10	10	89	74%	R	702.53	R	4 633.74	R	3 931.21	Increase		
1277	TOIR089200700005907000000000000000	LMT329	130088653	88	6	4	5	5	10	10	10	38	20	6	4	5	5	0	0	0	0	-78%	R	2 648.68	R	233.59	-R	2 415.09	Decrease		
1278	TOIR089200700005912000000000000000	LMT203	13057371	10	6	4	0	0	0	0	0	0	22	6	4	5	5	2	0	0	0	54%	R	76.75	R	303.33	R	226.58	Increase		
1279	TOIR089200700005913000000000000000	LM5987	HKD4390	14	6	4	4	0	0	0	0	0	23	6	4	5	5	3	0	0	0	41%	R	119.85	R	315.59	R	195.74	Increase		
1280	TOIR089200700005914000000000000000	LM5955	13015487	69	6	4	5	5	10	10	10	19	14	6	4	4	0	0	0	0	0	-79%	R	1 900.58	R	130.23	-R	1 770.35	Decrease		
1281	TOIR089200700005920000000000000000	LMT190	HKD4102	5	5	0	0	0	0	0	0	0	10	6	4	0	0	0	0	0	0	54%	R	32.13	R	71.09	R	38.96	Increase		
1282	TOIR089200700005924000000000000000	LM5981	13011788	7	6	1	0	0	0	0	0	0	10	6	4	0	0	0	0	0	0	35%	R	47.89	R	76.75	R	28.86	Increase		
1283	TOIR089200700005930000000000000000	LM5982	HKD4029	17	6	4	5	2	0	0	0	0	26	6	4	5	5	6	0	0	0	35%	R	176.63	R	403.82	R	227.19	Increase		
1284	TOIR089200700005932000000000000000	LM5986	HKD2836	7	6	1	0	0	0	0	0	0	6	6	0	0	0	0	0	0	0	-16%	R	48.43	R	40.46	-R	7.97	Decrease		
1285	TOIR089200700005933000000000000000	LM5946	HKD4307	10	6	4	0	0	0	0	0	0	27	6	4	5	5	7	0	0	0	64%	R	71.27	R	418.53	R	347.26	Increase		
1286	TOIR089200700005935000000000000000	LMT080	HKD4071	11	6	4	1	0	0	0	0	0	13	6	4	3	0	0	0	0	0	11%	R	90.72	R	109.08	R	18.36	Increase		
1287	TOIR089200700005936000000000000000	LM5966	HKD4266	18	6	4	5	3	0	0	0	0	34	6	4	5	5	10	4	0	0	49%	R	191.36	R	636.92	R	445.57	Increase		
1288	TOIR089200700005938000000000000000	LM5876	HKD4036	13	6	4	3	0	0	0	0	0	12	6	4	2	0	0	0	0	0	-6%	R	109.38							

SGID	Old Meter	New Meter	Old Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	New Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	% Loss				
				R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		Monthly Bill Old	Monthly Bill New	Change on Revenue	Increase / Decrease
1327	TOIR0892008000618600000000000000	LNB308	GKG2412	14	6	4	4	0	0	0	0	10	6	4	0	0	0	0	0	0	-28% R	119.54 R	71.27 -R	48.28	Decrease
1328	TOIR0892008000621800000000000000	LNB222	30046229	20	6	4	5	5	0	0	0	50	6	4	5	5	10	10	10	0	61% R	233.23 R	1 186.19 R	952.96	Increase
1329	TOIR0892008000623600000000000000	LNK796	HKD2837	11	6	4	1	0	0	0	0	9	6	3	0	0	0	0	0	0	-19% R	88.53 R	65.58 -R	22.95	Decrease
1330	TOIR0892008000623700000000000000	LNK784	HKD2866	6	6	0	0	0	0	0	0	9	6	3	0	0	0	0	0	0	39% R	41.06 R	68.34 R	27.28	Increase
1331	TOIR0892008000624200000000000000	LNK973	13011693	5	5	0	0	0	0	0	0	18	6	4	5	3	0	0	0	0	74% R	33.07 R	196.12 R	163.05	Increase
1332	TOIR0892008000624300000000000000	LNK778	HKD2869	6	6	0	0	0	0	0	0	20	6	4	5	5	0	0	0	0	70% R	42.25 R	228.24 R	185.99	Increase
1333	TOIR0892008000625000000000000000	LNK915	HKD3801	15	6	4	5	0	0	0	0	42	6	4	5	5	10	10	2	0	64% R	147.19 R	886.67 R	739.49	Increase
1334	TOIR0892008000625500000000000000	LNK799	HKD4181	6	6	0	0	0	0	0	0	14	6	4	4	0	0	0	0	0	58% R	41.06 R	123.45 R	82.39	Increase
1335	TOIR0892008000626100000000000000	LNB279	HKD2895	4	4	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0% R	31.77 R	31.81 R	0.03	Increase
1336	TOIR0892008000627100000000000000	LNB394	HKD4053	13	6	4	3	0	0	0	0	14	6	4	4	0	0	0	0	0	12% R	108.28 R	130.63 R	22.35	Increase
1337	TOIR0892008000631500000000000000	LNK841	HKD2968	16	6	4	5	1	0	0	0	15	6	4	5	0	0	0	0	0	-5% R	150.46 R	136.62 -R	13.85	Decrease
1338	TOIR0892008000633000000000000000	LMA322	HKC9644	14	6	4	4	0	0	0	0	23	6	4	5	5	3	0	0	0	40% R	121.45 R	313.14 R	191.69	Increase
1339	TOIR0892008000633400000000000000	LNK506	HKD4283	13	6	4	3	0	0	0	0	33	6	4	5	5	10	3	0	0	59% R	116.54 R	581.14 R	464.59	Increase
1340	TOIR0892008000633800000000000000	LNA327	HKD2885	10	6	4	0	0	0	0	0	22	6	4	5	5	2	0	0	0	56% R	71.90 R	295.98 R	224.09	Increase
1341	TOIR0892008000634300000000000000	LNK535	HKD2831	13	6	4	3	0	0	0	0	26	6	4	5	5	6	0	0	0	50% R	112.67 R	394.02 R	281.35	Increase
1342	TOIR0892008000635400000000000000	LNA576	HKC9635	12	6	4	2	0	0	0	0	28	6	4	5	5	8	0	0	0	56% R	103.89 R	450.39 R	346.50	Increase
1343	TOIR0892008000636000000000000000	LMX096	30039835	16	6	4	5	1	0	0	0	18	6	4	5	3	0	0	0	0	12% R	149.67 R	192.55 R	42.88	Increase
1344	TOIR0892008000636700000000000000	LMX736	HKB7637	37	6	4	5	5	10	7	0	83	6	4	5	5	10	10	10	33	56% R	715.00 R	2 465.42 R	1 750.42	Increase
1345	TOIR0892008000637200000000000000	LMX578	HKD3805	5	5	0	0	0	0	0	0	11	6	4	1	0	0	0	0	0	59% R	33.66 R	92.32 R	58.66	Increase
1346	TOIR0892008000637400000000000000	LMW678	HKD2984	7	6	1	0	0	0	0	0	19	6	4	5	4	0	0	0	0	64% R	51.05 R	226.45 R	175.40	Increase
1347	TOIR0892008000638700000000000000	LMX519	HKD4451	17	6	4	5	2	0	0	0	37	6	4	5	5	10	7	0	0	53% R	184.81 R	711.30 R	526.49	Increase
1348	TOIR0892008000639900000000000000	LMX538	GKG2409	95	6	4	5	5	10	10	10	45	36	6	4	5	5	10	6	0	-62% R	2 898.12 R	692.71 -R	2 205.41	Decrease
1349	TOIR0892008000640100000000000000	LNLD16	HKD2870	12	6	4	2	0	0	0	0	50	6	4	5	5	10	10	10	0	76% R	97.31 R	1 173.58 R	1 076.28	Increase
1350	TOIR0892008000640500000000000000	LNA488	HKD4244	9	6	3	0	0	0	0	0	30	6	4	5	5	10	0	0	0	69% R	68.74 R	509.42 R	440.68	Increase
1351	TOIR0892008000640600000000000000	LNA212	HKD3807	19	6	4	5	4	0	0	0	24	6	4	5	5	4	0	0	0	19% R	226.77 R	349.90 R	123.13	Increase
1352	TOIR0892008000640900000000000000	LNK833	HKD3798	27	6	4	5	5	7	0	0	29	6	4	5	5	9	0	0	0	8% R	428.13 R	492.05 R	63.93	Increase
1353	TOIR0892008000641000000000000000	LMX651	GKG2387	12	6	4	2	0	0	0	0	14	6	4	4	0	0	0	0	0	15% R	97.31 R	125.84 R	28.54	Increase
1354	TOIR0892008000641100000000000000	LNA340	HKD2828	9	6	3	0	0	0	0	0	26	6	4	5	5	6	0	0	0	65% R	66.84 R	411.17 R	344.33	Increase
1355	TOIR0892008000644500000000000000	LNA510	30039832	8	6	2	0	0	0	0	0	13	6	4	3	0	0	0	0	0	35% R	61.03 R	112.67 R	51.64	Increase
1356	TOIR0892008000645200000000000000	LNA293	30037073	30	6	4	5	5	10	0	0	31	6	4	5	5	10	1	0	0	2% R	515.35 R	530.67 R	15.31	Increase
1357	TOIR0892008000646700000000000000	LMX502	HKD3946	3	3	0	0	0	0	0	0	28	6	4	5	5	8	0	0	0	88% R	24.48 R	450.39 R	425.91	Increase
1358	TOIR0892008000647200000000000000	LNA289	30053155	5	5	0	0	0	0	0	0	13	6	4	3	0	0	0	0	0	60% R	35.70 R	106.68 R	70.98	Increase
1359	TOIR0892008000647400000000000000	LMX658	HKD4265	24	6	4	5	5	4	0	0	58	6	4	5	5	10	10	10	8	59% R	346.62 R	1 497.42 R	1 150.80	Increase
1360	TOIR0892008000650100000000000000	LMX661	30046471	34	6	4	5	5	10	4	0	30	6	4	5	5	10	0	0	0	-12% R	629.87 R	512.07 -R	117.79	Decrease
1361	TOIR0892008000651500000000000000	LMX573	30039826	18	6	4	5	3	0	0	0	21	6	4	5	5	1	0	0	0	13% R	199.41 R	259.22 R	59.81	Increase
1362	TOIR0892008000651600000000000000	LMX493	30039860	31	6	4	5	5	10	1	0	22	6	4	5	5	2	0	0	0	-28% R	532.33 R	295.98 -R	236.35	Decrease
1363	TOIR0892008000651700000000000000	LMX774	HKD3949	11	6	4	1	0	0	0	0	13	6	4	3	0	0	0	0	0	10% R	91.03 R	107.88 R	16.85	Increase
1364	TOIR0892008000651900000000000000	LNA476	HKC9888	8	6	2	0	0	0	0	0	11	6	4	1	0	0	0	0	0	33% R	55.29 R	92.32 R	37.02	Increase
1365	TOIR0892008000653600000000000000	LNLD18	30039843	13	6	4	3	0	0	0	0	58	6	4	5	5	10	10	10	8	78% R	109.79 R	1 483.34 R	1 373.55	Increase
1366	TOIR0892008000654500000000000000	LMX665	HKD4261	10	6	4	0	0	0	0	0	19	6	4	5	4	0	0	0	0	46% R	74.26 R	208.61 R	134.35	Increase
1367	TOIR0892008000656300000000000000	LMX627	30039853	2	2	0	0	0	0	0	0	12	6	4	2	0	0	0	0	0	80% R	17.58 R	100.70 R	83.11	Increase
1368	TOIR0892008000656400000000000000	LMX662	13034211	17	6	4	5	2	0	0	0	18	6	4	5	3	0	0	0	0	7% R	181.37 R	205.04 R	23.67	Increase
1369	TOIR0892008000656600000000000000	LMX648	HKD5834	14	6	4	4	0	0	0	0	10	6	4	0	0	0	0	0	0	-27% R	122.37 R	73.16 -R	49.21	Decrease
1370	TOIR0892008000660100000000000000	LMX660	13031069	13	6	4	3	0	0	0	0	12	6	4	2	0	0	0	0	0	-10% R	118.87 R	101.89 -R	16.97	Decrease
1371	TOIR0892008000660200000000000000	LNLD17	HKD4190	11	6	4	1	0	0	0	0	17	6	4	5	2	0	0	0	0	36% R	81.94 R	172.92 R	90.98	Increase
1372	TOIR0892008000660700000000000000	LNLD160	GKG2297	25	6	4	5	5	5	0	0	6	6	0	0	0	0	0	0	0	-78% R	374.66 R	39.59 -R	335.06	Decrease
1373	TOIR0892008000662000000000000000	LNLD164	30039573	36	6	4	5	5	10	6	0	17	6	4	5	2	0	0	0	0	-54% R	678.18 R	168.46 -R	509.73	Decrease
1374	TOIR0892008000663400000000000000	LMX585	30048124	7	6	1	0	0	0	0	0	16	6	4	5	1	0	0	0	0	58% R	48.55 R	162.21 R	113.66	Increase
1375	TOIR0892008000667000000000000000	LNLD126	30039884	21	6	4	5	5	1	0	0	57	6	4	5	5	10	10	10	7	63% R	275.46 R	1 458.70 R	1 183.24	Increase
1376	TOIR0892008000667400000000000000	LNLD020	30037075	1	1	0	0	0	0	0	0	13	6	4	3	0	0	0	0	0	92% R	7.14 R	110.28 R	103.14	Increase
1377	TOIR0892008000668500000000000000	LNB285	GKG2319	10	6	4	0	0	0	0	0	21	6	4	5	5	1	0	0	0	51% R	77.55 R	266.57 R	189.02	Increase
1378	TOIR0892008000670700000000000000	LNB281	HKD5845	16	6	4	5	1	0	0	0	20	6	4	5	5	0	0	0	0	21% R	150.46 R	231.81 R	81.35	Increase
1379	TOIR0892008000673400000000000000	LNK798	HKD4101	7	6	1	0	0	0	0	0	78	6	4	5	5	10	10	10	28	91% R	52.32 R	2 236.62 R		

SGID		Old Meter	New Meter	Old Cons	0-6					6-10					10-15					15-20					20-30					30-40					40-50					+50	% Loss																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
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SGID	Old Meter	New Meter	Old Cons	O-6										New Cons	O-6										% Loss			Increase/Decrease												
				6-10	10-15	15-20	20-30	30-40	40-50	+50	6-10	10-15	15-20		20-30	30-40	40-50	+50																						
				R	7.14	R	7.58	R	13.17	R	19.63	R	26.96	R	29.22	R	37.11	R	38.72		R	7.14	R	7.58	R	13.17	R	19.63	R	26.96	R	29.22	R	37.11	R	38.72				
1483	TI0IR08920080000784100000000000000000	LMX092	HKD4263	6		6	0	0	0	0	0	0	0	0	0	21	6	4	5	5	1	0	0	0	0	0	0	73%	R	40.64	R	273.92	R		233.28	Increase				
1484	TI0IR08920080000784300000000000000000	LMX072	HKD2862	6		6	0	0	0	0	0	0	0	0	0	28	6	4	5	5	8	0	0	0	0	0	0	79%	R	41.77	R	450.39	R		408.62	Increase				
1485	TI0IR08920080000785200000000000000000	LMW682	30039858	6		6	2	0	0	0	0	0	0	0	0	15	6	4	5	5	0	0	0	0	0	0	0	47%	R	58.00	R	140.79	R		82.79	Increase				
1486	TI0IR08920080000785700000000000000000	LMX083	30039857	27		6	4	5	5	5	7	0	0	0	0	28	6	4	5	5	8	0	0	0	0	0	0	6%	R	413.90	R	460.19	R		46.29	Increase				
1487	TI0IR08920080000786800000000000000000	LXZ457	13058304	21		6	4	5	5	5	1	0	0	0	0	26	6	4	5	5	6	0	0	0	0	0	0	19%	R	258.47	R	391.57	R		133.10	Increase				
1488	TI0IR08920080000787400000000000000000	LXZ197	30046399	41		6	4	5	5	10	10	1	0	0	39	6	4	5	5	10	9	0	0	0	0	0	0	-6%	R	848.44	R	761.77	-R		86.67	Decrease				
1489	TI0IR08920080000789500000000000000000	LXZ017	13058081	30		6	4	5	5	5	10	0	0	0	22	6	4	5	5	2	0	0	0	0	0	0	0	-27%	R	498.25	R	281.28	-R		216.97	Decrease				
1490	TI0IR08920080000791200000000000000000	LMW685	HKD4147	8		6	2	0	0	0	0	0	0	0	0	14	6	4	4	4	0	0	0	0	0	0	0	38%	R	61.50	R	122.25	R		60.75	Increase				
1491	TI0IR08920080000791900000000000000000	LMY858	130087967	24		6	4	5	5	4	0	0	0	0	0	23	6	4	4	5	3	0	0	0	0	0	0	-6%	R	357.64	R	315.59	-R		42.05	Decrease				
1492	TI0IR08920080000793000000000000000000	LMX075	HKD4286	24		6	4	5	5	4	0	0	0	0	0	125	6	4	4	5	5	10	10	10	75	81%	R	345.00	R	4086.97	R		3741.97	Increase						
1493	TI0IR08920080000793100000000000000000	LMY861	30039833	24		6	4	5	5	4	0	0	0	0	0	78	6	4	4	5	5	10	10	10	28	70%	R	332.31	R	2243.66	R		1911.35	Increase						
1494	TI0IR08920080000796400000000000000000	LMX084	30046482	29		6	4	5	5	9	0	0	0	0	0	30	6	4	4	5	5	10	0	0	0	0	0	3%	R	474.02	R	501.86	R		27.84	Increase				
1495	TI0IR08920080000796700000000000000000	LMY845	HKC9603	19		6	4	5	4	0	0	0	0	0	0	66	6	4	4	5																				

SGID	Old Meter	New Meter	Old Cons	0-6											New Cons											% Loss					Increase / Decrease																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
				R 7.14	R 7.58	R 10-15	R 13.17	R 15-20	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72	R 7.14	R 7.58	R 10-15	R 13.17	R 15-20	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72	Monthly Bill Old	Monthly Bill New		Change on Revenue																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
1561	TOIR089200900009052000000000000000	MLA793	HKE7092	9	6	3	0	0	0	0	0	0	10	6	4	0	0	0	0	0	0	0	0	7%	R	66.84	R	71.78	R																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				</

SGID	Old Meter	New Meter	Old Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	New Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	% Loss						
				R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		Monthly Bill Old	Monthly Bill New	Change on Revenue	Increase / Decrease		
1639	TOIR0892009000096400000000000000	WPG919	30046664	26	6	4	5	5	6	0	0	44	6	4	5	5	10	10	4	0	42% R	393.22	R	957.52	R	564.30	Increase
1640	TOIR0892009000096430000000000000	WPH326	HKF6153	60	6	4	5	5	10	10	10	24	6	4	5	5	4	0	0	0	-60% R	1,566.94	R	345.00	-R	1,221.94	Decrease
1641	TOIR0892009000096480000000000000	WPI566	30046003	52	6	4	5	5	10	10	10	2	16	6	4	5	1	0	0	0	-69% R	1,250.48	R	156.86	-R	1,093.62	Decrease
1642	TOIR0892009000096620000000000000	WPH198	130103285	22	6	4	5	5	2	0	0	0	14	6	4	4	0	0	0	0	-38% R	303.72	R	124.64	-R	179.07	Decrease
1643	TOIR0892009000096710000000000000	WPG737	KGK2421	8	6	2	0	0	0	0	0	21	6	4	5	5	1	0	0	0	64% R	55.59	R	269.02	R	213.43	Increase
1644	TOIR0892009000096720000000000000	WPG689	30048318	10	6	4	0	0	0	0	0	76	6	4	5	5	10	10	10	26	87% R	69.61	R	2,183.82	R	2,114.21	Increase
1645	TOIR0892009000096870000000000000	WPH323	130086569	32	6	4	5	5	10	2	0	25	6	4	5	5	5	0	0	0	-22% R	577.23	R	381.76	-R	195.47	Decrease
1646	TOIR0892009000096880000000000000	WPG994	130086846	8	6	2	0	0	0	0	0	24	6	4	5	5	4	0	0	0	67% R	58.58	R	357.25	R	298.67	Increase
1647	TOIR0892009000096920000000000000	WPH239	30046654	14	6	4	4	0	0	0	0	34	6	4	5	5	10	4	0	0	58% R	128.86	R	615.67	R	486.81	Increase
1648	TOIR0892009000096950000000000000	WPI153	HKD3785	14	6	4	4	0	0	0	0	24	6	4	5	5	4	0	0	0	44% R	120.57	R	352.35	R	231.78	Increase
1649	TOIR0892009000096970000000000000	WPG898	30046549	10	6	4	0	0	0	0	0	25	6	4	5	5	5	0	0	0	60% R	72.53	R	374.41	R	301.88	Increase
1650	TOIR0892009000097020000000000000	WPG786	KGK2336	18	6	4	5	3	0	0	0	15	6	4	5	0	0	0	0	0	-19% R	205.56	R	137.81	-R	67.75	Decrease
1651	TOIR0892009000097040000000000000	WPG781	30049819	21	6	4	5	5	1	0	0	77	6	4	5	5	10	10	10	27	72% R	276.83	R	2,219.02	R	1,942.19	Increase
1652	TOIR0892009000097100000000000000	WPG698	30037115	16	6	4	5	1	0	0	0	27	6	4	5	5	7	0	0	0	41% R	158.35	R	433.23	R	274.89	Increase
1653	TOIR0892009000097140000000000000	WPI421	KGK2313	48	6	4	5	5	10	10	8	103	6	4	5	5	10	10	10	53	53% R	1,112.33	R	3,208.14	R	2,095.81	Increase
1654	TOIR0892009000097150000000000000	WPG901	HKE9986	18	6	4	5	3	0	0	0	15	6	4	5	0	0	0	0	0	-16% R	202.26	R	146.15	-R	56.11	Decrease
1655	TOIR0892009000097200000000000000	MLA134	HKD3890	81	6	4	5	5	10	10	10	31	75	6	4	5	5	10	10	25	-7% R	2,351.02	R	2,120.46	-R	230.56	Decrease
1656	TOIR0892009000097310000000000000	WPH322	130079149	7	6	1	0	0	0	0	0	8	6	2	0	0	0	0	0	0	13% R	52.73	R	60.76	R	8.03	Increase
1657	TOIR0892009000097390000000000000	MPH041	30046558	25	6	4	5	5	5	0	0	31	6	4	5	5	10	1	0	0	20% R	361.66	R	525.35	R	163.69	Increase
1658	TOIR0892009000097540000000000000	WPH331	HKF5054	21	6	4	5	5	1	0	0	19	6	4	5	4	0	0	0	0	-9% R	264.12	R	221.10	-R	43.02	Decrease
1659	TOIR0892009000097560000000000000	WPI096	130104692	57	6	4	5	5	10	10	10	7	77	6	4	5	5	10	10	27	26% R	1,447.55	R	2,233.10	R	785.55	Increase
1660	TOIR0892009000097580000000000000	WPI256	HKF5159	14	6	4	4	0	0	0	0	45	6	4	5	5	10	10	5	0	68% R	127.49	R	977.76	R	850.28	Increase
1661	TOIR0892009000097620000000000000	WPH310	HKF6018	46	6	4	5	5	10	10	6	0	33	6	4	5	5	10	3	0	-29% R	1,034.98	R	594.42	-R	440.56	Decrease
1662	TOIR0892009000097730000000000000	WPH316	HKF5028	5	5	0	0	0	0	0	0	11	6	4	1	0	0	0	0	0	49% R	38.68	R	81.54	R	42.87	Increase
1663	TOIR0892009000097780000000000000	WPH052	30046626	13	6	4	3	0	0	0	0	92	6	4	5	5	10	10	10	42	86% R	113.95	R	2,785.74	R	2,671.79	Increase
1664	TOIR0892009000097790000000000000	WPG920	30049811	23	6	4	5	5	3	0	0	32	6	4	5	5	10	2	0	0	29% R	314.87	R	567.86	R	252.99	Increase
1665	TOIR0892009000097850000000000000	WPH188	KGK4682	59	6	4	5	5	10	10	10	9	19	6	4	5	4	0	0	0	-68% R	1,501.78	R	210.39	-R	1,291.39	Decrease
1666	TOIR0892009000097910000000000000	NKZ178	KGK3214	7	6	1	0	0	0	0	0	24	6	4	5	5	4	0	0	0	70% R	51.59	R	342.55	R	290.96	Increase
1667	TOIR0892009000098360000000000000	NKZ228	HKF6137	4	4	0	0	0	0	0	0	14	6	4	4	0	0	0	0	0	72% R	27.37	R	122.25	R	94.88	Increase
1668	TOIR0892009000098650000000000000	NKZ189	30037234	28	6	4	5	5	8	0	0	36	6	4	5	5	10	6	0	0	23% R	445.65	R	682.08	R	236.43	Increase
1669	TOIR0892009000098660000000000000	NKZ177	30037142	14	6	4	4	0	0	0	0	15	6	4	5	0	0	0	0	0	4% R	124.74	R	133.02	R	8.28	Increase
1670	TOIR0892009000098870000000000000	NKZ862	HKD5744	21	6	4	5	5	1	0	0	17	6	4	5	2	0	0	0	0	-22% R	275.35	R	172.92	-R	102.44	Decrease
1671	TOIR0892009000099110000000000000	MLA144	HKF6088	23	6	4	5	5	3	0	0	36	6	4	5	5	10	6	0	0	37% R	307.26	R	679.42	R	372.17	Increase
1672	TOIR0892009000099160000000000000	MYK916	KGK2463	55	6	4	5	5	10	10	10	5	21	6	4	5	5	1	0	0	-61% R	1,360.68	R	276.37	-R	1,084.31	Decrease
1673	TOIR0892009000099170000000000000	MLA095	KGK2456	19	6	4	5	4	0	0	0	31	6	4	5	5	10	1	0	0	39% R	210.66	R	530.67	R	320.01	Increase
1674	TOIR0892009000099320000000000000	WRA127	30046140	95	6	4	5	5	10	10	10	45	92	6	4	5	5	10	10	42	-2% R	2,903.86	R	2,813.90	-R	89.96	Decrease
1675	TOIR0892009000099570000000000000	MLA056	140027969	8	6	2	0	0	0	0	0	13	6	4	3	0	0	0	0	0	39% R	56.80	R	111.47	R	54.67	Increase
1676	TOIR0892009000099750000000000000	WPI593	KGK2294	15	6	4	5	0	0	0	0	19	6	4	5	4	0	0	0	0	23% R	136.82	R	224.67	R	87.85	Increase
1677	TOIR0892009000099760000000000000	WRA312	KGK2305	20	6	4	5	5	0	0	0	48	6	4	5	5	10	8	0	0	58% R	243.90	R	1,085.72	R	841.82	Increase
1678	TOIR0892009000099770000000000000	WPH304	130085917	24	6	4	5	5	4	0	0	62	6	4	5	5	10	10	10	12	62% R	334.22	R	1,620.62	R	1,286.40	Increase
1679	TOIR0892009000099810000000000000	WPE000	KGK2344	60	6	4	5	5	10	10	10	56	6	4	5	5	10	10	10	6	-7% R	1,557.26	R	1,388.30	-R	168.96	Decrease
1680	TOIR0892009000099840000000000000	WPG279	KGK3099	55	6	4	5	5	10	10	10	5	48	6	4	5	5	10	10	8	-13% R	1,349.72	R	1,082.35	-R	267.38	Decrease
1681	TOIR0892009000100090000000000000	WRA302	30046138	17	6	4	5	2	0	0	0	14	6	4	4	0	0	0	0	0	-21% R	185.20	R	121.05	-R	64.15	Decrease
1682	TOIR0892009000100120000000000000	WRA307	30046199	69	6	4	5	5	10	10	10	19	35	6	4	5	5	10	5	0	-50% R	1,892.83	R	642.23	-R	1,250.60	Decrease
1683	TOIR0892009000100220000000000000	WPI930	HKD3918	30	6	4	5	5	10	0	0	19	6	4	5	4	0	0	0	0	-36% R	512.60	R	221.10	-R	291.50	Decrease
1684	TOIR0892009000100230000000000000	WPI987	30046162	21	6	4	5	5	1	0	0	33	6	4	5	5	10	3	0	0	36% R	270.66	R	599.73	R	329.08	Increase
1685	TOIR0892009000100250000000000000	WPI603	KGK3189	69	6	4	5	5	10	10	10	19	53	6	4	5	5	10	10	3	-23% R	1,896.94	R	1,286.22	-R	610.72	Decrease
1686	TOIR0892009000100340000000000000	WRA345	130086635	10	6	4	0	0	0	0	0	31	6	4	5	5	10	1	0	0	67% R	75.79	R	533.32	R	457.53	Increase
1687	TOIR0892009000100350000000000000	WPI927	130088832	25	6	4	5	5	5	0	0	53	6	4	5	5	10	10	10	3	53% R	369.41	R	1,296.78	R	927.37	Increase
1688	TOIR0892009000100390000000000000	WRA348	130102442	8	6	2	0	0	0	0	0	71	6	4	5	5	10	10	10	21	89% R	58.29	R	1,976.14	R	1,917.85	Increase
1689	TOIR08920090																										

SGID	Old Meter	New Meter	Old Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	New Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	% Loss					
				R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		Monthly Bill Old	Monthly Bill New	Change on Revenue	Increase / Decrease	
1717	TOIR089200900010250000000000000000	WPF196	30048017	22	6	4	5	5	2	0	0	17	6	4	5	2	0	0	0	0	-21% R	282.57	179.91	-R	102.66	Decrease
1718	TOIR089200900010251000000000000000	WPF204	30048049	10	6	4	0	0	0	0	0	10	6	4	0	0	0	0	0	0	9% R	69.55	79.15	R	9.60	Increase
1719	TOIR089200900010252000000000000000	WPD967	KGK4604	7	6	1	0	0	0	0	0	13	6	4	3	0	0	0	0	0	46% R	51.00	112.67	R	61.67	Increase
1720	TOIR089200900010256000000000000000	WPF176	30048310	17	6	4	5	2	0	0	0	3	3	0	0	0	0	0	0	0	-80% R	180.95	24.67	-R	156.28	Decrease
1721	TOIR089200900010260000000000000000	WPF780	30037554	48	6	4	5	5	10	10	8	199	6	4	5	5	10	10	10	149	76% R	1077.29	6935.82	R	5858.54	Increase
1722	TOIR089200900010263000000000000000	WPF199	KGK2422	64	6	4	5	5	10	10	10	14	26	6	4	5	5	6	0	0	-59% R	1700.41	408.72	-R	1291.68	Decrease
1723	TOIR089200900010273000000000000000	WPD857	30045494	4	4	0	0	0	0	0	0	182	6	4	5	5	10	10	10	132	98% R	30.41	6266.21	R	6235.80	Increase
1724	TOIR089200900010291000000000000000	WRA316	130112524	15	6	4	5	0	0	0	0	6	6	0	0	0	0	0	0	0	-57% R	136.93	45.60	-R	91.33	Decrease
1725	TOIR089200900010289000000000000000	MLT729	KGK3200	4	4	0	0	0	0	0	0	7	6	1	0	0	0	0	0	0	39% R	30.63	50.42	R	19.79	Increase
1726	TOIR089200900010291000000000000000	MLW034	30046720	14	6	4	4	0	0	0	0	16	6	4	5	1	0	0	0	0	15% R	122.55	160.42	R	37.88	Increase
1727	TOIR089200900010292000000000000000	MLW026	30046143	13	6	4	3	0	0	0	0	13	6	4	3	0	0	0	0	0	1% R	108.48	110.28	R	1.80	Increase
1728	TOIR089200900010303000000000000000	MLW052	30046656	17	6	4	5	2	0	0	0	22	6	4	5	5	2	0	0	0	23% R	172.14	283.73	R	111.59	Increase
1729	TOIR089200900010305000000000000000	MLW166	30045485	45	6	4	5	5	10	10	5	42	6	4	5	5	10	10	2	0	-5% R	968.61	886.67	-R	81.93	Decrease
1730	TOIR089200900010306000000000000000	MLT658	30037117	17	6	4	5	2	0	0	0	0	36	6	4	5	5	10	6	0	53% R	176.70	687.39	R	510.69	Increase
1731	TOIR089200900010310000000000000000	MLT710	30048305	14	6	4	4	0	0	0	0	16	6	4	5	1	0	0	0	0	12% R	128.61	162.21	R	33.60	Increase
1732	TOIR089200900010315000000000000000	WRA301	30046132	15	6	4	5	0	0	0	0	14	6	4	4	0	0	0	0	0	-5% R	136.19	127.04	-R	9.15	Decrease
1733	TOIR089200900010319000000000000000	WPE945	30046707	30	6	4	5	5	10	0	0	15	6	4	5	0	0	0	0	0	-50% R	514.73	143.92	-R	370.81	Decrease
1734	TOIR089200900010322000000000000000	WPI982	HKF6116	42	6	4	5	5	10	10	2	0	22	6	4	5	5	2	0	0	-49% R	886.28	283.73	-R	602.55	Decrease
1735	TOIR089200900010323000000000000000	WPI599	30048319	44	6	4	5	5	10	10	4	36	6	4	5	5	10	6	0	0	-19% R	949.92	674.11	-R	275.81	Decrease
1736	TOIR089200900010325000000000000000	WPI991	30046576	14	6	4	4	0	0	0	0	33	6	4	5	5	10	3	0	0	57% R	128.47	586.45	R	457.98	Increase
1737	TOIR089200900010332000000000000000	MLT728	KGK2363	16	6	4	5	1	0	0	0	48	6	4	5	5	10	10	8	0	66% R	164.68	1085.72	R	921.04	Increase
1738	TOIR089200900010350000000000000000	WRA340	13055483	58	6	4	5	5	10	10	10	8	43	6	4	5	5	10	3	0	-27% R	1497.66	893.42	-R	604.24	Decrease
1739	TOIR089200900010361000000000000000	WPG278	130088336	8	6	2	0	0	0	0	0	9	6	3	0	0	0	0	0	0	12% R	59.52	68.34	R	8.82	Increase
1740	TOIR089200900010366000000000000000	MLW092	140008559	7	6	1	0	0	0	0	0	8	6	2	0	0	0	0	0	0	14% R	48.71	57.31	R	8.60	Increase
1741	TOIR089200900010367000000000000000	MLT717	30046716	13	6	4	3	0	0	0	0	19	6	4	5	4	0	0	0	0	35% R	107.29	226.45	R	119.16	Increase
1742	TOIR089200900010368000000000000000	MLT768	30045075	14	6	4	4	0	0	0	0	38	6	4	5	5	10	8	0	0	62% R	132.02	729.89	R	597.87	Increase
1743	TOIR089200900010402000000000000000	MMJ510	130110871	32	6	4	5	5	10	2	0	18	6	4	5	3	0	0	0	0	-43% R	576.56	206.82	-R	369.74	Decrease
1744	TOIR089200900010418000000000000000	MLW043	30046735	29	6	4	5	5	9	0	0	13	6	4	3	0	0	0	0	0	-55% R	475.45	113.87	-R	361.58	Decrease
1745	TOIR089200900010419000000000000000	MMJ355	30037122	17	6	4	5	2	0	0	0	7	6	1	0	0	0	0	0	0	-61% R	178.27	47.66	-R	130.61	Decrease
1746	TOIR089200900010438000000000000000	MMJ281	130108378	19	6	4	5	4	0	0	0	23	6	4	5	5	3	0	0	0	19% R	213.60	325.39	R	111.79	Increase
1747	TOIR089200900010475000000000000000	MMJ350	30048316	31	6	4	5	5	10	1	0	41	6	4	5	5	10	10	1	0	25% R	526.68	832.70	R	306.01	Increase
1748	TOIR089200900010486000000000000000	MMF629	140002766	13	6	4	3	0	0	0	0	36	6	4	5	5	10	6	0	0	65% R	108.28	692.71	R	584.43	Increase
1749	TOIR089200900010490000000000000000	MMJ398	30046640	46	6	4	5	5	10	10	6	23	6	4	5	5	3	0	0	0	-50% R	1018.53	320.49	-R	698.04	Decrease
1750	TOIR089200900010495000000000000000	MMK373	HKF5236	21	6	4	5	5	1	0	0	64	6	4	5	5	10	10	10	14	67% R	266.37	1698.06	R	1431.69	Increase
1751	TOIR089200900010504000000000000000	MMJ454	KGK4644	10	6	4	0	0	0	0	0	13	6	4	3	0	0	0	0	0	26% R	70.52	112.67	R	42.15	Increase
1752	TOIR089200900010506000000000000000	MMJ644	HKF6187	12	6	4	2	0	0	0	0	21	6	4	5	5	1	0	0	0	42% R	102.79	266.57	R	163.78	Increase
1753	TOIR089200900010510000000000000000	MMJ446	HKE7175	17	6	4	5	2	0	0	0	5	5	0	0	0	0	0	0	0	-72% R	184.81	35.05	-R	149.76	Decrease
1754	TOIR089200900010512000000000000000	MMF527	HKE7038	28	6	4	5	5	8	0	0	20	6	4	5	5	0	0	0	0	-29% R	450.59	235.38	-R	215.22	Decrease
1755	TOIR089200900010525000000000000000	MMJ276	HKF5997	12	6	4	2	0	0	0	0	19	6	4	5	4	0	0	0	0	36% R	101.26	219.31	R	118.06	Increase
1756	TOIR089200900010527000000000000000	MMJ286	HKC2954	7	6	1	0	0	0	0	0	5	5	0	0	0	0	0	0	0	-24% R	47.05	35.70	-R	11.35	Decrease
1757	TOIR089200900010528000000000000000	MMJ470	HKF5999	23	6	4	5	5	3	0	0	22	6	4	5	5	2	0	0	0	-6% R	327.75	291.08	-R	36.67	Decrease
1758	TOIR089200900010530000000000000000	MMJ290	KGK4622	13	6	4	3	0	0	0	0	22	6	4	5	5	2	0	0	0	42% R	107.63	286.18	R	178.54	Increase
1759	TOIR089200900010532000000000000000	MMJ452	KGK4632	24	6	4	5	5	4	0	0	26	6	4	5	5	6	0	0	0	5% R	351.22	389.12	R	37.89	Increase
1760	TOIR089200900010554000000000000000	MMJ306	HKE7159	4	4	0	0	0	0	0	0	14	6	4	4	0	0	0	0	0	69% R	30.35	119.85	R	89.51	Increase
1761	TOIR089200900010562000000000000000	MMK648	KGK3141	10	6	4	0	0	0	0	0	4	4	0	0	0	0	0	0	0	-55% R	73.16	31.81	-R	41.35	Decrease
1762	TOIR089200900010587000000000000000	MMK692	KGK3206	40	6	4	5	5	10	10	0	178	6	4	5	5	10	10	10	128	78% R	786.71	6140.30	R	5353.59	Increase
1763	TOIR089200900010602000000000000000	MMK623	30046139	5	5	0	0	0	0	0	0	15	6	4	5	0	0	0	0	0	68% R	35.11	147.93	R	112.83	Increase
1764	TOIR089200900010613000000000000000	MMH197	30037218	27	6	4	5	5	7	0	0	70	6	4	5	5	10	10	10	20	61% R	427.16	1941.23	R	1514.07	Increase
1765	TOIR089200900010629000000000000000	MMK566	30046126	20	6	4	5	5	0	0	0	23	6	4	5	5	3	0	0	0	15% R	229.31	320.49	R	91.18	Increase
1766	TOIR089200900010630000000000000000	MMJ467	30046570	37	6	4	5	5	10	7	0	14	6	4	4	0	0	0	0	0	-63% R	705.86	119.85	-R	586.01	Decrease
1767	TOIR089200900010632000000000000000	MMH219	30048320	32	6	4	5	5	10	2	0	8	6	2	0	0	0	0	0	0	-76% R	564.14	55.24	-R	508.89	Decrease
1768	TOIR089200900010633000000000000000	MMH212	KGK3																							

SGID	Old Meter	New Meter	Old Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	New Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	% Loss					Increase / Decrease
				R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		Monthly Bill Old	Monthly Bill New	Change on Revenue		
1795	TOIR089200900010791000000000000000	MLT510	HKF5177	11	6	4	1	0	0	0	0	32	6	4	5	5	10	2	0	0	65% R	89.47	R 578.48	R	489.02	Increase
1796	TOIR089200900010792000000000000000	MLW165	HKD2934	6	6	0	0	0	0	0	0	21	6	4	5	5	1	0	0	0	73% R	41.06	R 271.47	R	230.42	Increase
1797	TOIR089200900010795000000000000000	MLW022	HKG1467	11	6	4	1	0	0	0	0	77	6	4	5	5	10	10	10	27	86% R	85.23	R 2208.46	R	2123.23	Increase
1798	TOIR089200900010816000000000000000	WPI594	30037775	39	6	4	5	5	10	9	0	39	6	4	5	5	10	9	0	0	0% R	757.57	R 757.57	R	0.10	Increase
1799	TOIR089200900010820000000000000000	WPD738	130106893	10	6	4	0	0	0	0	0	21	6	4	5	5	1	0	0	0	53% R	71.83	R 256.77	R	184.93	Increase
1800	TOIR089200900010822000000000000000	WPA591	30046575	45	6	4	5	5	10	10	5	18	6	4	5	5	3	0	0	0	-59% R	978.11	R 201.47	-R	776.64	Decrease
1801	TOIR089200900010827000000000000000	WPB949	HKF6131	9	6	3	0	0	0	0	0	24	6	4	5	5	4	0	0	0	64% R	63.69	R 354.80	R	291.12	Increase
1802	TOIR089200900010838000000000000000	WPB364	30046523	73	6	4	5	5	10	10	10	23	74	6	4	5	5	10	10	24	2% R	2060.62	R 2116.94	R	56.32	Increase
1803	TOIR089200900010841000000000000000	WPB161	30045499	9	6	3	0	0	0	0	0	14	6	4	4	0	0	0	0	0	39% R	63.51	R 128.88	R	65.37	Increase
1804	TOIR089200900010842000000000000000	WDX647	30046765	7	6	1	0	0	0	0	0	90	6	4	5	5	10	10	10	40	92% R	51.22	R 2729.42	R	2678.20	Increase
1805	TOIR089200900010844000000000000000	WPD997	HKD3908	19	6	4	5	4	0	0	0	5	5	0	0	0	0	0	0	0	-72% R	209.35	R 37.00	-R	172.35	Decrease
1806	TOIR089201000010911000000000000000	MKB015	30046404	6	6	0	0	0	0	0	0	15	6	4	5	0	0	0	0	0	62% R	41.33	R 140.79	R	99.47	Increase
1807	TOIR089201000010918000000000000000	MKA633	30037032	245	6	4	5	5	10	10	10	195	15	6	4	5	0	0	0	0	-94% R	8706.95	R 140.79	-R	8566.16	Decrease
1808	TOIR089201000010920000000000000000	MKA787	30039815	75	6	4	5	5	10	10	10	25	20	6	4	5	5	0	0	0	-74% R	2127.22	R 232.25	-R	1894.97	Decrease
1809	TOIR089201000010922000000000000000	MKA564	GKIO496	8	6	2	0	0	0	0	0	7	6	1	0	0	0	0	0	0	-19% R	60.11	R 48.35	-R	11.75	Decrease
1810	TOIR089201000010933000000000000000	MKB186	HKC2698	7	6	1	0	0	0	0	0	27	6	4	5	5	7	0	0	0	74% R	50.42	R 428.33	R	377.91	Increase
1811	TOIR089201000010936000000000000000	MKA813	30046433	54	6	4	5	5	10	10	10	4	17	6	4	5	2	0	0	0	-69% R	1333.09	R 176.49	-R	1156.61	Decrease
1812	TOIR089201000010937000000000000000	MKB198	HKC9688	16	6	4	5	1	0	0	0	120	6	4	5	5	10	10	10	70	87% R	153.73	R 3866.38	R	3712.65	Increase
1813	TOIR089201000010946000000000000000	MKB195	HKC9684	5	5	0	0	0	0	0	0	19	6	4	5	4	0	0	0	0	74% R	35.20	R 221.10	R	185.90	Increase
1814	TOIR089201000010947000000000000000	MKB182	HKC9704	31	6	4	5	5	10	1	0	22	6	4	5	5	2	0	0	0	-28% R	538.07	R 303.33	-R	234.73	Decrease
1815	TOIR089201000010952000000000000000	MKA722	13046057	16	6	4	5	1	0	0	0	7	6	1	0	0	0	0	0	0	-55% R	158.23	R 51.80	-R	106.43	Decrease
1816	TOIR089201000010965000000000000000	MKA579	GKH4308	15	6	4	5	0	0	0	0	21	6	4	5	5	1	0	0	0	29% R	143.61	R 273.92	R	130.31	Increase
1817	TOIR089201000010971000000000000000	MKA128	HKC2561	20	6	4	5	5	0	0	0	69	6	4	5	5	10	10	10	19	72% R	227.35	R 1905.74	R	1678.40	Increase
1818	TOIR089201000010972000000000000000	MKA153	HKC2557	5	5	0	0	0	0	0	0	33	6	4	5	5	10	3	0	0	84% R	38.76	R 594.42	R	555.66	Increase
1819	TOIR089201000010979000000000000000	MKA492	GKH4297	55	6	4	5	5	10	10	10	5	46	6	4	5	5	10	10	6	-16% R	1369.77	R 1035.11	-R	334.66	Decrease
1820	TOIR089201000010984000000000000000	MKA449	GKIO935	16	6	4	5	1	0	0	0	30	6	4	5	5	10	0	0	0	45% R	167.80	R 504.31	R	336.51	Increase
1821	TOIR089201000010990000000000000000	MKA281	HKC2466	8	6	2	0	0	0	0	0	11	6	4	1	0	0	0	0	0	25% R	59.36	R 85.13	R	25.77	Increase
1822	TOIR089201000010991000000000000000	MKA351	HKC2606	2	2	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	48% R	16.32	R 31.16	R	14.84	Increase
1823	TOIR089201000010992000000000000000	MKA359	HKC2874	26	6	4	5	5	6	0	0	18	6	4	5	3	0	0	0	0	-33% R	398.92	R 188.98	-R	209.94	Decrease
1824	TOIR089201000010993000000000000000	MKA321	HKC2584	11	6	4	1	0	0	0	0	8	6	2	0	0	0	0	0	0	-24% R	85.45	R 60.76	-R	24.70	Decrease
1825	TOIR089201000010994000000000000000	MKA288	HKC2488	19	6	4	5	4	0	0	0	23	6	4	5	5	3	0	0	0	17% R	217.53	R 318.04	R	100.51	Increase
1826	TOIR089201000010997000000000000000	MKA331	HKC2587	7	6	1	0	0	0	0	0	12	6	4	2	0	0	0	0	0	44% R	48.09	R 98.30	R	50.22	Increase
1827	TOIR089201000010998000000000000000	MKA256	HKC2499	11	6	4	1	0	0	0	0	32	6	4	5	5	10	2	0	0	65% R	90.38	R 567.86	R	477.47	Increase
1828	TOIR089201000010999000000000000000	MKA278	HKC2465	9	6	3	0	0	0	0	0	42	6	4	5	5	10	10	2	0	79% R	64.50	R 873.18	R	808.68	Increase
1829	TOIR089201000011000000000000000000	MKA338	GKIO947	9	6	3	0	0	0	0	0	12	6	4	2	0	0	0	0	0	28% R	64.12	R 101.89	R	37.77	Increase
1830	TOIR089201000011006000000000000000	MKA287	HKC2582	8	6	2	0	0	0	0	0	19	6	4	5	4	0	0	0	0	59% R	58.00	R 224.67	R	166.67	Increase
1831	TOIR089201000011007000000000000000	MKA369	140001921	12	6	4	2	0	0	0	0	29	6	4	5	5	9	0	0	0	58% R	102.73	R 487.15	R	384.43	Increase
1832	TOIR089201000011034000000000000000	LNLS18	HKC2672	23	6	4	5	5	3	0	0	29	6	4	5	5	9	0	0	0	20% R	324.44	R 477.35	R	152.91	Increase
1833	TOIR089201000011037000000000000000	MKA000	HKC2669	8	6	2	0	0	0	0	0	16	6	4	5	1	0	0	0	0	50% R	57.37	R 155.07	R	97.70	Increase
1834	TOIR089201000011038000000000000000	MKA162	GKH4342	7	6	1	0	0	0	0	0	16	6	4	5	1	0	0	0	0	55% R	51.34	R 156.86	R	105.51	Increase
1835	TOIR089201000011049000000000000000	MKA095	13037417	21	6	4	5	5	1	0	0	16	6	4	5	1	0	0	0	0	-22% R	254.52	R 158.64	-R	95.88	Decrease
1836	TOIR089201000011058000000000000000	MKA193	HKC2597	24	6	4	5	5	4	0	0	17	6	4	5	2	0	0	0	0	-30% R	342.93	R 174.70	-R	168.23	Decrease
1837	TOIR089201000011059000000000000000	MKA199	HKC2704	36	6	4	5	5	10	6	0	26	6	4	5	5	6	0	0	0	-26% R	675.82	R 411.17	-R	264.64	Decrease
1838	TOIR089201000011060000000000000000	LNLS18	HKC2530	24	6	4	5	5	4	0	0	25	6	4	5	5	5	0	0	0	4% R	354.86	R 379.31	R	24.45	Increase
1839	TOIR089201000011062000000000000000	LNLS11	HKC2634	10	6	4	0	0	0	0	0	18	6	4	5	3	0	0	0	0	44% R	72.08	R 192.55	R	120.47	Increase
1840	TOIR089201000011063000000000000000	LNLS12	13058158	69	6	4	5	5	10	10	10	19	16	6	4	5	1	0	0	0	-77% R	1894.01	R 151.50	-R	1742.50	Decrease
1841	TOIR089201000011072000000000000000	MKA112	13046097	5	5	0	0	0	0	0	0	8	6	2	0	0	0	0	0	0	33% R	36.75	R 55.24	R	18.49	Increase
1842	TOIR089201000011074000000000000000	MKA103	HKC2826	37	6	4	5	5	10	7	0	34	6	4	5	5	10	4	0	0	-7% R	706.14	R 634.27	-R	71.88	Decrease
1843	TOIR089201000011076000000000000000	MKA139	HKC2795	2	2	0	0	0	0	0	0	6	6	0	0	0	0	0	0	0	65% R	14.28	R 40.89	R	26.61	Increase
1844	TOIR089201000011079000000000000000	MKA129	HKC2546	38	6	4	5	5	10	8	0	73	6	4	5	5	10	10	10	23	48% R	740.52	R 2053.58	R	1313.06	Increase
1845	TOIR089201000011101000000000000000	MKA178	HKC2747	41	6	4	5	5	10	10	1	22	6	4	5	5	2	0	0	0	-46% R	839.33	R 298.43	-R	540.89	Decrease
1846	TOIR089201000011102000000000000000	MKA179	HKC2474	10																						

SGID	Old Meter	New Meter	Old Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	New Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	% Loss	Monthly Bill Old	Monthly Bill New	Change on Revenue	Increase / Decrease	
				R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72						
1873	TOIR089201000011238000000000000000	MKA697	30046048	24	6	4	5	5	4	0	0	0	38	6	4	5	5	10	8	0	0	36%	R 354.63	R 737.86	R 383.24	Increase
1874	TOIR089201000011249000000000000000	MKB066	HKC9592	8	6	2	0	0	0	0	0	0	20	6	4	5	5	0	0	0	0	63%	R 54.84	R 246.96	R 192.12	Increase
1875	TOIR089201000011251000000000000000	MKA719	13058088	25	6	4	5	5	5	0	0	103	6	4	5	5	10	10	10	53	76%	R 359.19	R 3 229.26	R 2 870.07	Increase	
1876	TOIR089201000011263000000000000000	MKB085	HKD3773	41	6	4	5	5	10	10	1	0	39	6	4	5	5	10	9	0	0	-6%	R 854.03	R 767.08	-R 86.94	Decrease
1877	TOIR089201000011268000000000000000	MKB184	HKC2763	17	6	4	5	2	0	0	0	16	6	4	5	1	0	0	0	0	0	-9%	R 187.05	R 156.86	-R 30.20	Decrease
1878	TOIR089201000011274000000000000000	MKA626	30037238	16	6	4	5	1	0	0	0	28	6	4	5	5	8	0	0	0	0	45%	R 150.56	R 462.64	R 312.09	Increase
1879	TOIR089201000011290000000000000000	MKA789	GK55185	10	6	4	0	0	0	0	0	9	6	3	0	0	0	0	0	0	0	-7%	R 72.30	R 66.96	-R 5.34	Decrease
1880	TOIR089201000011291000000000000000	MKB016	GK55064	17	6	4	5	2	0	0	0	51	6	4	5	5	10	10	10	1	67%	R 174.51	R 1 212.30	R 1 037.79	Increase	
1881	TOIR089201000011303000000000000000	MKA717	13015303	17	6	4	5	2	0	0	0	23	6	4	5	5	3	0	0	0	0	25%	R 177.64	R 310.69	R 133.05	Increase
1882	TOIR089201000011298000000000000000	MKA769	13034672	17	6	4	5	2	0	0	0	10	6	4	0	0	0	0	0	0	0	-39%	R 177.52	R 76.75	-R 100.76	Decrease
1883	TOIR089201000011304000000000000000	MKA750	13034611	12	6	4	2	0	0	0	0	14	6	4	4	0	0	0	0	0	0	13%	R 101.48	R 125.84	R 24.36	Increase
1884	TOIR089201000011312000000000000000	MKB034	13055975	77	6	4	5	5	10	10	10	27	75	6	4	5	5	10	10	10	25	-3%	R 2 207.49	R 2 131.02	-R 76.47	Decrease
1885	TOIR089201000011315000000000000000	MKB037	130106819	8	6	2	0	0	0	0	0	8	6	2	0	0	0	0	0	0	0	1%	R 55.47	R 55.93	R 0.46	Increase
1886	TOIR089201000011327000000000000000	MKB129	GK55108	23	6	4	5	5	3	0	0	5	5	0	0	0	0	0	0	0	0	-79%	R 321.26	R 35.05	-R 286.21	Decrease
1887	TOIR089201000011330000000000000000	MKA984	30046022	32	6	4	5	5	10	2	0	39	6	4	5	5	10	9	0	0	0	17%	R 579.25	R 775.05	R 195.80	Increase
1888	TOIR089201000011332000000000000000	MKB029	13046010	9	6	3	0	0	0	0	0	8	6	2	0	0	0	0	0	0	0	-15%	R 64.83	R 54.55	-R 10.28	Decrease
1889	TOIR089201000011348000000000000000	MKB075	HKC2700	5	5	0	0	0	0	0	0	35	6	4	5	5	10	5	0	0	0	85%	R 36.89	R 639.58	R 602.69	Increase
1890	TOIR089201000011349000000000000000	MKB131	HKB7645	11	6	4	1	0	0	0	0	24	6	4	5	5	4	0	0	0	0	56%	R 80.84	R 347.45	R 266.61	Increase
1891	TOIR089201000011353000000000000000	MKB192	GK55156	7	6	1	0	0	0	0	0	25	6	4	5	5	5	0	0	0	0	72%	R 51.07	R 379.31	R 328.25	Increase
1892	TOIR089201000011357000000000000000	MKB128	HKB7624	53	6	4	5	5	10	10	10	3	16	6	4	5	1	0	0	0	0	-70%	R 1 286.22	R 156.86	-R 1 129.36	Decrease
1893	TOIR089201000011365000000000000000	MKE787	HKC0753	12	6	4	2	0	0	0	0	70	6	4	5	5	10	10	10	20	83%	R 96.79	R 1 940.94	R 1 844.15	Increase	
1894	TOIR089201000011367000000000000000	MKE816	13058102	66	6	4	5	5	10	10	10	16	32	6	4	5	5	10	2	0	0	-52%	R 1 795.78	R 551.92	-R 1 243.86	Decrease
1895	TOIR089201000011368000000000000000	MKE906	HKC9697	91	6	4	5	5	10	10	10	41	98	6	4	5	5	10	10	10	48	7%	R 2 763.11	R 3 025.10	R 261.99	Increase
1896	TOIR089201000011372000000000000000	MKF636	HKB7691	8	6	2	0	0	0	0	0	27	6	4	5	5	7	0	0	0	0	68%	R 61.19	R 413.63	R 352.43	Increase
1897	TOIR089201000011373000000000000000	MKF648	HKC0737	3	3	0	0	0	0	0	0	7	6	1	0	0	0	0	0	0	0	51%	R 23.43	R 48.35	R 24.92	Increase
1898	TOIR089201000011376000000000000000	MKF646	HKC0724	1	1	0	0	0	0	0	0	13	6	4	3	0	0	0	0	0	0	89%	R 10.60	R 116.26	R 105.66	Increase
1899	TOIR089201000011382000000000000000	MKE780	HKC0743	5	5	0	0	0	0	0	0	45	6	4	5	5	10	10	5	0	0	88%	R 37.49	R 994.63	R 957.15	Increase
1900	TOIR089201000011385000000000000000	MKF472	HKC0741	7	6	1	0	0	0	0	0	8	6	2	0	0	0	0	0	0	0	7%	R 51.16	R 55.24	R 4.08	Increase
1901	TOIR089201000011387000000000000000	MKE000	HKC0746	74	6	4	5	5	10	10	10	24	11	6	4	1	0	0	0	0	0	-85%	R 2 081.19	R 87.53	-R 1 993.66	Decrease
1902	TOIR089201000011390000000000000000	MKE744	GKH4369	11	6	4	1	0	0	0	0	38	6	4	5	5	10	8	0	0	0	72%	R 80.95	R 737.86	R 656.91	Increase
1903	TOIR089201000011391000000000000000	MKF426	HKC0742	9	6	3	0	0	0	0	0	16	6	4	5	1	0	0	0	0	0	45%	R 64.40	R 158.64	R 94.24	Increase
1904	TOIR089201000011392000000000000000	MKE763	13046182	27	6	4	5	5	7	0	0	20	6	4	5	5	0	0	0	0	0	-26%	R 413.11	R 231.81	-R 181.30	Decrease
1905	TOIR089201000011399000000000000000	MKA186	13055693	19	6	4	5	4	0	0	0	9	6	3	0	0	0	0	0	0	0	-53%	R 220.66	R 66.27	-R 154.39	Decrease
1906	TOIR089201000011400000000000000000	MKA048	GKH4365	19	6	4	5	4	0	0	0	16	6	4	5	1	0	0	0	0	0	-17%	R 215.50	R 151.50	-R 64.00	Decrease
1907	TOIR089201000011405000000000000000	MKA004	HKC2579	6	6	0	0	0	0	0	0	40	6	4	5	5	10	10	0	0	0	84%	R 45.29	R 802.33	R 757.05	Increase
1908	TOIR089201000011406000000000000000	MKA123	HKC2565	3	3	0	0	0	0	0	0	23	6	4	5	5	3	0	0	0	0	87%	R 20.27	R 305.79	R 285.52	Increase
1909	TOIR089201000011408000000000000000	MKB036	30046090	32	6	4	5	5	10	2	0	24	6	4	5	5	4	0	0	0	0	-24%	R 550.59	R 342.55	-R 208.04	Decrease
1910	TOIR089201000011410000000000000000	MKB188	HKC2967	49	6	4	5	5	10	10	9	170	6	4	5	5	10	10	10	120	71%	R 1 119.03	R 5 819.98	R 4 700.95	Increase	
1911	TOIR089201000011416000000000000000	MKB196	HKD5807	7	6	1	0	0	0	0	0	33	6	4	5	5	10	3	0	0	0	78%	R 52.19	R 605.05	R 552.85	Increase
1912	TOIR089201000011418000000000000000	MKB042	13058167	12	6	4	2	0	0	0	0	18	6	4	5	3	0	0	0	0	0	30%	R 103.40	R 190.76	R 87.37	Increase
1913	TOIR089201000011419000000000000000	MKB147	HKD3793	34	6	4	5	5	10	4	0	33	6	4	5	5	10	3	0	0	0	-2%	R 625.59	R 602.39	-R 23.20	Decrease
1914	TOIR089201000011420000000000000000	MKB079	HKC2977	40	6	4	5	5	10	10	0	10	6	4	0	0	0	0	0	0	0	-76%	R 796.53	R 70.24	-R 726.28	Decrease
1915	TOIR089201000011421000000000000000	MKA670	GKG2431	10	6	4	0	0	0	0	0	158	6	4	5	5	10	10	10	108	94%	R 71.42	R 5 365.90	R 5 294.48	Increase	
1916	TOIR089201000011422000000000000000	MKB132	HKC2593	18	6	4	5	3	0	0	0	39	6	4	5	5	10	9	0	0	0	55%	R 188.79	R 761.77	R 572.98	Increase
1917	TOIR089201000011423000000000000000	MKA736	30046117	35	6	4	5	5	10	5	0	14	6	4	4	0	0	0	0	0	0	-59%	R 639.11	R 127.04	-R 512.07	Decrease
1918	TOIR089201000011425000000000000000	MKB134	13046067	21	6	4	5	5	1	0	0	28	6	4	5	5	8	0	0	0	0	23%	R 272.52	R 440.59	R 168.07	Increase
1919	TOIR089201000011427000000000000000	MKB096	GK11178	6	6	0	0	0	0	0	0	16	6	4	5	1	0	0	0	0	0	62%	R 41.70	R 149.72	R 108.02	Increase
1920	TOIR089201000011428000000000000000	MKK219	HKC9686	4	4	0	0	0	0	0	0	19	6	4	5	4	0	0	0	0	0	79%	R 28.76	R 213.96	R 185.20	Increase
1921	TOIR089201000011435000000000000000	MKF641	HKD4281	14	6	4	4	0	0	0	0	7	6	1	0	0	0	0	0	0	0	-49%	R 125.84	R 51.11	-R 74.73	Decrease
1922	TOIR089201000011441000000000000000	MKF643	HKC9633	16	6	4	5	1	0	0	0	44	6	4	5	5	10	10	4	0	0	62%	R 165.82	R 930.53	R 764.71	Increase
1923	TOIR089201000011442000000000000000	MKF170	HKC9604	5	5	0	0	0	0	0	0	10	6	4	0	0	0	0	0	0	0	54%	R 32.69	R 72.47	R 39.78	Increase
1924	TOIR08920100001																									

SGID	Old Meter	New Meter	Old Cons	New Cons										% Loss	Increase / Decrease								
				0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50												
				R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72	R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72				
1951	T0IR089201000011562000000000000000	MKF632	HKC0734	4	4	0	0	0	0	0	0	32	6	4	2	0	0	0	0	70% R	24.99 R	97.11 R	72.12 Increase
1952	T0IR089201000011570000000000000000	MKF438	HKC9605	1	1	0	0	0	0	0	0	14	6	4	5	5	10	4	0	98% R	4.25 R	636.92 R	632.68 Increase
1953	T0IR089201000011578000000000000000	MKF048	HKC9600	2	2	0	0	0	0	0	0	36	6	4	5	5	10	10	10	96% R	16.91 R	1,395.93 R	1,379.02 Increase
1954	T0IR089201000011579000000000000000	MKF049	HKC9614	11	6	4	1	0	0	0	0	5	5	0	0	0	0	0	0	-54% R	88.36 R	36.30 -R	52.06 Decrease
1955	T0IR089201000011583000000000000000	MKA542	GK10987	49	6	4	5	5	10	10	9	92	6	4	5	5	10	10	42	47% R	1,127.65 R	2,803.34 R	1,675.69 Increase
1956	T0IR089201000011596000000000000000	MKA119	HKC2612	7	6	1	0	0	0	0	0	13	6	4	3	0	0	0	0	45% R	52.95 R	118.66 R	65.71 Increase
1957	T0IR089201000011602000000000000000	MKA240	13046105	21	6	4	5	5	1	0	0	19	6	4	5	4	0	0	0	-6% R	250.64 R	222.88 -R	27.76 Decrease
1958	T0IR089201000011604000000000000000	MKA241	HKC2696	9	6	3	0	0	0	0	0	20	6	4	5	5	0	0	0	53% R	67.75 R	231.81 R	164.06 Increase
1959	T0IR089201000011606000000000000000	MKA259	HKC2651	25	6	4	5	5	5	0	0	13	6	4	5	0	0	0	0	-48% R	382.00 R	115.06 -R	266.94 Decrease
1960	T0IR089201000011609000000000000000	LNLS10	HKC2691	20	6	4	5	5	0	0	0	104	6	4	5	5	10	10	10	81% R	232.63 R	3,253.90 R	3,021.27 Increase
1961	T0IR089201000011610000000000000000	MKA168	GKH4304	9	6	3	0	0	0	0	0	9	6	3	0	0	0	0	0	5% R	63.81 R	67.65 R	3.84 Increase
1962	T0IR089201000011613000000000000000	MKA138	130106816	8	6	2	0	0	0	0	0	8	6	2	0	0	0	0	0	-4% R	59.94 R	57.31 -R	2.63 Decrease
1963	T0IR089201000011619000000000000000	MKA148	HKC2682	11	6	4	1	0	0	0	0	15	6	4	5	0	0	0	0	28% R	88.36 R	147.93 R	59.58 Increase
1964	T0IR089201000011620000000000000000	LNLS21	HKC2679	12	6	4	2	0	0	0	0	9	6	3	0	0	0	0	0	-27% R	96.21 R	62.13 -R	34.07 Decrease
1965	T0IR089201000011622000000000000000	MKA170	HKC2687	12	6	4	2	0	0	0	0	7	6	1	0	0	0	0	0	-45% R	102.32 R	48.35 -R	53.97 Decrease
1966	T0IR089201000011637000000000000000	MKA355	HKB7649	3	3	0	0	0	0	0	0	32	6	4	5	5	10	2	0	91% R	21.93 R	578.48 R	556.55 Increase
1967	T0IR089201000011640000000000000000	MKA261	HKB7610	9	6	3	0	0	0	0	0	58	6	4	5	5	10	10	10	85% R	64.82 R	1,465.74 R	1,400.92 Increase
1968	T0IR089201000011641000000000000000	MKA352	HKB7676	8	6	2	0	0	0	0	0	15	6	4	5	0	0	0	0	49% R	54.79 R	139.01 R	84.22 Increase
1969	T0IR089201000011645000000000000000	MKA272	HKC2963	4	4	0	0	0	0	0	0	43	6	4	5	5	10	10	3	91% R	27.13 R	910.29 R	883.16 Increase
1970	T0IR089201000011646000000000000000	MKA251	HKC87677	9	6	3	0	0	0	0	0	22	6	4	5	5	2	0	0	58% R	66.84 R	283.73 R	216.88 Increase
1971	T0IR089201000011654000000000000000	MKA252	30039567	59	6	4	5	5	10	10	10	9	49	6	4	5	10	10	9	-16% R	1,518.54 R	1,146.44 R	372.10 Decrease
1972	T0IR089201000011655000000000000000	MKA266	HKC2678	19	6	4	5	4	0	0	0	19	6	4	5	4	0	0	0	0% R	219.60 R	221.10 R	1.50 Increase
1973	T0IR089201000011665000000000000000	LNLS07	HKC2677	73	6	4	5	5	10	10	23	28	6	4	5	8	0	0	0	-61% R	2,047.71 R	465.09 -R	1,582.62 Decrease
1974	T0IR089201000011668000000000000000	MKA349	GKH4840	25	6	4	5	5	5	0	0	115	6	4	5	5	10	10	10	78% R	366.81 R	3,690.38 R	3,323.57 Increase
1975	T0IR089201000011672000000000000000	MKA360	GK11018	7	6	1	0	0	0	0	0	12	6	4	0	0	0	0	0	42% R	49.41 R	97.11 R	47.70 Increase
1976	T0IR089201000011675000000000000000	MKA326	HKC2581	19	6	4	5	4	0	0	0	23	6	4	5	5	3	0	0	16% R	226.59 R	320.49 R	93.90 Increase
1977	T0IR089201000011676000000000000000	MKA285	HKC2992	4	4	0	0	0	0	0	0	5	5	0	0	0	0	0	0	14% R	30.81 R	35.70 R	4.89 Increase
1978	T0IR089201000011677000000000000000	MKA246	HKC2542	6	6	0	0	0	0	0	0	5	5	0	0	0	0	0	0	-23% R	43.64 R	33.75 -R	9.89 Decrease
1979	T0IR089201000011678000000000000000	MKA332	HKC2484	12	6	4	2	0	0	0	0	7	6	1	0	0	0	0	0	-42% R	95.58 R	49.04 -R	46.54 Decrease
1980	T0IR089201000011681000000000000000	MKA523	GKH7766	50	6	4	5	5	10	10	10	14	6	4	4	0	0	0	0	-72% R	1,172.43 R	125.84 -R	1,046.59 Decrease
1981	T0IR089201000011682000000000000000	MKA312	GK10948	62	6	4	5	5	10	10	12	10	6	4	0	0	0	0	0	-84% R	1,624.21 R	74.36 -R	1,549.86 Decrease
1982	T0IR089201000011684000000000000000	MKA318	GK11209	36	6	4	5	5	10	6	0	45	6	4	5	5	10	10	5	20% R	673.19 R	971.02 R	297.83 Increase
1983	T0IR089201000011685000000000000000	MKA471	30046034	16	6	4	5	5	1	0	0	33	6	4	5	5	10	3	0	52% R	159.46 R	602.39 R	442.93 Increase
1984	T0IR089201000011686000000000000000	MKA307	HKC2578	14	6	4	4	0	0	0	0	41	6	4	5	5	10	10	1	66% R	125.84 R	846.19 R	720.35 Increase
1985	T0IR089201000011687000000000000000	MKA317	HKC2472	6	6	0	0	0	0	0	0	32	6	4	5	5	10	2	0	83% R	39.72 R	562.77 R	523.05 Increase
1986	T0IR089201000011690000000000000000	MKA343	140034740	11	6	4	1	0	0	0	0	13	6	4	3	0	0	0	0	19% R	79.99 R	112.67 R	32.68 Increase
1987	T0IR089201000011695000000000000000	MKA248	30037739	15	6	4	5	0	0	0	0	14	6	4	4	0	0	0	0	-2% R	132.86 R	129.43 -R	3.43 Decrease
1988	T0IR089201000011702000000000000000	MKA158	HKB7615	7	6	1	0	0	0	0	0	12	6	4	2	0	0	0	0	41% R	51.80 R	101.89 R	50.10 Increase
1989	T0IR089201000011709000000000000000	MKA237	HKC7636	23	6	4	5	5	3	0	0	40	6	4	5	5	10	10	0	43% R	315.97 R	802.33 R	486.37 Increase
1990	T0IR089201000011714000000000000000	MKA367	GK11176	17	6	4	5	2	0	0	0	9	6	3	0	0	0	0	0	-45% R	185.05 R	69.03 -R	116.03 Decrease
1991	T0IR089201000011718000000000000000	MKA255	HKC2550	4	4	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0% R	29.07 R	29.21 R	0.14 Increase
1992	T0IR089201000011719000000000000000	MKA267	HKC2554	11	6	4	1	0	0	0	0	15	6	4	5	0	0	0	0	27% R	88.21 R	146.15 R	57.94 Increase
1993	T0IR089201000011727000000000000000	MKA651	13046101	9	6	3	0	0	0	0	0	26	6	4	5	5	6	0	0	66% R	63.53 R	396.67 R	333.14 Increase
1994	T0IR089201000011735000000000000000	MKB185	30050929	15	6	4	5	0	0	0	0	11	6	4	1	0	0	0	0	-23% R	134.40 R	89.92 -R	44.48 Decrease
1995	T0IR089201000011736000000000000000	MKB113	13045712	34	6	4	5	5	10	4	0	62	6	4	5	5	10	10	12	44% R	631.61 R	1,622.79 R	991.18 Increase
1996	T0IR089201000011740000000000000000	MKB108	GKH4845	30	6	4	5	5	10	0	0	2	2	0	0	0	0	0	0	-94% R	502.58 R	12.98 -R	489.60 Decrease
1997	T0IR089201000011757000000000000000	MKB123	HKD5894	8	6	2	0	0	0	0	0	28	6	4	5	5	8	0	0	71% R	60.65 R	465.09 R	404.44 Increase
1998	T0IR089201000011769000000000000000	MKA456	30064498	15	6	4	5	0	0	0	0	14	6	4	4	0	0	0	0	-1% R	132.86 R	130.63 -R	2.23 Decrease
1999	T0IR089201000011770000000000000000	MKB115	GKH4152	3	3	0	0	0	0	0	0	14	6	4	4	0	0	0	0	78% R	21.76 R	123.45 R	101.69 Increase
2000	T0IR089201000011780000000000000000	MKB120	30046375	22	6	4	5	5	2	0	0	13	6	4	3	0	0	0	0	-44% R	304.23 R	107.88 -R	196.35 Decrease
2001	T0IR089201000011795000000000000000	MKA810	30046047	117	6	4	5	5	10	10	10	28	6	4	5	5	8	0	0	-76% R	3,779.79 R	455.29 -R	3,324.50 Decrease
2002	T0IR089201000011799000000000000000	MKA599	13046001	17	6	4	5	5	10	7	0	11	6	4	1	0	0	0	0	-71% R	719.09 R	82.74 -R	636.35 Decrease
2003	T0IR089201000011812000000000000000	MKB112	HKB7660	17	6	4	5	2	0	0	0	25	6	4	5	5	5	0	0	32% R	172.82 R	359.71 R	186.89 Increase
2004	T0IR089201000011817000000000000000	MKB176	30053161	35	6	4	5	5	10	5	0	15	6	4	5	0	0	0	0	-56% R	642.42 R	142.58 -R	499.85 Decrease
2005	T0IR089201000011818000000000000000	MKB187	GKH4330	23	6	4	5	5	3	0	0	28	6	4	5	5	8	0	0	17% R	320.69 R	445.49 R	124.80 Increase
2006	T0IR089201000011819000000000000000	MKB175	GKH4368	5	5	0	0	0	0	0	0	13	6	4	3	0	0	0	0	62% R	35.70 R	112.67 R	76.97 Increase
2007	T0IR089201000011821000000000000000	MKB099																					

SGID	Old Meter	New Meter	Old Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	New Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	% Loss	Monthly Bill Old	Monthly Bill New	Change on Revenue	Increase / Decrease
				R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72					
2029	TOIR089201000011971000000000000000	MTKA532	13039931	10	6	4	0	0	0	0	0	16	6	4	5	1	0	0	0	0	38% R	73.53 R	160.42 R	86.90	Increase
2030	TOIR089201000011972000000000000000	MTKA309	130101522	22	6	4	5	2	0	0	0	13	6	4	3	0	0	0	0	0	-38% R	281.89 R	118.66 -R	163.23	Decrease
2031	TOIR089201000011974000000000000000	MKA029	HKC2824	11	6	4	1	0	0	0	0	12	6	4	2	0	0	0	0	0	7% R	85.67 R	95.91 R	10.24	Increase
2032	TOIR089201000011979000000000000000	MKE771	13057696	13	6	4	3	0	0	0	0	19	6	4	5	4	0	0	0	0	33% R	109.81 R	221.10 R	111.29	Increase
2033	TOIR089201000011980000000000000000	MKF167	HKC9693	8	6	2	0	0	0	0	0	23	6	4	5	5	3	0	0	0	65% R	60.17 R	330.29 R	270.13	Increase
2034	TOIR089201000011995000000000000000	MKE848	HKD5800	5	5	0	0	0	0	0	0	32	6	4	5	5	10	2	0	0	85% R	33.86 R	573.17 R	539.31	Increase
2035	TOIR089201000011996000000000000000	MKF443	HKD5782	6	6	0	0	0	0	0	0	18	6	4	5	3	0	0	0	0	65% R	44.85 R	199.68 R	154.84	Increase
2036	TOIR089201000011999000000000000000	MKA356	HKC0745	2	2	0	0	0	0	0	0	19	6	4	5	4	0	0	0	0	91% R	12.85 R	226.45 R	213.60	Increase
2037	TOIR089201000012003000000000000000	MKA505	GK11131	22	6	4	5	2	0	0	0	18	6	4	5	3	0	0	0	0	-17% R	288.63 R	199.68 -R	88.94	Decrease
2038	TOIR089201000012014000000000000000	MKA315	30037712	14	6	4	4	0	0	0	0	37	6	4	5	5	10	7	0	0	62% R	129.13 R	719.27 R	590.14	Increase
2039	TOIR089201000012015000000000000000	MKA522	30046413	36	6	4	5	5	10	6	0	8	6	2	0	0	0	0	0	0	-78% R	689.66 R	57.31 -R	632.34	Decrease
2040	TOIR089201000012018000000000000000	MKA320	GKH4349	6	6	0	0	0	0	0	0	19	6	4	5	4	0	0	0	0	67% R	45.84 R	226.45 R	180.62	Increase
2041	TOIR089201000012021000000000000000	MKA290	GKH4360	36	6	4	5	5	10	6	0	18	6	4	5	3	0	0	0	0	-49% R	675.67 R	203.25 -R	472.41	Decrease
2042	TOIR089201000012023000000000000000	MKA514	GK10498	33	6	4	5	5	10	3	0	28	6	4	5	5	8	0	0	0	-15% R	587.12 R	445.49 -R	141.63	Decrease
2043	TOIR089201000012034000000000000000	MKA559	GK10505	22	6	4	5	2	0	0	0	41	6	4	5	5	10	10	1	0	45% R	303.77 R	842.82 R	539.05	Increase
2044	TOIR089201000012036000000000000000	MKA801	30066111	7	6	1	0	0	0	0	0	27	6	4	5	5	7	0	0	0	73% R	51.68 R	425.88 R	374.20	Increase
2045	TOIR089201000012042000000000000000	MKA569	GK10493	14	6	4	4	0	0	0	0	17	6	4	5	2	0	0	0	0	17% R	131.48 R	187.19 R	55.71	Increase
2046	TOIR089201000012047000000000000000	MKA615	GK10499	53	6	4	5	5	10	10	10	3	31	6	4	5	5	10	1	0	-42% R	1296.41 R	530.67 -R	765.74	Decrease
2047	TOIR089201000012050000000000000000	MKA685	13038198	7	6	1	0	0	0	0	0	15	6	4	5	0	0	0	0	0	52% R	51.78 R	139.01 R	87.23	Increase
2048	TOIR089201000012052000000000000000	MKA962	GK10503	53	6	4	5	5	10	10	10	3	57	6	4	5	5	10	10	7	7% R	1282.62 R	1444.62 R	162.00	Increase
2049	TOIR089201000012063000000000000000	MKA611	GK12168	10	6	4	0	0	0	0	0	12	6	4	2	0	0	0	0	0	18% R	70.63 R	97.11 R	26.47	Increase
2050	TOIR089201000012065000000000000000	MKA502	GKH9409	15	6	4	5	0	0	0	0	12	6	4	2	0	0	0	0	0	-19% R	135.72 R	98.30 -R	37.41	Decrease
2051	TOIR089201000012067000000000000000	MKA289	HKC0755	9	6	3	0	0	0	0	0	23	6	4	5	5	3	0	0	0	61% R	66.12 R	330.29 R	264.17	Increase
2052	TOIR089201000012068000000000000000	MKA361	GKH4783	25	6	4	5	5	5	0	0	20	6	4	5	5	0	0	0	0	-20% R	374.96 R	242.06 -R	132.89	Decrease
2053	TOIR089201000012077000000000000000	MKA483	GKF2959	6	6	0	0	0	0	0	0	34	6	4	5	5	10	4	0	0	83% R	42.38 R	621.39 R	579.02	Increase
2054	TOIR089201000012093000000000000000	MKA302	30037740	11	6	4	1	0	0	0	0	4	4	0	0	0	0	0	0	0	-61% R	79.75 R	29.16 -R	50.59	Decrease
2055	TOIR089201000012100000000000000000	MKA499	GKH4321	23	6	4	5	5	3	0	0	27	6	4	5	5	7	0	0	0	13% R	328.37 R	425.88 R	97.51	Increase
2056	TOIR089201000012102000000000000000	MKA526	GK11200	39	6	4	5	5	10	9	0	69	6	4	5	5	10	10	10	19	43% R	775.31 R	1908.72 R	1133.41	Increase
2057	TOIR089201000012106000000000000000	MKA646	GKH4732	52	6	4	5	5	10	10	10	2	31	6	4	5	5	10	1	0	-41% R	1249.05 R	524.74 -R	724.31	Decrease
2058	TOIR089201000012110000000000000000	MKA793	GKH4376	6	6	0	0	0	0	0	0	31	6	4	5	5	10	1	0	0	82% R	41.31 R	546.61 R	505.30	Increase
2059	TOIR089201000012113000000000000000	MKA580	30037187	13	6	4	3	0	0	0	0	11	6	4	1	0	0	0	0	0	-20% R	118.91 R	82.74 -R	36.17	Decrease
2060	TOIR089201000012124000000000000000	MKA645	GK55073	6	6	0	0	0	0	0	0	18	6	4	5	3	0	0	0	0	68% R	41.60 R	197.90 R	156.30	Increase
2061	TOIR089201000012131000000000000000	MKA648	GKH4391	8	6	2	0	0	0	0	0	23	6	4	5	5	3	0	0	0	66% R	56.48 R	309.05 R	252.57	Increase
2062	TOIR089201000012141000000000000000	MKA592	13009907	47	6	4	5	5	10	10	7	75	6	4	5	5	10	10	10	25	38% R	1043.10 R	2134.83 R	1091.73	Increase
2063	TOIR089201000012154000000000000000	MKA619	30037830	23	6	4	5	5	3	0	0	32	6	4	5	5	10	2	0	0	28% R	316.24 R	565.20 R	248.96	Increase
2064	TOIR089201000012174000000000000000	LNL327	HKC2996	10	6	4	0	0	0	0	0	29	6	4	5	5	9	0	0	0	65% R	77.55 R	492.05 R	414.50	Increase
2065	TOIR089201000012185000000000000000	LNK551	13058326	83	6	4	5	5	10	10	10	33	11	6	4	1	0	0	0	0	-87% R	2443.26 R	87.53 -R	2355.74	Decrease
2066	TOIR089201000012190000000000000000	MKA107	HKC2574	22	6	4	5	2	0	0	0	20	6	4	5	5	0	0	0	0	-8% R	286.28 R	237.16 -R	49.12	Decrease
2067	TOIR089201000012193000000000000000	LNL235	13045709	8	6	2	0	0	0	0	0	17	6	4	5	2	0	0	0	0	54% R	55.83 R	171.13 R	115.30	Increase
2068	TOIR089201000012195000000000000000	LNL252	GK11201	16	6	4	5	1	0	0	0	38	6	4	5	5	10	8	0	0	58% R	163.14 R	748.49 R	585.35	Increase
2069	TOIR089201000012199000000000000000	LNK717	GKG2055	7	6	1	0	0	0	0	0	20	6	4	5	5	0	0	0	0	65% R	50.76 R	246.96 R	196.21	Increase
2070	TOIR089201000012202000000000000000	LNL349	130081607	1	1	0	0	0	0	0	0	17	6	4	5	2	0	0	0	0	92% R	10.44 R	183.62 R	173.19	Increase
2071	TOIR089201000012206000000000000000	LNL184	GKG0472	9	6	3	0	0	0	0	0	11	6	4	1	0	0	0	0	0	21% R	62.31 R	85.13 R	22.82	Increase
2072	TOIR089201000012216000000000000000	LNL328	13057795	52	6	4	5	5	10	10	10	2	22	6	4	5	5	2	0	0	-57% R	1253.95 R	295.98 -R	957.97	Decrease
2073	TOIR089201000012246000000000000000	MKA185	13046070	28	6	4	5	5	8	0	0	18	6	4	5	3	0	0	0	0	-34% R	440.47 R	199.68 -R	240.79	Decrease
2074	TOIR089201000012247000000000000000	MKA175	GKH4851	28	6	4	5	5	8	0	0	26	6	4	5	5	6	0	0	0	-7% R	441.09 R	391.57 -R	49.52	Decrease
2075	TOIR089201000012258000000000000000	LNK651	HKC2564	14	6	4	4	0	0	0	0	19	6	4	5	4	0	0	0	0	24% R	132.07 R	219.31 R	87.25	Increase
2076	TOIR089201000012264000000000000000	MKA142	HKC2636	34	6	4	5	5	10	4	0	52	6	4	5	5	10	10	10	2	34% R	626.56 R	1229.90 R	603.34	Increase
2077	TOIR089201000012267000000000000000	MKA083	HKC2577	12	6	4	2	0	0	0	0	11	6	4	1	0	0	0	0	0	-9% R	98.81 R	83.94 -R	14.87	Decrease
2078	TOIR089201000012270000000000000000	MKA114	HKC2515	2	2	0	0	0	0	0	0	5	5	0	0	0	0	0	0	0	57% R	16.07 R	37.65 R	21.58	Increase
2079	TOIR089201000012271000000000000000	MKA132	HKC2532	11	6	4	1	0	0	0	0	10	6	4	0	0	0	0	0	0	-5% R	86.64 R	79.15 -R	7.50	Decrease
2080	TOIR089201000012273000000000000000	MKA188	HKC2820	3	3	0	0	0	0	0	0	6	6	0	0	0	0	0	0	0	60% R	18.36 R	45.60 R	27.24	Increase
2081	TOIR089201000012275000000000000000	LNK573	GK11154	10	6	4	0	0	0																

SGID	Old Meter	New Meter	Old Cons	0-6											New Cons											% Loss	Increase		
				R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72	R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72										
2107	TOIR089201000012399000000000000000	LNA263	GK55199	9	6	3	0	0	0	0	0	0	18	6	4	5	3	0	0	0	48%	R	66.95	R	190.76	R	123.81	Increase	
2108	TOIR089201000012423000000000000000	LNA234	GKG0374	14	6	4	4	0	0	0	0	0	10	6	4	0	0	0	0	0	-29%	R	126.85	R	73.16	-R	53.69	Decrease	
2109	TOIR089201000012430000000000000000	LNL190	GKH4381	20	6	4	5	5	0	0	0	0	32	6	4	5	5	10	2	0	0	37%	R	239.67	R	559.89	R	320.22	Increase
2110	TOIR089201000012437000000000000000	LNL216	GK11199	29	6	4	5	5	9	0	0	0	26	6	4	5	5	6	0	0	-10%	R	472.39	R	391.57	-R	80.82	Decrease	
2111	TOIR089201000012439000000000000000	LNL221	HKC2652	16	6	4	5	1	0	0	0	0	7	6	1	0	0	0	0	0	-56%	R	158.64	R	50.42	-R	108.22	Decrease	
2112	TOIR089201000012449000000000000000	LMX789	13011633	60	6	4	5	5	10	10	10	10	79	6	4	5	5	10	10	29	25%	R	1548.32	R	2310.54	R	762.22	Increase	
2113	TOIR089201000012450000000000000000	LNK805	13045715	22	6	4	5	5	2	0	0	0	16	6	4	5	1	0	0	0	-28%	R	283.89	R	151.50	-R	132.39	Decrease	
2114	TOIR089201000012451000000000000000	LNK511	13030891	12	6	4	2	0	0	0	0	0	18	6	4	5	3	0	0	0	35%	R	97.62	R	202.43	R	104.81	Increase	
2115	TOIR089201000012457000000000000000	LNL222	HKC2831	26	6	4	5	5	6	0	0	0	58	6	4	5	5	10	10	8	56%	R	387.57	R	1462.22	R	1074.65	Increase	
2116	TOIR089201000012470000000000000000	LNL248	HKC2823	5	5	0	0	0	0	0	0	0	38	6	4	5	5	10	8	0	86%	R	36.89	R	735.21	R	698.32	Increase	
2117	TOIR089201000012473000000000000000	LNA356	13011646	25	6	4	5	5	5	5	0	0	26	6	4	5	5	6	0	0	2%	R	381.59	R	394.02	R	12.43	Increase	
2118	TOIR089201000012478000000000000000	LNA368	30049012	13	6	4	3	0	0	0	0	0	64	6	4	5	5	10	10	14	80%	R	108.00	R	1712.14	R	1604.14	Increase	
2119	TOIR089201000012480000000000000000	LMX484	GKH4300	3	3	0	0	0	0	0	0	0	16	6	4	5	1	0	0	0	82%	R	21.42	R	165.78	R	144.36	Increase	
2120	TOIR089201000012495000000000000000	LNK518	GK11252	8	6	2	0	0	0	0	0	0	37	6	4	5	5	10	7	0	79%	R	55.34	R	696.69	R	641.35	Increase	
2121	TOIR089201000012496000000000000000	LNK504	13031148	38	6	4	5	5	10	8	0	0	53	6	4	5	5	10	10	3	29%	R	739.13	R	1303.82	R	564.69	Increase	
2122	TOIR089201000012497000000000000000	LNK501	13046335	21	6	4	5	5	1	0	0	0	27	6	4	5	5	7	0	0	24%	R	259.36	R	438.13	R	178.77	Increase	
2123	TOIR089201000012731000000000000000	33108494	30046708	3	3	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	3%	R	23.21	R	24.02	R	0.81	Increase	
2124	TOIR089201200012968000000000000000	MKH1778	13045783	86	6	4	5	5	10	10	10	10	36	246	6	4	5	5	10	10	196	65%	R	2561.94	R	8745.10	R	6183.16	Increase
2125	TOIR089201200012974000000000000000	WSY858	13045742	40	6	4	5	5	10	10	0	0	40	6	4	5	5	10	10	0	0	0%	R	791.27	R	796.30	R	5.03	Increase
2126	TOIR089201200013000000000000000000	WSY703	13046068	42	6	4	5	5	10	10	2	0	59	6	4	5	5	10	10	10	9	28%	R	887.22	R	1500.94	R	613.72	Increase
2127	TOIR089201200013004000000000000000	WSY850	13045892	26	6	4	5	5	6	0	0	0	74	6	4	5	5	10	10	10	24	65%	R	397.80	R	2081.74	R	1683.94	Increase
2128	TOIR089201200013005000000000000000	WSY805	13058106	30	6	4	5	5	10	0	0	0	38	6	4	5	5	10	8	0	0	22%	R	495.10	R	735.21	R	240.11	Increase
2129	TOIR089201200013024000000000000000	WSW936	13046142	15	6	4	5	0	0	0	0	0	26	6	4	5	5	6	0	0	0	45%	R	133.37	R	406.27	R	272.91	Increase
2130	TOIR089201200013026000000000000000	WSW961	HKD4369	3	3	0	0	0	0	0	0	0	47	6	4	5	5	10	10	7	0	94%	R	19.53	R	1041.86	R	1022.33	Increase
2131	TOIR089201200013028000000000000000	WSY700	13062065	9	6	3	0	0	0	0	0	0	53	6	4	5	5	10	10	10	3	82%	R	69.01	R	1279.77	R	1210.76	Increase
2132	TOIR089201200013056000000000000000	WSY579	13045747	28	6	4	5	5	8	0	0	0	15	6	4	5	0	0	0	0	0	-48%	R	461.40	R	136.62	-R	324.78	Decrease
2133	TOIR089201200013089000000000000000	WRB592	13030860	17	6	4	5	2	0	0	0	0	21	6	4	5	5	1	0	0	0	18%	R	183.93	R	269.02	R	85.10	Increase
2134	TOIR089201200013090000000000000000	WRB611	13046376	37	6	4	5	5	10	7	0	0	51	6	4	5	5	10	10	10	1	27%	R	708.32	R	1201.74	R	493.42	Increase
2135	TOIR089201200013091000000000000000	WSR591	13011609	35	6	4	5	5	10	5	0	0	35	6	4	5	5	10	5	0	0	1%	R	651.74	R	663.49	R	11.75	Increase
2136	TOIR089201200013092000000000000000	WRB407	13058134	23	6	4	5	5	3	0	0	0	26	6	4	5	5	6	0	0	0	13%	R	307.93	R	401.37	R	93.44	Increase
2137	TOIR089201200013105000000000000000	WRB495	30046192	39	6	4	5	5	10	9	0	0	9	6	3	0	0	0	0	0	0	-77%	R	763.35	R	64.89	-R	698.46	Decrease
2138	TOIR089201200013106000000000000000	WRB315	140006294	14	6	4	4	0	0	0	0	0	18	6	4	5	3	0	0	0	0	24%	R	120.49	R	196.12	R	75.63	Increase
2139	TOIR089201200013110000000000000000	WRB285	13045792	50	6	4	5	5	10	10	10	0	34	6	4	5	5	10	4	0	0	-32%	R	1158.64	R	623.64	-R	535.00	Decrease
2140	TOIR089201200013132000000000000000	WOW542	HKD5764	25	6	4	5	5	5	0	0	0	20	6	4	5	5	0	0	0	0	-20%	R	383.71	R	244.51	-R	139.20	Decrease
2141	TOIR089201200013134000000000000000	WOW372	13058098	43	6	4	5	5	10	10	3	0	25	6	4	5	5	5	0	0	0	-42%	R	901.13	R	362.16	-R	538.98	Decrease
2142	TOIR089201200013143000000000000000	MKH906	13058094	16	6	4	5	1	0	0	0	0	22	6	4	5	5	2	0	0	0	28%	R	162.10	R	303.33	R	141.23	Increase
2143	TOIR089201200013145000000000000000	WOW636	13030876	12	6	4	2	0	0	0	0	0	17	6	4	5	2	0	0	0	0	31%	R	97.22	R	181.84	R	84.62	Increase
2144	TOIR089201200013148000000000000000	WOW398	13046211	29	6	4	5	5	9	0	0	0	58	6	4	5	5	10	10	8	50%	R	470.99	R	1472.78	R	1001.79	Increase	
2145	TOIR089201200013153000000000000000	WOW527	30050894	10	6	4	0	0	0	0	0	0	5	5	0	0	0	0	0	0	0	-45%	R	70.45	R	37.65	-R	32.81	Decrease
2146	TOIR089201200013167000000000000000	WOW373	13058037	26	6	4	5	5	6	0	0	0	47	6	4	5	5	10	7	0	0	46%	R	388.41	R				

SGID	Old Meter	New Meter	Old Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	New Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	% Loss					Increase / Decrease	
				R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		Monthly Bill Old	Monthly Bill New	Change on Revenue			
2185	TOIR089201200013595000000000000000	MKE887	30048997	49	6	4	5	5	10	10	9	0	49	6	4	5	5	10	10	9	0	0%	R 1127.65	R 1126.20	-R	1.45	Decrease
2186	TOIR089201200013601000000000000000	MKF466	13058253	23	6	4	5	5	3	0	0	0	27	6	4	5	5	7	0	0	0	18%	R 306.36	R 435.68	R	129.33	Increase
2187	TOIR089201200013602000000000000000	MKE939	30045212	12	6	4	2	0	0	0	0	0	24	6	4	5	5	4	0	0	0	51%	R 97.31	R 345.00	R	247.70	Increase
2188	TOIR089201200013606000000000000000	MKF631	13046276	15	6	4	5	5	0	0	0	0	50	6	4	5	5	10	10	10	0	69%	R 148.45	R 1151.51	R	1 003.05	Increase
2189	TOIR089201200013607000000000000000	MKE875	13045740	11	6	4	1	0	0	0	0	0	11	6	4	1	0	0	0	0	0	0%	R 86.96	R 87.53	R	0.57	Increase
2190	TOIR089201200013664000000000000000	WOW652	HKD4287	47	6	4	5	5	10	10	7	0	234	6	4	5	5	10	10	10	184	80%	R 1 050.41	R 8 280.46	R	7 230.05	Increase
2191	TOIR089201200013675000000000000000	WPB317	13058254	36	6	4	5	5	10	6	0	0	28	6	4	5	5	8	0	0	0	-22%	R 667.47	R 447.94	-R	219.53	Decrease
2192	TOIR089201200013682000000000000000	WPB334	13045971	8	6	2	0	0	0	0	0	0	19	6	4	5	4	0	0	0	0	55%	R 61.32	R 213.96	R	152.64	Increase
2193	TOIR089201200013713000000000000000	WPB191	13046236	20	6	4	5	5	0	0	0	0	12	6	4	2	0	0	0	0	0	-42%	R 235.93	R 94.71	-R	141.22	Decrease
2194	TOIR089201200013714000000000000000	WPB306	13058079	67	6	4	5	5	10	10	10	17	31	6	4	5	5	10	1	0	0	-54%	R 1 832.31	R 522.70	-R	1 309.61	Decrease
2195	TOIR089201200013715000000000000000	WRB166	30037128	32	6	4	5	5	10	2	0	0	37	6	4	5	5	10	7	0	0	13%	R 562.77	R 698.02	R	135.25	Increase
2196	TOIR089201200013722000000000000000	WPJ828	13045978	37	6	4	5	5	10	7	0	0	38	6	4	5	5	10	8	0	0	2%	R 715.80	R 740.52	R	24.72	Increase
2197	TOIR089201200013736000000000000000	WPA946	HKD4643	54	6	4	5	5	10	10	10	4	35	6	4	5	5	10	5	0	0	-36%	R 1 323.00	R 639.58	-R	683.43	Decrease
2198	TOIR089201200013738000000000000000	WPJ819	13034631	90	6	4	5	5	10	10	10	40	11	6	4	1	0	0	0	0	0	-88%	R 2 733.75	R 88.72	-R	2 645.03	Decrease
2199	TOIR089201200013752000000000000000	WRB413	HKD3954	29	6	4	5	5	9	0	0	0	116	6	4	5	5	10	10	10	66	75%	R 474.41	R 3 722.06	R	3 247.65	Increase
2200	TOIR089201200013758000000000000000	WOW647	13011544	6	6	0	0	0	0	0	0	0	25	6	4	5	5	5	0	0	0	76%	R 42.84	R 369.51	R	326.67	Increase
2201	TOIR089201200013785000000000000000	WOW661	13046103	48	6	4	5	5	10	10	8	0	94	6	4	5	5	10	10	10	44	49%	R 1 099.00	R 2 860.83	R	1 761.84	Increase
2202	TOIR089201200013789000000000000000	WOW478	13058297	111	6	4	5	5	10	10	10	61	55	6	4	5	5	10	10	10	5	-50%	R 3 531.98	R 1 363.66	-R	2 168.32	Decrease
2203	TOIR089201200013798000000000000000	WRB403	13058209	22	6	4	5	5	2	0	0	0	45	6	4	5	5	10	10	5	0	51%	R 292.36	R 991.26	R	698.89	Increase
2204	TOIR089201200013803000000000000000	WRB719	13046084	19	6	4	5	4	0	0	0	0	103	6	4	5	5	10	10	10	53	81%	R 218.16	R 3 204.62	R	2 986.46	Increase
2205	TOIR089201200013818000000000000000	WRB425	13046271	15	6	4	5	5	0	0	0	0	35	6	4	5	5	10	5	0	0	58%	R 134.07	R 658.17	R	524.10	Increase
2206	TOIR089201200013824000000000000000	WOW355	HKD5777	4	4	0	0	0	0	0	0	0	18	6	4	5	3	0	0	0	0	79%	R 27.77	R 206.82	R	179.06	Increase
2207	TOIR089201200013834000000000000000	WPB207	13062181	47	6	4	5	5	10	10	7	0	16	6	4	5	1	0	0	0	0	-67%	R 1 054.41	R 149.72	-R	904.70	Decrease
2208	TOIR089201200013836000000000000000	WRB776	30048323	1	1	0	0	0	0	0	0	0	28	6	4	5	5	8	0	0	0	97%	R 6.83	R 465.09	R	458.26	Increase
2209	TOIR089201200013849000000000000000	WPB211	13011651	13	6	4	3	0	0	0	0	0	40	6	4	5	5	10	10	0	0	67%	R 112.67	R 791.66	R	678.99	Increase
2210	TOIR089201200013879000000000000000	WOR789	13058291	15	6	4	5	5	0	0	0	0	23	6	4	5	5	3	0	0	0	32%	R 145.14	R 305.79	R	160.64	Increase
2211	TOIR089201200013886000000000000000	MLA006	13046273	35	6	4	5	5	10	5	0	0	26	6	4	5	5	6	0	0	0	-24%	R 648.31	R 411.17	-R	237.13	Decrease
2212	TOIR089201200013895000000000000000	WPB324	130111129	29	6	4	5	5	9	0	0	0	3	3	0	0	0	0	0	0	0	-90%	R 489.73	R 20.12	-R	469.61	Decrease
2213	TOIR089201200013901000000000000000	WRB651	13046054	12	6	4	2	0	0	0	0	0	79	6	4	5	5	10	10	10	29	85%	R 94.62	R 2 285.90	R	2 191.28	Increase
2214	TOIR089201200013912000000000000000	WPA568	13031035	98	6	4	5	5	10	10	10	48	42	6	4	5	5	10	10	2	0	-57%	R 3 009.26	R 886.67	-R	2 122.59	Decrease
2215	TOIR089201200013929000000000000000	WPB291	30048046	15	6	4	5	5	0	0	0	0	68	6	4	5	5	10	10	10	18	78%	R 138.52	R 1 863.50	R	1 724.98	Increase
2216	TOIR089201200013936000000000000000	WRB450	30046322	69	6	4	5	5	10	10	10	19	27	6	4	5	5	7	0	0	0	-60%	R 1 899.63	R 433.23	-R	1 466.39	Decrease
2217	TOIR089201200013959000000000000000	WPB209	30046797	24	6	4	5	5	4	0	0	0	26	6	4	5	5	6	0	0	0	8%	R 351.74	R 411.17	R	59.43	Increase
2218	TOIR089201200013963000000000000000	MKX095	130112759	71	6	4	5	5	10	10	10	21	65	6	4	5	5	10	10	10	15	-8%	R 1 975.80	R 1 747.34	-R	228.46	Decrease
2219	TOIR089201200013964000000000000000	MKX089	13058305	3	3	0	0	0	0	0	0	0	7	6	1	0	0	0	0	0	0	63%	R 19.34	R 53.18	R	33.84	Increase
2220	TOIR089201200014010000000000000000	WOX982	HKD5812	21	6	4	5	5	1	0	0	0	34	6	4	5	5	10	4	0	0	38%	R 275.35	R 634.27	R	358.91	Increase
2221	TOIR089201200014020000000000000000	MKZ365	13058318	68	6	4	5	5	10	10	18	53	6	4	5	5	5	10	10	10	3	-21%	R 1 860.57	R 1 303.82	-R	556.75	Decrease
2222	TOIR089201200014040000000000000000	MKX088	HKD5814	49	6	4	5	5	10	10	9	0	62	6	4	5	5	10	10	12	21%	R 1 142.63	R 1 641.74	R	499.11	Increase	
2223	TOIR089201200014052000000000000000	MKY926	13058003	45	6	4	5	5	10	10	5	0	56	6	4	5	5	10	10	10	6	19%	R 986.83	R 1 391.82	R	404.99	Increase
2224	TOIR089201200014088000000000000000	MLZ001	GKF8196	18	6	4	5	3	0	0	0	0	59	6	4	5	5	10	10	10	9	70%	R 196.26	R 1 529.10	R	1 332.84	Increase
2225	TOIR089201200014089000000000000000	MLA194	HKD5823	14	6	4	4	0	0	0	0	0	49	6	4	5	5	10	10	9	0	70%	R 131.92	R 1 132.95	R	1 001.03	Increase
2226	TOIR089201200014099000000000000000	MKZ348	HKD5772	2	2	0	0	0	0	0	0	0	80	6	4	5	5	10	10	10	30	97%	R 14.83	R 2 317.58	R	2 302.75	Increase
2227	TOIR089201200014100000000000000000	MKX211	13062001	23	6	4	5	5	3	0	0	0	121	6	4	5	5	10	10	10	71	81%	R 329.76	R 3 915.95	R	3 586.19	Increase
2228	TOIR089201200014113000000000000000	MLA181	13058194	12	6	4	2	0	0	0	0	0	18	6	4	5	3	0	0	0	0	29%	R 105.58	R 190.76	R	85.18	Increase
2229	TOIR089201200014120000000000000000	MKZ858	13058116	15	6	4	5	5	0	0	0	0	34	6	4	5	5	10	4	0	0	56%	R 136.38	R 623.64	R	487.26	Increase
2230	TOIR089201200014155000000000000000	MKZ159	13046144	38	6	4	5	5	10	8	0	0	172	6	4	5	5	10	10	122	78%	R 747.01	R 5 879.82	R	5 132.81	Increase	
2231	TOIR089201200014156000000000000000	MKZ244	13061946	13	6	4	3	0	0	0	0	0	23	6	4	5	5	3	0	0	0	44%	R 112.14	R 318.04	R	205.90	Increase
2232	TOIR089201200014178000000000000000	MKZ381	13046081	12	6	4	2	0	0	0	0	0	167	6	4	5	5	10	10	117	93%	R 98.32	R 5 682.43	R	5 584.11	Increase	
2233	TOIR089201200014179000000000000000	MKZ441	13046102	25	6	4	5	5	5	0	0	0	56	6	4	5	5	10	10	10	6	54%	R 382.07	R 1 388.30	R	1 006.23	Increase
2234	TOIR089201200014213000																										

SGID	Old Meter	New Meter	Old Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	New Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	% Loss					
				R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		Monthly Bill Old	Monthly Bill New	Change on Revenue	Increase / Decrease	
2263	TOIR089201300014485000000000000000	WPA592	13046089	59	6	4	5	5	10	10	10	9	12	6	4	2	0	0	0	0	0	-80% R	1508.08	R 97.11	-R	1410.97 Decrease
2264	TOIR089201300014508000000000000000	WVOV679	13047747	52	6	4	5	5	10	10	10	2	10	6	4	0	0	0	0	0	0	-82% R	1261.05	R 69.71	-R	1191.34 Decrease
2265	TOIR089201300014516000000000000000	WPE840	HKD3814	18	6	4	5	3	0	0	0	17	6	4	5	2	0	0	0	0	0	-4% R	196.67	R 181.84	-R	14.83 Decrease
2266	TOIR089201300014524000000000000000	WPI969	13037860	13	6	4	3	0	0	0	0	13	6	4	3	0	0	0	0	0	0	1% R	108.80	R 110.28	R	1.48 Increase
2267	TOIR089201300014541000000000000000	WVOV666	30046695	63	6	4	5	5	10	10	10	13	58	6	4	5	5	10	10	10	8	-8% R	1691.76	R 1493.90	-R	197.86 Decrease
2268	TOIR089201300014553000000000000000	WPF810	13039464	15	6	4	5	0	0	0	0	16	6	4	5	1	0	0	0	0	0	5% R	140.52	R 155.07	R	14.55 Increase
2269	TOIR089201300014563000000000000000	MKH792	13037454	93	6	4	5	5	10	10	10	43	49	6	4	5	5	10	10	9	0	-48% R	2827.64	R 1119.46	-R	1708.19 Decrease
2270	TOIR089201300014564000000000000000	MKH797	30067184	17	6	4	5	2	0	0	0	23	6	4	5	5	3	0	0	0	0	28% R	170.27	R 318.04	R	147.77 Increase
2271	TOIR089201300014566000000000000000	MKH938	30066134	35	6	4	5	5	10	5	0	46	6	4	5	5	10	10	6	0	0	25% R	645.56	R 1028.37	R	382.81 Increase
2272	TOIR089201300014587000000000000000	WRA569	13058039	26	6	4	5	5	6	0	0	0	89	6	4	5	5	10	10	10	39	70% R	410.36	R 2666.06	R	2255.70 Increase
2273	TOIR089201300014589000000000000000	WPE919	30039898	8	6	2	0	0	0	0	0	55	6	4	5	5	10	10	10	10	5	85% R	58.84	R 1374.22	R	1315.38 Increase
2274	TOIR089201300014628000000000000000	WOX607	30048025	10	6	4	0	0	0	0	0	8	6	2	0	0	0	0	0	0	0	-23% R	71.90	R 54.84	-R	17.06 Decrease
2275	TOIR089201300014635000000000000000	WPI561	13056357	12	6	4	2	0	0	0	0	13	6	4	3	0	0	0	0	0	0	11% R	98.56	R 117.46	R	18.90 Increase
2276	TOIR089201300014638000000000000000	WPF800	13038084	26	6	4	5	5	6	0	0	0	31	6	4	5	5	10	1	0	0	16% R	398.92	R 531.11	R	132.19 Increase
2277	TOIR089201300014646000000000000000	MKJ987	30046151	10	6	4	0	0	0	0	0	31	6	4	5	5	10	1	0	0	0	69% R	69.86	R 538.64	R	468.77 Increase
2278	TOIR089201300014651000000000000000	MKJ910	13037665	28	6	4	5	5	8	0	0	0	22	6	4	5	5	2	0	0	0	-22% R	462.14	R 295.98	-R	166.15 Decrease
2279	TOIR089201300014654000000000000000	MKJ678	HKC9625	7	6	1	0	0	0	0	0	154	6	4	5	5	10	10	10	104	95% R	50.00	R 5186.38	R	5136.38 Increase	
2280	TOIR089201300014655000000000000000	MKJ705	13039299	36	6	4	5	5	10	6	0	19	6	4	5	4	0	0	0	0	0	-48% R	695.12	R 215.75	-R	479.38 Decrease
2281	TOIR089201300014659000000000000000	MKK029	30046002	21	6	4	5	5	1	0	0	21	6	4	5	5	1	0	0	0	0	-3% R	273.11	R 254.32	-R	18.79 Decrease
2282	TOIR089201300014660000000000000000	MKJ697	HKC9631	7	6	1	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	-27% R	49.47	R 35.70	-R	13.77 Decrease
2283	TOIR089201300014661000000000000000	MKJ748	HKC2580	26	6	4	5	5	6	0	0	46	6	4	5	5	10	10	6	0	0	43% R	409.70	R 1021.62	R	611.92 Increase
2284	TOIR089201300014663000000000000000	MKJ793	13037616	16	6	4	5	1	0	0	0	11	6	4	1	0	0	0	0	0	0	-30% R	155.64	R 87.53	-R	68.11 Decrease
2285	TOIR089201300014678000000000000000	MKJ653	HKC0727	27	6	4	5	5	7	0	0	33	6	4	5	5	10	3	0	0	0	18% R	421.73	R 581.14	R	159.41 Increase
2286	TOIR089201300014681000000000000000	MKJ681	HKC9620	9	6	3	0	0	0	0	0	14	6	4	4	0	0	0	0	0	0	34% R	65.58	R 122.25	R	56.67 Increase
2287	TOIR089201300014683000000000000000	MKJ391	13037655	12	6	4	2	0	0	0	0	13	6	4	3	0	0	0	0	0	0	7% R	95.11	R 106.68	R	11.57 Increase
2288	TOIR089201300014685000000000000000	MKJ746	HKD4236	21	6	4	5	5	1	0	0	34	6	4	5	5	10	4	0	0	0	39% R	257.54	R 626.30	R	368.75 Increase
2289	TOIR089201300014686000000000000000	MKJ698	HKC9649	19	6	4	5	4	0	0	0	66	6	4	5	5	10	10	16	71% R	217.53	R 1771.98	R	1554.45 Increase		
2290	TOIR089201300014687000000000000000	MKJ018	13037645	7	6	1	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	-31% R	47.24	R 32.45	-R	14.79 Decrease
2291	TOIR089201300014688000000000000000	MKJ675	13037606	70	6	4	5	5	10	10	10	20	96	6	4	5	5	10	10	10	46	27% R	1941.79	R 2937.10	R	995.31 Increase
2292	TOIR089201300014697000000000000000	MKK001	HKD3924	23	6	4	5	5	3	0	0	15	6	4	5	5	0	0	0	0	0	-35% R	304.56	R 133.02	-R	171.54 Decrease
2293	TOIR089201300014698000000000000000	MKJ926	HKD5755	5	5	0	0	0	0	0	0	12	6	4	2	0	0	0	0	0	0	60% R	33.47	R 97.11	R	63.64 Increase
2294	TOIR089201300014702000000000000000	MKJ727	13038195	18	6	4	5	3	0	0	0	38	6	4	5	5	10	8	0	0	0	52% R	202.81	R 743.18	R	540.37 Increase
2295	TOIR089201300014707000000000000000	MKJ795	13037915	13	6	4	3	0	0	0	0	16	6	4	5	1	0	0	0	0	0	21% R	109.63	R 162.21	R	52.58 Increase
2296	TOIR089201300014708000000000000000	MKJ996	30047097	5	5	0	0	0	0	0	0	9	6	3	0	0	0	0	0	0	0	47% R	34.75	R 66.96	R	32.21 Increase
2297	TOIR089201300014714000000000000000	MKJ990	13037870	13	6	4	3	0	0	0	0	18	6	4	5	3	0	0	0	0	0	31% R	106.20	R 199.68	R	93.48 Increase
2298	TOIR089201300014717000000000000000	MKJ745	13015441	15	6	4	5	0	0	0	0	8	6	2	0	0	0	0	0	0	0	-46% R	140.41	R 58.69	-R	81.72 Decrease
2299	TOIR089201300014718000000000000000	MKK073	30037130	8	6	2	0	0	0	0	0	16	6	4	5	1	0	0	0	0	0	51% R	57.46	R 160.42	R	102.97 Increase
2300	TOIR089201300014719000000000000000	MKJ749	13037600	17	6	4	5	2	0	0	0	48	6	4	5	5	10	10	8	0	0	64% R	186.80	R 1089.09	R	902.29 Increase
2301	TOIR089201300014733000000000000000	MKH768	HKC2506	3	3	0	0	0	0	0	0	60	6	4	5	5	10	10	10	10	10	96% R	18.11	R 1557.26	R	1539.15 Increase
2302	TOIR089201300014735000000000000000	MKJ174	13056362	15	6	4	5	0	0	0	0	15	6	4	5	0	0	0	0	0	0	-2% R	137.60	R 133.52	-R	4.08 Decrease
2303	TOIR089201300014736000000000000000	MKJ284	GKS5067	7	6	1	0	0	0	0	0	24	6	4	5	5	4	0	0	0	0	71% R	49.85	R 332.75	R	282.89 Increase
2304	TOIR089201300014737000000000000000	MKJ725	13037901	21	6	4	5	5	1	0	0	55	6	4	5	5	10	10	10	5	62% R	258.61	R 1360.14	R	1101.53 Increase	
2305	TOIR089201300014746000000000000000	MKJ777	HKC2701	4	4	0	0	0	0	0	0	18	6	4	5	3	0	0	0	0	0	78% R	28.17	R 196.12	R	167.94 Increase
2306	TOIR089201300014749000000000000000	CMK970	13056384	36	6	4	5	5	10	6	0	34	6	4	5	5	10	4	0	0	0	-5% R	679.99	R 628.95	-R	51.04 Decrease
2307	TOIR089201300014760000000000000000	MKJ937	HKD2957	17	6	4	5	2	0	0	0	28	6	4	5	5	8	0	0	0	0	41% R	170.75	R 455.29	R	284.54 Increase
2308	TOIR089201300014762000000000000000	MKJ706	HKC9710	9	6	3	0	0	0	0	0	19	6	4	5	4	0	0	0	0	0	55% R	61.89	R 219.31	R	157.43 Increase
2309	TOIR089201300014779000000000000000	MKJ983	13039668	28	6	4	5	5	8	0	0	20	6	4	5	5	0	0	0	0	0	-27% R	446.74	R 242.06	-R	204.67 Decrease
2310	TOIR089201300014780000000000000000	MKJ989	30046180	9	6	3	0	0	0	0	0	51	6	4	5	5	10	10	10	1	83% R	65.07	R 1212.30	R	1147.23 Increase	
2311	TOIR089201300014782000000000000000	MKJ852	HKC2973	37	6	4	5	5	10	7	0	36	6	4	5	5	10	6	0	0	0	-3% R	699.40	R 671.45	-R	27.94 Decrease
2312	TOIR089201300014787000000000000000	MKK066	13037617	20	6	4	5	5	0	0	0	21	6	4	5	5	1	0	0	0	0	8% R	228.95	R 271.47	R	42.52 Increase
2313	TOIR089201300014792000000000000000	MKJ298	HKC2822	4	4	0	0	0	0	0	0	28	6	4	5	5	8	0	0	0	0	84% R	31.17	R 455.29	R	424

SGID	Old Meter	New Meter	Old Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	New Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	% Loss	Monthly Bill Old	Monthly Bill New	Change on Revenue	Increase / Decrease		
				R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72							
2341	TOIR089201300014958000000000000000	WPI293	13038035	14	6	4	4	0	0	0	0	13	6	4	3	0	0	0	0	0	-2% R	121.79	R	118.66	-R	3.13 Decrease	
2342	TOIR089201300014981000000000000000	WPD970	30053227	39	6	4	5	5	10	9	0	23	6	4	5	5	3	0	0	0	-41% R	756.75	R	313.14	-R	443.62 Decrease	
2343	TOIR089201300015004000000000000000	WPI331	30048048	6	6	0	0	0	0	0	0	59	6	4	5	5	10	10	10	9	89% R	46.12	R	1515.02	R	1468.90 Increase	
2344	TOIR089201300015005000000000000000	WPI327	30037615	23	6	4	5	5	3	0	0	21	6	4	5	5	1	0	0	0	-9% R	319.84	R	264.12	-R	55.72 Decrease	
2345	TOIR089201300015009000000000000000	WPF180	30045074	15	6	4	5	0	0	0	0	32	6	4	5	5	10	2	0	0	53% R	137.55	R	562.54	R	425.00 Increase	
2346	TOIR089201300015010000000000000000	WPI314	30046157	9	6	3	0	0	0	0	0	15	6	4	5	0	0	0	0	0	43% R	63.69	R	147.93	R	84.25 Increase	
2347	TOIR089201300015023000000000000000	WPG929	13037641	12	6	4	2	0	0	0	0	30	6	4	5	5	10	0	0	0	59% R	103.01	R	501.86	R	398.85 Increase	
2348	TOIR089201300015024000000000000000	WPH038	13015455	28	6	4	5	5	8	0	0	22	6	4	5	5	2	0	0	0	-21% R	460.33	R	298.43	-R	161.90 Decrease	
2349	TOIR089201300015031000000000000000	WPO995	30045601	15	6	4	5	0	0	0	0	59	6	4	5	5	10	10	10	9	74% R	143.63	R	1507.98	R	1364.35 Increase	
2350	TOIR089201300015034000000000000000	WPD739	30046529	34	6	4	5	5	10	4	0	18	6	4	5	3	0	0	0	0	-47% R	633.38	R	205.04	-R	428.34 Decrease	
2351	TOIR089201300015037000000000000000	WPH017	30050840	54	6	4	5	5	10	10	10	4	51	6	4	5	5	10	10	10	1	-7% R	1337.04	R	1191.18	-R	145.86 Decrease
2352	TOIR089201300015040000000000000000	WPI339	13038055	18	6	4	5	3	0	0	0	21	6	4	5	5	1	0	0	0	15% R	196.75	R	269.02	R	72.28 Increase	
2353	TOIR089201300015044000000000000000	WPI286	13038031	78	6	4	5	5	10	10	10	28	21	6	4	5	5	1	0	0	-73% R	2249.17	R	256.77	-R	1992.40 Decrease	
2354	TOIR089201300015048000000000000000	WPE864	30046624	28	6	4	5	5	8	0	0	17	6	4	5	2	0	0	0	0	-39% R	452.84	R	178.27	-R	274.57 Decrease	
2355	TOIR089201300015072000000000000000	WOW500	HKD2799	17	6	4	5	2	0	0	0	13	6	4	3	0	0	0	0	0	-20% R	175.00	R	118.66	-R	56.34 Decrease	
2356	TOIR089201300015103000000000000000	WOW695	13030997	23	6	4	5	5	3	0	0	34	6	4	5	5	10	4	0	0	32% R	319.46	R	615.67	R	296.21 Increase	
2357	TOIR089201300015113000000000000000	WPB373	30046669	16	6	4	5	1	0	0	0	47	6	4	5	5	10	10	7	0	66% R	159.26	R	1058.73	R	899.47 Increase	
2358	TOIR089201300015125000000000000000	WBP294	30046184	51	6	4	5	5	10	10	10	1	42	6	4	5	5	10	10	2	-19% R	1221.25	R	863.90	-R	357.35 Decrease	
2359	TOIR089201300015126000000000000000	WOW413	13015453	20	6	4	5	5	0	0	0	22	6	4	5	5	2	0	0	0	9% R	227.49	R	278.83	R	51.33 Increase	
2360	TOIR089201300015134000000000000000	WBP139	30046580	110	6	4	5	5	10	10	10	60	11	6	4	1	0	0	0	0	-90% R	3497.36	R	80.84	-R	3416.52 Decrease	
2361	TOIR089201300015193000000000000000	WRB660	30046731	83	6	4	5	5	10	10	10	33	26	6	4	5	5	0	0	0	-68% R	2458.76	R	406.27	-R	2052.49 Decrease	
2362	TOIR089201300015194000000000000000	WRB785	30046572	12	6	4	2	0	0	0	0	14	6	4	4	0	0	0	0	0	17% R	94.23	R	125.84	R	31.61 Increase	
2363	TOIR089201300015195000000000000000	WRB502	30046717	48	6	4	5	5	10	10	8	0	12	6	4	2	0	0	0	0	-75% R	1094.60	R	101.89	-R	992.71 Decrease	
2364	TOIR089201300015202000000000000000	WRB322	13010840	42	6	4	5	5	10	10	2	0	28	6	4	5	5	8	0	0	-33% R	879.73	R	465.09	-R	414.63 Decrease	
2365	TOIR089201300015205000000000000000	WRB416	HKD2955	13	6	4	3	0	0	0	0	0	18	6	4	5	3	0	0	0	28% R	117.61	R	206.82	R	89.21 Increase	
2366	TOIR089201300015213000000000000000	WPI535	130087248	16	6	4	5	1	0	0	0	69	6	4	5	5	10	10	10	19	77% R	154.71	R	1916.30	R	1761.59 Increase	
2367	TOIR089201300015222000000000000000	WRB585	13039160	78	6	4	5	5	10	10	10	28	34	6	4	5	5	10	4	0	-56% R	2239.70	R	628.95	-R	1610.75 Decrease	
2368	TOIR089201300015224000000000000000	WRB494	130087492	21	6	4	5	5	1	0	0	59	6	4	5	5	10	10	10	9	65% R	262.66	R	1522.06	R	1259.40 Increase	
2369	TOIR089201300015226000000000000000	WPH049	13009424	46	6	4	5	5	10	10	6	0	30	6	4	5	5	10	0	0	-34% R	1009.25	R	512.07	-R	497.18 Decrease	
2370	TOIR089201300015236000000000000000	WRB318	30046196	22	6	4	5	5	2	0	0	28	6	4	5	5	8	0	0	0	19% R	303.44	R	443.85	R	140.42 Increase	
2371	TOIR089201300015237000000000000000	WRB304	30046191	11	6	4	1	0	0	0	0	117	6	4	5	5	10	10	10	67	91% R	80.57	R	3753.74	R	3673.17 Increase	
2372	TOIR089201300015240000000000000000	WRB485	13035916	33	6	4	5	5	10	3	0	44	6	4	5	5	10	10	4	0	25% R	595.53	R	944.03	R	348.50 Increase	
2373	TOIR089201300015245000000000000000	WRB431	13037572	11	6	4	1	0	0	0	0	14	6	4	4	0	0	0	0	0	23% R	80.40	R	122.25	R	41.84 Increase	
2374	TOIR089201300015250000000000000000	WRB583	30045966	53	6	4	5	5	10	10	10	3	8	6	2	0	0	0	0	0	-84% R	1288.86	R	60.76	-R	1228.10 Decrease	
2375	TOIR089201300015272000000000000000	WPE906	30037276	23	6	4	5	5	3	0	0	47	6	4	5	5	10	10	7	0	52% R	317.38	R	1075.60	R	758.22 Increase	
2376	TOIR089201300015294000000000000000	WPH014	HKD2812	31	6	4	5	5	10	1	0	18	6	4	5	3	0	0	0	0	-43% R	549.67	R	197.90	-R	351.77 Decrease	
2377	TOIR089201300015324000000000000000	WPF803	30045958	17	6	4	5	2	0	0	0	36	6	4	5	0	10	6	0	0	53% R	180.34	R	687.39	R	507.06 Increase	
2378	TOIR089201300015341000000000000000	WPB194	30048035	17	6	4	5	2	0	0	0	5	5	0	0	0	0	0	0	0	-70% R	186.12	R	37.00	-R	149.12 Decrease	
2379	TOIR089201300015344000000000000000	WPF775	13039137	13	6	4	3	0	0	0	0	13	6	4	3	0	0	0	0	0	-2% R	113.39	R	110.28	-R	3.11 Decrease	
2380	TOIR089201300015345000000000000000	WPE836	1308070	13	6	4	3	0	0	0	0	23	6	4	5	5	3	0	0	0	40% R	118.71	R	307.67	R	188.96 Increase	
2381	TOIR089201300015364000000000000000	WPE855	30046579	34	6	4	5	5	10	4	0	38	6	4	5	5	10	8	0	0	11% R	610.94	R	728.35	R	117.41 Increase	
2382	TOIR089201300015368000000000000000	MKI756	HKB7712	6	6	0	0	0	0	0	0	28	6	4	5	5	8	0	0	0	78% R	44.89	R	462.64	R	417.75 Increase	
2383	TOIR089201300015384000000000000000	MKI766	13010866	43	6	4	5	5	10	10	3	0	44	6	4	5	5	10	10	4	1% R	916.74	R	930.53	R	13.79 Increase	
2384	TOIR089201300015386000000000000000	MKI818	HKB7634	4	4	0	0	0	0	0	0	14	6	4	4	0	0	0	0	0	75% R	25.47	R	125.84	R	100.37 Increase	
2385	TOIR089201300015387000000000000000	MKI759	HKB7743	3	3	0	0	0	0	0	0	17	6	4	5	2	0	0	0	0	84% R	19.30	R	180.05	R	160.76 Increase	
2386	TOIR089201300015390000000000000000	MKK135	13037866	18	6	4	5	3	0	0	0	15	6	4	5	0	0	0	0	0	-16% R	188.84	R	136.62	-R	52.22 Decrease	
2387	TOIR089201300015421000000000000000	MKI773	HKC2690	6	6	0	0	0	0	0	0	32	6	4	5	5	10	2	0	0	83% R	39.47	R	554.57	R	515.11 Increase	
2388	TOIR089201300015424000000000000000	MKI770	HKB7654	5	5	0	0	0	0	0	0	22	6	4	5	5	2	0	0	0	77% R	36.40	R	291.08	R	254.68 Increase	
2389	TOIR089201300015436000000000000000	MKI875	HKC9675	13	6	4	3	0	0	0	0	30	6	4	5	5	10	0	0	0	56% R	113.55	R	506.76	R	393.21 Increase	
2390	TOIR089201300015438000000000000000	MKI846	HKD4227	8	6	2	0	0	0	0	0	11	6	4	1	0	0	0	0	0	26% R	56.83	R	81.54	R	24.71 Increase	
2391	TOIR089201300015440000000000000000	MKI695	HKB7729	2	2	0	0	0	0	0	0	40	6	4	5	5	10	10	0	0	96% R	12.21	R				

SGID	Old Meter	New Meter	Old Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	New Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	% Loss	Monthly Bill Old	Monthly Bill New	Change on Revenue	Increase / Decrease		
				R	7.14	R	7.58	R	13.17	R	19.63	R	26.96	R	29.22	R	37.11	R	38.72	R							
2419	TOIR089201300015629000000000000000	CMKJ703	HKB4121	12	6	4	2	0	0	0	0	14	6	4	4	0	0	0	0	0	14% R	103.26	R	130.63	R	27.37 Increase	
2420	TOIR089201300015632000000000000000	MKJ728	HKD4124	5	5	0	0	0	0	0	0	30	6	4	5	5	10	0	0	0	84% R	35.50	R	512.07	R	476.57 Increase	
2421	TOIR089201300015634000000000000000	MKJ824	HKB7717	1	1	0	0	0	0	0	0	25	6	4	5	5	0	0	0	0	95% R	8.97	R	374.41	R	365.44 Increase	
2422	TOIR089201300015641000000000000000	MKJ761	HKB7723	2	2	0	0	0	0	0	0	12	6	4	2	0	0	0	0	0	79% R	17.17	R	95.91	R	78.74 Increase	
2423	TOIR089201300015643000000000000000	MKJ760	HKC3000	9	6	3	0	0	0	0	0	59	6	4	5	5	10	10	10	9	84% R	67.02	R	1,500.94	R	1,433.92 Increase	
2424	TOIR089201300015655000000000000000	MKK008	HKD3826	14	6	4	4	0	0	0	0	20	6	4	5	5	0	0	0	0	31% R	122.33	R	237.16	R	114.83 Increase	
2425	TOIR089201300015656000000000000000	MKK000	13038088	4	4	0	0	0	0	0	0	16	6	4	5	1	0	0	0	0	73% R	31.92	R	163.99	R	132.07 Increase	
2426	TOIR089201300015664000000000000000	MKJ721	HKC9707	3	3	0	0	0	0	0	0	16	6	4	5	1	0	0	0	0	81% R	21.77	R	167.56	R	145.79 Increase	
2427	TOIR089201300015673000000000000000	MKJ930	13037558	10	6	4	0	0	0	0	0	43	6	4	5	5	10	10	3	0	76% R	77.55	R	903.54	R	825.99 Increase	
2428	TOIR089201300015682000000000000000	MKJ895	HKB7632	2	2	0	0	0	0	0	0	5	5	0	0	0	0	0	0	0	54% R	16.02	R	35.05	R	19.03 Increase	
2429	TOIR089201300015683000000000000000	MKJ864	HKD4138	2	2	0	0	0	0	0	0	6	6	0	0	0	0	0	0	0	70% R	12.58	R	42.19	R	29.61 Increase	
2430	TOIR093000200001079000000000000000	32167848	13058171	13	6	4	3	0	0	0	0	8	6	2	0	0	0	0	0	0	-39% R	107.20	R	55.24	-R	51.95 Decrease	
2431	TOIR093000200001149000000000000000	33175531	13046145	15	6	4	5	0	0	0	0	12	6	4	2	0	0	0	0	0	-21% R	144.38	R	100.70	-R	43.69 Decrease	
2432	TOIR093000200001402000000000000000	1824630	13046063	16	6	4	5	1	0	0	0	32	6	4	5	5	10	2	0	0	50% R	160.76	R	578.48	R	417.72 Increase	
2433	TOIR093000200001453000000000000000	#01828302	13058049	24	6	4	5	5	4	0	0	20	6	4	5	5	0	0	0	0	-16% R	340.79	R	239.61	-R	101.18 Decrease	
2434	TOIR093000400002292000000000000000	CMOM795	13037360	30	6	4	5	5	5	10	0	9	6	3	0	0	0	0	0	0	-71% R	498.67	R	62.82	-R	435.85 Decrease	
2435	TOIR093000120004351000000000000000	32167906	13038048	22	6	4	5	5	2	0	0	25	6	4	5	5	5	0	0	0	11% R	293.33	R	364.61	R	71.28 Increase	
2436	TOIR093000180005021000000000000000	CNMK244	13018660	9	6	3	0	0	0	0	0	13	6	4	3	0	0	0	0	0	32% R	65.58	R	116.26	R	50.68 Increase	
2437	TOIR096100000000134000000000000000	CNMN1441	13033173	28	6	4	5	5	8	0	0	41	6	4	5	5	10	10	1	0	33% R	440.15	R	838.92	R	398.77 Increase	
2438	TOIR001100000000043000010000000000	CMKJ838	GKH0026	74	6	4	5	5	10	10	10	24	6	6	4	5	5	10	10	16	-10% R	2,091.04	R	1,796.62	-R	294.42 Decrease	
2439	TOIR010000400000125000000000000000	32205296	13062790	45	6	4	5	5	10	10	5	0	75	6	4	5	5	10	10	25	40% R	984.51	R	2,123.98	R	1,139.47 Increase	
2440	TOIR030102100000366000000000000000	CNWA210	GKG2182	48	6	4	5	5	10	10	8	0	46	6	4	5	5	10	10	6	0	-4% R	1,093.37	R	1,028.37	-R	65.00 Decrease
2441	TOIR055000100000046000000000000000	CNJD498	13045708	46	6	4	5	5	10	10	6	0	62	6	4	5	5	10	10	12	25% R	1,037.08	R	1,617.10	R	580.02 Increase	
2442	TOIQ060004000006270000000000000000	XDA116	13032437	18	6	4	5	3	0	0	0	39	6	4	5	5	10	9	0	0	54% R	204.44	R	783.02	R	578.58 Increase	
2443	TOIQ093000000000398000000000000000	CMS0683	13056460	28	6	4	5	5	8	0	0	0	24	6	4	5	5	4	0	0	-13% R	455.68	R	355.37	-R	100.31 Decrease	
2444	TOIQ010100800004275000000000000000	BXPJ166	13039651	17	6	4	5	2	0	0	0	96	6	4	5	5	10	10	46	82% R	186.86	R	2,951.18	R	2,764.32 Increase		
2445	TOIQ012100000000864000100000000000	C-MHF253	GKF2966	37	6	4	5	5	10	7	0	0	44	6	4	5	5	10	10	4	0	16% R	715.47	R	947.40	R	231.93 Increase
2446	TOIQ015601300018330000000000000000	MRC655	13048636	39	6	4	5	5	10	9	0	0	46	6	4	5	5	10	10	6	0	15% R	769.31	R	1,012.34	R	243.03 Increase
2447	TOIQ018300000000196000000000000000	CMJC781	GKH3980	199	6	4	5	5	10	10	10	149	264	6	4	5	5	10	10	214	25% R	6,949.02	R	9,452.91	R	2,503.89 Increase	
2448	TOIQ018300000000090800000000000000	CMJC774	13039798	402	6	4	5	5	10	10	10	352	605	6	4	5	5	10	10	555	34% R	14,783.37	R	22,659.66	R	7,876.29 Increase	
2449	TOIQ018300000000112700000000000000	BZWA500	13068269	156	6	4	5	5	10	10	10	106	334	6	4	5	5	10	10	284	53% R	5,261.47	R	12,150.41	R	6,888.93 Increase	
2450	TOIQ018300000000188600000000000000	E025001392	13068454	239	6	4	5	5	10	10	10	189	266	6	4	5	5	10	10	216	10% R	8,492.98	R	9,540.03	R	1,047.05 Increase	
2451	TOIQ01830000000435500000RE00000000	WTE005420	GZK337	7575	6	4	5	5	10	10	10	7525	8052	6	4	5	5	10	10	10	8002	6% R	292,550.16	R	311,023.63	R	18,473.47 Increase
2452	TOIQ018400000000034800000700000000	21376888	GKH4518	49	6	4	5	5	10	10	9	0	48	6	4	5	5	10	10	8	0	-3% R	1,128.00	R	1,078.97	-R	49.03 Decrease
2453	TOIQ021700100000386000000000000000	CMRN230	13030988	20	6	4	5	5	0	0	0	13	6	4	3	0	0	0	0	0	-32% R	228.57	R	116.26	-R	112.31 Decrease	
2454	TOIQ021700100000965000000000000000	CLRM040	GKG4733	46	6	4	5	5	10	10	6	0	35	6	4	5	5	10	5	0	0	-23% R	1,015.44	R	666.14	-R	349.29 Decrease
2455	TOIQ021700200002998000000000000000	CLRL828	13031679	18	6	4	5	3	0	0	0	18	6	4	5	3	0	0	0	0	-2% R	205.20	R	199.68	-R	5.52 Decrease	
2456	TOIQ023900000000103000010000000000	CLSJ421	GKH8512	233	6	4	5	3	10	10	10	183	259	6	4	5	5	10	10	209	10% R	8,258.80	R	9,276.62	R	1,017.82 Increase	
2457	TOIQ024300800000287000000000000000	32033693	13013058	18	6	4	5	3	0	0	0	27	6	4	5	5	7	0	0	0	32% R	201.58	R	423.43	R	221.85 Increase	
2458	TOIQ025200000000226000000000000000	643214#WD1	32037933	26	6	4	5	6	0	0	0	0	48	6	4	5	5	10	10	8	0	45% R	409.47	R	1,102.59	R	693.12 Increase
2459	TOIQ026701900023800001500000000000	BLMD369	GKG4413	48	6	4	5	5	10	10	8	0	63	6	4	5	5	10	10	13	24% R	1,085.72	R	1,676.19	R	590.47 Increase	
2460	TOIQ027000000001997000000000000000	2225743	13035015	43	6	4	5	5	10	10	3	0	43	6	4	5	5	10	10	3	0	1% R	892.71	R	904.58	R	11.87 Increase
2461	TOIQ027600000000061000010000000000	BXB8417	120114626	111	6	4	5	5	10	10	61	103	6	4	5	5	10	10	53	-8% R	3,534.26	R	3,209.31	-R	324.94 Decrease		
2462	TOIQ027603300036170000000000000000	BKHB749	13035495	41	6	4	5	5	10	10	1	0	54	6	4	5	5	10	10	4	24% R	851.97	R	1,341.07	R	489.10 Increase	
2463	TOIQ027603300037020000000000000000	CKUK970	13036576	56	6	4	5	5	10	10	10	6	51	6	4	5	5	10	10	1	-8% R	1,392.70	R	1,221.69	-R	171.01 Decrease	
2464	TOIQ028802500001045000000000000000	21376810	GKI0986	40	6	4	5	5	10	10	0	0	65	6	4	5	5	10	10	15	39% R	802.67	R	1,761.42	R	958.75 Increase	
2465	TOIQ030400000000015000010000000000	MUN918	140006558	31	6	4	5	5	10	1	0	0	38	6	4	5	5	10	8	0	0	19% R	532.54	R	750.26	R	217.72 Increase
2466	TOIQ033309000004509000000000000000	21376798	13032357	1374	6	4	5	5	10	10	10	1324	32	6	4	5	5	10	2	0	0	-98% R	52,426.74	R	559.89	-R	51,866.85 Decrease
2467	TOIQ041700000000065000000000000000	CMSC361	13032262	33	6	4	5	5	10	3	0	0	43	6	4	5	5	10	10	3	0	22% R	604.73	R	910.29	R	305.56 Increase
2468	TOIQ048702500001423000000000000000	937191702	13050883	536	6	4	5	5	10	10	10	486	524	6	4	5	5	10	10	474	-2% R	19,990.02	R	19,516.30	-R	473.72 Decrease	
2469	TOIR00000																										

SGID	Old Meter	New Meter	Old Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	New Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	% Loss							
				R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		Monthly Bill Old	Monthly Bill New	Change on Revenue	Increase / Decrease			
2497	T0IR053400400002191000000000000000	WC8663	13063258	25	6	4	5	5	5	0	0	0	28	6	4	5	5	8	0	0	0	10% R	379.19	R	455.09	R	75.89	Increase
2498	T0IR053400500002472000000000000000	CC8697	13046120	17	6	4	5	2	0	0	0	0	22	6	4	5	5	2	0	0	0	25% R	174.14	R	297.82	R	123.68	Increase
2499	T0IR053400500002904000000000000000	BZM8167	13063330	58	6	4	5	5	10	10	8	51	6	4	5	5	10	10	10	10	1	-11% R	1465.99	R	1222.86	-R	243.13	Decrease
2500	T0IR053400500002913000000000000000	BKFP155	13058192	8	6	2	0	0	0	0	0	0	40	6	4	5	5	10	10	0	0	79% R	61.37	R	794.09	R	732.72	Increase
2501	T0IR053400500003005000000000000000	BKXF1586	13056848	39	6	4	5	5	10	9	0	0	45	6	4	5	5	10	10	5	0	14% R	756.88	R	972.14	R	215.26	Increase
2502	T0IR053400500003129000000000000000	BKXF1978	13058367	25	6	4	5	5	5	0	0	0	36	6	4	5	5	10	6	0	0	29% R	375.33	R	669.91	R	294.58	Increase
2503	T0IR053400500003131000000000000000	BKFO751	13006909	46	6	4	5	5	10	10	6	0	43	6	4	5	5	10	10	3	0	-8% R	1032.75	R	894.83	-R	137.93	Decrease
2504	T0IR053400500003190000000000000000	BKXF1616	13062083	25	6	4	5	5	5	0	0	0	91	6	4	5	5	10	10	10	41	72% R	370.73	R	2741.45	R	2370.71	Increase
2505	T0IR053400500003213000000000000000	BZLM257	13058256	34	6	4	5	5	10	4	0	0	30	6	4	5	5	10	0	0	0	-12% R	630.52	R	506.76	-R	123.76	Decrease
2506	T0IR05450000000035700000RE00000000	C.KSJ501	KGK85258	35	6	4	5	5	10	5	0	0	37	6	4	5	5	10	7	0	0	5% R	649.21	R	698.02	R	48.81	Increase
2507	T0IR056700000000001000000000000000	C-MSB 537	KGK27775	9	6	3	0	0	0	0	0	0	6	6	0	0	0	0	0	0	0	-31% R	66.34	R	44.91	-R	21.43	Decrease
2508	T0IR057500000001990000000000000000	2TF066060	13068840	737	6	4	5	5	10	10	10	687	989	6	4	5	5	10	10	10	939	25% R	27764.25	R	37508.78	R	9744.53	Increase
2509	T0IR059000000000007000070000000000	CMS8637	13033115	221	6	4	5	5	10	10	10	171	208	6	4	5	5	10	10	10	158	-6% R	7802.80	R	7301.90	-R	500.90	Decrease
2510	T0IR059700400000476000000000000000	CLWA525	13056698	46	6	4	5	5	10	10	6	0	31	6	4	5	5	10	1	0	0	-33% R	1023.48	R	528.01	-R	495.46	Decrease
2511	T0IR066800000000033700000000000000	CNWC922	KGK0967	6	6	0	0	0	0	0	0	0	100	6	4	5	5	10	10	10	50	94% R	39.98	R	3092.23	R	3052.25	Increase
2512	T0IR071800000000129000000000000000	21375953	13055257	80	6	4	5	5	10	10	10	30	84	6	4	5	5	10	10	10	34	4% R	2347.15	R	2468.94	R	121.79	Increase
2513	T0IR073200300001080000000000000000	GKH4248	22252119	35	6	4	5	5	10	5	0	0	32	6	4	5	5	10	2	0	0	-8% R	659.12	R	573.17	-R	85.95	Decrease
2514	T0IR073400000000001000000000000000	GKH4255	22251656	101	6	4	5	5	10	10	10	51	177	6	4	5	5	10	10	10	127	43% R	3141.80	R	6105.10	R	2963.30	Increase
2515	T0IR076300200000018600002000000000	C-MSB738	13032821	49	6	4	5	5	10	9	0	0	50	6	4	5	5	10	10	10	0	1% R	1139.91	R	1163.88	R	23.97	Increase
2516	T0IR076700000000089400015000000000	21202743	13034725	5	5	0	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	-32% R	37.04	R	25.31	-R	11.72	Decrease
2517	T0IR076700600002568000420000000000	32185376	13035492	145	6	4	5	5	10	10	95	58	6	4	5	5	10	10	10	8	-60% R	4861.37	R	1479.82	-R	3381.55	Decrease	
2518	T0IR076700600002568008600000000000	32183366	30000864	105	6	4	5	5	10	10	10	55	9	6	3	0	0	0	0	0	0	-92% R	3284.17	R	62.82	-R	3221.35	Decrease
2519	T0IR076700600002289200000000000000	32185333	130093867	8	6	2	0	0	0	0	0	0	16	6	4	5	1	0	0	0	0	49% R	60.31	R	163.99	R	103.69	Increase
2520	T0IR091302200000060800000000000000	935693802	GZT187	242	6	4	5	5	10	10	10	192	171	6	4	5	5	10	10	10	121	-29% R	8615.79	R	5872.78	-R	2743.01	Decrease
2521	T0IR093000200001215000000000000000	32167915	13061949	18	6	4	5	3	0	0	0	0	24	6	4	5	5	4	0	0	0	23% R	203.40	R	340.10	R	136.70	Increase
2522	T0IR093000500002472000000000000000	99488839	13058238	11	6	4	1	0	0	0	0	0	21	6	4	5	5	1	0	0	0	49% R	83.56	R	271.47	R	187.92	Increase
2523	T0IR093001400004429000000000000000	32167747	KGK3734	3	3	0	0	0	0	0	0	0	11	6	4	1	0	0	0	0	0	73% R	21.42	R	86.33	R	64.91	Increase
2524	T0IR093001400004451600000000000000	32183309	13037947	20	6	4	0	5	0	0	0	0	12	6	4	2	0	0	0	0	0	-38% R	228.57	R	101.89	-R	126.68	Decrease
2525	T0IR093001500004600000000000000000	32185286	13012246	83	6	4	5	5	10	10	10	33	45	6	4	5	5	10	10	5	0	-46% R	2449.86	R	967.64	-R	1482.22	Decrease
2526	T0IR095001300000984000000000000000	CLNI184	KGK8502	43	6	4	5	5	10	10	3	0	17	6	4	5	2	0	0	0	0	-60% R	922.66	R	183.62	-R	739.04	Decrease
2527	T0IR303020110000167000000000000000	B-YUL295	KGK4407	69	6	4	5	5	10	10	10	19	27	6	4	5	5	7	0	0	0	-61% R	1899.29	R	423.81	-R	1475.48	Decrease
2528	T0IR303020160000182700000000000000	BLUP780	13062702	12	6	4	2	0	0	0	0	0	118	6	4	5	5	10	10	10	68	90% R	98.56	R	3808.98	R	3710.42	Increase
2529	T0IR303020160000187000000000000000	CLU0843	30019181	38	6	4	5	5	10	8	0	0	99	6	4	5	5	10	10	49	62% R	734.26	R	3055.43	R	2321.17	Increase	
2530	T0IR303020160000193100000000000000	CLU0874	30021371	13	6	4	3	0	0	0	0	0	53	6	4	5	5	10	10	10	3	76% R	107.97	R	1268.35	R	1160.38	Increase
2531	T0IR303020170000181400000000000000	CKUN272	13030523	12	6	4	2	0	0	0	0	0	63	6	4	5	5	10	10	10	13	80% R	104.57	R	1685.33	R	1580.77	Increase
2532	T0IR303110250000340000000000000000	CNUA849	130077022	3	3	0	0	0	0	0	0	0	24	6	4	5	5	4	0	0	0	86% R	24.48	R	342.55	R	318.07	Increase
2533	T0IR041200000000300000000000000000	32192862	GKH4260	19	6	4	5	4	0	0	0	0	40	6	4	5	5	10	10	10	0	52% R	219.40	R	785.47	R	566.07	Increase
2534	T0IR054500000000040000000000000000	32103739	KGK1049	76	6	4	5	5	10	10	10	26	171	6	4	5	5	10	10	10	121	56% R	2173.68	R	5865.74	R	3692.06	Increase
2535	T0IQ003300000000257600000000000000	30199003	13034126	19	6	4	5	4	0	0	0	0	36	6	4	5	5	10	6	0	0	48% R	215.46	R	695.57	R	480.10	Increase
2536	T0IQ003300000000260300000000000000	30289118	13032286	37	6	4	5	5	10	7	0	0	37	6	4	5	5	10	7	0	0	-2% R	721.04	R	700.06	-R	20.98	Decrease
2537	T0IQ003300000000272400000000000000	31138004	13038496	16	6	4	5	1	0	0	0	0	15	6	4	5	0	0	0	0	0	-10% R	166.27	R	136.38	-R	29.90	Decrease
2538	T0IQ012100200014410000000000000000	XCW046	KGK4376	40	6	4	5	5	10	10	0	0	38	6	4	5	5	10	8	0	0	-4% R	787.60	R	740.52	-R	47.08	Decrease
2539	T0IQ018300000000021000000000000000	CLSF107	KGK1286	103	6	4	5	5	10	10	10	53	132	6	4	5	5	10	10	82	22% R	3238.16	R	4359.99	R	1121.83	Increase	
2540	T0IQ019700300000017000000000000000	BKCT992	KGK4774	53	6	4	5	5	10	10	10	3	104	6	4	5	5	10	10	54	49% R	1282.99	R	3267.98	R	1984.99	Increase	
2541	T0IQ024301300000591000000000000000	20221476	13037816	43	6	4	5	5	10	10	3	0	81	6	4	5	5	10	10	31	47% R	897.92	R	2380.06	R	1482.14	Increase	
2542	T0IQ024303200000942000000000000000	CLUG377	13030651	50	6	4	5	5	10	10	0	65	6	4	5	5	10	10	10	15	23% R	1175.59	R	1747.34	R	571.75	Increase	
2543	T0IQ024303200000945000000000000000	CLUG310	13045030	76	6	4	5	5	10	10	10	26	149	6	4	5	5	10	10	99	49% R	2161.29	R	4999.82	R	2838.53	Increase	
2544	T0IQ024500000000063000000000000000	KL8556	13013346	79	6	4	5	5	10	10	29	78	6	4	5	5	10	10	10	28	-2% R	2295.92	R	2234.86	-R	61.06	Decrease	

SGID	Old Meter	New Meter	Old Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	New Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	% Loss	Monthly Bill Old	Monthly Bill New	Change on Revenue	Increase / Decrease		
				R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72							
2575	TOIR076700400002115000470000000000	BKLD 529	13038667	24	6	4	5	5	4	0	0	26	6	4	5	5	6	0	0	0	9% R	338.78	R	405.66	R	66.88 Increase	
2576	TOIR076700600002609000000000000000	32078796	13035818	20	6	4	5	5	0	0	0	27	6	4	5	5	7	0	0	0	27% R	233.48	R	425.88	R	192.40 Increase	
2577	TOIR089200200001538000000000000000	LLS876	KGK3245	19	6	4	5	4	0	0	0	33	6	4	5	5	10	3	0	0	42% R	213.32	R	581.14	R	367.81 Increase	
2578	TOIR089200200002287000000000000000	LMPO28	13062415	41	6	4	5	5	10	10	1	23	6	4	5	5	3	0	0	0	-43% R	828.12	R	322.94 -R		505.18 Decrease	
2579	TOIR089200500003577000000000000000	CLMM519	13056624	24	6	4	5	5	4	0	0	31	6	4	5	5	10	1	0	0	22% R	352.09	R	533.32	R	181.23 Increase	
2580	TOIR089200600004223000000000000000	LMW519	13018417	20	6	4	5	5	0	0	0	30	6	4	5	5	10	0	0	0	32% R	245.76	R	501.86	R	256.09 Increase	
2581	TOIR093000200001100000000000000000	1824572	13058296	25	6	4	5	5	5	0	0	36	6	4	5	5	10	6	0	0	29% R	380.95	R	674.11	R	293.16 Increase	
2582	TOIR093000400002101800000000000000	1819865	13012019	8	6	2	0	0	0	0	0	28	6	4	5	5	8	0	0	0	72% R	56.11	R	455.29	R	399.19 Increase	
2583	TOIR093000400002105000000000000000	BKMC697	13012259	122	6	4	5	5	10	10	10	72	56	6	4	5	5	10	10	10	6	-54% R	3 947.86	R	1 405.90 -R		2 541.96 Decrease
2584	TOIR093000500002397000000000000000	1821363	13058207	18	6	4	5	3	0	0	0	20	6	4	5	5	0	0	0	0	6% R	206.56	R	228.24	R	21.68 Increase	
2585	TOIR093000700003139000000000000000	1819449	13058334	17	6	4	5	2	0	0	0	4	4	0	0	0	0	0	0	0	-75% R	186.32	R	30.76 -R		155.57 Decrease	
2586	TOIR093000700003361000000000000000	1828909	13011637	11	6	4	1	0	0	0	0	60	6	4	5	5	10	10	10	10	81% R	87.75	R	1 543.18	R	1 455.43 Increase	
2587	TOIR093001000004029000000000000000	BKKH03	13037452	50	6	4	5	5	10	10	10	26	6	4	5	5	6	0	0	0	-47% R	1 180.39	R	410.15 -R		770.23 Decrease	
2588	TOIR010000300000707000350000000000	BLH2808	13062802	7	6	1	0	0	0	0	0	9	6	3	0	0	0	0	0	0	26% R	48.05	R	65.58	R	17.53 Increase	
2589	TOIR030200800001453000000000000000	CYUL219	KGK4405	44	6	4	5	5	10	10	4	34	6	4	5	5	10	4	0	0	-23% R	943.03	R	623.64 -R		319.39 Decrease	
2590	TOIQ003300000001201000000000000000	YUJL044	KGK0946	31	6			5	5	10	1	0	27	6	4	5	5	7	0	0	-14% R	539.63	R	417.58	R	122.05 Decrease	
2591	TOIQ004500000001059000000000000000	30203799	13055805	34	6	4	5	5	10	4	0	44	6	4	5	5	10	10	4	0	23% R	617.15	R	944.55	R	327.40 Increase	
2592	TOIQ011300000001205000080000000000	BXUB8687	13012508	23	6	4	5	5	3	0	0	14	6	4	4	0	0	0	0	0	-40% R	306.71	R	119.26 -R		187.45 Decrease	
2593	TOIQ011500000000917000000000000000	840063*	13047005	50	6	4	5	5	10	10	10	53	6	4	5	5	10	10	10	3	6% R	1 154.43	R	1 277.92	R	123.49 Increase	
2594	TOIQ012100200014350000000000000000	XDCC93	KGK4495	20	6	4	5	5	0	0	0	22	6	4	5	5	2	0	0	0	11% R	239.23	R	303.33	R	64.10 Increase	
2595	TOIQ0127000000062700000RE00000000	YDF296	13045837	13	6	4	3	0	0	0	0	13	6	4	3	0	0	0	0	0	3% R	110.64	R	115.06	R	4.42 Increase	
2596	TOIQ019700000000694000000000000000	29105436	KGK4700	28	6	4	5	5	8	0	0	29	6	4	5	5	9	0	0	0	5% R	444.98	R	487.15	R	42.18 Increase	
2597	TOIQ024100200000512000160000000000	9094467	13068422	171	6	4	5	5	10	10	121	242	6	4	5	5	10	10	10	192	300% R	5 843.79	R	8 618.38	R	2 774.59 Increase	
2598	TOIQ026701900002656000000000000000	B-KLA629	KGK4406	6	6	0	0	0	0	0	0	14	6	4	4	0	0	0	0	0	55% R	44.79	R	124.90	R	80.11 Increase	
2599	TOIQ027000000001819000000000000000	ZSF840	KGK0167	38	6	4	5	5	10	8	0	0	34	6	4	5	5	10	4	0	-10% R	749.75	R	634.88 -R		114.87 Decrease	
2600	TOIQ027600200000556000000000000000	ZSG128	13057513	93	6	4	5	5	10	10	10	43	108	6	4	5	5	10	10	58	14% R	2 832.04	R	3 426.38	R	594.34 Increase	
2601	TOIQ027602500003529000000000000000	YWAL310	KGK6937	36	6	4	5	5	10	6	0	0	35	6	4	5	5	10	5	0	-3% R	685.98	R	657.73 -R		28.25 Decrease	
2602	TOIQ027603300003630000000000000000	CKUS409	13036593	91	6	4	5	5	10	10	0	41	72	6	4	5	5	10	10	22	-20% R	2 742.09	R	2 034.81 -R		707.29 Decrease	
2603	TOIQ027603300003696000000000000000	CKUK380	13055586	53	6	4	5	5	10	10	3	79	6	4	5	5	10	10	10	29	33% R	1 278.48	R	2 273.58	R	995.10 Increase	
2604	TOIQ046700900001987000000000000000	XDF175	13056320	41	6	4	5	5	10	10	1	36	6	4	5	5	10	6	0	0	-13% R	835.42	R	674.11 -R		161.31 Decrease	
2605	TOIQ068200000000706000000000000000	BKHT642	KGK0105	35	6	4	5	5	10	5	0	55	6	4	5	5	10	10	10	5	36% R	665.04	R	1 374.22	R	709.19 Increase	
2606	TOIR007000000000031000000000000000	ZS4863	13056353	54	6	4	5	5	10	10	10	4	39	6	4	5	5	10	9	0	-27% R	1 315.26	R	769.74 -R		545.52 Decrease	
2607	TOIR026000400000851000000000000000	BKHJ240	13039472	45	6	4	5	5	10	10	5	0	64	6	4	5	5	10	10	14	29% R	984.51	R	1 701.58	R	717.07 Increase	
2608	TOIR028100600003199000000000000000	ZWA941	13012244	30	6	4	5	5	10	0	0	18	6	4	5	3	0	0	0	0	-41% R	500.02	R	189.72 -R		310.30 Decrease	
2609	TOIR032302400000183000000000000000	29022178	13032029	102	6	4	5	5	10	10	10	52	205	6	4	5	5	10	10	155	50% R	3 171.59	R	7 184.57	R	4 012.98 Increase	
2610	TOIR040400000000010000000000000000	125431	30037500	61	6	4	5	5	10	10	10	11	61	6	4	5	5	10	10	11	0% R	1 605.66	R	1 613.58	R	7.92 Increase	
2611	TOIR041000100001914000000000000000	CKSD640	KGK0930	47	6	4	5	5	10	7	0	34	6	4	5	5	10	4	0	0	-27% R	1 062.85	R	630.38 -R		432.47 Decrease	
2612	TOIR045108000001489000000000000000	BKJD142	KGK4408	54	6	4	5	5	10	10	10	4	55	6	4	5	5	10	10	5	1% R	1 331.39	R	1 353.10	R	21.71 Increase	
2613	TOIR04870000000020800000RE00000000	CM00073251	130103089	53	6	4	5	5	10	10	10	3	53	6	4	5	5	10	10	3	0% R	1 299.13	R	1 295.16 -R		3.97 Decrease	
2614	TOIR051100000000245000000000000000	CKSA283	13055476	52	6	4	5	5	10	10	2	38	6	4	5	5	10	8	0	0	-26% R	1 228.14	R	738.09 -R		490.06 Decrease	
2615	TOIR051100000000271000000000000000	CKSA350	13038903	61	6	4	5	5	10	10	10	11	16	6	4	5	1	0	0	0	-75% R	1 614.20	R	148.83 -R		1 465.38 Decrease	
2616	TOIR052000000000014100000000000000	29052265	KGK4430	151	6	4	5	5	10	10	10	101	94	6	4	5	5	10	10	44	-37% R	5 065.29	R	2 887.82 -R		2 177.47 Decrease	
2617	TOIR056303700000777000000000000000	6-KWA838	13056373	71	6	4	5	5	10	10	10	21	69	6	4	5	5	10	10	19	-3% R	1 992.86	R	1 919.82 -R		73.04 Decrease	
2618	TOIR056303700000778000000000000000	BKWA971	HKC2785	59	6	4	5	5	10	10	10	9	53	6	4	5	5	10	10	3	-9% R	1 510.24	R	1 303.82 -R		206.42 Decrease	
2619	TOIR074900100000182000000000000000	CKJ601	KGK2186	327	6	4	5	5	10	10	10	277	113	6	4	5	5	10	10	63	-65% R	11 903.75	R	3 627.02 -R		8 276.73 Decrease	
2620	TOIR076700400002115000220000000000	KLD.555	130081711	24	6	4	5	5	4	0	0	0	29	6	4	5	5	9	0	0	16% R	345.00	R	472.45	R	127.45 Increase	
2621	TOIR089200500002979000000000000000	CLLS534	HKD3987	55	6	4	5	5	10	10	10	5	59	6	4	5	5	10	10	9	7% R	1 360.89	R	1 515.02	R	154.13 Increase	
2622	TOIR089200500002996000000000000000	CLLY803	HKC2950	66	6	4	5	5	10	10	16	16	6	6	4	5	1	0	0	0	-76% R	1 779.90	R	155.07 -R		1 624.83 Decrease	
2623	TOIR093000100000226000000000000000	465354	13047379	22	6	4	5	5	2	0	0	0	92	6	4	5	5	10	10	42	76% R	294.82	R	2 786.62	R	2 491.80 Increase	
2624	TOIR093000100000036100000000000000	467997	13057796	25	6	4	5	5	5	0	0	0	23	6	4	5	5	3	0	0	-1						

SGID	Old Meter	New Meter	Old Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	New Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	% Loss					Increase / Decrease	
				R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		Monthly Bill Old	Monthly Bill New	Change on Revenue			
2653	TOIQ03240010000044500013000000000	VIV514	13039445	23	6	4	5	5	3	0	0	25	6	4	5	5	5	0	0	0	9% R	311.30	371.96	R	60.66	Increase	
2654	TOIQ035000900000852000000000000000	ZKM305	13120643	13	6	4	3	0	0	0	0	16	6	4	5	1	0	0	0	0	17% R	116.62	158.64	R	42.02	Increase	
2655	TOIQ050300300000169000040000000000	94050625	13034599	29	6	4	5	5	9	0	0	29	6	4	5	5	9	0	0	0	1% R	479.80	484.70	R	4.90	Increase	
2656	TOIQ060600000000595000000000000000	Z550177	130081612	30	6	4	5	5	10	0	0	27	6	4	5	5	7	0	0	0	-11% R	517.89	430.78	-R	87.11	Decrease	
2657	TOIR00260010000003200002RE00000000	97-309313	13037543	946	6	4	5	5	10	10	10	896	85	6	4	5	5	10	10	35	-91% R	35 853.50	2 542.86	-R	33 310.64	Decrease	
2658	TOIR01140000000055600000RE00000000	BVIA998	13058660	59	6	4	5	5	10	10	10	9	89	6	4	5	5	10	10	39	34% R	1 526.84	2 690.70	R	1 163.86	Increase	
2659	TOIR011600000000110000040000000000	B-YIB-071	13037909	24	6	4	5	5	4	0	0	29	6	4	5	5	9	0	0	0	17% R	347.70	484.70	R	137.01	Increase	
2660	TOIR014403400001694000000000000000	BKXF381	GKF3829	22	6	4	5	5	2	0	0	22	6	4	5	5	2	0	0	0	2% R	278.39	288.63	R	10.24	Increase	
2661	TOIR014403400001791000000000000000	BYFA268	GKF3694	43	6	4	5	5	10	10	3	0	41	6	4	5	5	10	10	1	-6% R	910.29	819.20	-R	91.09	Decrease	
2662	TOIR02100000000002600000RE00000000	ZZM824	GKH4542	32	6	4	5	5	10	2	0	0	41	6	4	5	5	10	10	1	23% R	560.70	842.82	R	282.11	Increase	
2663	TOIR021000000000025200158000000000	A179064	13037703	27	6	4	5	5	7	0	0	31	6	4	5	5	10	1	0	0	10% R	438.65	523.46	R	84.81	Increase	
2664	TOIR027300000000088000000000000000	BZHP485	13015597	34	6	4	5	5	10	4	0	0	83	6	4	5	5	10	10	33	59% R	623.64	2 454.86	R	1 831.22	Increase	
2665	TOIR031600000000202600001000000000	CZW8539	13045695	81	6	4	5	5	10	10	10	31	55	6	4	5	5	10	10	5	-32% R	2 380.57	1 363.66	-R	1 016.91	Decrease	
2666	TOIR035800000003819000000000000000	39097626	GKH0922	12	6	4	2	0	0	0	0	38	6	4	5	5	10	8	0	0	68% R	100.51	740.52	R	640.01	Increase	
2667	TOIR059200000000089000000000000000	C-ZSG727	13013160	66	6	4	5	5	10	10	10	16	62	6	4	5	5	10	10	12	-6% R	1 787.16	1 631.47	-R	155.69	Decrease	
2668	TOIR061600000000153000000000000000	3907464	GKH2254	42	6	4	5	5	10	10	2	0	38	6	4	5	5	10	8	0	-11% R	890.50	738.43	-R	152.07	Decrease	
2669	TOIR071800000000305000000000000000	WVLC694	13030698	39	6	4	5	5	10	9	0	0	56	6	4	5	5	10	10	6	31% R	761.39	1 416.46	R	655.07	Increase	
2670	TOIR076300200000187000790000000000	163563	GKG6047	31	6	4	5	5	10	1	0	0	38	6	4	5	5	10	8	0	20% R	525.54	751.15	R	225.60	Increase	
2671	TOIR076300200000301001700000000000	C-LUE319	13033186	22	6	4	5	5	2	0	0	15	6	4	5	0	0	0	0	0	-32% R	286.93	136.62	-R	150.32	Decrease	
2672	TOIR076700500002200000000000000000	ZOA 973	130074987	10	6	4	0	0	0	0	0	25	6	4	5	5	5	0	0	0	60% R	74.81	371.96	R	297.15	Increase	
2673	TOIR076700500002354000000000000000	BZOH 008	13037698	5	5	0	0	0	0	0	0	45	6	4	5	5	10	10	5	0	90% R	33.78	991.26	R	957.48	Increase	
2674	TOIR076700500002460000000000000000	ZNL325	30000889	27	6	4	5	5	7	0	0	35	6	4	5	5	10	5	0	0	23% R	430.03	663.49	R	233.46	Increase	
2675	TOIR093000100000112000000000000000	99454080	30007951	20	6	4	5	5	0	0	0	89	6	4	5	5	10	10	39	77% R	248.58	2 666.06	R	2 417.48	Increase		
2676	TOIR093000100000045000000000000000	99449900	13045942	104	6	4	5	5	10	10	10	54	68	6	4	5	5	10	10	18	-34% R	3 244.81	1 884.62	-R	1 360.19	Decrease	
2677	TOIR093000100000676000000000000000	99448411	13058045	15	6	4	5	0	0	0	0	7	6	1	0	0	0	0	0	0	-57% R	144.62	47.66	-R	96.95	Decrease	
2678	TOIR093000700003518000000000000000	99448427	13062048	58	6	4	5	5	10	10	10	8	34	6	4	5	5	10	4	0	-42% R	1 493.53	615.67	-R	877.86	Decrease	
2679	TOIR093600000000046000000000000000	B-YFB479	GKF3825	27	6	4	5	5	7	0	0	0	34	6	4	5	5	10	4	0	19% R	433.58	613.01	R	179.43	Increase	
2680	TOIR040800200004796000000000000000	30046100	BKA9610	9	6	3	0	0	0	0	0	10	6	4	5	5	10	0	0	0	8% R	69.08	76.75	R	7.67	Increase	
2681	TOIQ028500000000001800001000000000	B-KWC223	13031663	53	6	4	5	5	10	10	10	3	65	6	4	5	5	10	10	15	17% R	1 304.56	1 735.97	R	431.41	Increase	
2682	TOIR014403400000894000000000000000	970408552	30009881	50	6	4	5	5	10	10	10	0	41	6	4	5	5	10	10	1	-18% R	1 174.36	839.44	-R	334.92	Decrease	
2683	TOIR014403400000900000000000000000	BYFA293	13019221	34	6	4	5	5	10	4	0	0	48	6	4	5	5	10	10	8	0	29% R	630.95	1 111.30	R	480.36	Increase
2684	TOIR014403400000904000000000000000	BYFA215	30007024	16	6	4	5	1	0	0	0	33	6	4	5	5	10	3	0	0	52% R	156.91	602.39	R	445.48	Increase	
2685	TOIR014403400001024000000000000000	BYFA453	30007391	33	6	4	5	5	10	3	0	0	60	6	4	5	5	10	10	10	45% R	593.59	1 546.70	R	953.11	Increase	
2686	TOIR014403400001077000000000000000	BYFA926	13063089	19	6	4	5	4	0	0	0	34	6	4	5	5	10	4	0	0	42% R	225.71	615.67	R	389.96	Increase	
2687	TOIR014403400001094000000000000000	970404217	30009822	9	6	3	0	0	0	0	0	6	6	0	0	0	0	0	0	0	-35% R	66.97	42.84	-R	24.13	Decrease	
2688	TOIR014403400001100000000000000000	BYFB316	13045825	146	6	4	5	5	10	10	10	96	26	6	4	5	5	6	0	0	-82% R	4 893.29	406.27	-R	4 487.02	Decrease	
2689	TOIR014403400001102000000000000000	BYFA662	13062804	35	6	4	5	5	10	5	0	0	28	6	4	5	5	8	0	0	-18% R	643.56	465.09	-R	178.47	Decrease	
2690	TOIR014403400001189000000000000000	BYFB299	13062091	31	6	4	5	5	10	1	0	0	52	6	4	5	5	10	10	2	40% R	533.89	1 233.42	R	699.53	Increase	
2691	TOIR014403400001206000000000000000	BYFA342	13063393	9	6	3	0	0	0	0	0	22	6	4	5	5	2	0	0	0	60% R	65.04	293.53	R	228.49	Increase	
2692	TOIR014403400001276000000000000000	ZML023	13063372	31	6	4	5	5	10	1	0	0	16	6	4	5	1	0	0	0	-47% R	531.11	163.99	-R	367.12	Decrease	
2693	TOIR014403400001386000000000000000	970409597	30006908	57	6	4	5	5	10	10	10	7	43	6	4	5	5	10	3	0	-24% R	1 438.12	918.85	-R	519.27	Decrease	
2694	TOIR014403400001418000000000000000	BYFA953	13048363	33	6	4	5	5	10	3	0	0	71	6	4	5	5	10	10	21	54% R	580.93	1 997.26	R	1 416.33	Increase	
2695	TOIR014403400001423000000000000000	BYFB407	13057737	48	6	4	5	5	10	8	0	0	15	6	4	5	0	0	0	0	-69% R	1 089.29	137.81	-R	951.48	Decrease	
2696	TOIR014403400001429000000000000000	BYFA946	13062572	36	6	4	5	5	10	6	0	0	45	6	4	5	5	10	5	0	19% R	691.82	974.39	R	282.57	Increase	
2697	TOIR014403400001441000000000000000	BYFB339	30019154	31	6	4	5	5	10	1	0	0	17	6	4	5	2	0	0	0	-47% R	549.47	174.70	-R	374.77	Decrease	
2698	TOIR014403400001442000000000000000	BYFB298	30015289	104	6	4	5	5	10	10	10	54	40	6	4	5	5	10	10	0	-62% R	3 246.86	785.68	-R	2 461.18	Decrease	
2699	TOIR014403400001445000000000000000	BYFA847	30002507	55	6	4	5	5	10	10	10	5	66	6	4	5	5	10	10	16	17% R	1 356.28	1 789.58	R	433.30	Increase	
2700	TOIR014403400001478000000000000000	BKXF189	30015348	29	6	4	5	5	9	0	0	37	6	4	5	5	5	10	7	0	23% R	469.53	711.30	R	241.77	Increase	
2701	TOIR014403400001502000000000000000	BYFB450	13062578	9	6	3	0	0	0	0	0	17	6	4	5	2	0	0	0	0	47% R	65.58	180.05	R	114.47	Increase	
2702	TOIR014403400001505000000000000000	BYFC174	13047662	20	6	4	5	5	0	0	0	19	6	4	5	4	0	0	0	0	-3% R	230.62	219.17	-R	11.45	Decrease	
2703	TOIR014403400001526000000000000000	BKXF403	13062327																								

SGID	Old Meter	New Meter	Old Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	New Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	% Loss					Increase / Decrease	
				R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		Monthly Bill Old	Monthly Bill New	Change on Revenue			
2731	T0IR014403400001823000000000000000	BXFP342	30007362	33	6	4	5	5	10	3	0	0	74	6	4	5	5	10	10	10	24	55% R	598.40	R 2 085.26	R	1 486.86	Increase
2732	T0IR014403400001825000000000000000	BXFO982	13062504	36	6	4	5	5	10	6	0	0	29	6	4	5	5	9	0	0	0	-18% R	669.78	R 488.79	-R	180.99	Decrease
2733	T0IR014403400001843000000000000000	BXFP274	13031931	43	6	4	5	5	10	10	3	0	55	6	4	5	5	10	10	10	5	22% R	920.28	R 1 374.22	R	453.94	Increase
2734	T0IR014403400001854000000000000000	BXBO695	13032769	21	6	4	5	5	1	0	0	0	24	6	4	5	5	4	0	0	0	13% R	268.27	R 357.25	R	88.99	Increase
2735	T0IR014403400001855000000000000000	BXFP221	13048367	17	6	4	5	2	0	0	0	0	47	6	4	5	5	10	10	7	0	64% R	176.76	R 1 041.86	R	865.10	Increase
2736	T0IR014403400001856000000000000000	BXFP262	13048181	37	6	4	5	5	10	7	0	0	45	6	4	5	5	10	10	5	0	19% R	698.52	R 994.63	R	296.11	Increase
2737	T0IR014403400001891000000000000000	BYFC009	13048334	16	6	4	5	1	0	0	0	0	46	6	4	5	5	10	10	6	0	66% R	152.10	R 1 031.74	R	879.64	Increase
2738	T0IR014403400001893000000000000000	BXFP397	13048353	31	6	4	5	5	10	1	0	0	58	6	4	5	5	10	10	10	8	47% R	534.03	R 1 486.86	R	952.83	Increase
2739	T0IR014403400001916000000000000000	BXFP303	30006917	15	6	4	5	0	0	0	0	0	22	6	4	5	5	2	0	0	0	33% R	135.72	R 293.53	R	157.81	Increase
2740	T0IR014403400001938000000000000000	BXFP302	13062508	58	6	4	5	5	10	10	10	8	48	6	4	5	5	10	10	8	0	-18% R	1 477.05	R 1 085.72	-R	391.34	Decrease
2741	T0IR014403400001948000000000000000	BXFP524	13031714	59	6	4	5	5	10	10	10	9	19	6	4	5	4	0	0	0	0	-67% R	1 526.28	R 222.88	-R	1 303.40	Decrease
2742	T0IR014403400001954000000000000000	BXFP066	13048304	19	6	4	5	4	0	0	0	0	40	6	4	5	5	10	10	0	0	53% R	213.00	R 802.33	R	589.33	Increase
2743	T0IR014403400001986000000000000000	BYFC090	13046219	19	6	4	5	4	0	0	0	0	24	6	4	5	5	4	0	0	0	20% R	225.08	R 347.45	R	122.37	Increase
2744	T0IR014403400001995000000000000000	BYFA543	13062507	16	6	4	5	1	0	0	0	0	19	6	4	5	4	0	0	0	0	18% R	152.10	R 219.31	R	67.22	Increase
2745	T0IR014403400002016000000000000000	970131540	13063252	48	6	4	5	5	10	10	8	0	22	6	4	5	5	2	0	0	0	-54% R	1 081.92	R 293.33	-R	788.60	Decrease
2746	T0IR014403400002018000000000000000	970131501	30007963	24	6	4	5	5	4	0	0	0	76	6	4	5	5	10	10	10	26	68% R	346.38	R 2 168.48	R	1 822.10	Increase
2747	T0IR014403400002114000000000000000	BXFP061	13062505	16	6	4	5	1	0	0	0	0	20	6	4	5	5	0	0	0	0	19% R	161.66	R 235.38	R	73.72	Increase
2748	T0IR014403400002126000000000000000	970404768	13009451	68	6	4	5	5	10	10	10	18	58	6	4	5	5	10	10	10	8	-14% R	1 870.39	R 1 490.38	-R	380.01	Decrease
2749	T0IR014403400002129000000000000000	BXFP308	13062666	10	6	4	0	0	0	0	0	0	14	6	4	4	0	0	0	0	0	27% R	76.67	R 127.04	R	50.37	Increase
2750	T0IR014403400002156000000000000000	BYFA727	13047669	29	6	4	5	5	9	0	0	0	51	6	4	5	5	10	10	10	1	43% R	468.57	R 1 191.18	R	722.61	Increase
2751	T0IR014403400002161000000000000000	BYFB230	13062706	22	6	4	5	5	2	0	0	0	41	6	4	5	5	10	10	1	0	46% R	292.58	R 829.32	R	536.74	Increase
2752	T0IR014403400002252000000000000000	BYFB411	30002571	15	6	4	5	0	0	0	0	0	44	6	4	5	5	10	10	4	0	66% R	142.03	R 960.89	R	818.86	Increase
2753	T0IR014403400002253000000000000000	BXCU442	30009872	22	6	4	5	2	0	0	0	0	58	6	4	5	5	10	10	10	8	62% R	293.24	R 1 470.14	R	1 176.90	Increase
2754	T0IR014403400002274000000000000000	BYFB949	13062098	18	6	4	5	3	0	0	0	0	76	6	4	5	5	10	10	10	26	77% R	193.23	R 2 176.78	R	1 983.55	Increase
2755	T0IR014403400002279000000000000000	BXFP338	13047367	18	6	4	5	3	0	0	0	0	14	6	4	4	0	0	0	0	0	-24% R	200.92	R 122.25	-R	78.67	Decrease
2756	T0IR014403400002292000000000000000	BZAO05	13030514	25	6	4	5	5	5	0	0	0	33	6	4	5	5	10	3	0	0	27% R	358.48	R 605.05	R	246.57	Increase
2757	T0IR014403400002310000000000000000	BXFP167	30007250	21	6	4	5	5	1	0	0	0	15	6	4	5	0	0	0	0	0	-25% R	255.13	R 147.93	-R	107.20	Decrease
2758	T0IR014403400002314000000000000000	BXFO987	30006902	27	6	4	5	5	7	0	0	0	21	6	4	5	5	1	0	0	0	-22% R	435.51	R 271.47	-R	164.04	Decrease
2759	T0IR014403400002317000000000000000	BXBS772	30006496	22	6	4	5	5	2	0	0	0	38	6	4	5	5	10	8	0	0	42% R	292.88	R 745.83	R	452.96	Increase
2760	T0IR014403400002325000000000000000	BXBO700	13049721	14	6	4	4	0	0	0	0	0	20	6	4	5	5	0	0	0	0	28% R	126.26	R 228.24	R	101.97	Increase
2761	T0IR014403400002370000000000000000	BXFP400	30009771	19	6	4	5	4	0	0	0	0	24	6	4	5	5	4	0	0	0	18% R	223.73	R 332.75	R	109.02	Increase
2762	T0IR014403400002352000000000000000	BXFP140	30007646	15	6	4	5	0	0	0	0	0	14	6	4	4	0	0	0	0	0	-7% R	146.24	R 130.63	-R	15.61	Decrease
2763	T0IR014403400002376000000000000000	BXFP503	13047665	9	6	3	0	0	0	0	0	0	22	6	4	5	5	2	0	0	0	60% R	64.32	R 286.18	R	221.86	Increase
2764	T0IR014403400002384000000000000000	BXCT545	30007709	8	6	2	0	0	0	0	0	0	13	6	4	3	0	0	0	0	0	41% R	57.16	R 117.46	R	60.30	Increase
2765	T0IR014403400002420000000000000000	BYFA527	30019164	11	6	4	1	0	0	0	0	0	23	6	4	5	5	3	0	0	0	50% R	90.20	R 305.79	R	215.58	Increase
2766	T0IR014403400002492000000000000000	BXCM690	13057491	20	6	4	5	5	0	0	0	0	24	6	4	5	5	4	0	0	0	17% R	232.25	R 337.65	R	105.39	Increase
2767	T0IR014403400002504000000000000000	BXFP100	30005924	20	6	4	5	5	0	0	0	0	23	6	4	5	5	3	0	0	0	13% R	228.98	R 308.24	R	79.26	Increase
2768	T0IR014403400002505000000000000000	BXBR093	13032554	36	6	4	5	5	10	6	0	0	19	6	4	5	4	0	0	0	0	-47% R	672.78	R 217.53	-R	455.25	Decrease
2769	T0IR014403400002507000000000000000	BXFP204	13063008	45	6	4	5	5	10	10	5	0	42	6	4	5	5	10	2	0	0	-7% R	992.32	R 869.81	-R	122.52	Decrease
2770	T0IR014403400002562000000000000000	BYFB130	13063379	20	6	4	5	5	0	0	0	0	31	6	4	5	5	10	1	0	0	36% R	229.68	R 525.35	R	295.67	Increase
2771	T0IR014403400002657000000000000000	BXFP312	30007572	21	6	4	5	5	1	0	0	0	22	6	4	5	5	2	0	0	0	5% R	271.67	R 303.33	R	31.67	Increase
2772	T0IR025600000000065000000000000000	BYWA755	GKF8218	57	6	4	5	5	10	10	7	73	6	4	5	5	10	10	10	23	22%	1 436.54	R 2 050.94	R	614.40	Increase	
2773	T0IR022730000000005800000000000000	BYHS002	13012779	33	6	4	5	5	10	3	0	0	40	6	4	5	5	10	10	0	0	16% R	607.41	R 796.30	R	188.90	Increase
2774	T0IR022730000000008200000000000000	BYHS007	13012618	34	6	4	5	5	10	4	0	0	43	6	4	5	5	10	10	3	0	22% R	621.92	R 923.78	R	301.86	Increase
2775	T0IR031900000000030900001000000000	BYHU674	13012294	51	6	4	5	5	10	10	10	1	13	6	4	3	0	0	0	0	0	-74% R	1 215.23	R 113.87	-R	1 101.37	Decrease
2776	T0IR035000000000012000000000000000	BYHG293	13055566	67	6	4	5	5	10	10	10	17	56	6	4	5	5	10	10	10	6	-16% R	1 836.04	R 1 409.42	-R	426.62	Decrease
2777	T0IR050700000000080400000000000000	BYHS029	13031467	17	6	4	5	2	0	0	0	0	3	3	0	0	0	0	0	0	0	-84% R	180.51	R 19.77	-R	160.74	Decrease
2778	T0IR050700000000083100000000000000	297481	13037612	31	6	4	5	5	29	1481	1	0	0	23	6	4	5	5	3	0	0	-27% R	548.68	R 315.59	-R	233.10	Decrease
2779	T0IR050700000000087700000000000000	297487	13063204	24	6	4	5	5	4	0	0	0	17	6	4	5	2	0	0	0	0	-29% R	348.37	R 181.84	-R	166.53	Decrease
2780	T0IR05																										

SGID	Old Meter	New Meter	Old Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	New Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	% Loss				
				R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		Monthly Bill Old	Monthly Bill New	Change on Revenue	Increase / Decrease
2809	TOIQ026900000000025800000000000000	94040952	13055545	96	6	4	5	5	10	10	10	46	102	6	4	5	5	10	10	10	52	6% R	2 960.29 R	3 194.06 R	233.77 Increase
2810	TOIQ027000000001991000000000000000	WJT506	30016330	28	6	4	5	5	8	0	0	0	33	6	4	5	5	10	3	0	0	17% R	448.58 R	605.66 R	157.08 Increase
2811	TOIQ027600600001325000000000000000	93201897	GKH3348	6	6	0	0	0	0	0	0	6	6	0	0	0	0	0	0	0	0	12% R	39.78 R	45.37 R	5.59 Increase
2812	TOIQ027600600001362000000000000000	197928	13049879	46	6	4	5	5	10	10	6	0	46	6	4	5	5	10	10	6	0	0%	1 012.34 R	1 012.34 R	0.10 Increase
2813	TOIQ027601200002420000000000000000	290811	13037418	136	6	4	5	5	10	10	10	86	97	6	4	5	5	10	10	10	47	-29% R	4 509.66 R	2 975.82 -R	1 533.84 Decrease
2814	TOIQ027602500003476000000000000000	94037079	13011333	33	6	4	0	5	10	3	0	0	37	6	4	5	5	10	7	0	0	11% R	590.25 R	713.74 R	123.49 Increase
2815	TOIQ027602500003481000000000000000	94043440	13055901	1	1	0	0	0	0	0	0	13	6	4	3	0	0	0	0	0	0	92% R	7.48 R	111.57 R	104.09 Increase
2816	TOIQ027602500003492000000000000000	13680903	EKW7971	26	6	4	5	5	6	0	0	0	26	6	4	5	5	6	0	0	0	-1% R	396.99 R	387.69 -R	9.31 Decrease
2817	TOIQ027602500003503000000000000000	95165404	13012081	211	6	4	5	5	10	10	10	161	176	6	4	5	5	10	10	10	126	-17% R	7 409.51 R	6 042.33 -R	1 367.18 Decrease
2818	TOIQ027602500003551000000000000000	95259661	13055699	59	6	4	5	5	10	10	10	9	45	6	4	5	5	10	10	5	0	-24% R	1 505.63 R	965.96 -R	539.68 Decrease
2819	TOIQ027602500003553000000000000000	94049467	13055859	26	6	4	5	5	6	0	0	0	25	6	4	5	5	5	0	0	0	-6% R	400.72 R	360.73 -R	39.99 Decrease
2820	TOIQ027602500003554000000000000000	91310003	GKF2760	103	6	4	5	5	10	10	10	53	74	6	4	5	5	10	10	10	24	-28% R	3 216.69 R	2 102.32 -R	1 114.37 Decrease
2821	TOIQ030100100000030000000000000000	ZSF917	GKH2249	72	6	4	5	5	10	10	10	22	121	6	4	5	5	10	10	10	71	40% R	2 024.88 R	3 922.41 R	1 897.53 Increase
2822	TOIQ030200100000061000000000000000	150334	GKH0942	40	6	4	5	5	10	10	0	0	34	6	4	5	5	10	4	0	0	-15% R	809.56 R	626.30 -R	183.27 Decrease
2823	TOIQ030200200000138000000000000000	25A959	13015832	23	6	4	5	5	3	0	0	0	24	6	4	5	5	4	0	0	0	2% R	327.03 R	337.65 R	10.62 Increase
2824	TOIQ032400000000136000000000000000	WTFI291	13046677	23	6	4	5	5	3	0	0	0	28	6	4	5	5	8	0	0	0	15% R	328.82 R	440.59 R	111.76 Increase
2825	TOIQ034500200001520000000000000000	580844	GKF8115	10	6	4	0	0	0	0	0	0	32	6	4	5	5	10	2	0	0	69% R	71.90 R	570.51 R	498.62 Increase
2826	TOIQ041700000000096000000000000000	6467041	13031444	12	6	4	2	0	0	0	0	0	38	6	4	5	5	10	8	0	0	68% R	99.50 R	738.09 R	638.59 Increase
2827	TOIQ047700300000020000000000000000	#D0958280	GKH4174	14	6	4	4	0	0	0	0	0	23	6	4	5	5	3	0	0	0	39% R	126.85 R	318.04 R	191.19 Increase
2828	TOIQ047700300000027300000000000000	#D0958399	GKH4879	5	5	0	0	0	0	0	0	0	11	6	4	1	0	0	0	0	0	55% R	35.96 R	88.72 R	52.76 Increase
2829	TOIQ047700300000045900467000000000	#D0337633	GKH2212	1	1	0	0	0	0	0	0	0	125	6	4	5	5	10	10	10	75	99% R	6.49 R	4 074.06 R	4 067.57 Increase
2830	TOIQ047700300000045900517000000000	#D0309473	EKW7809	64	6	4	5	5	10	10	10	14	78	6	4	5	5	10	10	10	28	18% R	1 696.99 R	2 248.26 R	551.27 Increase
2831	TOIQ047800000000011300001000000000	95258131	13018669	45	6	4	5	5	10	10	5	0	38	6	4	5	5	10	8	0	0	-15% R	965.96 R	733.78 -R	232.18 Decrease
2832	TOIQ050202100000405000090000000000	XDC665	30045278	15	6	4	5	0	0	0	0	0	32	6	4	5	5	10	2	0	0	54% R	133.16 R	562.54 R	429.39 Increase
2833	TOIQ050600000000043600000000000000	13594591	13058496	17	6	4	5	2	0	0	0	0	8	6	2	0	0	0	0	0	0	-53% R	181.73 R	58.69 -R	123.05 Decrease
2834	TOIQ050600000000677000000000000000	#D0278077	13058461	22	6	4	5	5	2	0	0	0	20	6	4	5	5	0	0	0	0	-9% R	288.83 R	235.38 -R	53.46 Decrease
2835	TOIR010301200000048700000000000000	BWK468	130077663	11	6	4	1	0	0	0	0	0	17	6	4	5	2	0	0	0	0	34% R	86.02 R	169.35 R	83.32 Increase
2836	TOIR011400000000050720000500000000	96013750	GKG8505	54	6	4	5	5	10	10	10	4	47	6	4	5	5	10	10	7	0	-13% R	1 337.85 R	1 068.85 -R	269.00 Decrease
2837	TOIR011400700003176000000000000000	96010607	GKH0087	73	6	4	5	5	10	10	23	131	6	4	5	5	10	10	10	10	81	44% R	2 076.11 R	4 323.98 R	2 247.87 Increase
2838	TOIR011600000000031200000RE00000000	VKL593	GKH0093	55	6	4	5	5	10	10	10	5	27	6	4	5	5	7	0	0	0	-50% R	1 355.36 R	438.32 -R	917.04 Decrease
2839	TOIR011600000000036300000RE00000000	BWLC516	GKG2199	43	6	4	5	5	10	10	3	0	32	6	4	5	5	10	2	0	0	-25% R	905.65 R	575.83 -R	329.83 Decrease
2840	TOIR022900000000023800000000000000	95255357	13031468	81	6	4	5	5	10	10	31	79	6	4	5	5	10	10	10	29	-2% R	2 376.49 R	2 307.02 -R	69.47 Decrease	
2841	TOIR022900100000029500000000000000	95253433	GKG6109	59	6	4	5	5	10	10	10	9	42	6	4	5	5	10	10	2	0	-28% R	1 515.56 R	878.48 -R	637.08 Decrease
2842	TOIR022900100000057200000000000000	292848	13031859	60	6	4	5	5	10	10	10	10	46	6	4	5	5	10	10	6	0	-23% R	1 565.56 R	1 028.37 -R	537.19 Decrease
2843	TOIR022900100001047000000000000000	323500	GKF2838	25	6	4	5	5	5	0	0	0	37	6	4	5	5	10	7	0	0	31% R	382.74 R	708.64 R	325.90 Increase
2844	TOIR025300000000085100000000000000	BWWS623	13012536	11	6	4	1	0	0	0	0	0	205	6	4	5	5	10	10	155	95% R	87.06 R	7 153.79 R	7 066.73 Increase	
2845	TOIR028699100001031000000000000000	BZSA567	13039232	55	6	4	5	5	10	10	10	5	77	6	4	5	5	10	10	10	27	28% R	1 378.55 R	2 222.54 R	843.99 Increase
2846	TOIR028699100001037000000000000000	CM00001553	GKH8451	60	6	4	5	5	10	10	10	10	65	6	4	5	5	10	10	10	15	7% R	1 570.81 R	1 754.38 R	183.57 Increase
2847	TOIR032300000000002400000RE00000000	96013297	13039421	58	6	4	5	5	10	10	10	8	205	6	4	5	5	10	10	155	72% R	1 472.56 R	7 182.22 R	5 709.66 Increase	
2848	TOIR040401800000878000110000000000	BVHG435	130110572	21	6	4	5	5	1	0	0	0	19	6	4	5	4	0	0	0	0	-6% R	253.75 R	224.67 -R	29.08 Decrease
2849	TOIR044600100000023000010000000000	BXWB421	130093843	82	6	4	5	5	10	10	10	32	42	6	4	5	5	10	10	2	0	-49% R	2 400.16 R	856.31 -R	1 543.85 Decrease
2850	TOIR045113200001272000000000000000	96013302	13039383	56	6	4	5	5	10	10	10	6	57	6	4	5	5	10	10	7	3%	1 383.02 R	1 444.62 R	61.60 Increase	
2851	TOIR050700000000018900000000000000	96013387	13031495	31	6	4	5	5	10	1	0	0	52	6	4	5	5	10	10	10	2	40% R	542.72 R	1 251.02 R	708.30 Increase
2852	TOIR050700000000079300000000000000	BVHS209	GKG4502	29	6	4	5	5	9	0	0	0	37	6	4	5	5	10	7	0	0	21% R	483.17 R	711.30 R	228.13 Increase
2853	TOIR050700100001383000000000000000	96013094	13032854	25	6	4	5	5	5	0	0	0	52	6	4	5	5	10	10	10	2	52% R	375.81 R	1 254.54 R	878.73 Increase
2854	TOIR050900000000053900001000000000	WTI904	13036349	42	6	4	5	5	10	2	0	0	40	6	4	5	5	10	10	10	0	-6% R	887.61 R	796.30 -R	91.31 Decrease
2855	TOIR053400200001082000850000000000	WTR499	30009778	47	6	4	5	5	10	10	7	0	49	6	4	5	5	10	10	9	0	4% R	1 065.02 R	1 145.32 R	80.30 Increase
2856	TOIR059700000000005200000000000000	XWA245	GKH3281	63	6	4	5	5	10	10	10	13	38	6	4	5	5	10	8	0	0	-40% R	1 683.10 R	729.89 -R	953.21 Decrease
2857	TOIR069601800000301000000000000000	111311	13031715	30	6	4	5	5	10	0	0	0	82	6	4	5	5	10	10	10	32	63% R	518.94 R	2 402.06 R	1 883.13 Increase
2858	TOIR070500000000540000000000000000	XSW329	GKF2831	10	6	4	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	-70% R	73.16 R	21.42 -R	51.74 Decrease
2859	TOIR072400000000012700000000000000	334734	GKF2722	119	6	4	5	5	10	10	10	69	14												

SGID	Old Meter	New Meter	Old Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	New Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	% Loss							
				R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		Monthly Bill Old	Monthly Bill New	Change on Revenue	Increase / Decrease			
2887	TOIQ0606000000004410000000000000	544551	130074784	62	6	4	5	5	10	10	10	12	81	6	4	5	5	10	10	10	31	24% R	1 631.52	R	2 373.90	R	742.38	Increase
2888	TOIQ0679060000069000000000000000	WKT999	GK11107	15	6	4	5	0	0	0	0	30	6	4	5	5	10	0	0	0	0	49% R	142.47	R	494.51	R	352.03	Increase
2889	TOIR002600400000049000010000000000	WLC613	13058459	36	6	4	5	5	10	6	0	53	6	4	5	5	10	10	10	3	33% R	669.78	R	1 293.26	R	623.48	Increase	
2890	TOIR010301100000437000000000000000	BNU2005	130079825	43	6	4	5	5	10	10	3	0	12	6	4	2	0	0	0	0	-73% R	925.99	R	98.30	-R	827.69	Decrease	
2891	TOIR011400000000209400000000000000	WKF755	GK8563	29	6	4	5	5	9	0	0	59	6	4	5	5	10	10	10	9	51% R	488.10	R	1 529.10	R	1 041.00	Increase	
2892	TOIR011600000000092000110000000000	921187	GKG2281	10	6	4	0	0	0	0	0	10	6	4	0	0	0	0	0	0	-7% R	76.20	R	69.71	-R	6.48	Decrease	
2893	TOIR021000000000011200000000000000	WXA611	13050436	472	6	4	5	5	10	10	10	422	254	6	4	5	5	10	10	10	204	-46% R	17 497.80	R	9 068.94	-R	8 428.86	Decrease
2894	TOIR022900100000598000000000000000	359881	130103665	40	6	4	5	5	10	10	0	0	119	6	4	5	5	10	10	69	67% R	784.35	R	3 827.66	R	3 043.31	Increase	
2895	TOIR031900000000270000100000000000	431202	GK10920	90	6	4	5	5	10	10	10	40	112	6	4	5	5	10	10	10	62	20% R	2 716.58	R	3 570.70	R	854.12	Increase
2896	TOIR032302900000221000000000000000	96010999	13038487	135	6	4	5	5	10	10	10	85	181	6	4	5	5	10	10	131	25% R	4 473.04	R	6 245.90	R	1 772.86	Increase	
2897	TOIR032600000000268000000000000000	WMA911	13019288	147	6	4	5	5	10	10	10	97	118	6	4	5	5	10	10	10	68	-19% R	4 906.54	R	3 820.62	-R	1 085.92	Decrease
2898	TOIR035000000000017000060000000000	VLE132	GKF7893	13	6	4	3	0	0	0	0	13	6	4	3	0	0	0	0	0	0% R	110.04	R	110.28	R	0.24	Increase	
2899	TOIR039600000000031000010000000000	#00WWA389	GK11143	69	6	4	5	5	10	10	10	19	60	6	4	5	5	10	10	10	10	-13% R	1 891.22	R	1 557.26	-R	333.96	Decrease
2900	TOIR042000000000748000000000000000	WKL562	GKF2442	24	6	4	5	5	4	0	0	0	37	6	4	5	5	10	7	0	0	35% R	345.00	R	705.99	R	360.99	Increase
2901	TOIR05140000000033400000RE00000000	WKL682	GKF2409	6	6	0	0	0	0	0	0	12	6	4	2	0	0	0	0	0	0	52% R	41.06	R	97.85	R	56.80	Increase
2902	TOIR053400000000742000000000000000	VIC713	13058101	17	6	4	5	2	0	0	0	0	25	6	4	5	5	5	0	0	0	33% R	168.46	R	362.97	R	194.52	Increase
2903	TOIR074000100000238000000000000000	WKP102	GKH9319	18	6	4	5	3	0	0	0	0	18	6	4	5	3	0	0	0	0	-2% R	200.52	R	194.33	-R	6.19	Decrease
2904	TOIR074001100000494000030000000000	WKA033	13056322	51	6	4	5	5	10	10	10	1	52	6	4	5	5	10	10	10	2	2% R	1 202.33	R	1 243.98	R	41.65	Increase
2905	TOIR074500000000703000000000000000	BWTF455	13032257	219	6	4	5	5	10	10	10	169	334	6	4	5	5	10	10	10	284	34% R	7 713.74	R	12 152.71	R	4 438.97	Increase
2906	TOIR076700000000725000000000000000	WRT409	130076039	99	6	4	5	5	10	10	10	49	15	6	4	5	0	0	0	0	0	-85% R	3 052.45	R	135.42	-R	2 917.03	Decrease
2907	TOIR076700000000831000000000000000	VNB530	130084145	20	6	4	5	5	0	0	0	0	40	6	4	5	5	10	10	0	0	50% R	230.62	R	785.68	R	555.06	Increase
2908	TOIR076700000000870000000000000000	W446	130082262	39	6	4	5	5	10	4	0	0	39	6	4	5	5	10	9	0	0	13% R	625.89	R	775.05	R	149.17	Increase
2909	TOIR076700000000948000000000000000	VNB475	130084155	21	6	4	5	5	1	0	0	0	30	6	4	5	5	10	0	0	0	32% R	251.68	R	514.73	R	263.05	Increase
2910	TOIR076700000000950000000000000000	WRS703	130084142	20	6	4	5	5	0	0	0	0	13	6	4	3	0	0	0	0	0	-34% R	248.71	R	118.66	-R	130.06	Decrease
2911	TOIR076700100001061000000000000000	WPA468	13057479	28	6	4	5	5	8	0	0	0	24	6	4	5	5	4	0	0	0	-13% R	452.84	R	352.35	-R	100.49	Decrease
2912	TOIR040800000000082900000000000000	XNP240	130102197	41	6	4	5	5	10	10	1	0	44	6	4	5	5	10	10	4	0	8% R	818.94	R	944.03	R	125.08	Increase
2913	TOIR040800000000087600000000000000	XOY844	GKG3397	74	6	4	5	0	10	10	10	24	86	6	4	5	5	10	10	36	14% R	2 079.98	R	2 549.90	R	469.92	Increase	
2914	TOIR056602500001989000180000000000	VKW243	13035962	5	5	0	0	0	0	0	0	0	14	6	4	4	0	0	0	0	0	65% R	35.94	R	130.23	R	94.29	Increase
2915	TOIQ008400200007350000000000000000	600187	13031430	4	4	0	0	0	0	0	0	0	7	6	1	0	0	0	0	0	37% R	29.66	R	46.97	R	17.32	Increase	
2916	TOIQ008704800000794000000000000000	941126173	GKG6097	42	6	4	5	5	10	10	2	0	42	6	4	5	5	10	10	2	0	-1% R	887.76	R	869.81	-R	17.95	Decrease
2917	TOIQ012100000000720001000000000000	908914	120037089	13	6	4	3	0	0	0	0	0	24	6	4	5	5	4	0	0	0	46% R	114.70	R	352.35	R	237.66	Increase
2918	TOIQ012700500001081000000000000000	316305	GKF4472	40	6	4	5	5	10	10	0	0	34	6	4	5	5	10	4	0	0	-15% R	811.33	R	628.95	-R	182.38	Decrease
2919	TOIQ022400100000261000000000000000	821423	13031764	62	6	4	5	5	10	10	10	12	59	6	4	5	5	10	10	9	-4% R	1 616.63	R	1 518.54	-R	98.09	Decrease	
2920	TOIQ02410000000003200000RE00000000	316420	GKF2298	75	6	4	5	5	10	10	25	21	6	4	5	5	1	0	0	0	0	-72% R	2 135.08	R	269.02	-R	1 866.06	Decrease
2921	TOIQ028900000000017700000000000000	315338	GKG4777	35	6	4	5	5	10	5	0	0	36	6	4	5	5	10	6	0	0	4% R	646.37	R	692.71	R	46.34	Increase
2922	TOIQ039401400000735000000000000000	93-321281	GKG9991	56	6	4	5	5	10	10	6	62	6	4	5	5	10	10	10	12	9% R	1 415.29	R	1 624.14	R	208.85	Increase	
2923	TOIQ046708000004613000080000000000	VIC581	13039940	34	6	4	5	5	10	4	0	0	18	6	4	5	3	0	0	0	0	-47% R	630.52	R	203.25	-R	427.26	Decrease
2924	TOIR021000000000027000200000000000	VKF620	GKG2113	12	6	4	2	0	0	0	0	0	22	6	4	5	5	2	0	0	0	47% R	96.76	R	298.43	R	201.68	Increase
2925	TOIR021000000000196000100000000000	WKF770	13039415	74	6	4	5	5	10	10	10	24	95	6	4	5	5	10	10	45	22% R	2 090.92	R	2 915.98	R	825.06	Increase	
2926	TOIR026000400000859000000000000000	683649	130094245	19	6	4	5	4	0	0	0	0	43	6	4	5	5	10	10	3	0	55% R	220.80	R	900.17	R	679.37	Increase
2927	TOIR026000400000860000000000000000	93340433	130086478	94	6	4	5	5	10	10	10	44	21	6	4	5	5	1	0	0	0	-77% R	2 857.61	R	266.57	-R	2 591.04	Decrease
2928	TOIR031600000000247600002000000000	95166297	13011505	94	6	4	5	5	10	10	10	44	101	6	4	5	5	10	10	51	7% R	2 877.61	R	3 142.20	R	264.59	Increase	
2929	TOIR040402100000637000090000000000	VLE621	130086821	18	6	4	5	3	0	0	0	0	21	6	4	5	5	1	0	0	0	12% R	205.45	R	264.12	R	58.67	Increase
2930	TOIR040402100000881000190000000000	GK1558	GKF4295	48	6	4	5	5	10	10	8	0	80	6	4	5	5	10	10	30	40% R	1 088.42	R	2 338.70	R	1 250.28	Increase	
2931	TOIR041900000000078000000000000000	WKR754	13045592	17	6	4	5	2	0	0	0	0	23	6	4	5	5	3	0	0	0	25% R	181.73	R	315.59	R	133.85	Increase
2932	TOIR030200000000769000000000000000	95200569	GK8526	48	6	4	5	5	10	10	8	0	65	6	4	5	5	10	10	15	26% R	1 108.94	R	1 757.90	R	648.96	Increase	
2933	TOIQ003100900000512000480000000000	2110064	GKT9070	9	6	3	0	0	0	0	0	0	7	6	1	0	0	0	0	0	0	-23% R	63.25	R	48.05	-R	15.20	Decrease
2934	TOIQ003300000000011800000000000000	836761	13037632	36	6	4	5	5	10	6	0	0	40	6	4	5	5	10	10	0	0	11% R	672.95	R	801.81	R	128.87	Increase
2935	TOIQ003300000000014200000000000000	839168	13035801	30	6	4	5																					

SGID	Old Meter	New Meter	Old Cons	O-6				6-10				10-15				15-20				20-30				30-40				40-50				+50				New Cons	O-6				6-10				10-15				15-20				20-30				30-40				40-50				+50				% Loss	Monthly Bill Old	Monthly Bill New	Change on Revenue	Increase / Decrease
				R	7.14	R	7.58	R	13.17	R	19.63	R	26.96	R	29.22	R	37.11	R	38.72	R	7.14	R	7.58	R	13.17	R	19.63	R	26.96	R	29.22	R	37.11	R	38.72		R	7.14	R	7.58	R	13.17	R	19.63	R	26.96	R	29.22	R	37.11	R	38.72																					
2965	TOIQ013500000000063000000000000000	339150	13058430	7		6	1	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-41% R	53.34 R	31.16 -R	22.18 Decrease																			
2966	TOIQ014803600000601000050000000000	VI9991	13018478	16		6	4	5	1	0	0	0	0	0	0	16	6	4	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-2% R	157.55 R	151.50 -R	6.05 Decrease																			
2967	TOIQ014803600000601000080000000000	920293#WD1	13049875	12		6	4	2	0	0	0	0	0	0	0	10	6	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-19% R	98.51 R	70.40 -R	28.11 Decrease																			
2968	TOIQ018400000000007000000000000000	516424	13058628	43		6	4	5	5	10	10	3	0	34	6	4	4	5	5	10	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-23% R	927.75 R	613.01 -R	314.74 Decrease																				
2969	TOIQ01840000000010100000RE00000000	220696	13037884	66		6	4	5	5	10	10	10	16	75	6	4	5	5	10	10	10	10	25	13%	R	1771.71 R	2145.10 R	373.39 Increase																									13%	R	1771.71 R	2145.10 R	373.39 Increase																
2970	TOIQ01840000000012800000RE00000000	522356	13058882	31		6	4	5	5	10	1	0	0	47	6	4	4	5	5	10	10	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34% R	538.42 R	1068.85 R	530.44 Increase																			
2971	TOIQ018400000000137000000000000000	391321	13010854	41		6	4	5	5	10	10	1	0	36	6	4	4	5	5	10	6	0	0	0	-11% R	R	830.36 R	692.71 -R	137.66 Decrease																									-11%	R	830.36 R	692.71 -R	137.66 Decrease															
2972	TOIQ01840000000014800000RE00000000	587041	GKF4370	33		6	4	5	5	10	3	0	0	26	6	4	4	5	5	6	0	0	0	0	-21% R	R	584.68 R	396.47 -R	188.21 Decrease																									-21%	R	584.68 R	396.47 -R	188.21 Decrease															
2973	TOIQ018400000000365000000000000000	XUR142	13015522	36		6	4	5	5	10	6	0	0	36	6	4	4	5	5	10	6	0	0	0	-1% R	R	674.78 R	668.80 -R	5.98 Decrease																									-1%	R	674.78 R	668.80 -R	5.98 Decrease															
2974	TOIQ018400000000416000300000000000	505117	13035987	62		6	4	5	5	10	10	10	12	130	6	4	4	5	5	10	10	10	80	52%	R	1619.81 R	4253.58 R	2 633.77 Increase																									52%	R	1619.81 R	4253.58 R	2 633.77 Increase																
2975	TOIQ01840000000041700000RE00000000	522213	13037508	62		6	4	5	5	10	10	10	12	58	6	4	4	5	5	10	10	10	8	-7%	R	1649.59 R	1479.82 -R	169.77 Decrease																									-7%	R	1649.59 R	1479.82 -R	169.77 Decrease																
2976	TOIQ018400000000422000040000000000	516501	GKF2387	22		6	4	5	5	2	0	0	0	25	6	4	4	5	5	5	0	0	0	0	9%	R	300.60 R	359.71 R	59.11 Increase																									9%	R	300.60 R	359.71 R	59.11 Increase															
2977	TOIQ018500000000095000000000000000	654500	GKF3035	39		6	4	5	5	10	9	0	0	49	6	4	4	5	5	10	10	9	0	20%	R	776.48 R	1136.32 R	359.84 Increase																									20%	R	776.48 R	1136.32 R	359.84 Increase																
2978	TOIQ018500000000132000000000000000	656631	GKG8476	215		6	4	5	5	10	10	10	165	67	6	4	4	5	5	10	10	10	17	-69%	R	7543.37 R	1821.26 -R	5 722.11 Decrease																									-69%	R	7543.37 R	1821.26 -R	5 722.11 Decrease																
2979	TOIQ018500000000143000000000000000	656804	GKG2067	81		6	4	5	5	10	10	10	31	155	6	4	4	5	5	10	10	10	105	48%	R	2353.79 R	5232.43 R	2 878.65 Increase																									48%	R	2353.79 R	5232.43 R	2 878.65 Increase																
2980	TOIQ018500000000152000000000000000	631836	GKH2319	22		6	4	5	5	2	0	0	0	25	6	4	4	5	5	5	0	0	0	0	14%	R	286.82 R	379.31 R	92.49 Increase																									14%	R	286.82 R	379.31 R	92.49 Increase															
2981	TOIQ018500000000170000000000000000	631828	GKG4471	80		6	4	5	5	10	10	10	30	20	6	4	4	5	5	0	0	0	0	0	-76%	R	2343.05 R	228.24 -R	2 114.81 Decrease																									-76%	R	2343.05 R	228.24 -R	2 114.81 Decrease															
2982	TOIQ018500000000205000000000000000	656629	GKG2109	37		6	4	5	5	10	7	0	0	49	6	4	4	5	5	10	10	9	0	23%	R	721.04 R	1114.40 R	393.36 Increase																									23%	R	721.04 R	1114.40 R	393.36 Increase																
2983	TOIQ018500000000229000000000000000	301906	GKF3028	52		6	4	5	5	10	10	10	2	61	6	4	4	5	5	10	10	10	11	15%	R	1236.44 R	1599.21 R	362.77 Increase																									15%	R	1236.44 R	1599.21 R	362.77 Increase																
2984	TOIQ018500000000232000000000000000	656606	GKG2212	33		6	4	5	5	10	3	0	0	32	6	4	4	5	5	10	2	0	0	0	-2%	R	585.83 R	570.07 -R	15.76 Decrease																									-2%	R	585.83 R	570.07 -R	15.76 Decrease															
2985	TOIQ018500000000345000000000000000	654162	GKH0894	68		6	4	5	5	10	10	10	18	82	6	4	4	5	5	10	10	32	18%	R	1852.50 R	2426.70 R	574.20 Increase																									18%	R	1852.50 R	2426.70 R	574.20 Increase																	
2986	TOIQ018500000000416000000000000000	629223	GKG2265	41		6	4	5	5	10	10	1	0	36	6	4	4	5	5	10	6	0	0	0	-12%	R	820.61 R	679.42 -R	141.18 Decrease																									-12%	R	820.61 R	679.42 -R	141.18 Decrease															
2987	TOIQ018500000000445000000000000000	522395	GKG8480	47		6	4	5	5	10	10	7	0	46	6	4	4	5	5	10	10	6	0	0	-1%	R	1041.60 R	1028.37 -R	13.24 Decrease																									-1%	R	1041.60 R	1028.37 -R	13.24 Decrease															
2988	TOIQ018500000000480000000000000000	631245	13037510	23		6	4	5	5	3	0	0	0	52	6	4	4	5	5	10	10																																																				

SGID	Old Meter	New Meter	Old Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	New Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	% Loss					Increase / Decrease	
				R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		Monthly Bill Old	Monthly Bill New	Change on Revenue			
3043	T0IR074000900000689000000000000000	940327914	13055922	45	6	4	5	5	10	10	5	0	48	6	4	5	5	10	10	8	0	7% R	974.61	R 1,099.21	R	124.60	Increase
3044	T0IR074702400000227000000000000000	940527401	13046949	13	6	4	3	0	0	0	0	61	6	4	5	5	10	10	10	11	79% R	109.74	R 1,610.06	R	1,500.32	Increase	
3045	T0IQ000901000000133000000000000000	925540	13015855	4	4	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	-35% R	30.21	R 19.77	-R	10.44	Decrease	
3046	T0IR013100000000022000100000000000	VCN155	13057771	23	6	4	5	5	3	0	0	0	99	6	4	5	5	10	10	49	77% R	318.04	R 3,077.90	R	2,759.86	Increase	
3047	T0IQ003100800000510000500000000000	820778	13055525	22	6	4	5	5	2	0	0	0	23	6	4	5	5	3	0	0	5% R	285.30	R 318.04	R	32.74	Increase	
3048	T0IQ003300000000029000000000000000	836762	13037551	9	6	3	0	0	0	0	0	0	28	6	4	5	5	8	0	0	67% R	65.94	R 440.40	R	374.46	Increase	
3049	T0IQ003300000000034300000000000000	22857	13011343	28	6	4	5	5	8	0	0	0	34	6	4	5	5	10	4	0	0	18% R	450.00	R 625.89	R	175.89	Increase
3050	T0IQ003300000000029000000000000000	7469	13012758	25	6	4	5	5	5	0	0	0	32	6	4	5	5	10	2	0	0	22% R	373.31	R 571.46	R	198.15	Increase
3051	T0IQ003600300001489000230000000000	320316	KGK4424	7	6	1	0	0	0	0	0	0	60	6	4	5	5	10	10	10	10	88% R	49.88	R 1,550.22	R	1,500.34	Increase
3052	T0IQ003600300001489000350000000000	840982	GKI0979	29	6	4	5	5	9	0	0	0	32	6	4	5	5	10	2	0	0	8% R	486.89	R 557.23	R	70.34	Increase
3053	T0IQ003600900001371000000000000000	801756	GKF2695	23	6	4	5	5	3	0	0	0	30	6	4	5	5	10	0	0	0	26% R	305.35	R 520.04	R	214.69	Increase
3054	T0IQ003601200001401000000000000000	121649	GKI0972	27	6	4	5	5	7	0	0	0	29	6	4	5	5	9	0	0	0	8% R	415.65	R 479.80	R	64.15	Increase
3055	T0IQ011500000000574000000000000000	331668	GKI1075	261	6	4	5	5	10	10	10	211	274	6	4	5	5	10	10	10	224	5% R	9,358.32	R 9,843.34	R	485.02	Increase
3056	T0IQ011500000001112000000000000000	351683	120114624	105	6	4	5	5	10	10	10	55	132	6	4	5	5	10	10	10	82	20% R	3,317.53	R 4,325.74	R	1,008.21	Increase
3057	T0IQ01150000000166900000RE00000000	VXA814	120114672	68	6	4	5	5	10	10	10	18	66	6	4	5	5	10	10	10	16	-4% R	1,882.86	R 1,786.81	-R	96.05	Decrease
3058	T0IQ011500000002046000000000000000	455015	GKH4241	68	6	4	5	5	10	10	10	18	22	6	4	5	5	2	0	0	-67% R	1,865.47	R 298.78	-R	1,566.69	Decrease	
3059	T0IQ014802800000412000000000000000	VIV499	13046632	62	6	4	5	5	10	10	10	12	106	6	4	5	5	10	10	10	56	41% R	1,650.83	R 3,348.94	R	1,698.11	Increase
3060	T0IQ014803300000178000000000000000	422255	13046645	18	6	4	5	3	0	0	0	0	38	6	4	5	5	10	8	0	0	53% R	196.39	R 735.21	R	538.82	Increase
3061	T0IQ018400000000065000000000000000	505199	GKH4062	21	6	4	5	5	1	0	0	0	24	6	4	5	5	4	0	0	0	11% R	265.81	R 332.75	R	66.94	Increase
3062	T0IQ018400000000092000010000000000	505086	GKH4061	20	6	4	5	5	0	0	0	0	32	6	4	5	5	10	2	0	0	39% R	228.00	R 559.89	R	331.89	Increase
3063	T0IQ018400000000011600000000000000	522268	GKH4485	69	6	4	5	5	10	10	10	19	101	6	4	5	5	10	10	10	51	31% R	1,923.81	R 3,134.22	R	1,210.41	Increase
3064	T0IQ018400000000011800000000000000	331414	GKI1180	105	6	4	5	5	10	10	10	55	92	6	4	5	5	10	10	10	42	-13% R	3,307.96	R 2,792.78	-R	515.18	Decrease
3065	T0IQ018400000000029900000000000000	322210	GKI1303	35	6	4	5	5	10	5	0	0	15	6	4	5	5	0	0	0	0	-59% R	664.55	R 132.43	-R	532.12	Decrease
3066	T0IQ018500000000018900000000000000	B-YUE786	GKH9390	26	6	4	5	5	6	0	0	0	23	6	4	5	5	3	0	0	0	-11% R	400.72	R 320.49	-R	80.23	Decrease
3067	T0IQ018500000000019100000000000000	654693	GKF0100	38	6	4	5	5	10	8	0	0	22	6	4	5	5	2	0	0	0	-42% R	736.62	R 288.83	-R	447.79	Decrease
3068	T0IQ018500000000025200000000000000	656568	KGK4431	63	6	4	5	5	10	10	10	13	62	6	4	5	5	10	10	10	12	-2% R	1,673.42	R 1,628.25	-R	45.17	Decrease
3069	T0IQ018500000000052900153000000000	536798	GKF2679	49	6	4	5	5	10	10	9	0	60	6	4	5	5	10	10	10	10	19% R	1,122.04	R 1,553.74	R	431.70	Increase
3070	T0IQ018500000000054900000000000000	522413	GKH4249	15	6	4	5	0	0	0	0	0	14	6	4	4	0	0	0	0	0	-7% R	135.72	R 122.25	-R	13.47	Decrease
3071	T0IQ018500500000989000000000000000	840026	GKI1039	22	6	4	5	5	2	0	0	0	21	6	4	5	5	1	0	0	0	-8% R	300.07	R 251.87	-R	48.20	Decrease
3072	T0IQ018500500001048000000000000000	500490	GKH9404	65	6	4	5	5	10	10	10	15	41	6	4	5	5	10	1	0	0	-37% R	1,745.70	R 822.58	-R	923.12	Decrease
3073	T0IQ018500500001068000000000000000	584324	GKI1079	24	6	4	5	5	4	0	0	0	28	6	4	5	5	8	0	0	0	14% R	341.41	R 445.49	R	104.08	Increase
3074	T0IQ018500600001357000000000000000	801738	GKI1081	52	6	4	5	5	10	10	10	2	45	6	4	5	5	10	10	5	0	-14% R	1,264.44	R 993.79	-R	270.65	Decrease
3075	T0IQ020600000000000300000000000000	686103	GKF8130	104	6	4	5	5	10	10	10	54	84	6	4	5	5	10	10	10	34	-20% R	3,278.36	R 2,473.63	-R	804.73	Decrease
3076	T0IQ020600000000009700000000000000	505177	GKF8216	15	6	4	5	0	0	0	0	0	28	6	4	5	5	8	0	0	0	48% R	134.62	R 459.58	R	324.96	Increase
3077	T0IQ020600000000010400000000000000	107445	GKI0999	58	6	4	5	5	10	10	10	8	27	6	4	5	5	7	0	0	0	-53% R	1,485.10	R 432.62	-R	1,052.48	Decrease
3078	T0IQ020600000000010900000000000000	101137	GKI1083	66	6	4	5	5	10	10	10	16	258	6	4	5	5	10	10	10	208	74% R	1,807.92	R 9,230.27	R	7,422.35	Increase
3079	T0IQ020601100000144000000000000000	419035	GKH4275	29	6	4	5	5	9	0	0	0	66	6	4	5	5	10	10	16	55% R	488.79	R 1,776.67	R	1,287.89	Increase	
3080	T0IQ020601100000145000000000000000	107814	GKH4282	40	6	4	5	5	10	10	0	0	21	6	4	5	5	1	0	0	0	-48% R	797.42	R 259.63	-R	537.80	Decrease
3081	T0IQ021601300011488000000000000000	93392010	13056349	20	6	4	5	5	0	0	0	0	20	6	4	5	5	0	0	0	0	0% R	243.58	R 242.06	-R	1.52	Decrease
3082	T0IQ023700000000022000000000000000	302023	13056618	31	6	4	5	5	10	1	0	0	46	6	4	5	5	10	6	0	0	33% R	535.98	R 1,021.62	R	485.64	Increase
3083	T0IQ023700000000017500000000000000	275589	13058410	20	6	4	5	5	0	0	0	0	54	6	4	5	5	10	10	4	63% R	246.96	R 1,342.54	R	1,095.58	Increase	
3084	T0IQ026200300000131000040000000000	29676	GKH4237	69	6	4	5	5	10	10	10	19	43	6	4	5	5	10	10	3	0	-38% R	1,889.61	R 897.04	-R	992.57	Decrease
3085	T0IQ028000800000131000000000000000	516511	GKH4172	13	6	4	3	0	0	0	0	0	20	6	4	5	5	0	0	0	0	37% R	107.18	R 239.41	R	132.22	Increase
3086	T0IQ028800200000218000000000000000	631654	GKI1090	26	6	4	5	5	6	0	0	0	32	6	4	5	5	10	2	0	0	17% R	411.90	R 567.86	R	155.96	Increase
3087	T0IQ033304700003522000370000000000	536909	13038664	13	6	4	3	0	0	0	0	0	442	6	4	5	5	10	10	10	392	97% R	112.16	R 16,360.40	R	16,248.24	Increase
3088	T0IQ033304700003522000380000000000	536910	GKI1207	11	6	4	1	0	0	0	0	0	18	6	4	5	3	0	0	0	0	39% R	82.82	R 188.09	R	105.27	Increase
3089	T0IQ033304700003522000660000000000	631617	GKI1300	19	6	4	5	5	4	0	0	0	11	6	4	1	0	0	0	0	0	-41% R	215.22	R 88.72	-R	126.50	Decrease
3090	T0IQ034800000000020000000000000000	748179	13031038	63	6	4	5	5	10	10	10	13	172	6	4	5	5	10	10	10	122	63% R	1,690.01	R 5,881.99	R	4,191.97	Increase
3091	T0IQ035200000000021390000000000000	WMMA830	13012153	304	6	4	5	5	10	10	10	254	483	6	4	5	5	10	10	433	37% R	10,988.11	R 17,939.34	R	6,951.23		

SGID	Old Meter	New Meter	Old Cons	O-6											New Cons											% Loss	Monthly Bill Old	Monthly Bill New	Change on Revenue	Increase / Decrease				
				R	7.14	6-10	7-8	R	13.17	R	19.63	R	26.96	R	0	0	0	0	0	0	0	0	R	7.14	6-10						7-8	R	13.17	R
3121	TOIR029300000000007100010000000000	180128	30019155	8											38	6											79%	R	58.00	R	753.80	R	695.80	Increase
3122	TOIR031900000000022900034000000000	410219	13038497	28	6	4								136	6	4						86		79%	R	461.83	R	4 503.50	R	4 041.67	Increase			
3123	TOIR051403100000091900013000000000	930727839	130106156	22	6		4	5	5		8	0	0	0	34	6	4		5	5	10	4	0			37%	R	279.53	R	634.27	R	354.74	Increase	
3124	TOIR051403200000092300008000000000	125153	130084669	42	6	4		5	5		10	10	2	0	76	6	4		5	5	10	10	10	26	45%	R	867.88	R	2 194.38	R	1 326.50	Increase		
3125	TOIR053400000000089000000000000000	446190	13058143	34	6		4	5	5		10	4	0	0	23	6	4		5	5	10	3	0	0		-34%	R	633.38	R	311.30	-R	322.08	Decrease	
3126	TOIR053400000000091400000000000000	2BR176	13031114	38	6		4	5	5		10	8	0	0	45	6	4		5	5	10	10	5	0		16%	R	730.78	R	984.51	R	253.73	Increase	
3127	TOIR063600000000052000000000000000	554984	13035497	34	6		4	5	5		10	4	0	0	23	6	4		5	5	10	3	0	0		-32%	R	631.99	R	324.78	-R	307.21	Decrease	
3128	TOIR000040500000040500120000000000	735258	30046500	230	6		4	5	5		10	10	10	180	167	6	4		5	5	10	10	117	-27%	R	8 137.08	R	5 693.85	-R	2 443.23	Decrease			
3129	TOIR00280000000000940000RE00000000	VEA942	GKF3817	17	6		4	5	5		2	0	0	0	23	6	4		5	5	10	0	0		26%	R	175.96	R	313.14	R	137.18	Increase		
3130	TOIR009500000000015800001000000000	84354686	GKG6032	2	2	0		0	0		0	0	0	0	11	6		4	1	0	0	0	0	0		83%	R	13.83	R	88.72	R	74.89	Increase	
3131	TOIR01310000000003100000RE00000000	941109744	30007957	28	6		4	5	5		8	0	0	0	33	6	4		5	5	10	3	0	0		16%	R	450.59	R	605.05	R	154.45	Increase	
3132	TOIR056600000000048000000000000000	738913	13030147	59	6		4	5	5		10	10	10	9	55	6	4		5	5	10	10	10	5		-7%	R	1 534.03	R	1 377.74	-R	156.29	Decrease	
3133	TOIR056600200000083600000000000000	2387631	13068575	30	6		4	5	5		10	0	0	0	95	6	4		5	5	10	10	10	45	68%	R	509.20	R	2 923.02	R	2 413.83	Increase		
3134	TOIR056600800001123000000000000000	327242	GKG2241	12	6		4	2	0		0	0	0	0	33	6	4		5	5	10	3	0	0		64%	R	98.49	R	607.70	R	509.21	Increase	
3135	TOIR056602900001441000000000000000	288095	GKF0910	54	6		4	5	5		10	10	10	10	4	37	6	4		5	5	10	7	0		-31%	R	1 311.47	R	713.96	-R	597.52	Decrease	
3136	TOIR056603000001473000000000000000	288106	GKF3804	136	6		4	5	5		10	10	10	86	39	6	4		5	5	10	9	0	0		-72%	R	4 517.85	R	756.46	-R	3 761.39	Decrease	
3137	TOIQ00600110000083900000RE00000000	332812	13038104	33	6		4	5	5		10	3	0	0	27	6	4		5	5	10	7	0	0		-17%	R	592.80	R	434.87	-R	157.93	Decrease	
3138	TOIRQ012700500000107900020000000000	283278	13018398	38	6		4	5	5		10	8	0	0	47	6	4		5	5	10	10	7	0		18%	R	751.48	R	1 055.64	R	304.16	Increase	
3139	TOIRQ022400100000429000000000000000	299580	13019560	27	6		4	5	5		7	0	0	0	41	6	4		5	5	10	10	1	0		35%	R	420.49	R	849.56	R	429.08	Increase	
3140	TOIRQ048500000000024000000000000000	303057	13055450	37	6		4	5	5		10	7	0	0	18	6	4		5	5	10	3	0	0		-51%	R	716.07	R	201.47	-R	514.60	Decrease	
3141	TOIRQ048700300000377000000000000000	299604	13032829	21	6		4	5	5		1	0	0	0	71	6	4		5	5	10	10	10	21	70%	R	265.92	R	1 979.66	R	1 713.74	Increase		
3142	TOIR011403000004520000000000000000	327845	HKC0752	67	6		4	5	5		10	10	10	17	121	6	4		5	5	10	10	10	71	45%	R	1 813.41	R	3 929.74	R	2 116.33	Increase		
3143	TOIR031900500000094900000000000000	261047	GKF4444	61	6		4	5	5		10	10	10	11	83	6	4		5	5	10	10	10	33	26%	R	1 605.66	R	2 447.82	R	842.16	Increase		
3144	TOIR056301700000633000080000000000	327169	13019376	27	6		4	5	5		7	0	0	0	46	6	4		5	5	10	10	6	0		42%	R	412.75	R	1 021.62	R	608.87	Increase	
3145	TOIQ003003020000003500000000000000	10857	CGXA437	37	6		4	5	5		10	7	0	0	173	6	4		5	5	10	10	10	123	79%	R	704.56	R	5 915.02	R	5 210.46	Increase		
3146	TOIQ005100300000008000030000000000	157027	13046743	16	6		4	5	5		1	0	0	0	29	6	4		5	5	10	9	0	0		46%	R	155.84	R	489.60	R	333.77	Increase	
3147	TOIQ00600110000083900003RE00000000	1220391	130108427	41	6		4	5	5		10	10	1	0	26	6	4		5	5	10	6	0	0		-36%	R	841.37	R	403.82	-R	437.55	Decrease	
3148	TOIQ008709000000093000000000000000	151804	GKG6080	21	6		4	5	5		1	0	0	0	39	6	4		5	5	10	9	0	0		46%	R	265.35	R	775.05	R	509.71	Increase	
3149	TOIQ008706600001010000000000000000	205055	GKG6243	36	6		4	5	5		10	6	0	0	46	6	4		5	5	10	10	6	0		21%	R	689.39	R	1 011.50	R	322.11	Increase	
3150	TOIQ012100300001849000020000000000	WAS488	13032278	19	6		4	5	5		4	0	0	0	18	6	4		5	5	10	3	0	0		-7%	R	214.91	R	188.98	-R	25.94	Decrease	
3151	TOIQ012700000000795000010000000000	181685	120037356	22	6		4	5	5		2	0	0	0	31	6	4		5	5	10	1	0	0		31%	R	277.60	R	535.98	R	258.38	Increase	
3152	TOIQ014802800000435000000000000000	WBP794	13039919	8	6		2	0	0		0	0	0	0	14	6	4		4	0	0	0	0	0		38%	R	61.57	R	122.25	R	60.68	Increase	
3153	TOIQ039200300000840000000000000000	XAG598	13035019	31	6		4	5	5		10	1	0	0	40	6	4		5	5	10	10	0	0		24%	R	529.24	R	812.45	R	283.22	Increase	
3154	TOIQ048700300000304000000000000000	WAV563	GKH3399	20	6		4	5	5		0	0	0	0	23	6	4		5	5	10	3	0	0		10%	R	246.60	R	308.24	R	61.64	Increase	
3155	TOIQ068200000000132000000000000000	173963	13018311	24	6		4	5	5		4	0	0	0	34	6	4		5	5	10	4	0	0		30%	R	347.84	R	636.92	R	289.08	Increase	
3156	TOIQ068201200000747000000000000000	114623	120039066	34	6		4	5	5		10	4	0	0	49	6	4		5	5	10	10	9	0		31%	R	619.14	R	1 139.70	R	520.55	Increase	
3157	TOIR011440000000130800000000000000	183486	GKF2589	6	6		0	0	0		0	0																						

SGID	Old Meter	New Meter	Old Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	New Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	% Loss							
				R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		Monthly Bill Old	Monthly Bill New	Change on Revenue	Increase / Decrease			
3199	TOIR0591015000005500001000000000	93259	13013074	48	6	4	5	5	10	10	8	0	63	6	4	5	5	10	10	10	13	24% R	1,088.42	R	1,659.34	R	570.92	Increase
3200	TOIR062900100000200000300000000000	88052	13039000	23	6	4	5	5	3	0	0	0	48	6	4	5	5	10	10	8	0	52% R	318.04	R	1,099.21	R	781.17	Increase
3201	TOIR071800000000130000000000000000	101658	13045577	15	6	4	5	0	0	0	0	0	20	6	4	5	5	0	0	0	0	24% R	140.52	R	233.59	R	93.07	Increase
3202	TOIR071800000000215000000000000000	134813	13032864	55	6	4	5	5	10	10	10	5	80	6	4	5	5	10	10	10	30	31% R	1,354.55	R	2,328.14	R	973.59	Increase
3203	TOIR074000100000240000000000000000	764165	13038076	44	6	4	5	5	10	10	4	0	43	6	4	5	5	10	10	3	0	-4% R	962.58	R	896.80	-R	65.79	Decrease
3204	TOIQ003100000000020000000000000000	602333	13055255	30	6	4	5	5	10	0	0	0	28	6	4	5	5	8	0	0	0	-7% R	513.02	R	452.84	-R	60.18	Decrease
3205	TOIQ003100200000176000000000000000	602670	13055237	29	6	4	5	5	9	0	0	0	9	6	3	0	0	0	0	0	0	-71% R	487.44	R	62.13	-R	425.30	Decrease
3206	TOIQ003100200000178000000000000000	602664	13057579	24	6	4	5	5	4	0	0	0	34	6	4	5	5	10	4	0	0	29% R	347.25	R	626.30	R	279.05	Increase
3207	TOIQ005400000000007000000000000000	221998	13032364	8	6	2	0	0	0	0	0	0	7	6	1	0	0	0	0	0	0	-13% R	54.1	R	46.97	-R	7.43	Decrease
3208	TOIQ005400000000008000000000000000	WB8715	13032429	21	6	4	5	5	1	0	0	0	32	6	4	5	5	10	2	0	0	35% R	263.43	R	578.48	R	315.05	Increase
3209	TOIQ005400000000009000000000000000	604313	13031637	14	6	4	4	0	0	0	0	0	28	6	4	5	5	8	0	0	0	51% R	123.58	R	457.74	R	334.16	Increase
3210	TOIQ005400000000018000000000000000	602220	13048136	24	6	4	5	5	4	0	0	0	19	6	4	5	4	0	0	0	0	-19% R	331.98	R	219.17	-R	112.82	Decrease
3211	TOIQ005400000000028000000000000000	613825	13055433	23	6	4	5	5	3	0	0	0	31	6	4	5	5	10	1	0	0	27% R	312.90	R	549.26	R	236.36	Increase
3212	TOIQ006000000000008000000000000000	VB8577	120038653	35	6	4	5	5	10	5	0	0	42	6	4	5	5	10	10	2	0	16% R	660.65	R	876.55	R	215.90	Increase
3213	TOIQ006000000000012000000000000000	945589	GK64358	31	6	4	5	5	10	1	0	0	17	6	4	5	5	2	0	0	0	-46% R	539.81	R	174.70	-R	365.11	Decrease
3214	TOIQ006000000000016000000000000000	VC0561	120039071	33	6	4	5	5	10	3	0	0	27	6	4	5	5	7	0	0	0	-19% R	585.83	R	413.63	-R	172.20	Decrease
3215	TOIQ006000000000045000000000000000	WB84338	GK64319	29	6	4	5	5	9	0	0	0	34	6	4	5	5	10	4	0	0	14% R	484.86	R	620.98	R	136.13	Increase
3216	TOIQ006000000000073000000000000000	933300	13048124	27	6	4	5	5	7	0	0	0	30	6	4	5	5	10	0	0	0	10% R	417.74	R	494.51	R	76.76	Increase
3217	TOIQ006000100000114000000000000000	VD8627	120038657	31	6	4	5	5	10	1	0	0	28	6	4	5	5	8	0	0	0	-8% R	530.82	R	460.19	-R	70.63	Decrease
3218	TOIQ006000100000169000000000000000	WB8484	13032433	19	6	4	5	4	0	0	0	0	24	6	4	5	5	4	0	0	0	19% R	226.92	R	342.55	R	115.63	Increase
3219	TOIQ006000100000171000000000000000	WB8474	13031478	25	6	4	5	5	5	0	0	0	20	6	4	5	5	0	0	0	0	-19% R	369.82	R	239.61	-R	130.21	Decrease
3220	TOIQ006000300000320000000000000000	219325	13048129	52	6	4	5	5	10	10	10	2	48	6	4	5	5	10	8	0	0	-8% R	1,251.19	R	1,099.21	-R	151.97	Decrease
3221	TOIQ006000300000332000000000000000	506117	13032377	44	6	4	5	5	10	10	4	0	32	6	4	5	5	10	2	0	0	-27% R	938.12	R	565.20	-R	372.92	Decrease
3222	TOIQ006000300000336000000000000000	WB84308	GKF3031	22	6	4	5	5	2	0	0	0	27	6	4	5	5	7	0	0	0	19% R	288.08	R	423.63	R	135.55	Increase
3223	TOIQ006000300000340000000000000000	WB84324	13032509	32	6	4	5	5	10	2	0	0	61	6	4	5	5	10	10	10	11	47% R	574.19	R	1,610.06	R	1,035.87	Increase
3224	TOIQ006000300000373000000000000000	WB84316	GKF2462	26	6	4	5	5	6	0	0	0	24	6	4	5	5	4	0	0	0	-6% R	398.92	R	354.80	-R	44.12	Decrease
3225	TOIQ006000300000388000000000000000	WB8553	13031541	14	6	4	4	0	0	0	0	0	52	6	4	5	5	10	10	10	2	73% R	126.66	R	1,229.90	R	1,103.24	Increase
3226	TOIQ006000300000431000000000000000	WB84311	GKF3046	43	6	4	5	5	10	10	3	0	35	6	4	5	5	10	5	0	0	-19% R	918.24	R	658.17	-R	260.07	Decrease
3227	TOIQ006000400000562000000000000000	220545	GKF2375	12	6	4	2	0	0	0	0	0	11	6	4	1	0	0	0	0	0	-13% R	104.77	R	83.94	-R	20.83	Decrease
3228	TOIQ006000400000597000000000000000	221928	13019597	8	6	2	0	0	0	0	0	0	9	6	3	0	0	0	0	0	0	18% R	54.21	R	66.96	R	12.75	Increase
3229	TOIQ006000400000606000000000000000	WA82943	13019262	16	6	4	5	5	1	0	0	0	28	6	4	5	5	8	0	0	0	44% R	152.51	R	455.29	R	302.79	Increase
3230	TOIQ006001100000813000000000000000	WB84204	13032489	45	6	4	5	5	10	10	5	0	52	6	4	5	5	10	10	10	2	13% R	995.11	R	1,251.02	R	255.91	Increase
3231	TOIQ006600000000006000000000000000	602166	GKG2187	33	6	4	5	5	10	3	0	0	38	6	4	5	5	10	8	0	0	14% R	585.83	R	737.86	R	152.04	Increase
3232	TOIQ006600000000016000000000000000	602051	13036312	53	6	4	5	5	10	10	10	3	103	6	4	5	5	10	10	10	53	49% R	1,292.03	R	3,232.78	R	1,940.75	Increase
3233	TOIQ008400000000092000000000000000	219584	13055396	16	6	4	5	5	1	0	0	0	29	6	4	5	5	9	0	0	0	45% R	152.60	R	472.45	R	319.85	Increase
3234	TOIQ008400000000013200000000000000	947838	13019297	36	6	4	5	5	10	6	0	0	27	6	4	5	5	7	0	0	0	-26% R	695.57	R	425.88	-R	269.69	Decrease
3235	TOIQ008400000000277000000000000000	600072	13019552	22	6	4	5	5	2	0	0	0	22	6	4	5	5	2	0	0	0	-1% R	291.08	R	286.18	-R	4.90	Decrease
3236	TOIQ008400000000562000000000000000	172721	13039696	8	6	2	0	0	0	0	0	0	24	6	4	5	5	4	0	0	0	66% R	57.61	R	335.20	R	277.59	Increase
3237	TOIQ008400200000698000000000000000	600084	13032406	16	6	4	5	5	1	0	0	0	23	6	4	5	5	3	0	0	0	32% R	157.13	R	327.84	R	170.71	Increase
3238	TOIQ008400200000756000000000000000	WB8577	13055404	24	6	4	5	5	4	0	0	0	25	6	4	5	5	5	0	0	0	3% R	355.78	R	374.41	R	18.63	Increase
3239	TOIQ008400200000757000000000000000	316150	13031411	32	6	4	5	5	10	2	0	0	29	6	4	5	5	9	0	0	0	-7% R	556.21	R	492.05	-R	64.15	Decrease
3240	TOIQ008400200000782000000000000000	222497	13034205	19	6	4	5	4	0	0	0	0	35	6	4	5	5	10	5	0	0	46% R	216.13	R	650.20	R	434.08	Increase
3241	TOIQ008400200000786000000000000000	222502	13019566	37	6	4	5	5	10	7	0	0	32	6	4	5	5	10	2	0	0	-13% R	708.87	R	565.20	-R	143.67	Decrease
3242	TOIQ008400200000788000000000000000	930600177	13018359	7	6	1	0	0	0	0	0	0	12	6	4	2	0	0	0	0	0	38% R	53.67	R	99.50	R	45.83	Increase
3243	TOIQ008400200000796000000000000000	600191	13034114	19	6	4	5	5	4	0	0	0	23	6	4	5	5	3	0	0	0	17% R	216.88	R	315.59	R	98.71	Increase
3244	TOIQ008400200000933000000000000000	222695	13031061	22	6	4	5	5	2	0	0	0	36	6	4	5	5	10	6	0	0	41% R	277.60	R	687.39	R	409.79	Increase
3245	TOIQ008400200000974000000000000000	221280	13031617	27	6	4	5	5	7	0	0	0	36	6	4	5	5	10	6	0	0	26% R	422.29	R	690.05	R	267.76	Increase
3246	TOIQ008400200001042000000000000000	222058	13032517	14	6	4	4	0	0	0	0	0	19	6	4	5	4	0	0	0	0	29% R	122.91	R	226.45	R	103.54	Increase
3247	TOIQ008400200001082000000000000000	600109	13019562	32	6	4	5	5	10	2	0																	

SGID	Old Meter	New Meter	Old Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	New Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	% Loss					Increase / Decrease
				R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		Monthly Bill Old	Monthly Bill New	Change on Revenue		
3277	TOIQ012100000000880000000000000000	XBM933	13032404	22	6	4	5	5	2	0	0	21	6	4	5	5	1	0	0	0	-9% R	303.66 R	251.87 -R	51.80	Decrease	
3278	TOIQ01210000000092200000RE00000000	945400	13031443	19	6	4	5	4	0	0	0	28	6	4	5	5	8	0	0	0	30% R	224.89 R	445.49 R	220.60	Increase	
3279	TOIQ012100000000930000000000000000	945768	120037263	102	6	4	5	5	10	10	52	108	6	4	5	5	10	10	10	58	6% R	3 180.52 R	3 412.30 R	231.78	Increase	
3280	TOIQ012100000000956000040000000000	931435	120037297	21	6	4	5	5	1	0	0	25	6	4	5	5	5	0	0	0	16% R	267.49 R	371.96 R	104.47	Increase	
3281	TOIQ012100000001026000110000000000	161243	13038224	17	6	4	5	2	0	0	0	27	6	4	5	5	7	0	0	0	36% R	176.63 R	416.08 R	239.44	Increase	
3282	TOIQ012100200001439000000000000000	161203	GKF4602	14	6	4	4	0	0	0	0	19	6	4	5	4	0	0	0	0	27% R	124.29 R	215.75 R	91.45	Increase	
3283	TOIQ012100200001458000000000000000	947884	GKF4341	48	6	4	5	5	10	10	8	45	6	4	5	5	10	10	5	0	-7% R	1 084.93 R	967.64 -R	117.28	Decrease	
3284	TOIQ012100200001460000000000000000	219749	GKF4368	56	6	4	5	5	10	10	10	6	74	6	4	5	5	10	10	24	24% R	1 398.08 R	2 099.34 R	701.26	Increase	
3285	TOIQ012100200001490000000000000000	222457	GKF4540	52	6	4	5	5	10	10	2	39	6	4	5	5	10	9	0	0	-24% R	1 247.50 R	777.71 -R	469.79	Decrease	
3286	TOIQ012100200001597000000000000000	VB7734	120040073	40	6	4	5	5	10	10	0	40	6	4	5	5	10	10	0	0	-1% R	810.56 R	790.99 -R	19.57	Decrease	
3287	TOIQ012100200001599000000000000000	VB7246	13018413	4	4	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	-30% R	31.50 R	22.07 -R	9.43	Decrease	
3288	TOIQ012100200001620000000000000000	219215	120036090	34	6	4	5	5	10	4	0	0	29	6	4	5	5	9	0	0	-15% R	618.16 R	470.00 -R	148.16	Decrease	
3289	TOIQ012100300001700000000000000000	VB7409	GKF4339	24	6	4	5	5	4	0	0	22	6	4	5	5	2	0	0	0	-10% R	353.99 R	288.63 -R	65.36	Decrease	
3290	TOIQ012100300001709000000000000000	WA5768	120037275	32	6	4	5	5	10	2	0	27	6	4	5	5	7	0	0	0	-14% R	558.46 R	430.78 -R	127.68	Decrease	
3291	TOIQ012100300001840000000000000000	161116	13055431	22	6	4	5	5	2	0	0	20	6	4	5	5	0	0	0	0	-7% R	282.09 R	239.61 -R	42.48	Decrease	
3292	TOIQ012100300001914000000000000000	161083	13036402	26	6	4	5	5	6	0	0	34	6	4	5	5	10	4	0	0	23% R	398.92 R	620.98 R	222.06	Increase	
3293	TOIQ012100300001943000000000000000	222146	13018389	24	6	4	5	5	4	0	0	5	5	0	0	0	0	0	0	0	-80% R	352.93 R	35.05 -R	317.88	Decrease	
3294	TOIQ012100300002006000000000000000	226140	13036320	45	6	4	5	5	10	10	5	52	6	4	5	5	10	10	10	2	14% R	974.20 R	1 251.02 R	276.82	Increase	
3295	TOIQ012100400002026000000000000000	WA5804	13019346	12	6	4	2	0	0	0	0	30	6	4	5	5	10	0	0	0	60% R	101.26 R	517.39 R	416.13	Increase	
3296	TOIQ012100400002032000000000000000	219223	120037097	32	6	4	5	5	10	2	0	28	6	4	5	5	8	0	0	0	-12% R	554.57 R	450.39 -R	104.19	Decrease	
3297	TOIQ012100400002038000000000000000	WA5448	13034153	32	6	4	5	5	10	2	0	33	6	4	5	5	10	3	0	0	4% R	555.46 R	597.08 R	41.62	Increase	
3298	TOIQ012100400002046000000000000000	807966	13019292	34	6	4	5	5	10	4	0	50	6	4	5	5	10	10	10	0	31% R	636.63 R	1 166.69 R	530.06	Increase	
3299	TOIQ012100400002052000000000000000	161193	13036347	35	6	4	5	5	10	5	0	129	6	4	5	5	10	10	10	79	73% R	656.76 R	4 228.94 R	3 572.18	Increase	
3300	TOIQ012100400002068000000000000000	WBV891	120039073	14	6	4	4	0	0	0	0	19	6	4	5	4	0	0	0	0	26% R	126.72 R	217.53 R	90.81	Increase	
3301	TOIQ012100400002105000000000000000	94331	13056591	20	6	4	5	5	0	0	0	31	6	4	5	5	10	1	0	0	35% R	234.71 R	522.70 R	287.99	Increase	
3302	TOIQ012100400002121000000000000000	161192	13055391	18	6	4	5	3	0	0	0	12	6	4	2	0	0	0	0	0	-35% R	204.44 R	98.30 -R	106.14	Decrease	
3303	TOIQ012100400002123000000000000000	505447	13018397	59	6	4	5	5	10	10	10	9	77	6	4	5	5	10	10	27	24% R	1 520.69 R	2 233.10 R	712.41	Increase	
3304	TOIQ012100400002128000000000000000	948440	13032220	11	6	4	1	0	0	0	0	35	6	4	5	5	10	5	0	0	69% R	81.94 R	642.23 R	560.29	Increase	
3305	TOIQ012100400002133000000000000000	948445	13055496	31	6	4	5	5	10	1	0	71	6	4	5	5	10	10	10	21	56% R	535.98 R	1 979.66 R	1 443.68	Increase	
3306	TOIQ012100400002134000000000000000	225034	13034144	65	6	4	4	5	5	10	10	15	40	6	4	5	5	10	10	0	-38% R	1 746.56 R	809.08 -R	937.48	Decrease	
3307	TOIQ012100400002148000000000000000	908930	13019398	60	6	4	5	5	10	10	10	52	6	4	5	5	10	10	10	2	-13% R	1 540.67 R	1 229.90 -R	310.77	Decrease	
3308	TOIQ012100400002149000000000000000	220362	13036348	12	6	4	2	0	0	0	0	23	6	4	5	5	3	0	0	0	47% R	103.26 R	320.49 R	217.23	Increase	
3309	TOIQ012100400002150000000000000000	220360	GKF4652	33	6	4	5	5	10	3	0	37	6	4	5	5	10	7	0	0	12% R	582.25 R	705.99 R	123.74	Increase	
3310	TOIQ012100500002173000000000000000	948457	13034251	44	6	4	4	5	5	10	4	38	6	4	5	5	10	8	0	0	-12% R	931.50 R	753.80 -R	177.69	Decrease	
3311	TOIQ012100500002183000000000000000	948442	13049891	29	6	4	4	5	5	9	0	0	16	6	4	5	1	0	0	0	-46% R	492.16 R	158.64 -R	333.52	Decrease	
3312	TOIQ012100500002204000000000000000	WBV895	13049841	21	6	4	5	5	1	0	0	20	6	4	5	5	0	0	0	0	-2% R	260.53 R	246.96 -R	13.56	Decrease	
3313	TOIQ012100900002236000000000000000	948185	13034258	31	6	4	4	5	5	10	1	0	33	6	4	5	5	10	3	0	6% R	535.98 R	591.76 R	55.78	Increase	
3314	TOIQ012100900002237000020000000000	220370	13019556	19	6	4	4	5	4	0	0	18	6	4	5	3	0	0	0	0	-4% R	221.21 R	206.82 -R	14.39	Decrease	
3315	TOIQ012100900002237000280000000000	225230	13031427	74	6	4	5	5	10	10	10	24	12	6	4	2	0	0	0	0	-83% R	2 088.58 R	105.49 -R	1 983.10	Decrease	
3316	TOIQ012199100001077000000000000000	219767	13055507	12	6	4	2	0	0	0	0	22	6	4	5	5	2	0	0	0	47% R	98.68 R	300.88 R	202.21	Increase	
3317	TOIQ012199100001081000000000000000	167161	13036343	66	6	4	4	5	5	10	10	16	17	6	4	5	2	0	0	0	-75% R	1 787.00 R	172.92 -R	1 614.08	Decrease	
3318	TOIQ012199100001090000000000000000	VB7284	13032201	75	6	4	4	5	5	10	10	25	69	6	4	5	5	10	10	19	-8% R	2 145.80 R	1 919.82 -R	225.98	Decrease	
3319	TOIQ012200000000129000000000000000	947189	13046812	46	6	4	4	5	5	10	10	6	51	6	4	5	5	10	10	1	11% R	1 009.90 R	1 226.38 R	216.48	Increase	
3320	TOIQ012200100000331000000000000000	172669	13055573	20	6	4	4	5	5	0	0	19	6	4	5	5	4	0	0	0	-4% R	237.16 R	221.10 -R	16.06	Decrease	
3321	TOIQ012300000000050300000000000000	366645	GKF4487	53	6	4	4	5	5	10	10	3	34	6	4	5	5	10	4	0	-35% R	1 283.80 R	636.92 -R	646.88	Decrease	
3322	TOIQ012300000000051400000000000000	906893	120038679	21	6	4	4	5	5	1	0	0	35	6	4	5	5	10	5	0	40% R	254.41 R	639.58 R	385.16	Increase	
3323	TOIQ012300000000054000000000000000	906730	13018637	27	6	4	4	5	5	7	0	0	29	6	4	5	5	9	0	0	5% R	436.36 R	472.45 R	36.08	Increase	
3324	TOIQ012300000000057600000000000000	906723	13034109	71	6	4	4	5	5	10	10	21	118	6	4	5	5	10	10	68	40% R	1 991.33 R	3 810.06 R	1 818.73	Increase	
3325	TOIQ012300000000057700000000000000	313154	13039410	18	6	4	4	5	3	0	0	0	27	6	4	5	5	7	0	0	35% R	191.70 R	435.68 R	243.98	Increase	
3326	TOIQ012300200000651000000000000000	907099	13031102	62	6	4	4	5	5	10	10	12	76	6	4	5	5	10	10	26	19% R	1 617.49 R	2 190.86 R	573.37	Increase	
3327	TOIQ012300200000652000000000000000	907101	13019334	75	6	4	4	5	5	10	10	10	25	67	6	4	5	5	10	10	17	-11% R	2 153.55 R	1 845.90 -R		

SGID	Old Meter	New Meter	Old Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	New Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	% Loss	Monthly Bill Old	Monthly Bill New	Change on Revenue	Increase / Decrease	
				R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72						
3355	TOIQ01350000000044800014000000000	93919	13018461	34	6	4	5	5	10	4	0	0	14	6	4	4	0	0	0	0	-59% R	630.95	R 128.23	-R	502.71 Decrease	
3356	TOIQ01350000000044800043000000000	94270	13011718	32	6	4	5	5	10	2	0	0	43	6	4	5	5	10	3	0	26% R	565.20	R 917.04	R	351.84 Increase	
3357	TOIQ01480260000011400000000000000	VBS922	GKH3347	19	6	4	5	4	0	0	0	0	26	6	4	5	5	6	0	0	26% R	221.89	R 398.92	R	177.03 Increase	
3358	TOIQ01490000000019000000000000000	338873	13056605	26	6	4	5	5	6	0	0	0	20	6	4	5	5	0	0	0	-21% R	386.34	R 239.61	-R	146.73 Decrease	
3359	TOIQ01490000000051000000000000000	326470	GKG4743	44	6	4	5	5	10	10	4	0	67	6	4	5	5	10	10	10	35% R	947.40	R 1842.38	R	894.98 Increase	
3360	TOIQ01490000000055000000000000000	326475	GKG4710	20	6	4	5	5	0	0	0	0	38	6	4	5	5	10	8	0	48% R	237.16	R 748.49	R	511.33 Increase	
3361	TOIQ01490000000075000000000000000	946429	13049862	43	6	4	5	5	10	10	3	0	18	6	4	5	3	0	0	0	-58% R	898.69	R 192.55	-R	706.15 Decrease	
3362	TOIQ01490000000014700000000000000	326277	GKG4443	16	6	4	5	1	0	0	0	0	19	6	4	5	4	0	0	0	19% R	150.05	R 222.88	R	72.83 Increase	
3363	TOIQ01490000000018900370000000000	326484	GKG4376	27	6	4	5	5	7	0	0	0	26	6	4	5	5	6	0	0	-2% R	412.40	R 401.37	-R	11.03 Decrease	
3364	TOIQ01490000000019200001000000000	326477	GKG4445	18	6	4	5	3	0	0	0	0	18	6	4	5	3	0	0	0	0% R	190.35	R 188.98	-R	1.37 Decrease	
3365	TOIQ01490000000019500013000000000	326483	GKG4472	51	6	4	5	5	10	10	10	1	37	6	4	5	5	10	7	0	-27% R	1215.23	R 724.58	-R	490.65 Decrease	
3366	TOIQ01490000000019800010000000000	338874	13049845	18	6	4	5	3	0	0	0	0	30	6	4	5	5	10	0	0	38% R	202.11	R 494.51	R	292.40 Increase	
3367	TOIQ01490000000020400012000000000	326268	13038108	37	6	4	5	5	10	7	0	0	29	6	4	5	5	9	0	0	-20% R	701.56	R 492.05	-R	209.51 Decrease	
3368	TOIQ01560000000013200000000000000	338933	GKG4714	21	6	4	5	5	1	0	0	0	76	6	4	5	5	10	10	10	73% R	252.57	R 2166.22	R	1913.65 Increase	
3369	TOIQ01560010000061400000000000000	1007105	13012015	55	6	4	5	5	10	10	10	5	79	6	4	5	5	10	10	10	30% R	1371.96	R 2302.62	R	930.66 Increase	
3370	TOIQ01560010000074000000000000000	1007069	GKF2417	77	6	4	5	5	10	10	10	27	33	6	4	5	5	10	3	0	-57% R	2223.80	R 597.08	-R	1626.72 Decrease	
3371	TOIQ01560010000087600000000000000	93107064	GKG4823	34	6	4	5	5	10	4	0	0	39	6	4	5	5	10	9	0	13% R	609.03	R 756.46	R	147.43 Increase	
3372	TOIQ01560010000089300000000000000	334058	GKG4827	14	6	4	4	0	0	0	0	0	13	6	4	3	0	0	0	0	-1% R	120.82	R 118.66	-R	2.17 Decrease	
3373	TOIQ01560060000103100000000000000	326400	GKH4630	28	6	4	5	5	8	0	0	0	29	6	4	5	5	9	0	0	2% R	459.80	R 474.90	R	15.10 Increase	
3374	TOIQ01700010000121200000000000000	VBS661	GKG4876	28	6	4	5	5	8	0	0	0	31	6	4	5	5	10	1	0	10% R	450.59	R 533.32	R	82.73 Increase	
3375	TOIQ01970010000020500000000000000	WAS640	13039381	13	6	4	3	0	0	0	0	0	12	6	4	2	0	0	0	0	-8% R	107.97	R 94.71	-R	13.26 Decrease	
3376	TOIQ02120000000053000000000000000	11282	GKH4137	40	6	4	5	5	10	10	0	0	34	6	4	5	5	10	4	0	-14% R	794.46	R 636.92	-R	157.54 Decrease	
3377	TOIQ02410000000005000010000000000	315983	GKH4612	88	6	4	5	5	10	10	10	38	191	6	4	5	5	10	10	10	54% R	2658.01	R 6161.02	R	3961.01 Increase	
3378	TOIQ02410000000002200000000000000	1007679	GKF2997	28	6	4	5	5	8	0	0	0	34	6	4	5	5	10	4	0	20% R	440.26	R 631.61	R	191.35 Increase	
3379	TOIQ02410000000009100001000000000	947362	GKF2481	30	6	4	5	5	10	0	0	0	44	6	4	5	5	10	4	0	32% R	496.49	R 930.53	R	434.04 Increase	
3380	TOIQ02410000000046100003000000000	316379	GKT9159	15	6	4	5	0	0	0	0	0	19	6	4	5	4	0	0	0	18% R	148.17	R 215.75	R	67.57 Increase	
3381	TOIQ02410000000048300003000000000	172800	GKF2474	125	6	4	5	5	10	10	10	75	10	6	4	0	0	0	0	0	-92% R	4059.17	R 75.55	-R	3983.61 Decrease	
3382	TOIQ02410000000048600002000000000	VC0640	GKH3153	24	6	4	4	5	4	0	0	0	20	6	4	5	5	0	0	0	-18% R	340.85	R 228.24	-R	112.62 Decrease	
3383	TOIQ02410000000048600004000000000	315198	13031508	30	6	4	5	5	10	0	0	0	22	6	4	5	5	2	0	0	-28% R	510.20	R 278.83	-R	231.37 Decrease	
3384	TOIQ02410010000047600000000000000	91642	GKH4687	125	6	4	4	5	10	10	10	75	121	6	4	5	5	10	10	10	-4% R	4074.06	R 3901.58	-R	172.48 Decrease	
3385	TOIQ02419910000039700000000000000	WBY918	GKF2370	24	6	4	5	5	4	0	0	0	25	6	4	5	5	5	0	0	7% R	336.70	R 381.76	R	45.06 Increase	
3386	TOIQ02419910000045800005000000000	VBR940	GKF4543	30	6	4	4	5	5	0	0	0	1	1	0	0	0	0	0	0	-97% R	500.77	R 6.55	-R	494.22 Decrease	
3387	TOIQ02670000000060900000000000000	568711	GKF9698	24	6	4	5	5	4	0	0	0	28	6	4	5	5	8	0	0	15% R	337.81	R 446.62	R	108.81 Increase	
3388	TOIQ02760190000184100000RE0000000	315408	GKH3133	30	6	4	4	5	5	0	0	0	45	6	4	5	5	10	10	5	34% R	497.77	R 973.09	R	475.32 Increase	
3389	TOIQ02890000000015800000000000000	XAG526	13019577	33	6	4	4	5	5	10	3	0	37	6	4	4	5	5	10	7	0	12% R	585.83	R 713.96	R	128.13 Increase
3390	TOIQ02890000000017600000000000000	315611	GKG4731	46	6	4	4	5	5	10	10	6	71	6	4	5	5	10	10	10	35% R	1019.15	R 1969.10	R	949.95 Increase	
3391	TOIQ02890000000019000000000000000	312520	GKG4772	31	6	4	4	5	5	10	1	0	32	6	4	4	5	5	10	2	0	2% R	549.62	R 573.17	R	23.55 Increase
3392	TOIQ02890000000029200000000000000	WAR490	GKG4721	20	6	4	4	5	5	0	0	0	17	6	4	4	5	2	0	0	-15% R	238.66	R 180.05	-R	58.60 Decrease	
3393	TOIQ03040000000001000000RE0000000	502540	13056645	248	6	4	4	5	5	10	10	10	198	28	6	4	5	5	8	0	-89% R	8850.17	R 439.36	-R	8410.81 Decrease	
3394	TOIQ03180010000077000000000000000	72412	13022447	273	6	4	4	5	5	10	10	223	597	6	4	5	5	10	10	10	54% R	9798.85	R 22340.96	R	12542.11 Increase	
3395	TOIQ03240000000010400000000000000	1006585	13018661	80	6	4	4	5	5	10	10	30	53	6	4	5	5	10	10	3	-34% R	2336.82	R 1268.62	-R	1068.20 Decrease	
3396	TOIQ03240000000012900000000000000	944095	GKF2717	33	6	4	4	5	5	10	3	0	32	6	4	4	5	5	10	2	0	0% R	579.81	R 578.48	-R	1.33 Decrease
3397	TOIQ03240000000018400000000000000	948519	GKG3361	29	6	4	4	5	5	9	0	0	9	6	3	0	0	0	0	0	-69% R	470.81	R 65.58	-R	405.23 Decrease	
3398	TOIQ03680000000000640000000000000	922125	13039498	36	6	4	4	5	5	10	6	0	23	6	4	4	5	5	3	0	-36% R	692.52	R 327.84	-R	364.67 Decrease	
3399	TOIQ03680000000010000000000000000	922148	GKG2107	55	6	4	4	5	5	10	10	10	5	62	6	4	5	5	10	10	12	12% R	1348.17	R 1624.14	R	275.97 Increase
3400	TOIQ03680000000011000000000000000	VBS732	GKG2091	13	6	4	4	3	0	0	0	0	41	6	4	4	5	5	10	10	69% R	109.85	R 833.42	R	723.57 Increase	
3401	TOIQ03680000000018100000000000000	922151	GKH4119	24	6	4	4	5	5	4	0	0	49	6	4	4	5	5	10	10	9	50% R	357.58	R 1116.08	R	758.50 Increase
3402	TOIQ03920000000000090000000000000	920356	GKG4439	33	6	4	4	5	5	10	3	0	56	6	4	4	5	5	10	10	6	42% R	579.81	R 1416.46	R	836.65 Increase
3403	TOIQ03920010000003020000000000000	920220	13057262	15	6	4	4	5	0	0	0	0	21	6	4	4	5	5	1	0	31% R	133.52	R 264.12	R	130.60 Increase	
3404	TOIQ03920040000034200000000000000	1006643	13038089	22	6	4	4	5	5	2	0	0	19	6	4	4	5	4	0	0	-12% R	291.08	R 224.67	-R	66.41 Decrease	
3405	TOIQ04670030000128300000000000000	922159	13039688	44	6	4	4	5	5	10	10	4	0	74	6	4	4	5	5	10	10	40% R	955.35	R 2081.74	R	1126.39 Increase
3406	TOIQ04670040000064400000000000000	947794	13037404	37	6	4	4	4	5	10	7	0	28	6	4	4	5	5								

SGID	Old Meter	New Meter	Old Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	New Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	% Loss								
				R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		R 7.14	R 7.58	R 13.17	R 19.63	R 26.96	R 29.22	R 37.11	R 38.72		Monthly Bill Old	Monthly Bill New	Change on Revenue	Increase / Decrease				
3433	TOIQ0482003000001380000000000000	920908	13013150	38	6	4	5	5	10	8	0	0	20	6	4	5	5	0	0	0	-49% R	751.48	R	230.02	-R	521.46	Decrease		
3434	TOIQ0482004000001610000000000000	920936	13055594	31	6	4	5	5	10	1	0	0	16	6	4	5	1	0	0	0	-50% R	531.11	R	149.72	-R	381.39	Decrease		
3435	TOIQ0482004000001720000000000000	920020	13013044	15	6	4	5	0	0	0	0	0	14	6	4	4	0	0	0	0	-7% R	133.74	R	119.85	-R	13.89	Decrease		
3436	TOIQ0487000000000280000000000000	7565	GKH3293	35	6	4	5	5	10	5	0	0	25	6	4	5	5	5	0	0	-29% R	647.02	R	362.16	-R	284.86	Decrease		
3437	TOIQ0487000000000310000000000000	WBX526	GKH3403	17	6	4	5	2	0	0	0	0	15	6	4	5	0	0	0	0	-13% R	185.90	R	142.58	-R	43.32	Decrease		
3438	TOIQ0487000000000870000000000000	921682	GKH3365	38	6	4	5	5	10	8	0	0	40	6	4	5	5	10	10	0	4% R	754.01	R	798.96	R	44.95	Increase		
3439	TOIQ0487000000000129000000000000	921687	GKH3370	14	6	4	4	0	0	0	0	0	10	6	4	4	0	0	0	0	-28% R	126.66	R	75.55	-R	51.11	Decrease		
3440	TOIQ0488003000000683000000000000	932957	GKF9861	28	6	4	5	5	8	0	0	0	31	6	4	5	5	10	1	0	8% R	461.14	R	531.11	R	69.97	Increase		
3441	TOIQ0502003000000168000000000000	VBS527	13012077	41	6	4	5	5	10	10	1	0	44	6	4	5	5	10	10	4	7% R	820.44	R	933.91	R	113.46	Increase		
3442	TOIQ050300200000054600029000000000	503121	13039847	24	6	4	5	5	4	0	0	0	18	6	4	5	3	0	0	0	-23% R	342.00	R	206.82	-R	135.18	Decrease		
3443	TOIQ052300000000002700000000000000	WAZ956	13010856	22	6	4	5	5	2	0	0	0	25	6	4	5	5	5	0	0	13% R	278.83	R	364.61	R	85.78	Increase		
3444	TOIQ052300000000011400000000000000	506222	13037642	15	6	4	5	0	0	0	0	0	18	6	4	5	3	0	0	0	17% R	134.31	R	188.98	R	54.67	Increase		
3445	TOIQ052300000000018400004000000000	WAT103	13037533	17	6	4	5	2	0	0	0	0	27	6	4	5	5	7	0	0	36% R	176.96	R	416.08	R	239.12	Increase		
3446	TOIQ052300000000023400000000000000	WAT110	13038087	7	6	1	0	0	0	0	0	0	24	6	4	5	5	4	0	0	73% R	46.63	R	345.00	R	298.37	Increase		
3447	TOIQ0523000000000299000000RE000000	197939	13012544	23	6	4	5	5	3	0	0	0	19	6	4	5	4	0	0	0	-17% R	327.97	R	226.45	-R	101.52	Decrease		
3448	TOIQ052300100000063900000000000000	WAT102	GKG3471	35	6	4	5	5	10	5	0	0	38	6	4	5	5	10	8	0	9% R	642.15	R	740.52	R	98.37	Increase		
3449	TOIQ068201000000088000000000000000	59777	GKG3442	27	6	4	4	5	5	7	0	0	31	6	4	4	5	5	10	1	0	12% R	423.81	R	526.24	R	102.43	Increase	
3450	TOIR004700300000010200000000000000	188137	130109969	46	6	4	5	5	10	10	6	0	54	6	4	5	5	10	10	10	4	15% R	1029.57	R	1335.50	R	305.93	Increase	
3451	TOIR001140000000046550000000000000	375184	140019297	62	6	4	4	5	5	10	10	12	39	6	4	5	5	10	9	0	-38% R	1641.15	R	764.43	-R	876.73	Decrease		
3452	TOIR00210000000000930000300000000000	481192	30046030	54	6	4	4	5	5	10	10	10	4	38	6	4	5	5	10	8	0	-29% R	1331.77	R	748.49	-R	583.28	Decrease	
3453	TOIR002600012000000366000000000000	611203	130105918	51	6	6	4	5	5	10	10	1	124	6	4	5	5	10	10	10	74	59% R	1218.46	R	4031.82	R	2813.36	Increase	
3454	TOIR003500000000010000072000000000	998313	13045455	29	6	4	4	5	5	9	0	0	43	6	4	5	5	10	10	3	0	34% R	471.87	R	923.78	R	451.91	Increase	
3455	TOIR003620050000000650000000000000	63889	130108570	73	6	4	4	5	5	10	10	23	55	6	4	5	5	10	10	10	5	-25% R	2060.62	R	1367.18	-R	693.44	Decrease	
3456	TOIR00404005000000059100015000000000	188148	130055594	24	6	4	4	5	5	4	0	0	51	6	4	4	5	5	10	10	1	53% R	346.69	R	1212.30	R	865.62	Increase	
3457	TOIR00404007000000060000280000000000	114688	130103299	23	6	4	4	5	5	3	0	0	0	31	6	4	5	5	10	1	0	27% R	306.81	R	535.98	R	229.17	Increase	
3458	TOIR004200000000004170000000000000	343831	130091308	2	2	0	0	0	0	0	0	0	44	6	4	5	5	10	10	4	0	95% R	17.09	R	930.53	R	913.45	Increase	
3459	TOIR00451096000011650000220000000000	39458	13035970	159	6	4	4	5	5	10	10	10	109	33	6	4	5	5	10	3	0	-79% R	5396.07	R	583.79	-R	4812.28	Decrease	
3460	TOIR005140020000000005000000RE000000	1077	130085908	19	6	4	4	5	5	4	0	0	0	20	6	4	5	5	0	0	0	7% R	212.62	R	242.06	R	29.44	Increase	
3461	TOIR00629028000000211000370000000000	39472	13057444	12	6	4	4	2	0	0	0	0	0	17	6	4	5	2	0	0	0	27% R	104.92	R	180.05	R	75.13	Increase	
3462	TOIR007470010000000300000000000000	392323	1300091926	2	2	0	0	0	0	0	0	0	29	6	4	5	5	9	0	0	0	94% R	12.01	R	477.35	R	465.34	Increase	
3463	TOIQ00031000000000016000000000000000	WAT101	13032333	25	6	4	5	5	5	0	0	0	17	6	4	5	2	0	0	0	-33% R	362.25	R	169.35	-R	192.91	Decrease		
3464	TOIQ00031001000002130000000000000000	121736	13032535	10	6	4	4	0	0	0	0	0	14	6	4	4	0	0	0	0	33% R	70.53	R	130.63	R	60.10	Increase		
3465	TOIQ00600010000017300000000000000000	WBA476	130103661	31	6	4	4	5	5	10	1	0	0	31	6	4	5	5	10	1	0	0%	534.26	R	533.32	-R	0.94	Decrease	
3466	TOIQ00600020000002690000000000000000	WAS919	13018426	48	6	4	4	5	5	10	10	8	0	47	6	4	5	5	10	10	7	0	-2% R	1098.59	R	1062.10	-R	36.49	Decrease
3467	TOIQ00600040000005300000000000000000	WBA431	120039047	11	6	4	1	0	0	0	0	0	9	6	3	0	0	0	0	0	0	-21% R	89.19	R	64.20	-R	24.99	Decrease	
3468	TOIQ00600040000005580000000000000000	222681	13011534	22	6	4	5	5	2	0	0	0	20	6	4	5	5	0	0	0	0	-10% R	292.77	R	233.59	-R	59.17	Decrease	
3469	TOIQ00600100000008460000000000000000	DXF648	13032515	56	6	4	4	5	5	10	10	10	6	77	6	4	5	5	10	10	27	28% R	1383.02	R	2209.05	R	826.03	Increase	
3470	TOIQ00660000000001000000000000000000	602174	130106497	57	6	4	4	5	5	10	10	7	44	6	4	5	5	10	10	4	0	-24% R	1454.93	R	938.12	-R	516.81	Decrease	
3471	TOIQ00840000000000590000000000000000	WAS886	130083597	32	6	4	4	5	5	10	2	0	0	31	6	4	5	5	10	1	0	-4% R	563.25	R	521.37	-R	41.88	Decrease	
3472	TOIQ00840000000000890000000000000000	219266	13010890	55	6	4	4	5	5	10	10	10	5	54	6	4	5	5	10	10	4	-1% R	1348.51	R	1328.46	-R	20.05	Decrease	
3473	TOIQ00840000000004260000000000000000	221861	13018454	22	6	4	4	5	5	2	0	0	0	32	6	4	5	5	10	2	0	30% R	297.50	R	554.57	R	257.08	Increase	
3474	TOIQ00840020000008570000000000000000	931661	130094414	27	6	4	4	5	5	7	0	0	0	26	6	4	5	5	6	0	0	-4% R	418.18	R	386.67	-R	31.51	Decrease	
3475	TOIQ00840110001800000000000000000000	600128	30046223	36	6	4	4	5	5	10	6	0	0	35	6	4	4	5	10	5	0	-3% R	693.21	R	657.73	-R	35.48	Decrease	
3476	TOIQ01010010000202900000000000000000	201074	13058580	9	6	3	0	0	0	0	0	0	14	6	4	4	0	0	0	0	37% R	65.58	R	128.23	R	62.65	Increase		
3477	TOIQ01010010000211200000000000000000	91201179FW01	13037321	25	6	4	5	5	5	0	0	0	73	6	4	5	5	10	10	23	65% R	379.82	R	2067.66	R	1687.84	Increase		
3478	TOIQ01010010000232500000000000000000	272165	13015372	47	6	4	4	5	5	10	10	7	0	22	6	4	4	5	2	0	0	-53% R	1065.18	R	291.08	-R	774.10	Decrease	
3479	TOIQ01210000000008150000000000000000	219236	130103977	21	6	4	5	5	5	1	0	0	0	29	6	4	5	5	9	0	0	29% R	257.90	R	489.60	R	231.71	Increase	
3480	TOIQ01220000000000100000000000000000	947187	13037945	34	6	4	4	5	5	10	4	0	0	27	6	4	5	5	7	0	0	-21% R	618.16	R	416.08	-R	202.08	Decrease	
3481	TOIQ01220000000002200000000000000000	XCM539	GKH4256	22	6	4	4	5	5	2	0	0	0	20	6	4	5	5	0	0	0	-6% R	284.05						

SGID	Old Meter	New Meter	Old Cons	Old Cons										New Cons										% Loss	Increase / Decrease													
				0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50																			
				R	7.14	R	7.58	R	13.17	R	19.63	R	26.96	R	29.22	R	37.11	R	38.72		R	7.14	R	7.58	R	13.17	R	19.63	R	26.96	R	29.22	R	37.11	R	38.72		
3511	TOIQ022160110001025700000000000000	91170062	13018360	21	6	4	5	5	5	1	0	0	0	0	29	6	4	5	1	0	0	28%	R	266.37	R	484.70	R	218.34	Increase									
3512	TOIQ022160110001029300000000000000	91170050	13039220	14	6	4	4	0	0	0	0	0	0	16	6	4	5	1	0	0	16%	R	119.26	R	158.64	R	39.39	Increase										
3513	TOIQ022160110001029600000000000000	91053409	13013004	22	6	4	5	5	2	0	0	0	0	37	6	4	5	1	0	7	0	42%	R	277.60	R	721.93	R	444.33	Increase									
3514	TOIQ022200000000152000000000000000	315271	13058473	17	6	4	5	2	0	0	0	0	0	24	6	4	5	5	14	0	0	27%	R	187.33	R	340.10	R	152.77	Increase									
3515	TOIQ022200000000192000000000000000	312696	13035710	12	6	4	2	0	0	0	0	0	0	28	6	4	5	5	8	0	0	59%	R	93.30	R	457.74	R	364.44	Increase									
3516	TOIQ022200000000204000000000000000	312467	13056594	49	6	4	5	5	10	9	0	0	0	22	6	4	5	5	2	0	0	-55%	R	1130.10	R	291.08	R	839.02	Decrease									
3517	TOIQ022200000000265000000000000000	313789	13046643	19	6	4	5	4	0	0	0	0	0	29	6	4	5	5	9	0	0	35%	R	214.91	R	482.25	R	267.34	Increase									
3518	TOIQ022200000000417000000000000000	313000	13058455	192	6	4	5	5	10	10	10	142	17	6	4	5	2	0	0	0	0	-91%	R	6666.02	R	176.49	R	6489.54	Decrease									
3519	TOIQ022200000000439000000000000000	312909	13034410	39	6	4	5	5	10	9	0	0	0	35	6	4	5	5	10	5	0	0	-11%	R	779.04	R	647.55	R	131.49	Decrease								
3520	TOIQ022200100000679000000000000000	946565	13030045	20	6	4	5	5	0	0	0	0	0	27	6	4	5	5	7	0	0	25%	R	242.55	R	428.33	R	185.78	Increase									
3521	TOIQ022220020000844000000000000000	312888	GKH3232	12	6	4	2	0	0	0	0	0	0	11	6	4	1	0	0	0	0	-12%	R	103.01	R	84.14	R	18.88	Decrease									
3522	TOIQ022200400001025000000000000000	313713	GKH3226	16	6	4	5	1	0	0	0	0	0	21	6	4	5	5	1	0	0	25%	R	153.03	R	261.67	R	108.64	Increase									
3523	TOIQ022200400001054000000000000000	932727	130100611	7	6	4	0	0	0	0	0	0	0	23	6	4	5	5	3	0	0	57%	R	72.08	R	318.04	R	245.96	Increase									
3524	TOIQ023900000000050000000000000000	313764	140009679	81	6	4	5	5	10	10	10	31	6	6	0	0	0	0	0	0	0	-92%	R	2366.51	R	46.29	R	2320.22	Decrease									
3525	TOIQ026500000000453000000000000000	92909871	GKG3310	47	6	4	5	5	10	10	7	0	107	6	4	5	5	10	10	10	57	56%	R	1042.24	R	3373.58	R	2331.34	Increase									
3526	TOIQ026700000000147000000000000000	13649778	13056568	104	6	4	5	5	10	10	10	54	44	6	4	5	5	10	10	4	0	-58%	R	3261.80	R	934.15	R	2327.65	Decrease									
3527	TOIQ026700000000148000000000000000	9410	13039231	20	6	4	5	5	0	0	0	0	32	6	4	5	5	10	2	0	0	38%	R	237.16	R	567.29	R	330.13	Increase									
3528	TOIQ026700000000182000000000000000	62795	13039214	25	6	4	5	5	5	5	0	0	25	6	4	5	5	5	5	0	0	-1%	R	364.87	R	360.41	R	4.46	Decrease									
3529	TOIQ026700000000287000000000000000	154790	13037799	87	6	4	5	5	10	10	37	18	6	4	5	5	5	3	0	0	0	-79%	R	2596.25	R	201.17	R	2395.08	Decrease									
3530	TOIQ026700000000634000000000000000	214153	13058408	15	6	4	5	0	0	0	0	0	10	6	4	4	0	0	0	0	0	-34%	R	144.78	R	74.10	R	70.68	Decrease									
3531	TOIQ027601900001762000000000000000	315776	13033712	32	6	4	5	5	0	2	0	0	16	6	4	5	5	1	0	0	0	-49%	R	551.36	R	160.04	R	391.32	Decrease									
3532	TOIQ027601900001778000000000000000	315771	30018935	29	6	4	5	5	9	0	0	0	33	6	4	5	5	10	3	0	0	11%	R	489.91	R	589.92	R	100.01	Increase									
3533	TOIQ027601900001787000000000000000	944366	13034734	32	6	4	5	5	10	2	0	0	20	6	4	5	5	5	0	0	0	-36%	R	550.59	R	239.41	R	311.18	Decrease									
3534	TOIQ027601900001911000000000000000	315674	13034500	7	6	1	0	0	0	0	0	0	41	6	4	5	5	10	10	1	0	83%	R	51.86	R	842.26	R	790.39	Increase									
3535	TOIQ032400000000107000000000000000	WBX865	13049836	20	6	4	5	5	0	0	0	31	6	4	5	5	5	10	1	0	0	34%	R	244.74	R	525.35	R	280.61	Increase									
3536	TOIQ032400000000121000000000000000	1005657	13046885	33	6	4	5	5	10	3	0	0	62	6	4	5	5	10	10	10	12	46%	R	608.06	R	1620.62	R	1012.56	Increase									
3537	TOIQ032400000000165000000000000000	950012	GKG3383	18	6	4	5	3	0	0	0	27	6	4	5	5	7	0	0	0	0	31%	R	203.51	R	416.08	R	212.57	Increase									
3538	TOIQ032400000000265000000000000000	303065	13039879	39	6	4	5	5	10	9	0	0	35	6	4	5	5	10	5	0	0	-12%	R	780.98	R	647.55	R	133.43	Decrease									
3539	TOIQ032400000000298000000000000000	807580	13010833	22	6	4	5	5	2	0	0	41	6	4	5	5	5	10	10	1	0	47%	R	287.09	R	832.70	R	545.61	Increase									
3540	TOIQ032400100000377000000000000000	316144	13038418	21	6	4	5	5	1	0	0	0	11	6	4	4	1	0	0	0	0	-50%	R	273.36	R	81.54	R	191.82	Decrease									
3541	TOIQ033800000000016000000000000000	944210	12023155	55	6	4	5	5	10	10	5	36	6	4	5	5	10	6	0	0	0	-34%	R	1363.66	R	690.05	R	673.61	Decrease									
3542	TOIQ033800000000020000000000000000	944227	GKH4120	6	6	0	0	0	0	0	0	0	8	6	2	0	0	0	0	0	0	29%	R	40.86	R	58.69	R	17.83	Increase									
3543	TOIQ033800000000032000000000000000	932501	13038179	13	6	4	3	0	0	0	0	15	6	4	5	0	0	0	0	0	0	17%	R	109.51	R	146.15	R	36.64	Increase									
3544	TOIQ033800000000062000000000000000	932515	13039681	93	6	4	5	5	10	10	10	43	3	3	0	0	0	0	0	0	0	-97%	R	2831.70	R	22.44	R	2809.26	Decrease									
3545	TOIQ033800000000063000000000000000	932512	13037448	34	6	4	5	5	10	4	0	3	3	0	0	0	0	0	0	0	0	-92%	R	629.02	R	19.47	R	609.55	Decrease									
3546	TOIQ033800000000065000000000000000	932508	13009465	19	6	4	5	4	0	0	0	26	6	4	5	5	5	6	0	0	0	28%	R	219.04	R	411.17	R	192.13	Increase									
3547	TOIQ033800000000073000000000000000	932493	130107656	347	6	4	5	5	10	7	0	183	6	4	5	5	10	10	10	10	133	80%	R	700.17	R	6319.82	R	5619.65	Increase									
3548	TOIQ033800000000083000000000000000	933367	13055762	18	6	4	5	3	0	0	0	26	6	4	5	5	6	0	0	0	0	30%	R	206.43	R	403.82	R	197.39	Increase									
3549	TOIQ035100300000690000000000000000	312593	13018516	13	6	4	3	0	0	0	0	12	6	4	2	0	0	0	0	0	0	-10%	R	115.16	R	97.11	R	18.06	Decrease									
3550	TOIQ035100700001210000000000000000	129557	13031194	9	6	3	0	0	0	0	0	7	6	1	0	0	0	0	0	0	0	-17%	R	64.17	R	52.49	R	11.69	Decrease									
3551	TOIQ035100700001438000000000000000	VEB147	13033099	44	6	4	5	5	10	10	4	23	6	4	5	5	3	0	0	0	0	-46%	R	935.03	R	327.84	R	607.19	Decrease									
3552	TOIQ035100800001008000000000000000	1006544	13018510	50	6	4	5	5	10	10	10	47	6	4	5	5	10	7	0	0	0	-7%	R	1168.20	R	1045.24	R	122.97	Decrease									
3553	TOIQ035100800001010000000000000000	VED211	13058880	33	6	4	5	5	10	3	0	37	6	4	5	5	10	7	0	0	0	10%	R	602.04	R	705.99	R	103.94	Increase									
3554	TOIQ035100900001525000000000000000	VC0667	13056692	28	6	4	5	5	8	0	0	13	6	4	4	3	0	0	0	0	0	-54%	R	464.39	R	115.06	R	349.33	Decrease									
3555	TOIQ035200000000060200000000000000	426808	13033112	80	6	4	5	5	10	10	30	5	5	0	0	0	0	0	0	0	0	-94%	R	2313.07	R	35.70	R	2277.37	Decrease									
3556	TOIQ035300000000261000000000000000	WAW293	13019586	24	6	4	5	5	4	0	0	16	6	4	5	1	0	0	0	0	0	-33%	R	333.45	R	156.86	R	176.59	Decrease									
3557	TOIQ035300000000316000000000000000	XBM869	13039454	35	6	4	5	4	0	0	0	31	6	4	5	5	10	1	0	0	0	38%	R	224.07	R	541.29	R	317.22	Increase									
3558	TOIQ035300000000383000000000000000	WAW5657	13056313	53	6	4	5	5	10	10	3	36	6	4	5	5	10	6	0	0	0	-33%	R	1286.22	R	668.80	R	617.42	Decrease									
3559	TOIQ035300000000647000000																																					

SGID	Old Meter	New Meter	Old Cons	O-6										New Cons	O-6										% Loss	Increase / Decrease								
				0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	0-6	6-10		10-15	15-20	20-30	30-40	40-50	+50														
R	7.14	R	7.58	R	7.58	R	13.17	R	19.63	R	29.22	R	37.11	R	38.72	R	7.14	R	7.58	R	13.17	R	19.63	R	26.96	R	29.22	R	37.11	R	38.72			
3589	T0IR00000920000009200260RE00000000	WSP832	GKF0937	106	6	4	5	5	10	10	10	56	99	6	4	5	5	10	10	10	49	-7%	3 347.60	R	3 057.66	-R							289.94	Decrease
3590	T0IR0045000000006170000RE0000000000	BR14045531	13034134	427	6	4	5	5	10	10	10	377	243	6	4	5	5	10	10	10	193	-43%	15 780.41	R	8 633.34	-R							7 147.07	Decrease
3591	T0IR00470030000001210000000000000000	821954	GKF4323	57	6	4	5	5	10	10	10	7	16	6	4	5	1	0	0	0	0	-72%	1 445.40	R	1 553.37	-R							1 290.03	Decrease
3592	T0IR00700000000004400000000000000000	94041623	13035911	24	6	4	5	5	4	0	0	0	28	6	4	5	5	8	0	0	0	16%	341.15	R	464.07	R							122.92	Increase
3593	T0IR01030060000036800000000000000000	93347106	13056402	95	6	4	5	5	10	10	10	45	95	6	4	5	5	10	10	10	45	0%	2 919.29	R	2 905.42	-R							13.87	Decrease
3594	T0IR01160000000006000400000000000000	918168	GKG2238	20	6	4	5	5	0	0	0	0	19	6	4	5	4	0	0	0	0	-1%	228.10	R	224.67	-R							3.43	Decrease
3595	T0IR02560000000031400000000000000000	368841	GKH3491	106	6	4	5	5	10	10	10	56	113	6	4	5	5	10	10	10	63	7%	3 326.99	R	3 622.33	R							295.33	Increase
3596	T0IR02810500002540000000000000000000	94044367	GKH3949	115	6	4	5	5	10	10	10	65	22	6	4	5	5	2	0	0	0	-81%	3 671.80	R	293.15	-R							3 378.65	Decrease
3597	T0IR03160000000130000000RE0000000000	94116875	13035853	63	6	4	5	5	10	10	10	13	44	6	4	5	5	10	10	4	0	-31%	1 680.87	R	928.85	-R							752.02	Decrease
3598	T0IR0316000000014490000RE0000000000	93357053	13018382	19	6	4	5	4	0	0	0	0	89	6	4	5	5	10	10	39	79%	209.90	R	2 669.08	R							2 459.18	Increase	
3599	T0IR03160000000153100001000000000000	BWTH370	13039652	73	6	4	5	5	10	10	10	23	78	6	4	5	5	10	10	10	28	7%	2 067.88	R	2 268.05	R							200.17	Increase
3600	T0IR03160000000209400000000000000000	359726	13015899	42	6	4	5	5	10	10	2	0	46	6	4	5	5	10	10	6	0	10%	859.93	R	1 024.47	R							164.55	Increase
3601	T0IR03190050000068800000000000000000	921214	13031439	54	6	4	5	5	10	10	10	4	47	6	4	5	5	10	10	7	0	-13%	1 318.98	R	1 048.61	-R							270.37	Decrease
3602	T0IR0358000000079880000RE0000000000	#00016112	GKH2292	42	6	4	5	5	10	10	2	0	57	6	4	5	5	10	10	10	7	27%	866.22	R	1 449.40	R							583.18	Increase
3603	T0IR03580000000811300000000000000000	13594279	GKG4395	45	6	4	5	5	10	10	5	0	33	6	4	5	5	10	3	0	0	-28%	998.78	R	585.43	-R							413.35	Decrease
3604	T0IR03610000000724001080000000000000	91210081	13033139	48	6	4	5	5	10	10	8	0	49	6	4	5	5	10	10	9	0	3%	1 085.24	R	1 139.70	R							54.46	Increase
3605	T0IR03610000000085400000000000000000	91437045	13055600	38	6	4	5	5	10	8	0	0	61	6	4	5	5	10	10	10	11	38%	732.73	R	1 581.90	R							849.17	Increase
3606	T0IR0396000000007900000RE000000000000	93202646	GKI2214	129	6	4	5	5	10	10	10	79	163	6	4	5	5	10	10	10	113	21%	4 218.61	R	5 538.38	R							1 319.77	Increase
3607	T0IR04040090000033500000000000000000	918160	13036408	23	6	4	5	5	3	0	0	0	80	6	4	5	5	10	10	10	30	71%	328.15	R	2 338.70	R							2 010.55	Increase
3608	T0IR04060000000000300010000000000000	13649939	13030812	21	6	4	5	5	1	0	0	0	31	6	4	5	5	10	1	0	0	33%	250.64	R	530.67	R							280.03	Increase
3609	T0IR0406000000001250000RE0000000000	13595137	13034183	47	6	4	5	5	10	10	7	0	30	6	4	5	5	10	0	0	0	-36%	1 050.48	R	499.41	-R							551.08	Decrease
3610	T0IR04060000000013700000RE0000000000	94039143	13032958	52	6	4	5	5	10	10	10	2	108	6	4	5	5	10	10	10	58	52%	1 231.37	R	3 396.46	R							2 165.09	Increase
3611	T0IR04511160000129900100000000000000	102952	GKI1191	34	6	4	5	5	10	4	0	0	50	6	4	5	5	10	10	10	10	32%	623.64	R	1 170.06	R							546.42	Increase
3612	T0IR0475000000002900000RE0000000000	CM00013628	GKH4904	32	6	4	5	5	10	2	0	0	20	6	4	5	5	0	0	0	0	-38%	555.46	R	231.81	-R							323.65	Decrease
3613	T0IR05020000000191000000000000000000	13508660	13005235	268	6	4	5	5	10	10	10	218	87	6	4	5	5	10	10	37	-68%	9 624.57	R	2 609.15	-R							7 015.42	Decrease	
3614	T0IR05060000000032200000000000000000	WST190	13032206	26	6	4	5	5	6	0	0	0	56	6	4	5	5	10	10	10	6	54%	394.77	R	1 405.90	R							1 011.13	Increase
3615	T0IR05060000000125600000000000000000	WTK182	GKF7901	28	6	4	5	5	8	0	0	0	6	6	0	0	0	0	0	0	0	-77%	439.36	R	46.29	-R							393.07	Decrease
3616	T0IR05060000000207400000000000000000	95253400	13032848	32	6	4	5	5	10	2	0	0	26	6	4	5	5	6	0	0	0	-18%	557.41	R	396.67	-R							160.73	Decrease
3617	T0IR05090000000001800000RE0000000000	WST941	GKF8040	25	6	4	5	5	5	0	0	0	36	6	4	5	5	10	6	0	0	31%	371.96	R	692.71	R							320.75	Increase
3618	T0IR05090000000012500010000000000000	154697	GKF2588	38	6	4	5	5	10	8	0	0	0	60	6	4	5	5	10	10	10	36%	743.77	R	1 553.74	R							809.97	Increase
3619	T0IR05110000000948000000000000000000	WSP 222	13019265	146	6	4	5	5	10	10	10	96	136	6	4	5	5	10	10	86	-7%	4 879.44	R	4 496.75	-R							382.68	Decrease	
3620	T0IR05660150000029900030000000000000	918088	GKF2676	19	6	4	5	4	0	0	0	0	41	6	4	5	5	10	10	1	0	54%	212.62	R	836.07	R							623.45	Increase
3621	T0IR05670000000163000000000000000000	CYSV003	GKF9748	95	6	4	5	5	10	10	10	45	138	6	4	5	5	10	10	88	31%	2 921.57	R	4 566.86	R							1 645.29	Increase	
3622	T0IR05750000000199300000000000000000	286191	GKI2286	146	6	4	5	5	10	10	10	96	132	6	4	5	5	10	10	82	-10%	4 895.78	R	4 341.58	-R							554.20	Decrease	
3623	T0IR05759910000157300000000000000000	259591	GKF4611	50	6	4	5	5	10	10	10	10	60	6	4	5	5	10	10	10	10	17%	1 170.06	R	1 574									

SGID	Old Meter	New Meter	Old Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	New Cons	0-6	6-10	10-15	15-20	20-30	30-40	40-50	+50	% Loss				Increase / Decrease			
				R	7.14	R	7.58	R	13.17	R	19.63		R	26.96	R	29.22	R	37.11	R	38.72		Monthly Bill Old	Monthly Bill New	Change on Revenue				
3667 TOIR050700000000204000000000000000	42733	13045616	21		6	4	5	5	1	0	0	0	26	6	4	5	5	6	0	0	0	19% R	257.38	R	386.67	R	129.29	Increase
3668 TOIR050700000000526000000000000000	644888	GKH2271	36		6	4	5	5	10	6	0	0	52	6	4	5	5	10	10	10	2	31% R	678.43	R	1233.42	R	554.99	Increase
3669 TOIR054000000000200000000000000000	246530	13011363	14		6	4	4	0	0	0	0	0	26	6	4	5	5	6	0	0	0	45% R	127.87	R	386.67	R	258.80	Increase
3670 TOIR055700000000030000000000000000	YHY035	GKF2912	135		6	4	5	5	10	10	10	85	34	6	4	5	5	10	4	0	0	-75% R	4457.89	R	634.27	-R	3823.63	Decrease
3671 TOIR059101100000534000070000000000	9743	13013100	16		6	4	5	1	0	0	0	0	9	6	3	0	0	0	0	0	0	-41% R	153.19	R	67.65	-R	85.54	Decrease
3672 TOIR071800000000160000000000000000	751533	GKH4469	23		6	4	5	5	3	0	0	0	38	6	4	5	5	10	8	0	0	39% R	327.75	R	753.80	R	426.06	Increase
3673 TOIR071800000000231000000000000000	438832	13012026	34		6	4	5	5	10	4	0	0	49	6	4	5	5	10	10	9	0	30% R	635.82	R	1143.07	R	507.26	Increase
3674 TOIR071800400000068800000000000000	697488	GKF9605	20		6	4	5	5	0	0	0	0	24	6	4	5	5	4	0	0	0	18% R	228.57	R	342.55	R	113.98	Increase
3675 TOIR071800800000076600000000000000	65502	13030746	35		6	4	5	5	10	5	0	0	41	6	4	5	5	10	10	1	0	16% R	646.12	R	846.19	R	200.07	Increase
3676 TOIR074400000000319000000000000000	34902	13012295	364		6	4	5	5	10	10	10	314	310	6	4	5	5	10	10	10	260	-15% R	13318.46	R	11230.81	-R	2087.65	Decrease
3677 TOIR074400300000044800000000000000	720553	13030182	46		6	4	5	5	10	10	6	0	113	6	4	5	5	10	10	10	63	60% R	1009.25	R	3619.98	R	2610.73	Increase
3678 TOIR039200000000053000000000000000	521582	GKG4590	14		6	4	4	0	0	0	0	0	9	6	3	0	0	0	0	0	0	-40% R	128.70	R	62.13	-R	66.57	Decrease
3679 TOIR050700000000384000000000000000	59831	13055751	26		6	4	5	5	6	0	0	0	38	6	4	5	5	10	8	0	0	30% R	405.26	R	727.24	R	321.97	Increase

Annexure C – Payback Period Calculations – Based on sizing groupings

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			Change on																													
			Old	Monthly Bill	New Consumption	Size Old	Size New	Cost	NPV	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
7	R	16.76	71.09	54.33	20mm	15mm	R	2708	12	-R	2708	-R 2520.11	-R 2223.81	-R 1858.10	-R 1467.13	-R 1091.29	-R 760.66	-R 492.05	-R 289.58	-R 147.80	-R 55.77	-R 0.82	-R 28.80	-R 42.48	-R 46.98	-R 46.69	-R 44.21	-R 40.96	-R 37.61	-R 34.46	-R 31.61	-R 29.05
7	R	166.19	115.06	51.13	20mm	15mm	R	2708																								
7	R	299.17	171.13	128.04	20mm	15mm	R	2708																								
7	R	981.42	1116.08	134.66	100mm	100mm	R	34370	15	-R	34370	-R 32512.19	-R 29200.27	-R 24893.98	-R 20138.41	-R 15451.46	-R 11235.63	-R 7733.25	-R 5026.97	-R 3073.68	-R 1753.55	-R 917.28	-R 421.12	-R 146.38	-R 5.69	-R 59.44	-R 84.95	-R 91.28	-R 89.19	-R 83.91	-R 77.81	-R 71.83
7	R	125.84	315.59	189.75	20mm	15mm	R	2708	8	-R	2708	-R 2391.50	-R 1985.69	-R 1508.13	-R 1096.77	-R 700.61	-R 374.74	-R 128.87	-R 40.28	-R 144.52	-R 199.44	-R 220.52	-R 220.76	-R 209.78	-R 193.89	-R 176.80	-R 160.43	-R 145.55	-R 132.35	-R 120.74	-R 110.53	-R 101.51
7	R	84.41	499.41	415.00	20mm	15mm	R	2708	6	-R	2708	-R 2177.59	-R 1589.62	-R 1006.03	-R 480.73	-R 50.77	-R 267.18	-R 475.23	-R 588.95	-R 630.75	-R 623.94	-R 588.62	-R 540.08	-R 488.06	-R 438.25	-R 393.23	-R 353.74	-R 319.52	-R 289.93	-R 264.25	-R 241.80	-R 222.04
7	R	227.14	1013.25	994.32	20mm	15mm	R	2708	1	-R	2708	-R 6334.32	-R 5195.96	-R 2147.52	-R 25472.30	-R 27326.07	-R 27310.52	-R 25925.08	-R 23703.62	-R 21114.94	-R 18507.63	-R 16098.76	-R 13929.72	-R 12111.56	-R 1032.76	-R 9511.02	-R 8497.50	-R 7648.67	-R 6928.61	-R 6309.96	-R 5772.13	-R 5299.78
7	R	91.82	137.62	46.30	20mm	15mm	R	2708	12	-R	2708	-R 2527.92	-R 2238.28	-R 1817.56	-R 1489.65	-R 1115.04	-R 784.13	-R 309.64	-R 165.58	-R 71.29	-R 14.27	-R 17.12	-R 32.30	-R 38.05	-R 38.78	-R 37.15	-R 34.60	-R 31.85	-R 29.22	-R 26.81	-R 24.65	
7	R	33.23	49.16	15.93	25mm	15mm	R	2708	14	-R	2708	-R 2556.57	-R 2291.33	-R 1948.82	-R 1572.15	-R 1202.07	-R 870.10	-R 514.13	-R 230.69	-R 128.14	-R 63.98	-R 25.64	-R 4.96	-R 5.32	-R 9.79	-R 11.26	-R 13.60	-R 10.75	-R 10.00	-R 9.23	-R 8.51	
7	R	4.56	866.43	861.88	20mm	15mm	R	2708	3	-R	2708	-R 1753.20	-R 803.86	-R 49.69	-R 741.43	-R 1238.44	-R 1540.69	-R 1673.69	-R 1677.45	-R 1595.37	-R 1466.11	-R 1319.07	-R 1173.56	-R 1040.13	-R 923.03	-R 822.60	-R 737.24	-R 664.66	-R 602.55	-R 548.95	-R 502.23	-R 461.16
7	R	2254.22	3588.30	1334.08	20mm	15mm	R	2708	2	-R	2708	-R 1730.77	-R 26.44	-R 1165.25	-R 2032.87	-R 2600.73	-R 2886.38	-R 2867.65	-R 2614.68	-R 2356.01	-R 2090.86	-R 1842.94	-R 1623.50	-R 1435.29	-R 1276.31	-R 1142.49	-R 1029.36	-R 932.90	-R 849.78	-R 772.42	-R 713.83	
7	R	2673.41	7787.95	5114.55	25mm	15mm	R	2708	1	-R	2708	-R 2285.42	-R 6673.80	-R 10096.43	-R 12372.10	-R 13507.18	-R 13659.97	-R 13078.81	-R 12036.14	-R 10775.22	-R 9480.56	-R 8269.80	-R 7202.06	-R 6293.94	-R 5536.44	-R 4908.68	-R 4386.86	-R 3949.17	-R 3577.63	-R 3258.29	-R 2980.61	-R 2736.71
7	R	106.68	359.52	252.83	20mm	15mm	R	2708	7	-R	2708	-R 2331.59	-R 1874.77	-R 1389.15	-R 924.24	-R 518.61	-R 194.96	-R 40.81	-R 193.94	-R 280.69	-R 318.32	-R 323.63	-R 310.19	-R 287.71	-R 262.32	-R 237.42	-R 214.57	-R 194.27	-R 176.48	-R 160.93	-R 147.29	-R 135.27
7	R	158.64	224.67	66.03	25mm	15mm	R	2708	11	-R	2708	-R 2509.00	-R 2203.24	-R 1830.47	-R 1435.13	-R 1057.54	-R 727.32	-R 460.68	-R 261.09	-R 122.55	-R 33.72	-R 18.39	-R 35.38	-R 56.93	-R 59.67	-R 57.93	-R 54.25	-R 49.99	-R 45.80	-R 41.92	-R 38.43	-R 35.31
7	R	56.83	69.03	12.19	20mm	15mm	R	2708	14	-R	2708	-R 2560.12	-R 2297.90	-R 1957.65	-R 1435.13	-R 1212.85	-R 880.74	-R 605.06	-R 392.22	-R 238.76	-R 135.18	-R 69.69	-R 40.34	-R 5.98	-R 1.27	-R 62.90	-R 8.05	-R 8.41	-R 8.13	-R 7.62	-R 7.05	-R 6.51
7	R	6491.91	6175.50	316.41	100mm	100mm	R	34370																								
7	R	136.82	128.23	8.58	20mm	15mm	R	2708																								
7	R	3301.94	9484.30	6182.36	100mm	100mm	R	34370	5	-R	34370	-R 26768.89	-R 18566.34	-R 10606.57	-R 3598.51	-R 1995.84	-R 5999.12	-R 8485.97	-R 9704.07	-R 9800.93	-R 9643.75	-R 8967.31	-R 8151.97	-R 7325.02	-R 6555.02	-R 5870.22	-R 5275.05	-R 4762.16	-R 4320.02	-R 3936.85	-R 3602.30	-R 3307.88
7	R	2189.34	394.02	1795.32	20mm	15mm	R	2708																								
7	R	867.47	798.96	68.51	20mm	15mm	R	2708																								
7	R	345.1	98.40	63.89	25mm	15mm	R	2708	11	-R	2708	-R 2511.02	-R 2206.99	-R 1835.51	-R 1440.98	-R 1063.70	-R 733.41	-R 466.40	-R 266.29	-R 127.16	-R 37.75	-R 14.81	-R 42.35	-R 54.29	-R 57.35	-R 55.88	-R 52.42	-R 48.34	-R 44.30	-R 40.56	-R 37.18	-R 34.17
7	R	285.40	398.92	113.52	25mm	15mm	R	2708	10	-R	2708	-R 2463.90	-R 2119.74	-R 1718.28	-R 1305.26	-R 920.54	-R 591.99	-R 333.32	-R 145.41	-R 20.04	-R 55.77	-R 95.92	-R 122.70	-R 115.60	-R 111.19	-R 103.56	-R 95.01	-R 86.67	-R 79.02	-R 72.17	-R 66.10	-R 60.72
8	R	195.28	268.27	72.99	25mm	15mm	R	2708	11	-R	2708	-R 2502.39	-R 2191.00	-R 1814.03	-R 1416.11	-R 1037.47	-R 707.50	-R 442.02	-R 244.14	-R 107.53	-R 20.61	-R 29.68	-R 55.24	-R 65.53	-R 67.22	-R 64.61	-R 60.22	-R 55.37	-R 50.66	-R 46.35	-R 42.48	-R 39.04
8	R	687.92	506.76	181.16	25mm	15mm	R	2708																								
8	R	302.31	574.94	272.63	20mm	15mm	R	2708	7	-R	2708	-R 2312.80	-R 1839.96	-R 1342.39	-R 870.11	-R 461.51	-R 138.56	-R 93.40	-R 242.15	-R 323.42	-R 355.63	-R 355.98	-R 338.25	-R 312.17	-R 283.79	-R 256.44	-R 231.55	-R 209.56	-R 190.33	-R 173.54	-R 158.83	-R 145.86
8	R	130.00	234.36	104.36	25mm	15mm	R	2708	7	-R	2708	-R 2472.60	-R 2135.84	-R 1739.92	-R 1330.31	-R 946.96	-R 618.09	-R 357.88	-R 172.72	-R 38.81	-R 38.51	-R 80.95	-R 99.71	-R 104.28	-R 101.25	-R 94.76	-R 87.15	-R 79.60	-R 72.61	-R 66.34	-R 60.76	-R 55.82
8	R	3338.67	360.71	69.08	80mm	80mm	R	2708	11	-R	28292	-R 26237.08	-R 23063.24	-R 19184.09	-R 15063.34	-R 11122.19	-R 7671.34	-R 4881.27	-R 2789.77	-R 1335.33	-R 400.33	-R 149.60	-R 437.98	-R 563.31	-R 595.77	-R 580.75	-R 544.94	-R 502.63	-R 460.63	-R 421.70	-R 386.62	-R 355.30
8	R	424.47	2483.02	1658.55	25mm	15mm	R	2708	2	-R	2708	-R 996.63	-R 596.96	-R 1931.79	-R 2920.26	-R 3536.80	-R 3811.05	-R 3810.28	-R 3617.99	-R 3315.07	-R 2967.49	-R 2621.18	-R 2302.90	-R 2024.35	-R 1787.28	-R 1588.06	-R 1420.94	-R 1279.96	-R 1159.89	-R 1065.50	-R 966.52	-R 887.45
8	R	262.62	283.63	26.01	20mm	15mm	R	2708	13	-R	2708	-R 2547.00	-R 2273.61	-R 1925.01	-R 1544.59	-R 1173.00	-R 841.37	-R 568.01	-R 358.57	-R 208.94	-R 109.15	-R 47.11	-R 11.35	-R 7.49	-R 16.25	-R 19.48	-R 19.91	-R 19.08	-R 17.80	-R 16.42	-R 15.10	-R 13.90
8	R	2319.75	1940.94	378.81	25mm	15mm	R	2708																								
8	R	1658.53	2278.86	620.33	25mm	15mm	R	2708	4	-R	2708	-R 1982.59	-R 1228.58	-R 520.95	-R 80.84	-R 541.60	-R 852.34	-R 1025.90	-R 1089.09	-R 1073.98	-R 1010.90	-R 924.28	-R 831.15	-R 741.73	-R 661.00	-R 590.52	-R 529.95	-R 478.10	-R 433.58	-R 395.06	-R 361.47	-R 331.91
8	R	1629.42	1184.14	445.28	20mm	15mm	R	2708																								
8	R	110.20	116.26	6.06	20mm	15mm	R	2708	15	-R	2708	-R 2565.94	-R 2308.68	-R 1972.13	-R 1599.14	-R 1230.54	-R 898.22	-R 621.50	-R 407.15	-R 251.99	-R 146.73	-R 79.71	-R 39.63	-R 17.15	-R 5.38	-R 0.31	-R 2.79	-R 3.68	-R 3.84	-R 3.71	-R 3.48	-R 3.23
8	R	721.04	1191.18	470.14	25mm	15mm	R	2708	5	-R	2708	-R 2125.22	-R 1492.67	-R 877.77	-R 329.93	-R 108.31	-R 42.32	-R 62.11	-R 723.25	-R 749.77	-R 727.85	-R 678.80	-R 618.24	-R 556.18	-R 498.66	-R 446.21	-R 401.06	-R 362.11	-R 328.50	-R 299.37	-R 273.94	-R 251.55
8	R	2593.76	25341.90	22748.14	50mm	50mm	R	2708	1	-R	22444	-R 28883	-R 20776.31	-R 3775.62	-R 4882.96	-R 55283.54	-R 57240.14	-R 55722.13	-R 51934.24	-R 46907.33	-R 41559.81	-R 36437.92	-R 31847.66	-R 2789.91	-R 24578.06	-R 21811.31	-R 19502.30	-R 17560.99	-R 15910.82	-R 14149.43	-R 13256.75	-R 12127.10
8	R	1091.20	43.53	1047.67	25mm	15mm	R	2708																								
8	R	1043.89	1529.10	485.21	25mm	15mm	R	2708	5	-R	2708	-R 2110.91	-R 1466.16	-R 840.16	-R 288.70	-R 151.79	-R 467.28	-R 663.53	-R 759.97	-R 782.31	-R 756.26	-R 703.44	-R 639.61	-R 574.80	-R 514.42	-R 460.69	-R 414.00	-R 373.75	-R 339.05	-R 308.98	-R 282.72	-R 259.61
8	R	712.30	1515.77	803.48	25mm	15mm	R	2708	4	-R	2708	-R 1808.66	-R 906.54	-R 88.27	-R 581.72	-R 1069.97	-R 1374.27	-R 1517.08	-R 1535.20	-R 1469.32	-R 1356.05	-R 1223.62	-R 1090.77	-R 967.								

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		Change on		Size Old	Size New	Cost	NPV																								
Age (yrs)	Monthly Bill	Old	Monthly Bill New					Consumption																							
10	R	976.08	R 1031.74	R 55.67	20mm	15mm	R 2 708	11	-R	2 708	-R 2 518.84	-R 2 221.46	-R 1 854.95	-R 1 463.48	-R 1 087.43	-R 756.85	-R 488.47	-R 286.33	-R 144.92	-R 53.25	R 1.37	R 30.69	R 44.13	R 48.43	R 47.97	R 45.36	R 41.99	R 38.55	R 35.32	R 32.39	R 29.77
10	R	766.30	R 1620.62	R 854.32	25mm	15mm	R 2 708	3	-R	2 708	-R 1 760.38	-R 817.15	R 31.83	R 720.77	R 1 216.64	R 1 519.15	R 1 653.43	R 1 659.04	R 1 579.06	R 1 451.86	R 1 306.72	R 1 162.84	R 1 030.79	R 914.83	R 815.34	R 730.76	R 658.82	R 597.27	R 544.13	R 497.83	R 457.12
10	R	440.40	R 95.40	-R 345.00	20mm	15mm	R 2 708																								
10	R	71.27	R 757.57	R 686.30	25mm	15mm	R 2 708	4	-R	2 708	-R 1 919.94	-R 1 112.58	-R 365.10	R 261.25	R 731.92	R 1 202.82	R 1 249.78	R 1 216.38	R 1 135.22	R 1 032.10	R 924.66	R 823.22	R 732.56	R 653.90	R 586.57	R 529.05	R 479.72	R 437.09	R 399.91	R 367.21	
10	R	1631.18	R 1 764.94	R 133.76	25mm	15mm	R 2 708	9	-R	2 708	-R 2 444.67	-R 2 084.14	-R 1 670.45	-R 1 249.89	-R 862.13	-R 534.30	-R 279.03	-R 96.10	-R 23.66	-R 93.92	-R 129.01	-R 141.39	-R 140.61	-R 133.15	-R 123.01	-R 112.38	-R 102.31	-R 93.18	-R 85.07	-R 77.90	R 71.56
10	R	722.78	R 5 777.74	R 5 054.96	20mm	15mm	R 2 708	1	-R	2 708	-R 2 228.83	-R 6 569.02	-R 9 955.66	-R 12 209.14	-R 13 335.28	-R 13 490.16	-R 12 919.07	-R 11 891.00	-R 10 646.60	-R 9 368.26	-R 8 172.41	-R 7 117.59	-R 6 220.32	-R 5 471.80	-R 4 851.42	-R 4 335.72	-R 3 903.15	-R 3 535.95	-R 3 220.33	-R 2 945.88	-R 2 704.83
10	R	32.84	R 19.47	-R 13.37	25mm	15mm	R 2 708																								
10	R	499.57	R 691.82	R 192.25	20mm	15mm	R 2 708	8	-R	2 708	-R 2 389.13	-R 1 981.29	-R 1 532.27	-R 1 089.93	-R 693.39	-R 367.62	-R 122.17	-R 46.37	-R 149.91	-R 204.15	-R 224.61	-R 224.31	-R 212.87	-R 196.60	-R 179.21	-R 162.57	-R 147.48	-R 134.10	-R 122.33	-R 111.99	-R 102.85
10	R	434.87	R 425.88	-R 8.99	20mm	15mm	R 2 708																								
10	R	263.55	R 237.16	-R 26.39	25mm	15mm	R 2 708																								
10	R	3836.46	R 2 228.41	-R 1 608.05	20mm	15mm	R 2 708																								
10	R	1033.28	R 152.10	-R 881.19	25mm	15mm	R 2 708																								
10	R	616.90	R 288.83	-R 328.06	20mm	15mm	R 2 708																								
10	R	212.08	R 327.84	-R 115.77	25mm	15mm	R 2 708	10	-R	2 708	-R 2 461.76	-R 2 115.78	-R 1 712.96	-R 1 299.11	-R 914.04	-R 585.58	-R 327.28	-R 139.93	-R 15.18	-R 60.01	-R 99.60	-R 115.89	-R 118.38	-R 113.63	-R 105.72	-R 96.94	-R 88.41	-R 80.59	-R 73.61	-R 67.41	-R 61.93
10	R	628.14	R 660.83	-R 32.69	25mm	15mm	R 2 708	13	-R	2 708	-R 2 540.65	-R 2 261.85	-R 1 909.22	-R 1 526.30	-R 1 153.70	-R 822.32	-R 550.07	-R 342.28	-R 194.50	-R 96.54	-R 36.18	-R 1.87	-R 15.75	-R 23.51	-R 25.90	-R 25.65	-R 24.25	-R 22.48	-R 20.68	-R 19.00	-R 17.48
10	R	4487.07	R 2 896.33	-R 1 590.75	25mm	15mm	R 2 708																								
10	R	31 740.22	R 35 676.03	R 3 935.82	25mm	15mm	R 2 708	1	-R	2 708	-R 1 166.02	-R 4 601.18	-R 7 311.73	-R 9 148.38	-R 10 106.60	-R 10 300.82	-R 9 917.65	-R 9 164.98	-R 8 230.81	-R 7 259.16	-R 6 343.24	-R 5 531.12	-R 4 837.72	-R 4 257.72	-R 3 776.12	-R 3 375.28	-R 3 038.79	-R 2 753.02	-R 2 507.33	-R 2 293.67	-R 2 105.99
10	R	19 445.90	R 14 468.62	-R 4 977.28	40mm	50mm	R 22 444																								
10	R	895.45	R 1 743.82	R 848.37	25mm	15mm	R 2 708	3	-R	2 708	-R 1 766.03	-R 827.60	-R 17.79	-R 704.51	-R 1 199.49	-R 1 502.21	-R 1 637.49	-R 1 644.56	-R 1 566.23	-R 1 440.66	-R 1 297.00	-R 1 154.42	-R 1 023.45	-R 908.38	-R 809.63	-R 725.66	-R 654.23	-R 593.11	-R 540.34	-R 494.36	-R 453.94
10	R	941.54	R 967.64	-R 26.10	25mm	15mm	R 2 708	13	-R	2 708	-R 2 546.91	-R 2 273.44	-R 1 924.79	-R 1 544.33	-R 1 172.72	-R 841.10	-R 567.75	-R 358.34	-R 208.73	-R 108.97	-R 46.95	-R 11.22	-R 7.60	-R 16.36	-R 19.57	-R 19.99	-R 19.16	-R 17.86	-R 16.48	-R 15.16	-R 13.95
10	R	2 689.82	R 896.80	-R 1 793.02	25mm	15mm	R 2 708																								
10	R	80 197.58	R 83 636.62	R 3 439.04	100mm	100mm	R 34 370	7	-R	34 370	-R 29 374.13	-R 23 390.04	-R 17 087.54	-R 11 101.24	-R 5 918.50	-R 1 818.81	-R 1 128.70	-R 3 021.86	-R 4 059.17	-R 4 473.77	-R 4 483.52	-R 4 263.09	-R 3 935.88	-R 3 578.99	-R 3 234.37	-R 2 920.75	-R 2 643.38	-R 2 400.86	-R 2 189.10	-R 2 003.54	-R 1 839.96
10	R	405.34	R 1 990.22	-R 1 584.88	20mm	15mm	R 2 708	2	-R	2 708	-R 1 066.59	-R 467.43	-R 1 757.75	-R 2 718.79	-R 3 324.28	-R 3 601.11	-R 3 612.71	-R 3 438.55	-R 3 156.06	-R 2 828.66	-R 2 500.78	-R 2 198.48	-R 1 933.34	-R 1 707.36	-R 1 517.28	-R 1 357.72	-R 1 223.06	-R 1 108.35	-R 1 009.57	-R 923.59	-R 848.03
10	R	2 634.74	R 594.42	-R 2 040.32	25mm	15mm	R 2 708																								
10	R	4 011.87	R 4 932.94	-R 921.07	25mm	15mm	R 2 708	3	-R	2 708	-R 1 696.99	-R 699.78	-R 189.52	-R 903.32	-R 1 409.21	-R 1 709.37	-R 1 832.44	-R 1 821.63	-R 1 723.14	-R 1 577.66	-R 1 415.81	-R 1 257.47	-R 1 113.26	-R 987.24	-R 879.47	-R 788.04	-R 710.37	-R 643.96	-R 586.66	-R 536.73	-R 492.83
10	R	166.19	R 237.16	-R 70.97	20mm	15mm	R 2 708	11	-R	2 708	-R 2 504.30	-R 2 194.55	-R 1 818.79	-R 1 421.62	-R 1 043.28	-R 713.24	-R 447.42	-R 249.05	-R 111.88	-R 24.41	-R 26.38	-R 1.38	-R 63.04	-R 65.03	-R 62.68	-R 58.49	-R 53.81	-R 49.25	-R 45.07	-R 41.31	-R 37.96
10	R	4319.93	R 1 940.94	-R 2 378.99	20mm	15mm	R 2 708																								
10	R	662.94	R 805.71	-R 142.77	20mm	15mm	R 2 708	9	-R	2 708	-R 2 436.11	-R 2 068.29	-R 1 649.16	-R 1 225.25	-R 836.14	-R 508.62	-R 254.86	-R 74.15	-R 43.11	-R 110.91	-R 143.74	-R 154.17	-R 151.74	-R 142.92	-R 131.67	-R 120.11	-R 109.27	-R 99.48	-R 90.81	-R 83.15	-R 76.38
10	R	675.20	R 1 072.22	-R 397.02	25mm	15mm	R 2 708	6	-R	2 708	-R 2 194.66	-R 1 621.24	-R 1 048.51	-R 529.90	-R 102.64	-R 215.94	-R 427.01	-R 545.15	-R 591.93	-R 590.05	-R 559.29	-R 514.59	-R 465.84	-R 418.74	-R 375.96	-R 338.31	-R 305.63	-R 277.35	-R 252.79	-R 231.32	-R 212.42
10	R	1 610.18	R 60.76	-R 1 549.42	20mm	15mm	R 2 708																								
10	R	860.42	R 1 247.50	-R 387.08	20mm	15mm	R 2 708	6	-R	2 708	-R 2 204.11	-R 1 638.72	-R 1 072.00	-R 557.10	-R 131.33	-R 187.60	-R 400.34	-R 520.93	-R 570.47	-R 571.32	-R 543.04	-R 500.49	-R 453.56	-R 407.95	-R 366.40	-R 329.77	-R 297.95	-R 270.39	-R 246.46	-R 225.53	-R 207.10
10	R	634.16	R 996.88	-R 362.72	20mm	15mm	R 2 708	6	-R	2 708	-R 2 227.24	-R 1 681.55	-R 1 129.54	-R 623.71	-R 201.59	-R 118.19	-R 335.02	-R 461.60	-R 517.89	-R 525.42	-R 503.23	-R 465.96	-R 423.47	-R 381.53	-R 343.00	-R 308.87	-R 279.14	-R 253.36	-R 230.94	-R 211.33	-R 194.07
10	R	1 261.58	R 231.81	-R 1 029.77	20mm	15mm	R 2 708																								
10	R	66.66	R 1 613.58	-R 1 546.92	20mm	15mm	R 2 708	2	-R	2 708	-R 1 102.64	-R 400.68	-R 1 668.07	-R 2 614.96	-R 3 214.75	-R 3 492.92	-R 3 51														

		Change on				Size Old	Size New	Cost	NPV	Age (yrs)																																													
Bill	Old	Monthly	New	Consumption	0					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21																									
10	R	1504.02	R	599.73	-R	904.29	20mm	15mm	R	2.708																																													
10	R	307.93	R	64.89	-R	243.04	20mm	15mm	R	2.708																																													
10	R	983.40	R	367.06	-R	616.34	25mm	15mm	R	2.708																																													
10	R	564.69	R	156.86	-R	407.83	20mm	15mm	R	2.708																																													
10	R	101.97	R	607.70	-R	505.73	20mm	15mm	R	2.708	5	-R	2.708	-R	2.091.42	-R	1.430.08	-R	791.68	-R	232.58	R	210.99	R	525.75	R	718.56	R	809.95	R	826.60	R	794.93	R	736.97	R	668.70	R	600.15	R	536.67	R	480.41	R	431.60	R	389.59	R	353.40	R	322.05	R	294.68	R	270.59
10	R	213.40	R	315.59	-R	102.19	20mm	15mm	R	2.708	10	-R	2.708	-R	2.474.65	-R	2.139.65	-R	1.745.03	-R	1.336.23	-R	953.21	-R	624.26	-R	363.69	-R	173.00	-R	44.49	R	34.43	R	77.41	R	96.64	R	101.61	R	98.90	R	92.68	R	85.29	R	77.92	R	71.10	R	64.96	R	59.50	R	54.66
10	R	828.65	R	413.63	-R	415.02	20mm	15mm	R	2.708																																													
10	R	1499.99	R	557.23	-R	942.76	20mm	15mm	R	2.708																																													
10	R	528.68	R	2479.50	R	1950.83	20mm	15mm	R	2.708	2	-R	2.708	-R	719.06	R	1110.89	R	2.622.28	R	3.719.61	R	4.380.01	R	4.643.98	R	4.594.13	R	4.329.92	R	3.945.99	R	3.518.31	R	3.098.89	R	2.717.23	R	2.385.43	R	2.104.35	R	1.868.89	R	1.671.77	R	1.505.70	R	1.364.36	R	1.242.71	R	1.136.85	R	1.043.85
10	R	246.88	R	602.39	R	355.51	20mm	15mm	R	2.708	6	-R	2.708	-R	2.234.09	-R	1.694.23	-R	1.146.59	-R	643.44	-R	222.41	-R	97.63	-R	315.67	-R	444.03	-R	502.32	-R	511.82	-R	491.44	-R	455.74	-R	414.55	-R	373.70	-R	336.07	-R	302.68	-R	273.57	-R	248.31	-R	226.34	-R	207.13	-R	190.21
10	R	287.23	R	398.92	R	111.69	20mm	15mm	R	2.708	10	-R	2.708	-R	2.465.63	-R	2.122.94	-R	1.722.59	-R	1.310.25	-R	925.80	-R	597.19	-R	338.21	-R	149.86	-R	23.98	-R	52.33	-R	92.94	-R	110.11	-R	113.34	-R	109.21	-R	101.80	-R	93.44	-R	85.26	-R	77.74	-R	71.01	-R	65.04	-R	59.75
10	R	70.63	R	1240.46	R	1169.83	20mm	15mm	R	2.708	3	-R	2.708	-R	1.460.75	-R	262.38	-R	777.21	-R	1.583.65	-R	2.126.87	-R	2.418.29	-R	2.499.58	-R	2.427.56	-R	2.260.12	-R	2.046.46	-R	1.822.40	-R	1.610.10	-R	1.420.58	-R	1.257.10	-R	1.118.49	-R	1.001.53	-R	902.50	-R	817.99	-R	745.14	-R	681.70	-R	625.94
10	R	306.97	R	318.04	R	11.07	20mm	15mm	R	2.708	14	-R	2.708	-R	2.561.18	-R	2.299.87	-R	1.960.29	-R	1.585.43	-R	1.216.08	-R	883.93	-R	608.06	-R	394.95	-R	241.17	-R	137.29	-R	17.52	-R	32.52	-R	10.96	-R	0.05	-R	5.13	-R	7.09	-R	7.55	-R	7.35	-R	6.91	-R	6.40	-R	5.91
10	R	1298.80	R	554.57	-R	744.23	20mm	15mm	R	2.708																																													
10	R	1222.45	R	364.61	-R	857.84	20mm	15mm	R	2.708	5	-R	2.708	-R	2.157.90	-R	1.553.16	-R	957.05	-R	424.02	R	9.05	R	326.27	R	530.84	R	639.45	R	675.51	R	663.02	R	622.57	R	569.47	R	513.67	R	460.74	R	413.16	R	371.53	R	335.53	R	304.44	R	277.46	R	253.89	R	233.14
10	R	105.26	R	44.91	-R	60.35	20mm	15mm	R	2.708																																													
10	R	390.99	R	379.31	-R	11.68	20mm	15mm	R	2.708																																													
10	R	702.31	R	634.27	-R	68.04	20mm	15mm	R	2.708																																													
10	R	446.42	R	703.33	R	256.91	20mm	15mm	R	2.708	7	-R	2.708	-R	2.327.72	-R	1.867.60	-R	1.379.52	-R	913.09	-R	506.85	-R	183.35	-R	51.25	-R	203.87	-R	289.49	-R	326.01	-R	330.29	-R	315.97	-R	292.75	-R	266.74	-R	241.33	-R	218.07	-R	197.42	-R	179.33	-R	163.53	-R	149.67	-R	137.45
10	R	14.57	R	72.47	R	57.91	20mm	15mm	R	2.708	11	-R	2.708	-R	2.516.71	-R	2.212.57	-R	1.849.66	-R	1.457.35	-R	1.080.97	-R	750.47	-R	482.46	-R	280.87	-R	140.08	-R	49.03	-R	5.03	-R	33.86	-R	46.90	-R	50.86	-R	50.13	-R	47.28	-R	43.72	-R	40.11	-R	36.74	-R	33.69	-R	30.97
10	R	1355.36	R	1745.10	R	16.101.74	20mm	15mm	R	2.708	1	-R	2.708	-R	1.7219.60	-R	25.993.06	-R	38.053.16	-R	42.421.07	-R	45.204.67	-R	44.971.32	-R	42.455.25	-R	38.798.84	-R	34.492.35	-R	30.186.67	-R	26.227.70	-R	22.777.29	-R	19.867.65	-R	17.455.64	-R	15.465.45	-R	13.815.99	-R	12.435.01	-R	11.264.03	-R	10.258.14	-R	9.383.74	-R	8.615.83
10	R	375.55	R	342.55	-R	33.01	20mm	15mm	R	2.708																																													
10	R	296.22	R	203.25	-R	92.96	20mm	15mm	R	2.708																																													
10	R	493.12	R	2861.74	R	2.658.02	20mm	15mm	R	2.708	2	-R	2.708	-R	417.26	R	1.669.68	R	3.373.06	R	4.588.76	R	5.296.83	R	5.549.64	R	5.446.43	R	5.104.01	R	4.631.99	R	4.117.22	R	3.618.31	R	3.167.73	R	2.778.04	R	2.449.10	R	2.174.24	R	1.944.50	R	1.755.14	R	1.586.68	R	1.445.17	R	1.322.06	R	1.213.89
10	R	319.68	R	546.61	-R	227.13	20mm	15mm	R	2.708	8	-R	2.708	-R	2.356.00	-R	1.919.97	-R	1.449.88	-R	994.54	-R	592.77	-R	268.22	-R	28.63	-R	131.32	-R	225.20	-R	269.88	-R	281.61	-R	273.75	-R	255.95	-R	234.44	-R	212.72	-R	192.51	-R	174.42	-R	158.50	-R	144.55	-R	132.31	-R	121.52
10	R	363.66	R	506.76	-R	143.10	20mm	15mm	R	2.708	9	-R	2.708	-R	2.435.81	-R	2.067.72	-R	1.648.40	-R	1.234.36	-R	835.20	-R	507.69	-R	253.99	-R	73.36	-R	43.81	-R	111.52	-R	144.27	-R	154.63	-R	152.14	-R	143.28	-R	131.98	-R	120.39	-R	109.52	-R	99.71	-R	91.02	-R	83.34	-R	76.55
10	R	181.07	R	1881.10	R	1.700.03	20mm	15mm	R	2.708	2	-R	2.708	-R	957.24	-R	669.89	-R	2.029.78	-R	3.033.70	-R	3.656.46	-R	3.929.25	-R	3.921.52	-R	3.719.02	-R	3.404.61	-R	3.045.66	-R	2.688.97	-R	2.361.70	-R	2.075.59	-R	1.832.28	-R	1.627.92	-R	1.456.54	-R	1.312.00	-R	1.188.91	-R	1.082.92	-R	990.69	-R	909.65
10	R	1699.23	R	269.02	-R	1.430.21	20mm	15mm	R	2.708																																													
10	R	306.06	R	249.41	-R	56.64	20mm	15mm	R	2.708																																													
10	R	1568.71	R	95.91	-R	1472.80	20mm	15mm	R	2.708																																													
10	R	392.18	R	3866.38	R	3.474.20	20mm	15mm	R	2.708	1	-R	2.708	-R	727.64	R	3.789.50	R	6.221.18	R	7.885.90	R	8.774.87	R	9.985.30	R	8.679.65	R	8.040.57	R	7.234.36	R	6.389.21	R	5.588.75	R	4.876.74	R	4.267.43	R	3.756.95	R	3.332.59	R	2.979.12	R	2.682.26	R	2.430.08	R	2.213.24	R	2.024.65	R	1.858.98
10	R	124.56	R	1008.13	R	883.57	20mm	15mm	R	2.708	3	-R	2.708	-R	1.732.60	-R	765.71	-R	100.94	-R	800.77	-R	1.301.03	-R	1.602.51	-R	1.731.88	-R	1.730.29	-R	1.642.20	-R	1.506.99	-R	1.354.53	-R	1.204.31	-R	1.066.93	-R	946.56	-R	843.45	-R	755.86	-R	681.41	-R	617.73	-R	562.77	-R	514.88	-R	472.77
10	R	663.82	R	1136.32	R	472.51	20mm	15mm	R	2.708	5	-R	2.708	-R	2.122.98	-R	1.488.51	-R	870.18	-R	323.45	-R	115.13	-R	431.06	-R	629.45	-R	729.02	-R	754.88	-R	732.31	-R	682.67	-R	621.59	-R	559.10	-R	500.63	-R	448.48	-R	403.09	-R	363.93	-R	330.16	-R	300.88	-R	275.31	-R	252.81
10	R	168.09	R	197.61	-R	28.52	20mm	15mm	R	2.708	13	-R	2.708	-R	2.543.74	-R	2.267.56	-R	1.916.89	-R	1.535.19	-R	1.163.08	-R	831.58	-R	558.79	-R	350.19	-R	201.52	-R	102.67	-R	41.49	-R	6.48	-R	11.74	-R	19.98	-R	22.78	-R	22.86	-R	23.74	-R	20.20	-R	18.61	-R	17.11	-R	15.74
10	R	582.35	R	974.39	-R	392.04	20mm	15mm	R	2.708	6	-R	2.708	-R	2.199.39	-R	1.630.00	-R	1.060.28	-R	543.53	-R	117.01	-R	20.714	-R	413.65	-R	533.01	-R	581.18	-R	580.67	-R	551.15	-R	507.52	-R	459.69	-R	413.34	-R	371.17	-R	334.03	-R	301.78	-R	273.87	-R	249.62	-R	228.42	-R	209.76
10	R	3804.82	R	1190.91	-R	2.613.91	20																																																

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[illegible]

Age (yrs)		Change on				Size Old	Size New	Cost	NPV																							
Monthly Bill	Old	Monthly Bill	New	Consumption	0					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21		
10	R	1098.93	R	559.89	-R 539.05	20mm	15mm	R 2 708																								
10	R	151.55	R	278.83	R 127.27	20mm	15mm	R 2 708	9	-R	2 708	-R 2 450.83	-R 2 095.54	-R 1 685.77	-R 1 267.63	-R 880.85	-R 552.78	-R 296.42	-R 111.90	R 9.66	R 81.70	R 118.41	R 132.20	R 132.59	R 126.11	R 116.78	R 106.81	R 97.30	R 88.64	R 80.94	R 74.12	R 68.08
10	R	9175.81	R	41.54	-R 9134.27	20mm	15mm	R 2 708																								
10	R	384.65	R	85.13	-R 299.51	20mm	15mm	R 2 708																								
10	R	39.40	R	44.91	R 5.51	20mm	15mm	R 2 708	16	-R	2 708	-R 2 566.47	-R 2 309.66	-R 1 973.45	-R 1 600.66	-R 1 232.14	-R 899.80	-R 622.99	-R 408.51	-R 253.19	-R 147.78	-R 80.62	-R 50.42	-R 17.84	-R 5.99	-R 0.22	-R 2.31	-R 3.25	-R 3.46	-R 3.36	-R 3.16	-R 2.93
10	R	121.61	R	525.35	R 403.75	20mm	15mm	R 2 708	6	-R	2 708	-R 2 188.27	-R 1 609.61	-R 1 032.62	-R 511.50	-R 83.23	-R 235.11	-R 445.05	-R 651.54	-R 606.46	-R 602.73	-R 570.29	-R 542.18	-R 474.19	-R 426.04	-R 382.42	-R 344.08	-R 310.83	-R 282.06	-R 257.08	-R 235.24	-R 216.02
10	R	51.73	R	39.59	-R 12.13	20mm	15mm	R 2 708																								
10	R	510.41	R	735.21	R 224.79	20mm	15mm	R 2 708	8	-R	2 708	-R 2 358.22	-R 1 924.07	-R 1 455.39	-R 1 000.92	-R 599.50	-R 274.87	-R 34.88	-R 125.64	-R 220.17	-R 265.48	-R 277.80	-R 270.44	-R 253.07	-R 231.91	-R 210.48	-R 190.51	-R 172.62	-R 156.87	-R 143.07	-R 130.95	-R 120.27
10	R	379.66	R	452.84	R 73.18	20mm	15mm	R 2 708	11	-R	2 708	-R 2 502.21	-R 2 190.66	-R 1 813.58	-R 1 415.58	-R 1 036.91	-R 706.95	-R 441.50	-R 243.67	-R 107.12	-R 20.25	-R 29.99	-R 55.51	-R 65.76	-R 67.43	-R 64.80	-R 60.39	-R 55.52	-R 50.80	-R 46.47	-R 42.59	-R 39.14
10	R	4474.17	R	1105.96	-R 3368.21	20mm	15mm	R 2 708																								
10	R	1796.03	R	1719.18	-R 76.85	20mm	15mm	R 2 708																								
10	R	757.71	R	219.17	-R 538.54	20mm	15mm	R 2 708																								
10	R	1525.27	R	809.08	-R 716.19	20mm	15mm	R 2 708																								
10	R	110.64	R	303.33	-R 192.69	20mm	15mm	R 2 708	8	-R	2 708	-R 2 388.71	-R 1 980.52	-R 1 531.23	-R 1 088.72	-R 692.12	-R 366.36	-R 120.98	-R 47.44	-R 150.87	-R 204.98	-R 225.33	-R 234.93	-R 213.41	-R 197.08	-R 179.63	-R 162.95	-R 147.82	-R 134.41	-R 122.61	-R 112.24	-R 103.09
10	R	46.00	R	100.70	-R 54.70	20mm	15mm	R 2 708	12	-R	2 708	-R 2 519.75	-R 2 223.16	-R 1 857.23	-R 1 466.12	-R 1 090.22	-R 759.61	-R 491.06	-R 288.68	-R 147.00	-R 55.07	-R 0.21	-R 29.32	-R 42.93	-R 47.38	-R 47.04	-R 44.53	-R 41.24	-R 37.87	-R 34.70	-R 31.82	-R 29.25
10	R	89.99	R	369.51	-R 279.52	20mm	15mm	R 2 708	7	-R	2 708	-R 2 306.25	-R 1 827.84	-R 1 326.10	-R 851.25	-R 441.62	-R 118.91	-R 111.89	-R 258.94	-R 338.30	-R 368.62	-R 367.25	-R 348.02	-R 320.68	-R 291.27	-R 263.06	-R 237.47	-R 214.88	-R 195.15	-R 177.93	-R 162.85	-R 149.55
10	R	239.86	R	440.59	-R 200.73	20mm	15mm	R 2 708	8	-R	2 708	-R 2 381.07	-R 1 966.38	-R 1 512.24	-R 1 066.74	-R 668.93	-R 343.45	-R 99.42	-R 67.02	-R 168.22	-R 220.13	-R 238.47	-R 236.33	-R 232.64	-R 205.80	-R 187.35	-R 169.85	-R 154.03	-R 140.03	-R 127.73	-R 116.93	-R 107.39
10	R	113.68	R	199.68	-R 86.00	20mm	15mm	R 2 708	10	-R	2 708	-R 2 490.03	-R 2 168.12	-R 1 783.28	-R 1 380.51	-R 999.91	-R 670.40	-R 407.11	-R 212.43	-R 79.43	-R 3.92	-R 50.95	-R 73.69	-R 81.61	-R 81.34	-R 77.12	-R 71.39	-R 65.42	-R 59.77	-R 54.64	-R 50.07	-R 46.00
10	R	2159.95	R	618.33	-R 1541.62	20mm	15mm	R 2 708																								
10	R	259.36	R	602.39	-R 343.03	20mm	15mm	R 2 708	6	-R	2 708	-R 2 245.94	-R 1 716.18	-R 1 176.07	-R 677.57	-R 258.41	-R 62.07	-R 282.20	-R 413.63	-R 475.38	-R 488.30	-R 467.90	-R 438.05	-R 399.14	-R 360.17	-R 324.08	-R 291.97	-R 263.93	-R 239.58	-R 218.39	-R 199.86	-R 183.53
10	R	781.43	R	3704.46	-R 2923.03	20mm	15mm	R 2 708	1	-R	2 708	-R 204.21	-R 2 820.36	-R 4 919.07	-R 3 378.51	-R 1784.77	-R 7 414.58	-R 7 201.48	-R 6 698.03	-R 6 044.60	-R 5 350.50	-R 4 687.90	-R 4 095.41	-R 3 586.51	-R 3 159.03	-R 2 803.01	-R 2 506.11	-R 2 256.57	-R 2 044.49	-R 1 862.09	-R 1 703.44	-R 1 564.06
10	R	271.47	R	1518.54	-R 1247.07	20mm	15mm	R 2 708	3	-R	2 708	-R 1 387.40	-R 126.56	-R 959.69	-R 1 794.90	-R 2 349.70	-R 2 706.73	-R 2 615.70	-R 2 426.85	-R 2 192.03	-R 1 948.64	-R 1 719.60	-R 1 516.00	-R 1 340.89	-R 1 192.70	-R 1 067.81	-R 962.16	-R 872.03	-R 794.35	-R 726.71	-R 667.27	
10	R	152.60	R	72.47	-R 80.13	20mm	15mm	R 2 708																								
10	R	1678.07	R	2736.46	-R 1058.39	20mm	15mm	R 2 708	3	-R	2 708	-R 1 566.58	-R 458.32	-R 513.95	-R 1 279.89	-R 1 805.39	-R 2 100.73	-R 2 200.73	-R 2 156.13	-R 2 019.58	-R 1 836.46	-R 1 640.27	-R 1 452.14	-R 1 282.91	-R 1 136.22	-R 1 011.42	-R 905.89	-R 816.44	-R 740.03	-R 674.15	-R 616.76	-R 566.32
10	R	461.83	R	1229.90	-R 768.07	20mm	15mm	R 2 708	4	-R	2 708	-R 1 842.29	-R 968.80	-R 171.92	-R 484.89	-R 967.83	-R 1 273.37	-R 1 422.13	-R 1 448.96	-R 1 392.89	-R 1 289.33	-R 1 165.76	-R 1 040.58	-R 924.25	-R 821.27	-R 732.47	-R 656.74	-R 592.21	-R 536.93	-R 489.19	-R 447.57	-R 410.97
10	R	32.58	R	2951.18	-R 2918.60	20mm	15mm	R 2 708	1	-R	2 708	-R 200.00	-R 2 812.57	-R 4 908.61	-R 6 366.40	-R 7 172.00	-R 7 401.96	-R 7 189.60	-R 6 687.24	-R 6 035.04	-R 5 342.15	-R 4 680.67	-R 4 089.13	-R 3 581.04	-R 3 154.22	-R 2 798.76	-R 2 502.31	-R 2 253.15	-R 2 041.40	-R 1 859.27	-R 1 700.86	-R 1 561.69
10	R	113.36	R	452.84	-R 339.48	20mm	15mm	R 2 708	6	-R	2 708	-R 2 249.31	-R 1 722.42	-R 1 184.46	-R 687.28	-R 268.65	-R 51.95	-R 272.68	-R 404.98	-R 467.72	-R 481.61	-R 465.24	-R 433.01	-R 394.75	-R 356.32	-R 320.67	-R 288.92	-R 261.19	-R 237.09	-R 216.13	-R 197.79	-R 181.63
10	R	1753.63	R	140.79	-R 1612.83	20mm	15mm	R 2 708																								
10	R	115.12	R	322.94	-R 207.83	20mm	15mm	R 2 708	8	-R	2 708	-R 2 374.33	-R 1 953.91	-R 1 495.47	-R 1 047.33	-R 648.46	-R 323.23	-R 80.39	-R 84.31	-R 183.54	-R 233.51	-R 250.06	-R 246.39	-R 232.11	-R 213.50	-R 194.17	-R 175.94	-R 159.51	-R 144.99	-R 132.26	-R 121.06	-R 111.19
10	R	275.67	R	264.12	-R 11.55	20mm	15mm	R 2 708																								
10	R	93.96	R	313.14	-R 219.17	20mm	15mm	R 2 708	8	-R	2 708	-R 2 363.56	-R 1 933.95	-R 1 468.67	-R 1 016.30	-R 615.72	-R 290.89	-R 49.96	-R 111.95	-R 208.03	-R 254.89	-R 268.61	-R 262.47	-R 246.13	-R 225.81	-R 205.08	-R 185.68	-R 168.27	-R 152.93	-R 139.49	-R 127.68	-R 117.26
10	R	65.72	R	1648.78	-R 1583.06	20mm	15mm	R 2 708	2	-R	2 708	-R 1 068.32	-R 464.23	-R 1 453.45	-R 2 713.81	-R 3 319.02	-R 3 595.92	-R 3 607.83	-R 3 434.11	-R 3 152.13	-R 2 85.23	-R 2 497.80	-R 2 195.89	-R 1 931.09	-R 1 705.39	-R 1 515.53	-R 1 356.16	-R 1 221.66	-R 1 107.08	-R 922.52	-R 847.06	
10	R	910.74	R	843.78	-R 66.96	20mm	15mm	R 2 708																								
10	R	129.35	R	119.85	-R 9.50	20mm	15mm	R 2 708																								
10	R	48.10	R	428.33	-R 380.23	20mm	15mm	R 2 708	6	-R	2 708	-R 2 210.61	-R 1 650.77	-R 1 088.18	-R 575.83	-R 151.09	-R 168.08	-R 381.97	-R 504.24	-R 555.68	-R 558.41	-R 531.84	-R 490.78	-R 445.10	-R 400.52	-R 359.82	-R 323.90	-R 292.66	-R 265.60	-R 242.09	-R 221.54	-R 203.44
10	R	382.58	R	222.88	-R 159.70	20mm	15mm	R 2 708																								
10	R	882.46	R	1381.26	-R 498.80	20mm	15mm	R 2 708	5	-R	2 708	-R 2 098.00	-R 1 442.27	-R 808.06	-R 251.54	-R 191.00	-R 506.00	-R 699.98	-R 793.07	-R 811.64	-R 781.87	-R 725.65	-R 658.87	-R 591.59	-R 529.16	-R 473.75	-R 425.66	-R 384.24	-R 348.56	-R 317.63	-R 290.64	-R 266.89
10	R	59.41	R	40.24	-R 19.17	25mm	15mm	R 2 708																								
10	R	196.59	R	607.70	-R 411.11	20mm	15mm	R 2 708	6	-R	2 708	-R 2 181.28	-R 1 596.46	-R 1 015.22	-R 491.37	-R 61.99	-R 256.10	-R 464.80	-R 579.47	-R 622.35	-R 616.61	-R 582.32	-R 534.56	-R 483.25	-R 434.03	-R 389.49	-R 350.40	-R 316.51	-R 287.21	-R 261.77	-R 239.53	-R 219.96
10	R	36.18	R	101.89	-R 65.72	20mm	15mm	R 2 708	11	-R	2 708	-R 2 509.29	-R 2 203.78	-R 1 831.20	-R 1 435.98																	

Age (yrs)		Monthly Bill		Old		Monthly Bill		New		Consumption		Size Old		Size New		Cost		NPV		0		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
10	R	222.44	R	125.84	-R	96.60	25mm	15mm	R	2	708																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															</

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		Change on				Size Old	Size New	Cost	NPV	0																																													
Age (yrs)	Monthly Bill	Old Bill	Monthly Bill	New Consumption																																																			
10	R	66.92	R	106.68	R	39.77	20mm	15mm	R	2 708	12	-R	2 708	-R	2 533.94	-R	2 249.41	-R	1 892.51	-R	1 506.96	-R	1 133.30	-R	802.16	-R	531.11	-R	325.05	-R	179.24	-R	83.22	-R	24.62	R	8.15	R	24.49	R	31.18	R	32.70	R	31.71	R	29.71	R	27.42	R	25.19	R	23.12	R	21.26
10	R	144.90	R	950.77	R	805.87	20mm	15mm	R	2 708	4	-R	2 708	-R	1 806.39	-R	902.33	-R	82.61	-R	588.28	-R	1 076.88	-R	1 381.10	-R	1 523.51	-R	1 541.04	-R	1 474.49	-R	1 360.57	-R	1 227.54	R	1 094.17	R	970.95	R	862.28	R	768.79	R	689.18	R	621.41	R	563.38	R	513.27	R	469.60	R	431.20
10	R	709.76	R	51.11	-R	658.65	20mm	15mm	R	2 708	10	-R	2 708	-R	2 470.01	-R	2 131.06	-R	1 733.49	-R	1 322.87	-R	939.11	-R	610.34	-R	350.58	-R	161.10	-R	33.94	R	43.64	R	85.40	R	103.57	R	107.64	R	104.20	R	97.37	R	89.48	R	81.70	R	74.51	R	68.07	R	63.35	R	57.28
10	R	11.58	R	118.66	R	107.08	20mm	15mm	R	2 708	10	-R	2 708	-R	2 542.14	-R	2 264.61	-R	1 912.93	-R	1 530.60	-R	1 158.24	-R	826.79	-R	554.29	-R	346.11	-R	197.90	R	99.50	R	38.75	-R	4.10	R	13.81	R	21.80	R	24.39	R	24.30	R	23.03	R	21.38	R	19.68	R	18.08	R	16.64
10	R	16.21	R	347.45	R	331.24	20mm	15mm	R	2 708	6	-R	2 708	-R	2 257.13	-R	1 736.90	-R	1 203.91	-R	709.80	-R	292.41	-R	28.48	-R	250.60	-R	384.92	R	449.94	R	466.09	R	451.78	R	421.34	R	384.58	R	347.38	R	312.75	R	281.86	R	254.83	R	231.33	R	210.88	R	192.99	R	177.23
10	R	371.96	R	60.76	-R	311.20	20mm	15mm	R	2 708	8	-R	2 708	-R	2 378.19	-R	1 961.04	-R	1 505.05	-R	1 058.42	-R	660.16	-R	334.78	-R	91.27	R	74.43	R	174.78	R	225.86	R	243.44	R	240.64	R	227.10	R	209.10	R	190.28	R	172.46	R	156.38	R	142.16	R	129.67	R	118.70	R	109.02
10	R	18.53	R	201.47	R	182.94	20mm	15mm	R	2 708	8	-R	2 708	-R	2 397.96	-R	1 997.66	-R	1 554.26	-R	1 115.38	-R	720.24	-R	394.13	-R	147.12	R	23.70	R	129.83	R	186.61	R	209.40	R	211.12	R	201.37	R	186.50	R	170.27	R	154.59	R	140.29	R	127.59	R	116.40	R	106.56	R	97.87
10	R	20.07	R	133.02	R	112.95	20mm	15mm	R	2 708	10	-R	2 708	-R	2 464.43	-R	2 120.72	-R	1 719.60	-R	1 306.80	-R	922.16	-R	593.59	-R	334.82	-R	146.78	-R	21.25	R	54.71	R	95.00	R	111.90	R	114.90	R	110.58	R	103.02	R	94.52	R	86.24	R	78.62	R	71.81	R	65.77	R	60.42
10	R	331.30	R	1 799.26	R	1 467.96	20mm	15mm	R	2 708	2	-R	2 708	-R	1 177.62	-R	261.84	-R	1 481.54	-R	2 399.02	-R	2 986.97	-R	3 267.91	-R	3 299.15	-R	3 153.76	-R	2 903.67	-R	2 608.32	-R	2 309.68	-R	2 032.73	R	1 788.90	R	1 580.53	R	1 404.94	R	1 257.38	R	1 132.76	R	1 026.56	R	935.08	R	855.45	R	785.47
10	R	643.73	R	2 437.26	R	1 793.53	20mm	15mm	R	2 708	2	-R	2 708	-R	1 868.44	-R	834.31	-R	2 250.68	-R	2 399.02	-R	3 926.22	-R	4 195.73	-R	4 299.19	-R	3 946.78	-R	3 606.45	-R	3 221.88	-R	2 841.80	-R	2 494.25	-R	2 191.11	R	1 933.71	R	1 717.76	R	1 536.78	R	1 384.21	R	1 254.32	R	1 142.50	R	1 045.18	R	959.68
10	R	92.70	R	930.53	R	837.83	20mm	15mm	R	2 708	4	-R	2 708	-R	1 776.04	-R	846.14	-R	7.12	R	675.67	R	1 169.07	R	1 472.16	R	1 609.21	R	1 618.87	R	1 543.47	R	1 420.79	R	1 279.77	R	1 139.47	R	1 010.42	R	896.94	R	799.50	R	716.61	R	646.09	R	585.73	R	533.63	R	488.22	R	448.29
10	R	371.96	R	2 180.30	R	1 808.34	20mm	15mm	R	2 708	2	-R	2 708	-R	654.38	-R	860.35	-R	2 285.67	-R	3 329.93	-R	3 968.94	-R	4 237.93	-R	4 212.00	-R	3 982.85	-R	3 638.42	-R	3 249.78	-R	2 865.01	-R	2 515.25	-R	2 209.41	R	1 949.78	R	1 731.99	R	1 549.49	R	1 395.65	R	1 264.68	R	1 151.93	R	1 053.81	R	967.60
10	R	152.82	R	1 014.87	R	862.05	20mm	15mm	R	2 708	3	-R	2 708	-R	1 753.04	-R	803.56	-R	50.10	R	741.91	R	1 238.94	R	1 541.18	R	1 674.16	R	1 677.87	-R	1 595.75	-R	1 466.43	-R	1 319.35	R	1 173.80	R	1 040.34	R	923.22	R	822.77	R	737.39	R	664.79	R	602.68	R	549.06	R	502.33	R	461.25
10	R	40.36	R	325.39	R	285.03	20mm	15mm	R	2 708	7	-R	2 708	-R	2 301.02	-R	1 818.15	-R	1 313.08	-R	836.19	-R	425.73	-R	103.21	-R	126.66	-R	272.36	-R	350.19	-R	379.00	-R	376.25	-R	355.83	-R	327.49	-R	297.25	-R	268.35	-R	242.20	-R	219.14	-R	199.00	-R	181.44	-R	166.06	-R	152.50
10	R	161.74	R	484.29	R	322.55	20mm	15mm	R	2 708	6	-R	2 708	-R	2 265.38	-R	1 752.17	-R	1 224.44	-R	733.56	-R	317.47	-R	3.73	-R	227.30	-R	363.76	-R	431.19	-R	449.72	-R	437.58	-R	409.03	-R	373.85	-R	337.96	-R	304.41	-R	274.40	-R	248.12	-R	225.26	-R	205.35	-R	187.93	-R	172.58
10	R	475.54	R	196.12	-R	279.43	20mm	15mm	R	2 708	10	-R	2 708	-R	2 539.33	-R	2 259.40	-R	1 905.92	-R	1 522.49	-R	1 149.69	-R	818.35	-R	546.34	-R	338.89	-R	191.50	-R	93.92	-R	33.90	R	0.10	R	17.47	R	25.02	R	27.24	R	26.84	R	25.32	R	23.45	R	21.57	R	19.81	R	18.22
10	R	91.75	R	125.84	R	34.09	20mm	15mm	R	2 708	12	-R	2 708	-R	2 484.34	-R	2 157.59	-R	1 769.14	-R	1 364.14	-R	982.65	-R	653.35	-R	391.06	-R	197.86	-R	66.51	R	15.20	R	60.73	R	82.18	R	89.00	R	87.83	R	82.87	R	76.53	R	70.04	R	63.96	R	58.46	R	53.56	R	49.20
10	R	522.49	R	743.18	R	220.68	20mm	15mm	R	2 708	8	-R	2 708	-R	2 362.12	-R	1 931.30	-R	1 465.10	-R	1 012.17	-R	611.37	-R	286.59	-R	45.91	-R	115.62	-R	211.29	-R	257.73	-R	271.08	-R	264.18	-R	247.99	-R	227.44	-R	206.53	-R	186.98	-R	169.44	-R	153.99	-R	140.45	-R	128.56	-R	118.07
10	R	50.42	R	72.47	R	22.05	20mm	15mm	R	2 708	13	-R	2 708	-R	2 550.76	-R	2 280.56	-R	1 934.36	-R	1 555.41	-R	1 184.41	-R	852.65	-R	578.62	-R	368.21	-R	217.48	-R	116.60	-R	53.57	-R	16.96	-R	2.60	-R	11.96	-R	15.68	-R	16.51	-R	16.03	-R	15.03	-R	13.90	-R	12.80	-R	11.78
10	R	44.44	R	71.09	R	26.66	20mm	15mm	R	2 708	13	-R	2 708	-R	2 546.38	-R	2 272.46	-R	1 923.48	-R	1 542.81	-R	1 171.12	-R	839.52	-R	566.26	-R	356.99	-R	207.54	-R	107.92	-R	46.04	-R	10.43	-R	8.29	-R	16.96	-R	20.10	-R	20.46	-R	19.59	-R	18.25	-R	16.83	-R	15.48	-R	14.25
10	R	1 292.31	R	805.71	-R	486.60	20mm	15mm	R	2 708	9	-R	2 708	-R	2 444.85	-R	2 084.47	-R	1 670.89	-R	1 250.40	-R	862.67	-R	534.83	-R	279.53	-R	96.56	-R	23.26	-R	93.57	-R	128.70	-R	141.13	-R	140.38	-R	132.95	-R	122.83	-R	112.22	-R	102.16	-R	93.05	-R	84.95	-R	77.79	-R	71.46
10	R	76.82	R	210.39	R	133.57	20mm	15mm	R	2 708	14	-R	2 708	-R	2 557.85	-R																																							

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		Change on																														
Age	Yrs	Monthly Bill	Old	Monthly Bill	New Consumption	Size Old	Size New	Cost	NPV	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
10	R	1507.10	R	300.88	-R 1206.22	20mm	15mm	R 2708																								
10	R	2869.51	R	2106.38	-R 763.13	20mm	15mm	R 2708																								
10	R	2270.52	R	1845.90	-R 424.62	20mm	15mm	R 2708																								
10	R	19.11	R	332.75	-R 313.64	20mm	15mm	R 2708	7	-R	2708	-R 2273.85	-R 1767.86	-R 1245.50	-R 757.95	-R 343.20	-R 21.69	R 203.38	R 342.04	R 411.94	R 432.91	R 423.00	R 396.38	R 362.83	R 328.28	R 295.84	R 266.75	R 241.23	R 219.02	R 199.67	R 182.73	R 167.80
10	R	77.95	R	1102.28	-R 32.33	20mm	15mm	R 2708	13	-R	2708	-R 2541.00	-R 2262.49	-R 1910.08	-R 1527.31	-R 1154.76	-R 823.36	-R 551.06	-R 343.18	-R 195.30	-R 97.24	-R 36.78	-R 2.40	R 15.29	R 23.11	R 25.55	R 25.33	R 23.96	R 22.22	R 20.45	R 18.79	R 17.28
10	R	414.82	R	113.87	-R 300.95	20mm	15mm	R 2708																								
10	R	71.59	R	283.73	-R 212.14	20mm	15mm	R 2708	8	-R	2708	-R 2370.24	-R 1946.33	-R 1485.29	-R 1035.54	-R 636.02	-R 310.94	-R 68.83	-R 94.80	-R 192.84	-R 241.63	-R 257.11	-R 252.50	-R 237.43	-R 218.17	-R 198.31	-R 179.64	-R 162.84	-R 148.01	-R 135.00	-R 123.58	-R 113.49
10	R	815.97	R	64.20	-R 751.77	20mm	15mm	R 2708																								
10	R	196.50	R	69.03	-R 127.47	20mm	15mm	R 2708																								
10	R	2105.01	R	594.42	-R 1510.59	20mm	15mm	R 2708																								
10	R	280.44	R	3176.46	-R 2896.02	20mm	15mm	R 2708	1	-R	2708	R 178.56	R 2772.87	R 4855.26	R 6304.64	R 7106.85	R 7337.61	R 7129.04	R 6632.24	R 5986.30	R 5299.60	R 4643.76	R 4057.12	R 3553.14	R 3129.73	R 2777.06	R 2482.93	R 2235.71	R 2025.60	R 1844.88	R 1687.69	R 1549.61
10	R	350.12	R	71.09	-R 279.03	20mm	15mm	R 2708																								
10	R	42.17	R	139.01	-R 96.84	20mm	15mm	R 2708	10	-R	2708	-R 2479.73	-R 2149.05	-R 1757.67	-R 1350.86	-R 968.64	-R 639.50	-R 378.03	-R 186.02	-R 56.03	-R 24.35	-R 68.67	-R 89.06	-R 95.00	-R 93.10	-R 87.54	-R 80.70	-R 73.79	-R 67.35	-R 61.55	-R 56.39	-R 51.80
10	R	270.31	R	662.60	-R 392.29	20mm	15mm	R 2708	6	-R	2708	-R 2199.15	-R 1629.55	-R 1059.68	-R 542.83	-R 116.28	-R 202.47	-R 414.33	-R 533.63	-R 581.73	-R 581.15	-R 551.56	-R 507.89	-R 460.00	-R 413.61	-R 371.41	-R 334.25	-R 301.98	-R 274.04	-R 249.78	-R 228.57	-R 209.89
10	R	688.74	R	605.05	-R 83.69	20mm	15mm	R 2708																								
10	R	130.23	R	48.35	-R 81.88	20mm	15mm	R 2708																								
10	R	508.75	R	433.20	-R 75.55	20mm	15mm	R 2708																								
10	R	99.50	R	1761.42	-R 1661.92	20mm	15mm	R 2708	2	-R	2708	-R 993.43	-R 602.89	-R 1939.76	-R 2929.48	-R 3546.53	-R 3820.66	-R 3819.32	-R 3626.20	-R 3322.36	-R 2973.85	-R 2626.69	-R 2307.68	-R 2028.52	-R 1790.94	-R 1591.30	-R 1423.84	-R 1282.56	-R 1162.25	-R 1058.65	-R 968.48	-R 889.26
10	R	4953.94	R	3257.42	-R 1696.52	20mm	15mm	R 2708																								
10	R	40.46	R	40.24	-R 0.22	20mm	15mm	R 2708																								
10	R	388.99	R	2747.02	-R 2358.03	20mm	15mm	R 2708	2	-R	2708	-R 332.35	-R 1826.90	-R 3584.29	-R 4833.29	-R 5554.78	-R 5804.44	-R 5686.22	-R 5321.80	-R 4824.99	-R 4285.72	-R 3764.45	-R 3294.48	-R 2888.50	-R 2546.10	-R 2260.15	-R 2021.24	-R 1820.20	-R 1649.23	-R 1502.14	-R 1374.16	-R 1261.74
10	R	101.70	R	674.11	-R 572.42	20mm	15mm	R 2708	5	-R	2708	-R 2028.10	-R 1312.83	-R 634.15	-R 50.21	-R 403.37	-R 715.79	-R 897.40	-R 972.38	-R 970.54	-R 920.60	-R 845.96	-R 763.22	-R 682.53	-R 609.01	-R 544.48	-R 488.83	-R 441.10	-R 400.05	-R 364.53	-R 333.54	-R 306.27
10	R	338.53	R	1062.10	-R 723.57	20mm	15mm	R 2708	4	-R	2708	-R 1884.55	-R 1047.04	-R 277.04	-R 363.19	-R 839.45	-R 1146.56	-R 1302.79	-R 1340.57	-R 1296.84	-R 1205.47	-R 1093.02	-R 977.50	-R 869.27	-R 772.99	-R 689.72	-R 618.55	-R 557.84	-R 505.80	-R 460.83	-R 421.63	-R 387.16
10	R	534.44	R	401.37	-R 133.07	20mm	15mm	R 2708																								
10	R	300.52	R	35.70	-R 264.82	20mm	15mm	R 2708																								
10	R	729.28	R	3123.89	-R 2395.65	20mm	15mm	R 2708	2	-R	2708	-R 297.58	-R 1891.28	-R 3670.79	-R 4933.43	-R 5660.42	-R 5908.79	-R 5784.42	-R 5410.99	-R 4904.03	-R 4354.72	-R 3824.29	-R 3346.39	-R 2933.74	-R 2585.82	-R 2295.33	-R 2052.66	-R 1848.48	-R 1674.85	-R 1525.46	-R 1395.50	-R 1281.33
10	R	288.17	R	179.91	-R 102.68	20mm	15mm	R 2708																								
10	R	69.55	R	79.15	-R 9.60	20mm	15mm	R 2708	15	-R	2708	-R 2562.59	-R 2302.46	-R 1963.78	-R 1589.47	-R 1220.34	-R 888.14	-R 612.02	-R 398.54	-R 244.36	-R 140.07	-R 73.93	-R 34.62	-R 12.79	-R 1.55	-R 3.71	-R 5.82	-R 6.41	-R 6.32	-R 5.97	-R 5.54	-R 5.12
10	R	51.00	R	112.67	-R 61.67	20mm	15mm	R 2708	11	-R	2708	-R 2513.14	-R 2210.90	-R 1840.77	-R 1447.06	-R 1070.12	-R 739.75	-R 472.37	-R 271.71	-R 131.96	-R 41.94	-R 11.18	-R 39.20	-R 51.54	-R 54.94	-R 53.74	-R 50.51	-R 46.63	-R 42.75	-R 39.14	-R 35.89	-R 32.98
10	R	180.95	R	24.67	-R 156.28	20mm	15mm	R 2708																								
10	R	1077.29	R	6935.82	-R 5858.54	20mm	15mm	R 2708	1	-R	2708	-R 2991.96	-R 7981.98	-R 11854.06	-R 14406.84	-R 15653.55	-R 15780.19	-R 15074.16	-R 13848.35	-R 12381.20	-R 10882.65	-R 9485.81	-R 8256.72	-R 7213.07	-R 6343.54	-R 5623.52	-R 5025.34	-R 4523.78	-R 4098.11	-R 3732.28	-R 3414.19	-R 3134.81
10	R	1700.41	R	408.72	-R 1291.68	20mm	15mm	R 2708																								
10	R	30.41	R	6266.21	-R 6235.80	20mm	15mm	R 2708	1	-R	2708	-R 3350.24	-R 8645.35	-R 12745.34	-R 15438.63	-R 16741.94	-R 16855.33	-R 16085.94	-R 14767.30	-R 13195.57	-R 11593.64	-R 10102.42	-R 8791.53	-R 7679.15	-R 6752.81	-R 5986.01	-R 5349.11	-R 4815.16	-R 4362.04	-R 3972.63	-R 3634.06	-R 3336.68
10	R	136.93	R	45.60	-R 91.33	20mm	15mm	R 2708																								
10	R	30.63	R	50.42	-R 19.79	20mm	15mm	R 2708	14	-R	2708	-R 2552.91	-R 2284.54	-R 1939.71	-R 1561.60	-R 1190.94	-R 859.10	-R 584.69	-R 373.72	-R 222.36	-R 120.87	-R 57.27	-R 20.17	-R 0.20	-R 9.51	-R 13.50	-R 14.57	-R 14.28	-R 13.45	-R 12.46	-R 11.48	-R 10.57
10	R	22.55	R	160.23	-R 137.68	20mm	15mm	R 2708	12	-R	2708	-R 2535.73	-R 2252.73	-R 1896.97	-R 1512.13	-R 1138.75	-R 807.55	-R 536.17	-R 329.66	-R 183.32	-R 86.78	-R 27.71	-R 5.47	-R 22.15	-R 29.13	-R 30.88	-R 30.09	-R 28.25	-R 26.10	-R 23.98	-R 22.02	-R 20.25
10	R	108.48	R	110.28	-R 1.80	20mm	15mm	R 2708	17	-R	2708	-R 2569.99	-R 2316.18	-R 1982.21	-R 1610.80	-R 1242.84	-R 910.37	-R 632.94	-R 417.54	-R 261.20	-R 154.77	-R 86.68	-R 45.68	-R 22.42	-R 10.01	-R 3.79	-R 0.87	-R 0.38	-R 0.86	-R 1.00	-R 0.99	-R 0.94
10	R	172.14	R	283.73	-R 111.59	20mm	15mm	R 2708	10	-R	2708	-R 2465.92	-R 2123.12	-R 1722.82	-R 1310.52	-R 926.09	-R 597.47	-R 338.48	-R 150.10	-R 24.19	-R 52.15	-R 92.78	-R 109.97	-R 113.22	-R 109.10	-R 101.71	-R 93.36	-R 85.18	-R 77.67	-R 70.95	-R 64.98	-R 59.69
10	R	96.61	R	886.67	-R 81.93	20mm	15mm	R 2708																								
10	R	176.70	R	687.39	-R 510.69	20mm	15mm	R 2708	5	-R	2708	-R 2086.71	-R 1421.36	-R 779.96	-R 219.02	-R 225.30	-R 539.89	-R 731.86	-R 822.03	-R 837.31	-R 804.28	-R 745.08	-R 675.73	-R 606.28	-R 542.06	-R 485.18	-R 435.86	-R 393.43	-R 356.87	-R 325.21	-R 297.57	-R 273.25
10	R	128.61	R	162.21	-R 33.60	20mm	15mm	R 2708	13	-R	2708	-R 2539.79	-R 2260.26	-R 1907.08	-R 1523.83	-R 1151.10	-R 819.75	-R 547.65	-R 340.08	-R 192.56	-R 94.84	-R 34.70	-R 0.60	-R 16.86	-R 24.49	-R 26.77	-R 26.42	-R 24.95	-R 23.11	-R 21.26	-R 19.53	-R 17.96
10	R	136.19	R	127.04	-R 9.15	20mm	15mm	R 2708																								
10	R	514.73	R	143.92	-R 370.81	25mm	15mm	R 2708																								
10	R	886.28	R	283.73	-R 602.55	20mm	15mm	R 2708																								
10	R	949.92	R	674.11	-R 275.81	20mm	15mm	R 2708																								
10	R	128.47	R	45																												

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		Change on				Size Old	Size New	Cost	NPV	0123456789101112131415161718192021																																													
Age (yrs)	Monthly Bill	Old	Monthly Bill	New	Consumption					0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21																								
10	R	51.78	R	139.01	R	87.23	20mm	15mm	R	2 708	10	-R	2 708	-R	2 488.86	-R	2 165.96	-R	1 780.38	-R	1 377.15	-R	996.37	-R	666.90	-R	403.82	-R	209.44	-R	76.78	R	6.23	R	52.96	R	75.43	R	83.12	R	82.67	R	78.30	R	72.45	R	66.37	R	60.63	R	55.42	R	50.78	R	46.66
10	R	1282.62	R	1444.62	R	162.00	20mm	15mm	R	2 708	9	-R	2 708	-R	2 417.85	-R	2 034.48	-R	1 603.73	-R	1 172.66	-R	780.66	-R	453.81	-R	203.29	-R	27.31	R	84.62	R	147.15	R	175.17	R	181.63	R	175.50	R	163.79	R	150.14	R	136.62	R	124.12	R	112.94	R	103.06	R	94.36	R	86.67
10	R	70.63	R	97.11	R	26.47	20mm	15mm	R	2 708	13	-R	2 708	-R	2 546.56	-R	2 272.79	-R	1 923.91	-R	1 543.32	-R	1 171.65	-R	840.05	-R	566.76	-R	357.44	-R	207.93	-R	108.27	-R	46.35	-R	10.69	R	8.06	R	16.76	R	19.92	R	20.31	R	19.44	R	18.12	R	16.72	R	15.37	R	14.15
10	R	135.72	R	98.30	R	37.41	25mm	15mm	R	2 708	7	-R	2 708	-R	2 320.82	-R	1 854.83	-R	1 362.36	-R	893.23	-R	485.90	-R	162.65	R	70.73	R	221.56	R	305.17	R	339.70	R	342.16	R	326.27	R	301.72	R	274.62	R	248.31	R	224.30	R	203.03	R	184.41	R	168.15	R	153.90	R	141.34
10	R	66.12	R	336.29	R	264.37	20mm	15mm	R	2 708	5	-R	2 708	-R	2 021.83	-R	1 301.23	-R	618.56	-R	32.16	R	422.41	R	734.59	R	915.10	R	988.45	R	984.79	R	933.04	R	856.75	R	772.58	R	690.68	R	616.17	R	550.82	R	494.50	R	446.19	R	404.67	R	368.74	R	337.39	R	309.81
10	R	79.75	R	29.16	-R	50.59	20mm	15mm	R	2 708	10	-R	2 708	-R	2 479.09	-R	2 147.87	-R	1 756.08	-R	1 349.02	-R	966.70	-R	637.59	-R	376.23	-R	184.39	-R	54.58	R	25.62	R	69.77	R	90.01	R	95.83	R	93.83	R	88.18	R	81.27	R	74.31	R	67.82	R	61.98	R	56.78	R	52.16
10	R	775.31	R	1908.72	R	1133.41	20mm	15mm	R	2 708	3	-R	2 708	-R	2 495.33	-R	326.41	-R	691.18	-R	1484.06	-R	2 021.81	R	2 314.52	R	2 401.93	R	2 338.86	R	2 181.52	R	1 977.84	R	1 762.88	R	1 558.48	R	1 375.59	R	1 217.60	R	1 083.50	R	970.27	R	874.38	R	792.52	R	721.94	R	660.48	R	606.46
10	R	1249.05	R	524.74	-R	724.31	25mm	15mm	R	2 708	5	-R	2 708	-R	2 091.84	-R	1 430.85	-R	792.72	-R	233.78	R	209.73	R	524.50	R	717.39	R	808.89	R	825.66	R	794.11	R	736.26	R	668.08	R	599.61	R	536.20	R	479.99	R	431.23	R	389.26	R	353.10	R	321.77	R	294.42	R	270.36
10	R	41.31	R	546.61	R	505.30	20mm	15mm	R	2 708	5	-R	2 708	-R	2 423.27	-R	2 044.50	-R	1 617.20	-R	1 188.24	-R	797.10	-R	470.06	-R	218.57	-R	41.20	R	72.32	R	136.40	R	165.85	R	173.35	R	168.46	R	157.60	R	144.67	R	131.72	R	119.72	R	108.95	R	99.43	R	91.04	R	83.62
10	R	118.91	R	197.90	R	156.30	20mm	15mm	R	2 708	9	-R	2 708	-R	2 331.84	-R	1 875.23	-R	1 389.77	-R	924.96	-R	519.37	-R	195.72	R	39.61	R	193.29	R	280.12	R	317.83	R	323.20	R	309.82	R	287.39	R	262.04	R	237.16	R	214.34	R	194.07	R	176.30	R	160.76	R	147.14	R	135.13
10	R	1043.10	R	2134.83	R	1091.73	20mm	15mm	R	2 708	3	-R	2 708	-R	2 153.92	-R	399.70	-R	52.70	-R	1 370.06	-R	1 901.56	-R	2195.72	R	2290.13	R	2237.32	R	2 091.54	R	1 899.28	R	1 694.75	R	1 499.39	R	1 324.09	R	1 172.38	R	1 043.45	R	934.50	R	842.18	R	763.35	R	695.38	R	636.19	R	584.15
10	R	316.24	R	565.20	R	248.96	20mm	15mm	R	2 708	7	-R	2 708	-R	2 335.27	-R	1 881.58	-R	1 398.30	-R	934.84	-R	529.80	-R	206.01	R	29.92	R	184.50	R	272.32	R	311.02	R	317.29	R	304.70	R	282.92	R	258.12	R	233.69	R	211.24	R	191.28	R	173.77	R	158.46	R	145.03	R	133.20
10	R	77.55	R	492.05	R	414.50	20mm	15mm	R	2 708	6	-R	2 708	-R	2 178.06	-R	1 590.49	-R	1 007.21	-R	482.08	-R	52.20	R	265.77	R	473.90	R	587.74	R	629.68	R	623.01	R	587.87	R	539.37	R	487.44	R	437.71	R	392.76	R	353.31	R	319.14	R	289.58	R	263.93	R	241.51	R	221.78
10	R	2443.26	R	87.53	-R	2355.74	20mm	15mm	R	2 708	10	-R	2 708	-R	2 462.21	-R	2 116.60	-R	1 714.07	-R	1 300.39	-R	915.40	-R	586.91	-R	328.54	-R	141.07	-R	16.19	R	59.13	R	98.83	R	115.22	R	117.80	R	113.12	R	105.27	R	96.54	R	88.05	R	80.26	R	73.31	R	67.14	R	61.68
10	R	286.28	R	237.16	-R	49.12	20mm	15mm	R	2 708	5	-R	2 708	-R	2 015.81	-R	1 290.09	-R	603.59	-R	14.84	R	440.68	R	752.65	R	932.09	R	1 003.88	R	998.47	R	944.98	R	867.11	R	781.56	R	698.51	R	623.05	R	556.91	R	499.93	R	451.09	R	409.10	R	372.77	R	341.08	R	313.20
10	R	50.76	R	246.96	R	196.21	20mm	15mm	R	2 708	8	-R	2 708	-R	2 385.37	-R	1 974.34	-R	1 523.92	-R	1 079.11	-R	681.98	-R	356.34	-R	111.55	-R	56.00	R	158.46	R	211.61	R	231.07	R	229.92	R	217.75	R	200.89	R	183.01	R	165.97	R	150.54	R	136.87	R	124.85	R	114.29	R	104.97
10	R	10.44	R	183.62	R	173.19	20mm	15mm	R	2 708	9	-R	2 708	-R	2 407.23	-R	2 014.81	-R	1 577.30	-R	1 124.06	-R	748.39	-R	421.94	-R	173.28	-R	0.06	R	108.77	R	168.23	R	193.45	R	197.29	R	189.32	R	175.92	R	160.89	R	146.22	R	132.76	R	120.76	R	110.19	R	100.88	R	92.65
10	R	85.23	R	85.13	R	22.82	20mm	15mm	R	2 708	13	-R	2 708	-R	2 550.03	-R	2 279.21	-R	1 932.94	-R	1 553.30	-R	1 182.18	-R	850.45	-R	576.55	-R	366.33	-R	215.81	-R	115.15	-R	52.31	-R	15.87	R	3.55	R	12.80	R	16.42	R	17.17	R	16.62	R	15.57	R	14.39	R	13.25	R	12.19
10	R	125.95	R	295.98	R	957.97	20mm	15mm	R	2 708	7	-R	2 708	-R	2 355.27	-R	1 881.58	-R	1 398.30	-R	934.84	-R	529.80	-R	206.01	R	29.92	R	184.50	R	272.32	R	311.02	R	317.29	R	304.70	R	282.92	R	258.12	R	233.69	R	211.24	R	191.28	R	173.77	R	158.46	R	145.03	R	133.20
10	R	440.47	R	199.68	R	240.79	20mm	15mm	R	2 708	6	-R	2 708	-R	2 178.06	-R	1 590.49	-R	1 007.21	-R	482.08	-R	52.20	R	265.77	R	473.90	R	587.74	R	629.68	R	623.01	R	587.87	R	539.37	R	487.44	R	437.71	R	392.76	R	353.31	R	319.14	R	289.58	R	263.93	R	241.51	R	221.78
10	R	2443.26	R	87.53	-R	2355.74	20mm	15mm	R	2 708	10	-R	2 708	-R	2 462.21	-R	2 116.60	-R	1 714.07	-R	1 300.39	-R	915.40	-R	586.91	-R	328.54	-R	141.07	-R	16.19	R	59.13	R	98.83	R	115.22	R	117.80	R	113.12	R	105.27	R	96.54	R	88.05	R	80.26	R	73.31	R	67.14	R	

Age (yrs)		Change on				Size Old		Size New		Cost		NPV		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21																																					
10	R	307.93	R	401.37	R	93.44	20mm	15mm	R	2	708	10	-R	2	708	-R	2	482.96	-R	2	155.03	-R	1	765.70	-R	1	360.16	-R	978.45	6	649.20	-R	387.16	-R	194.31	-R	63.37	R	17.94	R	63.11	R	84.24	R	90.80	R	89.41	R	84.27	R	77.78	R	71.17	R	64.97	R	59.38	R	54.40	R	49.98											
10	R	763.35	R	64.89	-R	698.46	20mm	15mm	R	2	708	11	-R	2	708	-R	2	499.88	-R	2	186.36	-R	1	807.79	-R	1	408.89	-R	1	029.85	-R	699.97	-R	434.94	-R	237.71	-R	101.83	-R	15.63	R	33.99	R	58.98	R	68.79	R	70.08	R	67.15	R	62.49	R	57.41	R	52.51	R	48.03	R	44.02	R	40.45										
10	R	1158.64	R	623.64	-R	535.00	25mm	15mm	R	2	708	10	R	2	708	-R	2	491.34	-R	2	170.55	-R	1	786.55	-R	1	1384.29	-R	1	003.90	-R	674.34	-R	410.82	-R	82.42	R	1.31	R	48.69	R	71.73	R	79.90	R	79.84	R	75.79	R	70.21	R	64.35	R	58.80	R	53.76	R	49.26	R	45.26												
10	R	383.71	R	244.51	-R	139.20	25mm	15mm	R	2	708	3	-R	2	708	-R	1	620.33	-R	557.84	R	380.24	R	1	124.10	R	1	642.10	R	1	939.43	R	2	048.94	R	2	018.26	R	1	897.40	R	1	729.79	R	1	547.76	R	1	371.90	R	1	212.99	R	1	074.81	R	957.04	R	857.32	R	772.72	R	700.44	R	638.09	R	583.77	R	536.03			
10	R	901.13	R	362.16	-R	538.98	20mm	15mm	R	2	708	9	-R	2	708	-R	2	437.58	-R	2	071.00	-R	1	652.80	-R	1	1229.46	-R	840.58	-R	513.01	-R	258.99	-R	77.91	R	39.78	R	108.00	R	141.22	R	151.98	R	149.84	R	141.25	R	130.19	R	118.79	R	108.08	R	98.41	R	89.83	R	82.25	R	75.55											
10	R	97.22	R	181.84	R	84.62	20mm	15mm	R	2	708	10	-R	2	708	-R	2	485.34	-R	2	159.43	-R	1	771.61	-R	1	367.00	-R	985.66	-R	656.32	-R	393.86	-R	200.40	-R	68.77	R	13.23	R	59.02	R	80.70	R	87.71	R	86.70	R	81.87	R	75.63	R	69.24	R	63.23	R	57.79	R	52.95	R	48.64											
10	R	470.99	R	1472.78	R	1001.79	25mm	15mm	R	2	708	3	-R	2	708	-R	1	620.33	-R	557.84	R	380.24	R	1	124.10	R	1	642.10	R	1	939.43	R	2	048.94	R	2	018.26	R	1	897.40	R	1	729.79	R	1	547.76	R	1	371.90	R	1	212.99	R	1	074.81	R	957.04	R	857.32	R	772.72	R	700.44	R	638.09	R	583.77	R	536.03			
10	R	70.45	R	37.65	-R	32.81	20mm	15mm	R	2	708	4	-R	2	708	-R	1	931.92	-R	1	134.75	-R	394.88	R	226.77	R	695.55	R	1	004.41	R	1	169.01	R	1	219.07	R	1	189.16	R	1	111.46	R	1	011.50	R	906.79	R	807.65	R	718.88	R	641.79	R	575.75	R	519.32	R	470.91	R	429.06	R	392.56	R	360.47							
10	R	27.71	R	118.66	R	90.94	20mm	15mm	R	2	708	10	-R	2	708	-R	2	485.34	-R	2	159.43	-R	1	771.61	-R	1	367.00	-R	985.66	-R	656.32	-R	393.86	-R	200.40	-R	68.77	R	13.23	R	59.02	R	80.70	R	87.71	R	86.70	R	81.87	R	75.63	R	69.24	R	63.23	R	57.79	R	52.95	R	48.64											
10	R	98.97	R	62.82	-R	36.15	20mm	15mm	R	2	708	5	-R	2	708	-R	2	134.82	-R	1	510.43	-R	899.64	-R	357.56	R	79.16	R	395.53	R	596.01	R	698.64	R	727.96	R	708.81	R	662.29	R	603.92	R	543.69	R	487.10	R	436.50	R	392.39	R	354.30	R	321.44	R	292.94	R	268.05	R	246.14													
10	R	238.96	R	69.71	-R	169.24	20mm	15mm	R	2	708	3	-R	2	708	-R	1	620.33	-R	557.84	R	380.24	R	1	124.10	R	1	642.10	R	1	939.43	R	2	048.94	R	2	018.26	R	1	897.40	R	1	729.79	R	1	547.76	R	1	371.90	R	1	212.99	R	1	074.81	R	957.04	R	857.32	R	772.72	R	700.44	R	638.09	R	583.77	R	536.03			
10	R	388.41	R	1062.10	R	673.69	20mm	15mm	R	2	708	4	-R	2	708	-R	1	931.92	-R	1	134.75	-R	394.88	R	226.77	R	695.55	R	1	004.41	R	1	169.01	R	1	219.07	R	1	189.16	R	1	111.46	R	1	011.50	R	906.79	R	807.65	R	718.88	R	641.79	R	575.75	R	519.32	R	470.91	R	429.06	R	392.56	R	360.47							
10	R	27.71	R	118.66	R	90.94	20mm	15mm	R	2	708	10	-R	2	708	-R	2	485.34	-R	2	159.43	-R	1	771.61	-R	1	367.00	-R	985.66	-R	656.32	-R	393.86	-R	200.40	-R	68.77	R	13.23	R	59.02	R	80.70	R	87.71	R	86.70	R	81.87	R	75.63	R	69.24	R	63.23	R	57.79	R	52.95	R	48.64											
10	R	190.17	R	660.20	R	460.04	20mm	15mm	R	2	708	5	-R	2	708	-R	2	134.82	-R	1	510.43	-R	899.64	-R	357.56	R	79.16	R	395.53	R	596.01	R	698.64	R	727.96	R	708.81	R	662.29	R	603.92	R	543.69	R	487.10	R	436.50	R	392.39	R	354.30	R	321.44	R	292.94	R	268.05	R	246.14													
10	R	370.88	R	340.10	-R	30.78	25mm	15mm	R	2	708	7	-R	2	708	-R	2	343.49	-R	1	896.79	-R	1	418.73	-R	958.49	-R	554.74	-R	230.65	R	6.73	R	163.43	R	253.66	R	294.72	R	303.16	R	292.44	R	272.24	R	248.74	R	225.38	R	203.82	R	184.60	R	167.72	R	152.95	R	140.00	R	128.57												
10	R	1858.72	R	68.34	-R	1790.39	20mm	15mm	R	2	708	5	-R	2	708	-R	2	136.99	-R	1	514.45	-R	905.04	-R	363.81	R	72.56	R	389.01	R	589.88	R	693.07	R	723.03	R	704.50	R	658.55	R	600.68	R	540.87	R	484.62	R	434.31	R	390.43	R	352.54	R	319.84	R	291.48	R	266.72	R	244.92													
10	R	3892.56	R	455.29	-R	3437.27	20mm	15mm	R	2	708	5	-R	2	708	-R	2	136.99	-R	1	514.45	-R	905.04	-R	363.81	R	72.56	R	389.01	R	589.88	R	693.07	R	723.03	R	704.50	R	658.55	R	600.68	R	540.87	R	484.62	R	434.31	R	390.43	R	352.54	R	319.84	R	291.48	R	266.72	R	244.92													
10	R	64.95	R	522.70	R	457.75	25mm	15mm	R	2	708	5	-R	2	708	-R	2	136.99	-R	1	514.45	-R	905.04	-R	363.81	R	72.56	R	389.01	R	589.88	R	693.07	R	723.03	R	704.50	R	658.55	R	600.68	R	540.87	R	484.62	R	434.31	R	390.43	R	352.54	R	319.84	R	291.48	R	266.72	R	244.92													
10	R	386.52	R	123.45	-R	263.08	20mm	15mm	R	2	708	5	-R	2	708	-R	2	136.99	-R	1	514.45	-R	905.04	-R	363.81	R	72.56	R	389.01	R	589.88	R	693.07	R	723.03	R	704.50	R	658.55	R	600.68	R	540.87	R	484.62	R	434.31	R	390.43	R	352.54	R	319.84	R	291.48	R	266.72	R	244.92													
10	R	69.70	R	1493.90	R	1424.20	20mm	15mm	R	2	708	2	-R	2	708	-R	1	219.18	-R	184.90	R	1378.15	R	2	279.34	R	2	860.72	R	3	143.20	R	3	181.79	R	3	047.16	R	2	809.21	R	2	525.85	R	2	238.15	R	1	970.70	R	1	734.83	R	1	533.05	R	1	362.90	R	1	219.83	R	1	098.96	R	995.94	R	907.20	R	829.94	R	762.05
10	R	957.30	R	470.76	-R	486.54	20mm	15mm	R	2	708	14	-R	2	708	-R	2	556.28	-R	2	290.78	-R	1	948.09	-R	1	571.30	-R	869.20	-R	594.20	-R	382.36	-R	230.02	-R	127.55	-R	63.07	-R	25.20	-R	4.58	R	5.66	R	10.09	R	11.53	R	11.54	R	10.97	R	10.20	R	9.41	R	8.67													
10	R	43.14	R	59.38	-R	16.24	20mm	15mm	R	2	708	10	-R	2	708	-R	2	467.38	-R	2	126.18	-R	1	726.93	-R	1	315.28	-R	931.11	-R	602.43	-R	343.14	-R	154.34	-R	27.95	R	48.87	R	89.93	R	107.50	R	111.07	R	107.21	R	100.04	R	91.86	R	83.84	R	76.45	R	69.84	R	63.97	R	58.76											
10	R	100.54	R	210.39	R	109.85	25mm	15mm	R	2	708	5	-R	2	708	-R	2	087.71	-R	1	423.21	-R	782.44	-R	221.89	R	222.27	R	536.90	R	729.05	R	819.48	R	835.04	R	802.30	R	743.37	R	674.24	R	604.98	R	540.92	R	484.17	R	434.96	R	392.62	R	356.14	R	324.54	R	296.96	R	272.69													
10	R	2290.52	R	210.39	-R	2080.13	20mm	15mm	R	2	708	3	-R	2	708	-R	1	765.17	-R	826.01	R	19.92	R	706.98	R	1	202.10	R	1	504.79	R	1	639.91	R	1	646.76	R	1	568.18	R	1	442.36	R	1	298.48	R	1	155.70	R	1	024.57	R	909.36	R	810.50	R	726.43	R	654.93	R	593.74	R	540.92	R	494.89	R	454.42					
10	R	933.66	R	663.49	-R	270.17	25mm	15mm	R	2	708	3	-R	2	708	-R	1	728.64	-R	758.38	R	110.80	R	812.18	R	1	313.07	R	1	614.40	R	1	743.07	R	1	740.45	R	1	651.21	R	1																															

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		Bill	Old	New	Consumption	Size	Old	Size	New	Cost	NPV	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
10	R	13.88	163.99	R	150.11	20mm	15mm	R	2708	9	-R	2708	-R	2429.15	-R	2055.39	R	1631.82	-R	1205.18	R	814.96	-R	487.70	-R	235.18	-R	56.28	R	58.95	R	124.74	R	155.73	R	164.57	R	160.81	R	150.89	R	138.72	R	126.41	R	114.93	R	104.62	R	95.49	R	87.43	R	80.30																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
10	R	74.17	143.92	R	61.25	20mm	15mm	R	2708	11	-R	2708	-R	2513.54	-R	2211.65	R	1841.76	-R	1448.22	-R	1071.34	R	740.95	-R	473.50	-R	272.74	R	132.87	R	42.74	R	10.49	R	38.60	R	51.02	R	54.48	R	53.33	R	50.15	R	46.30	R	42.45	R	38.87	R	35.64	R	32.75																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
10	R	105.14	169.35	R	64.20	20mm	15mm	R	2708	11	-R	2708	-R	2510.73	-R	2206.44	R	1834.78	-R	1440.13	-R	1062.80	R	732.52	-R	465.57	-R	265.53	R	126.49	R	37.16	R	13.32	R	42.79	R	54.68	R	57.69	R	56.18	R	52.69	R	48.58	R	44.52	R	40.75	R	37.36	R	34.34																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
10	R	677.91	381.76	R	296.34	20mm	15mm	R	2708	11	-R	2708	-R	2510.73	-R	2206.44	R	1834.78	-R	1440.13	-R	1062.80	R	732.52	-R	465.57	-R	265.53	R	126.49	R	37.16	R	13.32	R	42.79	R	54.68	R	57.69	R	56.18	R	52.69	R	48.58	R	44.52	R	40.75	R	37.36	R	34.34																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
10	R	122.88	106.68	R	36.19	25mm	20mm	R	2708	11	-R	2708	-R	2504.66	-R	2191.51	R	1814.71	-R	1416.90	-R	1038.30	R	708.32	-R	442.79	-R	244.84	R	108.16	R	21.16	R	29.20	R	54.83	R	65.17	R	66.90	R	64.34	R	59.98	R	55.14	R	50.46	R	46.17	R	42.31	R	38.88																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
10	R	177.04	679.65	R	502.60	20mm	15mm	R	2708	5	-R	2708	-R	2504.66	-R	2191.51	R	1814.71	-R	1416.90	-R	1038.30	R	708.32	-R	442.79	-R	244.84	R	108.16	R	21.16	R	29.20	R	54.83	R	65.17	R	66.90	R	64.34	R	59.98	R	55.14	R	50.46	R	46.17	R	42.31	R	38.88																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
10	R	177.08	1363.66	R	1186.58	20mm	15mm	R	2708	3	-R	2708	-R	2444.84	-R	232.92	R	816.79	-R	1629.47	R	2175.20	R	2466.03	R	2544.51	R	2468.36	R	2296.28	R	2078.03	R	1849.78	R	1633.85	R	1441.27	R	1275.28	R	1134.58	R	1015.90	R	915.44	R	829.71	R	758.81	R	691.46	R	634.91																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
10	R	334.52	210.39	-R	124.12	20mm	15mm	R	2708																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				</

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		Change on		Size Old	Size New	Cost	NPV	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21																										
12	R	380.95	R	674.11	R	293.16	20mm	15mm	R	2 708	7	-R	2 708	-R	2 293.29	-R	1 803.85	-R	1 293.87	-R	813.94	-R	402.26	-R	80.03	R	148.48	R	292.17	R	367.75	R	39.33	R	389.55	R	367.36	R	337.54	R	306.07	R	276.17	R	249.18	R	225.42	R	204.70	R	186.62	R	170.80	R	156.85
12	R	56.11	R	455.29	R	399.19	20mm	15mm	R	2 708	6	-R	2 708	-R	2 192.61	-R	1 617.43	-R	1 043.40	-R	523.98	-R	96.39	-R	222.11	R	432.81	R	550.42	R	596.61	R	594.14	R	562.83	R	517.66	R	468.52	R	421.09	R	378.04	R	340.17	R	307.30	R	278.87	R	254.17	R	232.59	R	213.58
12	R	3947.86	R	1405.90	-R	2 541.96	20mm	15mm	R	2 708	13	-R	2 708	-R	2 551.11	-R	2 281.22	-R	1 935.24	-R	1 556.43	-R	1 185.49	-R	853.71	-R	579.62	-R	369.12	-R	218.28	-R	117.31	-R	54.18	-R	17.49	R	2.14	R	11.56	R	15.32	R	16.19	R	15.74	R	14.77	R	13.66	R	12.58	R	11.58
12	R	206.56	R	228.24	R	21.68	20mm	15mm	R	2 708		-R	2 708	-R	1 189.53	-R	239.80	R	1 451.92	R	2 364.74	R	2 950.81	R	3 232.19	R	3 265.53	R	3 123.22	R	2 876.62	R	2 584.69	R	2 289.19	R	2 014.96	R	1 773.41	R	1 566.93	R	1 392.90	R	1 246.62	R	1 123.08	R	1 017.79	R	927.09	R	848.14	R	778.76
12	R	186.32	R	30.76	-R	155.57	20mm	15mm	R	2 708		-R	2 708	-R	2 567.50	-R	2 311.56	-R	1 976.01	-R	1 603.63	-R	1 235.27	-R	902.89	-R	625.90	-R	411.15	-R	255.53	-R	149.83	-R	82.39	-R	41.95	-R	19.18	-R	7.16	-R	1.26	R	1.38	R	2.41	R	2.70	R	2.67	R	2.52	R	2.35
12	R	87.75	R	1 543.18	R	1 455.43	20mm	15mm	R	2 708	2	-R	2 708	-R	1 189.53	-R	239.80	R	1 451.92	R	2 364.74	R	2 950.81	R	3 232.19	R	3 265.53	R	3 123.22	R	2 876.62	R	2 584.69	R	2 289.19	R	2 014.96	R	1 773.41	R	1 566.93	R	1 392.90	R	1 246.62	R	1 123.08	R	1 017.79	R	927.09	R	848.14	R	778.76
12	R	1180.39	R	410.15	-R	770.23	20mm	15mm	R	2 708	14	-R	2 708	-R	2 555.05	-R	2 288.51	-R	1 945.04	-R	1 567.78	-R	1 197.45	-R	865.53	-R	590.75	-R	379.22	-R	227.24	-R	125.12	-R	60.96	-R	23.37	-R	2.99	R	7.06	R	11.33	R	12.63	R	12.54	R	11.87	R	11.02	R	10.16	R	9.36
12	R	48.05	R	65.58	R	17.53	20mm	15mm	R	2 708		-R	2 708	-R	2 565.53	-R	2 311.56	-R	1 976.01	-R	1 603.63	-R	1 235.27	-R	902.89	-R	625.90	-R	411.15	-R	255.53	-R	149.83	-R	82.39	-R	41.95	-R	19.18	-R	7.16	-R	1.26	R	1.38	R	2.41	R	2.70	R	2.67	R	2.52	R	2.35
12	R	943.03	R	623.64	-R	319.39	20mm	15mm	R	2 708		-R	2 708	-R	2 565.53	-R	2 311.56	-R	1 976.01	-R	1 603.63	-R	1 235.27	-R	902.89	-R	625.90	-R	411.15	-R	255.53	-R	149.83	-R	82.39	-R	41.95	-R	19.18	-R	7.16	-R	1.26	R	1.38	R	2.41	R	2.70	R	2.67	R	2.52	R	2.35
13	R	539.63	R	417.58	-R	122.05	25mm	15mm	R	2 708	6	-R	2 708	-R	2 260.78	-R	1 743.66	-R	1 212.99	-R	720.31	-R	303.50	-R	17.53	R	240.29	R	375.56	R	441.65	R	458.85	R	445.50	R	415.89	R	379.83	R	343.21	R	309.06	R	278.56	R	251.86	R	228.65	R	208.43	R	190.75	R	175.17
13	R	617.15	R	944.55	R	327.40	20mm	15mm	R	2 708		-R	2 708	-R	2 260.78	-R	1 743.66	-R	1 212.99	-R	720.31	-R	303.50	-R	17.53	R	240.29	R	375.56	R	441.65	R	458.85	R	445.50	R	415.89	R	379.83	R	343.21	R	309.06	R	278.56	R	251.86	R	228.65	R	208.43	R	190.75	R	175.17
13	R	306.71	R	119.26	-R	187.45	20mm	15mm	R	2 708		-R	2 708	-R	2 260.78	-R	1 743.66	-R	1 212.99	-R	720.31	-R	303.50	-R	17.53	R	240.29	R	375.56	R	441.65	R	458.85	R	445.50	R	415.89	R	379.83	R	343.21	R	309.06	R	278.56	R	251.86	R	228.65	R	208.43	R	190.75	R	175.17
13	R	1154.43	R	1 277.92	R	123.49	25mm	15mm	R	2 708	9	-R	2 708	-R	2 454.43	-R	2 102.20	-R	1 694.72	-R	1 277.99	-R	891.77	-R	563.57	-R	306.57	-R	121.12	R	1.49	R	74.56	R	112.22	R	126.83	R	127.92	R	122.00	R	113.14	R	103.56	R	94.37	R	85.99	R	78.52	R	71.91	R	66.06
13	R	229.23	R	303.33	R	64.10	25mm	15mm	R	2 708	11	-R	2 708	-R	2 510.83	-R	2 206.62	-R	1 835.02	-R	1 440.41	-R	1 063.10	-R	732.81	-R	465.84	-R	265.78	R	126.71	R	37.35	R	15.15	R	42.65	R	54.55	R	57.58	R	56.08	R	52.60	R	48.50	R	44.45	R	40.69	R	37.30	R	34.28
13	R	110.64	R	115.06	R	4.42	20mm	15mm	R	2 708	16	-R	2 708	-R	2 567.50	-R	2 311.56	-R	1 976.01	-R	1 603.63	-R	1 235.27	-R	902.89	-R	625.90	-R	411.15	-R	255.53	-R	149.83	-R	82.39	-R	41.95	-R	19.18	-R	7.16	-R	1.26	R	1.38	R	2.41	R	2.70	R	2.67	R	2.52	R	2.35
13	R	444.98	R	487.15	R	42.18	25mm	15mm	R	2 708	12	-R	2 708	-R	2 531.65	-R	2 245.18	-R	1 886.81	-R	1 500.37	-R	1 126.35	-R	795.29	-R	524.64	-R	319.18	-R	174.04	-R	78.67	-R	20.68	-R	11.57	-R	27.46	R	33.80	R	35.01	R	33.78	R	31.57	R	29.11	R	26.72	R	24.53	R	22.55
13	R	5843.79	R	8618.38	R	2 774.59	50mm	50mm	R	22 444	6	-R	22 444	-R	18 679.40	-R	14 344.05	-R	9 908.96	-R	5 802.86	-R	2 339.13	R	319.43	R	2 155.38	R	3 261.50	R	3 792.28	R	3 918.09	R	3 792.17	R	3 533.55	R	3 223.53	R	2 910.84	R	2 620.22	R	2 361.14	R	2 134.62	R	1 937.76	R	1 766.44	R	1 616.54	R	1 484.50
13	R	44.79	R	124.90	R	80.11	25mm	15mm	R	2 708	11	-R	2 708	-R	2 495.62	-R	2 178.47	-R	1 797.20	-R	1 396.62	-R	1 016.91	-R	687.19	-R	422.91	-R	226.78	-R	92.15	-R	7.18	R	41.32	R	65.34	R	74.33	R	74.95	R	71.46	R	66.34	R	60.87	R	55.65	R	50.89	R	46.63	R	42.85
13	R	749.75	R	634.88	-R	114.87	25mm	15mm	R	2 708	4	-R	2 708	-R	2 007.28	-R	1 274.28	-R	582.36	R	9.75	R	466.61	R	778.26	R	956.19	R	1 025.78	R	1 017.87	R	961.91	R	881.80	R	794.30	R	709.61	R	632.80	R	565.54	R	507.65	R	458.03	R	415.39	R	378.50	R	346.32	R	318.01
13	R	2832.04	R	3426.38	R	594.34	20mm	15mm	R	2 708		-R	2 708	-R	2 007.28	-R	1 274.28	-R	582.36	R	9.75	R	466.61	R	778.26	R	956.19	R	1 025.78	R	1 017.87	R	961.91	R	881.80	R	794.30	R	709.61	R	632.80	R	565.54	R	507.65	R	458.03	R	415.39	R	378.50	R	346.32	R	318.01
13	R	685.98	R	657.73	-R	28.25	25mm	15mm	R	2 708		-R	2 708	-R	2 007.28	-R	1 274.28	-R	582.36	R	9.75	R	466.61	R	778.26	R	956.19	R	1 025.78	R	1 017.87	R	961.91	R	881.80	R	794.30	R	709.61	R	632.80	R	565.54	R	507.65	R	458.03	R	415.39	R	378.50	R	346.32	R	318.01
13	R	2 742.09	R	2 034.81	-R	707.29	20mm	15mm	R	2 708	3	-R	2 708	-R	1 626.68	-R	569.60	R	364.43	R	1																																		

Age (yrs)		Monthly Bill	Old Bill	Monthly Bill	New	Change on	Consumption	Size Old	Size New	Cost	NPV	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21																								
15	R	292.88	R	745.83	R	452.96	25mm	15mm	R	2 708	5	-R	2 708	-R	2 141.54	-R	1 522.88	-R	916.37	-R	376.92	R	58.73	R	375.35	R	577.02	R	681.40	R	712.68	R	695.47	R	650.71	R	593.88	R	534.95	R	479.42	R	429.70	R	386.31	R	348.83	R	316.48	R	288.43	R	263.92	R	242.35		
15	R	126.26	R	228.24	R	101.97	25mm	15mm	R	2 708	10	-R	2 708	-R	2 474.86	-R	2 140.03	-R	1 745.55	-R	1 336.83	-R	953.84	-R	624.89	-R	364.28	-R	175.53	-R	44.96	R	34.02	R	77.05	R	96.33	R	101.34	R	98.66	R	92.47	R	85.10	R	77.75	R	70.94	R	64.82	R	59.37	R	54.55		
15	R	223.73	R	332.75	R	109.02	20mm	15mm	R	2 708	10	-R	2 708	-R	2 468.17	-R	2 127.65	-R	1 728.91	-R	1 317.57	-R	933.52	-R	604.81	-R	345.39	-R	156.37	-R	29.75	R	47.29	R	88.57	R	106.32	R	110.04	R	106.31	R	98.66	R	92.47	R	85.10	R	77.75	R	70.94	R	64.82	R	59.37	R	54.55
15	R	146.24	R	130.63	-R	15.61	25mm	15mm	R	2 708	15	-R	2 708	-R	2 468.17	-R	2 127.65	-R	1 728.91	-R	1 317.57	-R	933.52	-R	604.81	-R	345.39	-R	156.37	-R	29.75	R	47.29	R	88.57	R	106.32	R	110.04	R	106.31	R	98.66	R	92.47	R	85.10	R	77.75	R	70.94	R	64.82	R	59.37	R	54.55
15	R	64.32	R	286.18	R	221.86	25mm	15mm	R	2 708	8	-R	2 708	-R	2 361.01	-R	1 929.23	-R	1 462.32	-R	1 008.94	-R	607.97	-R	283.23	-R	42.75	R	118.49	R	213.83	R	259.96	R	273.01	R	266.29	R	249.45	R	228.72	R	207.66	R	187.99	R	170.35	R	154.81	R	141.20	R	129.24	R	118.70		
15	R	57.16	R	117.46	R	60.30	25mm	15mm	R	2 708	11	-R	2 708	-R	2 514.43	-R	2 213.30	-R	1 843.99	-R	1 450.80	-R	1 074.06	-R	743.64	-R	476.03	-R	275.03	-R	134.91	-R	44.51	R	8.94	R	37.26	R	49.86	R	53.46	R	52.43	R	49.34	R	45.57	R	41.79	R	38.27	R	35.09	R	32.25		
15	R	90.20	R	305.79	R	215.58	25mm	15mm	R	2 708	8	-R	2 708	-R	2 366.97	-R	1 940.27	-R	1 477.15	-R	1 026.12	-R	626.08	-R	301.12	-R	59.59	R	103.20	R	200.28	R	248.12	R	262.74	R	257.38	R	241.69	R	221.91	R	201.63	R	182.60	R	165.50	R	150.42	R	137.20	R	125.58	R	115.34		
15	R	232.25	R	337.65	R	105.39	25mm	15mm	R	2 708	10	-R	2 708	-R	2 471.61	-R	2 134.02	-R	1 737.46	-R	1 327.47	-R	943.97	-R	615.13	-R	355.10	-R	165.20	-R	37.57	R	40.47	R	82.65	R	101.18	R	105.56	R	102.38	R	95.75	R	88.04	R	80.40	R	73.34	R	67.00	R	61.37	R	56.38		
15	R	228.98	R	308.24	R	79.26	20mm	15mm	R	2 708	11	-R	2 708	-R	2 496.43	-R	2 179.98	-R	1 799.22	-R	1 398.96	-R	1 019.38	-R	689.63	-R	425.20	-R	228.87	-R	94.00	-R	8.79	R	39.92	R	64.13	R	73.27	R	74.02	R	70.64	R	65.60	R	60.21	R	55.05	R	50.34	R	46.14	R	42.39		
15	R	672.78	R	217.53	-R	455.25	25mm	15mm	R	2 708	15	-R	2 708	-R	2 496.43	-R	2 179.98	-R	1 799.22	-R	1 398.96	-R	1 019.38	-R	689.63	-R	425.20	-R	228.87	-R	94.00	-R	8.79	R	39.92	R	64.13	R	73.27	R	74.02	R	70.64	R	65.60	R	60.21	R	55.05	R	50.34	R	46.14	R	42.39		
15	R	992.32	R	869.81	-R	122.52	25mm	15mm	R	2 708	15	-R	2 708	-R	2 496.43	-R	2 179.98	-R	1 799.22	-R	1 398.96	-R	1 019.38	-R	689.63	-R	425.20	-R	228.87	-R	94.00	-R	8.79	R	39.92	R	64.13	R	73.27	R	74.02	R	70.64	R	65.60	R	60.21	R	55.05	R	50.34	R	46.14	R	42.39		
15	R	229.68	R	525.35	R	295.67	25mm	15mm	R	2 708	7	-R	2 708	-R	2 290.91	-R	1 799.44	-R	1 287.94	-R	807.08	-R	395.02	-R	72.88	R	155.20	R	298.28	R	373.16	R	399.06	R	393.64	R	370.92	R	340.64	R	308.80	R	278.58	R	251.33	R	227.36	R	206.45	R	188.22	R	172.26	R	158.19		
15	R	271.67	R	303.33	R	31.67	20mm	15mm	R	2 708	13	-R	2 708	-R	2 541.63	-R	2 263.66	-R	1 911.64	-R	1 529.11	-R	1 156.67	-R	825.25	-R	552.83	-R	344.79	-R	196.72	-R	98.48	-R	37.86	-R	3.33	R	14.48	R	22.39	R	24.91	R	24.76	R	23.45	R	21.76	R	20.03	R	18.40	R	16.93		
15	R	1426.54	R	2050.94	R	614.40	25mm	15mm	R	2 708	4	-R	2 708	-R	1 988.23	-R	1 239.02	-R	554.97	-R	64.60	-R	524.47	-R	835.42	-R	1 009.98	R	1074.63	R	1061.16	R	999.71	R	914.58	R	822.73	R	734.39	R	654.55	R	584.82	R	524.86	R	473.52	R	429.42	R	391.28	R	358.01	R	328.74		
15	R	607.41	R	796.30	R	188.90	20mm	15mm	R	2 708	8	-R	2 708	-R	2 392.31	-R	1 987.19	-R	1 540.19	-R	1 099.10	-R	703.07	-R	377.17	-R	131.16	-R	38.20	-R	142.68	R	197.83	R	219.13	R	215.96	R	192.96	R	175.99	R	159.70	R	144.89	R	131.75	R	120.20	R	110.03	R	101.06				
15	R	621.92	R	923.78	R	301.86	20mm	15mm	R	2 708	7	-R	2 708	-R	2 285.03	-R	1 788.56	-R	1 273.32	-R	790.15	-R	377.16	-R	55.24	R	171.81	R	313.36	R	386.53	R	410.73	R	403.76	R	379.69	R	348.28	R	315.51	R	284.53	R	256.64	R	232.14	R	210.78	R	192.17	R	175.87	R	161.51		
15	R	1215.23	R	113.87	-R	1101.37	25mm	15mm	R	2 708	15	-R	2 708	-R	2 421.12	-R	2 040.53	-R	1 611.86	-R	1 182.07	-R	790.58	-R	463.62	-R	212.51	-R	35.69	-R	77.19	-R	140.66	-R	169.54	-R	176.55	-R	171.25	-R	160.05	-R	146.84	-R	133.66	-R	121.46	-R	109.87	-R	92.35	-R	84.83				
15	R	1836.04	R	1409.42	-R	426.62	25mm	15mm	R	2 708	15	-R	2 708	-R	2 421.12	-R	2 040.53	-R	1 611.86	-R	1 182.07	-R	790.58	-R	463.62	-R	212.51	-R	35.69	-R	77.19	-R	140.66	-R	169.54	-R	176.55	-R	171.25	-R	160.05	-R	146.84	-R	133.66	-R	121.46	-R	109.87	-R	92.35	-R	84.83				
15	R	180.51	R	19.77	-R	160.74	25mm	15mm	R	2 708	15	-R	2 708	-R	2 421.12	-R	2 040.53	-R	1 611.86	-R	1 182.07	-R	790.58	-R	463.62	-R	212.51	-R	35.69	-R	77.19	-R	140.66	-R	169.54	-R	176.55	-R	171.25	-R	160.05	-R	146.84	-R	133.66	-R	121.46	-R	109.87	-R	92.35	-R	84.83				
15	R	548.68	R	315.59	-R	233.10	25mm	15mm	R	2 708	15	-R	2 708	-R	2 421.12	-R	2 040.53	-R	1 611.86	-R	1 182.07	-R	790.58	-R	463.62	-R	212.51	-R	35.69	-R	77.19	-R	140.66	-R	169.54	-R	176.55	-R	171.25	-R	160.05	-R	146.84	-R	133.66	-R	121.46	-R	109.87	-R	92.35	-R	84.83				
15	R	348.37	R	181.84	-R	166.53	20mm	15mm	R	2 708	6	-R	2 708	-R	2 164.15	-R	1 564.75	-R	972.62	-R	442.04	-R	9.96	R	307.49	R	513.16	R	623.40	R	661.28	R	650.60	R	611.80	R	560.13	R	505.53	R	453.59	R	406.82	R	365.88	R	330.44	R	299.83	R	273.26	R	250.05	R	229.61		
15	R	688.34	R	1117.49	R	429.15	20mm	15mm	R	2 708	6	-R	2 708	-R	2 164.15																																										

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		Change on		Size Old	Size New	Cost	NPV	Age (yrs)	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21																																																
24	R	340.85	R						228.24	-R	112.62	25mm	15mm	R	2	708																																																														
24	R	510.20	R	278.83	-R	231.37	25mm	15mm	R	2	708																																																																			
24	R	4074.06	R	3901.58	-R	172.48	25mm	15mm	R	2	708																																																																			
24	R	336.70	R	381.76	R	45.06	20mm	15mm	R	2	708	12	-R	2	708	-R	2	528.91	-R	2	240.11	-R	1880.00	-R	1492.48	-R	1118.03	-R	787.08	-R	516.91	-R	312.16	-R	167.81	-R	73.24	-R	15.97	R	15.65	R	31.03	R	36.92	R	37.78	R	36.26	R	33.80	R	31.13	R	28.56	R	26.21	R	24.09																			
24	R	500.77	R	6.55	-R	494.22	25mm	15mm	R	2	708																																																																			
24	R	337.81	R	446.62	R	108.81	25mm	15mm	R	2	708	10	-R	2	708	-R	2	468.37	-R	2	128.01	-R	1729.40	-R	1318.14	-R	934.12	-R	605.41	-R	345.95	-R	156.88	-R	30.20	R	46.90	R	88.23	R	106.02	R	109.78	R	106.08	R	99.03	R	90.97	R	83.03	R	75.72	R	69.17	R	63.36	R	58.20																			
24	R	497.77	R	973.09	R	475.32	25mm	15mm	R	2	708	5	-R	2	708	-R	2	120.31	-R	2	1483.56	-R	863.54	-R	315.76	R	123.24	R	439.08	R	636.99	R	735.87	R	760.95	R	737.61	R	687.26	R	625.58	R	562.57	R	503.68	R	451.19	R	405.50	R	366.10	R	332.13	R	302.67	R	276.95	R	254.32																			
24	R	585.83	R	713.96	R	128.13	20mm	15mm	R	2	708	9	-R	2	708	-R	2	450.02	-R	2	2094.04	-R	1683.75	-R	1265.29	-R	878.37	-R	590.82	R	294.12	-R	109.82	R	115.51	R	83.31	R	119.81	R	133.41	R	136.65	R	127.04	R	117.60	R	107.55	R	97.96	R	89.24	R	81.48	R	74.62	R	68.54																			
24	R	1019.15	R	1969.10	R	949.95	25mm	15mm	R	2	708	3	-R	2	708	-R	2	1669.56	-R	2	648.99	-R	257.77	R	982.32	R	1492.54	R	1791.69	R	1909.91	R	1891.99	R	1785.50	R	1632.10	R	1463.03	R	1298.42	R	1148.94	R	1018.58	R	907.23	R	812.83	R	732.68	R	664.17	R	605.06	R	553.56	R	508.29																			
24	R	549.62	R	573.17	R	23.55	25mm	15mm	R	2	708	13	-R	2	708	-R	2	549.33	-R	2	277.92	-R	1930.81	-R	1551.30	-R	1180.07	-R	848.37	-R	574.59	-R	364.55	-R	214.24	-R	113.77	-R	51.12	-R	14.83	R	4.46	R	13.59	R	17.12	R	17.80	R	17.19	R	16.08	R	14.86	R	13.67	R	12.59																			
24	R	238.66	R	1805.05	-R	58.60	25mm	15mm	R	2	708																																																																			
24	R	8550.17	R	439.36	-R	8410.81	20mm	15mm	R	2	708																																																																			
24	R	9798.85	R	22340.96	R	12542.11	50mm	50mm	R	22	444	2	-R	22	444	-R	9	403.50	R	2	830.61	R	13	166.36	R	20	910.42	R	25	839.68	R	28	154.97	R	28	350.76	R	27	053.32	R	24	876.53	R	22	325.66	R	19	756.59	R	17	379.80	R	15	290.46	R	13	506.91	R	12	005.10	R	10	743.56	R	9	678.46	R	8	770.91	R	7	989.25	R	7	308.87	R	6	710.98
24	R	2336.82	R	1268.62	-R	1068.20	20mm	15mm	R	2	708																																																																			
24	R	579.81	R	578.48	-R	1.33	25mm	15mm	R	2	708																																																																			
24	R	470.81	R	65.58	-R	405.23	25mm	15mm	R	2	708																																																																			
24	R	692.52	R	327.84	-R	364.67	20mm	15mm	R	2	708																																																																			
24	R	1348.17	R	1624.14	R	275.97	25mm	15mm	R	2	708	7	-R	2	708	-R	2	309.62	-R	2	1834.09	-R	1334.49	-R	860.97	-R	451.87	-R	129.03	R	102.36	R	250.29	R	330.63	R	361.92	R	361.44	R	342.99	R	316.29	R	287.42	R	259.65	R	234.42	R	212.14	R	192.67	R	175.67	R	160.78	R	147.65																			
24	R	109.85	R	833.42	R	723.57	25mm	15mm	R	2	708	4	-R	2	708	-R	2	1884.55	-R	2	1047.05	-R	277.05	R	363.19	R	839.44	R	1146.55	R	1302.78	R	1340.56	R	1296.83	R	1205.46	R	1093.02	R	977.50	R	869.27	R	772.99	R	689.71	R	618.55	R	557.84	R	505.80	R	460.83	R	421.63	R	387.16																			
24	R	357.58	R	1116.08	R	758.50	20mm	15mm	R	2	708	4	-R	2	708	-R	2	1851.38	-R	2	985.63	-R	194.53	R	458.71	R	940.21	R	1246.09	R	1396.46	R	1425.64	R	1372.23	R	1271.29	R	1150.11	R	927.01	R	912.42	R	810.88	R	723.28	R	648.53	R	584.82	R	530.23	R	483.09	R	441.99	R	405.85																			
24	R	579.81	R	1416.46	R	836.65	25mm	15mm	R	2	708	4	-R	2	708	-R	2	1777.16	-R	2	848.22	-R	9.91	R	672.45	R	1165.67	R	1468.80	R	1606.04	R	1616.00	R	1540.92	R	1418.57	R	1277.84	R	1137.80	R	1008.97	R	895.66	R	798.36	R	715.60	R	645.18	R	584.91	R	532.87	R	487.53	R	447.66																			
24	R	133.52	R	264.12	R	130.60	25mm	15mm	R	2	708	9	-R	2	708	-R	2	708	-R	2	447.68	-R	2089.70	-R	1677.92	-R	1258.54	-R	871.26	-R	543.31	-R	287.51	-R	103.81	R	16.83	R	87.96	R	123.84	R	136.91	R	136.70	R	129.72	R	119.97	R	109.67	R	99.86	R	90.97	R	83.05	R	76.06	R	69.86																	
24	R	291.08	R	224.67	-R	66.41	25mm	15mm	R	2	708																																																																			
24	R	955.35	R	2081.74	R	1126.39	20mm	15mm	R	2	708	3	-R	2	708	-R	2	708	-R	2	1502.01	-R	338.76	R	674.59	R	1464.85	R	2001.55	R	2294.50	R	2383.09	R	2321.75	R	2166.35	R	1964.60	R	1751.40	R	1548.52	R	1366.91	R	1209.98	R	1076.75	R	964.25	R	868.95	R	787.60	R	717.46	R	656.39	R	602.70																	
24	R	496.62	R	45.29	-R	451.33	25mm	15mm	R	2	708																																																																			
24	R	90.09	R	100.70	R	10.60	25mm	15mm	R	2	708	15	-R	2	708	-R	2	708	-R	2	561.63	-R	2300.69	-R	1961.40	-R	1586.71	-R	1217.43	-R	885.27	-R	609.32	R	396.09	-R	242.19	-R	138.17	-R	72.28	-R	33.19	-R	11.54	-R	0.45	R	4.68	R	6.69	R	7.19	R	7.02	R	6.61	R	6.13	R	5.66																	
24	R	514.07	R	205.04	-R	309.03	25mm	15mm	R	2	708																																																																			
24	R	269.26	R	335.20	-R	65.94	20mm	15mm	R	2	708	11	-R	2	708	-R	2	708	-R	2	509.08	-R	2203.39	-R	1830.67	-R	1435.37	-R	1057.79	-R	727.57	-R	460.91	-R	261.30	-R	122.74	-R	33.89	R	18.16	R	45.26	R	56.82	R	59.58	R	57.85	R	54.18	R	49.93	R	45.74	R	41.86	R	38.38	R	35.27																	
24	R	284.34	R	455.29	R	170.95	25mm	15mm	R	2	708																																																																			

Age (yrs)		Change on				Size Old	Size New	Cost	NPV																																																																		
Monthly Bill	Old	Monthly Bill	New	Consumption	0					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21																																													
25	R	563.25	R	521.37	-R	41.88	20mm	15mm	R	2	708																																																																
25	R	1348.51	R	1328.46	-R	20.05	20mm	15mm	R	2	708																																																																
25	R	297.50	R	554.57	R	257.08	20mm	15mm	R	2	708	7	-R	2	708	-R	2	327.56	-R	1	867.31	-R	1	379.12	-R	912.64	-R	506.37	-R	182.87	R	51.69	R	204.27	R	289.85	R	326.32	R	330.56	R	316.20	R	292.95	R	266.92	R	241.49	R	218.21	R	197.55	R	179.45	R	163.63	R	149.77	R	137.54															
25	R	418.18	R	386.67	-R	31.51	20mm	15mm	R	2	708																																																																
25	R	693.21	R	657.73	-R	35.48	20mm	15mm	R	2	708																																																																
25	R	65.58	R	128.23	R	62.65	20mm	15mm	R	2	708	11	-R	2	708	-R	2	512.20	-R	2	209.17	-R	1	838.44	-R	1	444.36	-R	1	067.27	-R	736.94	-R	469.72	-R	269.30	-R	129.83	-R	40.08	R	12.79	R	40.60	R	52.76	R	56.01	R	54.69	R	51.36	R	47.39	R	43.44	R	39.77	R	36.46	R	33.51													
25	R	379.82	R	2	067.66	R	1	687.84	20mm	15mm	R	2	708	2	-R	2	708	-R	9	68.82	R	6	48.46	R	3	000.98	R	3	621.30	R	3	894.52	-R	3	888.83	R	3	689.33	R	3	778.30	R	3	022.69	R	2	669.05	R	2	344.42	R	2	060.53	R	1	819.05	R	1	616.21	R	1	446.08	R	1	302.58	R	1	180.38	R	1	075.16	R	983.59	R	903.12
25	R	257.90	R	489.60	R	231.71	20mm	15mm	R	2	708	8	-R	2	708	-R	2	351.66	-R	1	911.92	-R	1	439.06	-R	982.02	-R	579.57	-R	255.17	-R	16.35	R	142.47	R	235.08	R	278.51	R	289.09	R	280.24	R	261.61	R	239.40	R	217.12	R	196.44	R	177.95	R	161.70	R	147.47	R	134.98	R	123.96															
25	R	618.16	R	416.08	-R	202.08	25mm	15mm	R	2	708																																																																
25	R	284.05	R	249.41	-R	34.63	25mm	15mm	R	2	708																																																																
25	R	904.30	R	1122.83	R	218.52	25mm	15mm	R	2	708	8	-R	2	708	-R	2	364.17	-R	1	935.09	-R	1	470.20	-R	1	018.07	-R	617.59	-R	292.74	-R	51.70	R	110.37	R	206.63	R	253.67	R	267.55	R	261.56	R	245.33	R	225.10	R	204.45	R	185.12	R	167.77	R	152.48	R	139.07	R	127.30	R	116.91														
25	R	682.08	R	1349.58	R	667.50	20mm	15mm	R	2	708	4	-R	2	708	-R	1	937.80	-R	1	145.64	-R	409.52	R	209.84	R	677.68	R	986.76	R	1152.40	R	1	039.99	R	1	175.79	R	1	099.79	R	1	001.37	R	898.01	R	800.00	R	712.16	R	635.84	R	570.43	R	514.53	R	466.57	R	425.11	R	388.95	R	357.15												
25	R	109.57	R	171.13	R	61.56	20mm	15mm	R	2	708	11	-R	2	708	-R	2	513.24	-R	2	211.09	-R	1	841.02	-R	1	447.35	-R	1	070.43	-R	740.05	-R	472.66	-R	271.97	-R	132.19	-R	42.14	-R	11.00	R	39.05	R	51.41	R	54.82	R	53.64	R	50.42	R	46.54	R	42.67	R	39.07	R	35.82	R	32.92													
25	R	314.87	R	379.31	R	64.44	20mm	15mm	R	2	708	11	-R	2	708	-R	2	510.50	-R	2	206.02	-R	1	834.21	-R	1	439.47	-R	1	062.11	-R	731.83	-R	464.92	-R	264.94	-R	125.97	-R	36.71	R	15.72	R	43.13	R	54.97	R	57.95	R	56.41	R	52.89	R	48.77	R	44.69	R	40.91	R	37.50	R	34.47													
25	R	686.58	R	342.55	-R	344.03	25mm	15mm	R	2	708																																																																
25	R	332.56	R	273.92	-R	58.63	25mm	15mm	R	2	708																																																																
25	R	1279.77	R	2	067.66	R	7	87.89	25mm	15mm	R	2	708	4	-R	2	708	-R	1	823.46	-R	93.95	-R	125.09	R	539.10	R	1	025.01	R	1	329.85	R	1	475.28	R	1	497.24	R	1	435.68	R	1	326.68	R	1	198.15	R	1	068.68	R	948.73	R	842.77	R	751.52	R	673.75	R	607.52	R	550.80	R	501.81	R	459.12	R	421.57							
25	R	487.50	R	156.86	-R	330.65	25mm	15mm	R	2	708																																																																
25	R	1186.65	R	352.35	-R	834.30	20mm	15mm	R	2	708																																																																
25	R	367.81	R	408.72	R	40.91	25mm	15mm	R	2	708	12	-R	2	708	-R	2	532.85	-R	2	247.40	-R	1	889.80	-R	1	503.83	-R	1	130.00	-R	798.90	-R	528.04	-R	322.27	-R	176.77	-R	81.06	-R	22.75	R	9.77	R	25.90	R	32.42	R	33.80	R	32.70	R	30.59	R	28.22	R	25.92	R	23.79	R	21.87													
25	R	527.21	R	415.54	-R	485.67	20mm	15mm	R	2	708																																																																
25	R	220.80	R	256.77	R	35.97	20mm	15mm	R	2	708	12	-R	2	708	-R	2	537.54	-R	2	256.10	-R	1	901.49	-R	1	517.35	-R	1	144.27	-R	812.99	-R	541.30	-R	334.31	-R	187.44	-R	90.38	-R	30.83	R	2.76	R	19.79	R	27.06	R	29.05	R	28.45	R	26.78	R	24.77	R	22.77	R	20.91	R	19.23													
25	R	376.00	R	230.02	-R	145.98	20mm	15mm	R	2	708																																																																
25	R	451.42	R	433.23	-R	18.19	20mm	15mm	R	2	708																																																																
25	R	473.81	R	620.98	R	147.17	20mm	15mm	R	2	708	9	-R	2	708	-R	2	431.93	-R	2	060.55	-R	1	638.76	-R	1	213.21	-R	823.43	-R	496.07	-R	243.05	-R	63.43	R	52.62	R	119.20	R	150.93	R	160.41	R	157.18	R	147.70	R	135.90	R	123.89	R	112.67	R	102.56	R	93.62	R	85.72	R	78.73														
25	R	354.44	R	342.55	-R	11.89	20mm	15mm	R	2	708																																																																
25	R	661.85	R	615.67	-R	46.18	20mm	15mm	R	2	708																																																																
25	R	414.09	R	384.21	-R	29.87	20mm	15mm	R	2	708																																																																
25	R	209.35	R	131.83	-R	77.52	25mm	15mm	R	2	708																																																																
25	R	219.04	R	128.23	-R	90.81	25mm	15mm	R	2	708																																																																
25	R	207.52	R	525.35	R	317.83	20mm	15mm	R	2	708	7	-R	2	708	-R	2	269.87	-R	1	760.48	-R	1	235.59	-R	746.47	-R	331.10	-R	9.73	R	214.63	R	352.26	R	421.00	R	440.82	R	429.86	R	402.33	R	368.01	R	332.83	R	299.87	R	270.35	R	244.47	R	221.95	R	202.34	R	185.17	R	170.05															
25	R	196.81	R	155.07	-R	41.74	25mm	15mm	R	2	708																																																																
25	R	44217.22	R	42357.58	-R	1859.64	50mm	50mm	R	22	444																																																																
25	R	42.84	R	29.86	-R	12.98	25mm	15mm	R	2	708																																																																
25	R	395.33	R	283.73	-R	111.60	20mm	15mm	R	2	708																																																																
25	R	379.91	R	538.64	R	158.73	20mm	15mm	R	2	708	9	-R	2	708	-R	2	420.96	-R	2	040.24	-R	1	611.47	-R	1	181.61	-R	790.11	-R	463.15	-R	212.07	-R	35.29	R	77.55	R	140.97	R	169.81	R	176.79	R	171.45	R	160.23	R	147.00	R	133.81	R	121.59	R	110.65	R	100.98	R	92.45	R	84.91														
25	R	146.86	R	155.07	R	8.21	25mm	15mm	R	2	708	15	-R	2	708	-R	2	563.90	-R	2	304.90	-R	1	967.06	-R	1	593.27	-R	1	224.34	-R	892.09	-R	615.74	-R	401.92	-R	247.36	-R	142.69	-R	76.20	-R	36.58	-R	14.50	-R	3.05	R	2.38	R	4.63	R	5.34	R	5.35	R	5.08	R	4.73	R	4.37													
25	R	16492.12	R	31481.37	R	14989.25	40mm	40mm	R	6	185	1	-R	6	185	-R	8	361.11	R	2	1058.96	R	30	874.40	R	37	303.98	R	40	392.76	R	40	625.48	R	38	742.82	R	35	547.30	R	31	750.48	R	27	887.04	R	24	294.34	R	21	138.33	R	18	461.63	R	16	233.43	R</																	

[illegible]

[illegible]

Annexure D – Payback Period Calculations – Based on Age Groupings

Change on Consumption	5%																	
	NPV	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
R408.70	12	-R 27 082	-R 25 330.43	-R 22 476.12	-R 18 900.20	-R 15 040.38	-R 11 301.92	-R 7 990.72	-R 5 281.86	-R 3 223.91	-R 1 768.71	-R 811.44	-R 228.20	R 97.13	R 258.48	R 323.78	R 337.57	R 326.62
R1 661.26	12	-R 95 820	-R 89 419.75	-R 79 146.63	-R 66 364.31	-R 52 627.32	-R 39 367.63	-R 27 659.51	-R 18 111.13	-R 10 882.67	-R 5 793.51	-R 2 465.49	-R 455.69	R 648.71	R 1 180.42	R 1 379.05	R 1 401.17	R 1 340.33
R28 196.74	6	-R 233 217	-R 194 700.80	-R 150 164.78	-R 104 462.62	-R 62 032.15	-R 26 135.42	-R 1 512.08	-R 20 696.02	-R 32 345.77	-R 38 036.90	-R 39 518.00	-R 38 368.17	-R 35 818.29	-R 32 712.46	-R 29 558.72	-R 26 617.51	-R 23 990.52
R21 558.25	8	-R 258 359	-R 224 881.61	-R 183 370.95	-R 138 588.60	-R 95 188.62	-R 56 874.17	-R 25 906.00	-R 3 028.77	-R 12 258.47	-R 21 245.95	-R 25 538.93	-R 26 685.96	-R 25 960.00	-R 24 282.40	-R 22 246.08	-R 20 187.92	-R 18 271.01
R319.76	16	-R 241 844	-R 229 367.28	-R 206 570.77	-R 176 648.91	-R 143 420.30	-R 110 534.90	-R 80 848.32	-R 56 098.51	-R 36 901.31	-R 22 983.01	-R 13 521.92	-R 7 480.54	-R 3 853.19	-R 1 805.62	-R 721.08	-R 184.95	-R 59.00
R86 779.18	5	-R 486 820	-R 379 906.23	-R 264 362.08	-R 152 095.38	-R 53 126.04	-R 25 994.64	-R 82 725.24	-R 118 081.66	-R 135 528.92	-R 139 668.97	-R 135 109.25	-R 125 725.27	-R 114 347.74	-R 102 778.29	-R 91 990.65	-R 82 388.89	-R 74 039.67
R60 102.74	7	-R 537 475	-R 453 344.78	-R 354 652.64	-R 252 274.74	-R 156 306.35	-R 74 310.38	-R 10 422.02	-R 34 609.02	-R 62 658.06	-R 77 126.63	-R 81 877.27	-R 80 447.98	-R 75 629.74	-R 69 360.94	-R 62 827.64	-R 56 654.40	-R 51 101.01
R80 375.00	6	-R 503 293	-R 401 631.75	-R 289 731.37	-R 179 308.58	-R 80 469.30	-R 72.84	-R 58 905.66	-R 97 026.91	-R 117 363.03	-R 124 232.40	-R 122 078.06	-R 114 712.90	-R 104 975.97	-R 94 716.58	-R 84 970.48	-R 76 202.07	-R 68 528.97
R617 187.07	7	-R 5 254 875	-R 4 404 262.00	-R 3 415 443.90	-R 2 396 638.10	-R 1 447 346.63	-R 641 238.69	-R 17 643.07	-R 417 659.60	-R 684 619.14	-R 817 882.65	-R 856 227.73	-R 834 858.64	-R 781 339.60	-R 714 664.03	-R 646 336.20	-R 582 314.60	-R 524 985.03

Annexure E – Payback Period Calculations – Based on Volumetric Groupings

Change on		5%																																		
Consumption		NPV	0		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16	
R220 469.52	7	-R	1 925 505	-R	1 619 216.53	-R	1 261 485.99	-R	891 604.98	-R	545 879.39	-R	251 355.78	-R	22 656.62	R	137 802.16	R	237 020.28	R	287 426.02	R	303 033.53	R	296 624.58	R	278 246.13	R	254 849.72	R	230 668.45	R	207 914.04	R	187 490.32	
R151 875.44	7	-R	1 703 435	-R	1 473 465.95	-R	1 191 900.96	-R	890 756.26	-R	600 981.23	-R	346 902.00	-R	143 061.75	R	6 139.87	R	104 537.52	R	161 095.95	R	186 732.94	R	191 860.52	R	184 962.85	R	172 128.44	R	157 236.37	R	142 459.05	R	128 821.16	
R218 390.22	8	-R	2 528 754	-R	2 194 077.31	-R	1 781 810.12	-R	1 339 030.66	-R	911 491.88	-R	535 371.30	-R	232 521.50	-R	9 844.25	R	137 966.87	R	223 887.61	R	263 883.03	R	273 263.16	R	264 556.59	R	246 791.66	R	225 748.87	R	204 688.50	R	185 168.56	
R138 398.86	6	-R	1 068 447	-R	883 236.13	-R	671 745.33	-R	456 798.12	-R	258 975.43	-R	93 136.75	R	33 202.02	R	119 542.11	R	170 644.92	R	194 162.19	R	198 421.02	R	190 847.13	R	177 165.86	R	161 257.39	R	145 420.67	R	130 802.70	R	117 821.25	
R39 808.80	10	-R	1 020 793	-R	931 608.47	-R	804 286.10	-R	654 755.99	-R	500 177.72	-R	355 601.95	-R	231 650.09	-R	133 642.16	-R	62 076.94	-R	13 990.35	R	15 404.46	R	31 284.65	R	38 255.08	R	39 891.59	R	38 677.93	R	36 171.85	R	33 254.39	
R352 515.74	7	-R	3 198 189	-R	2 702 443.37	-R	2 119 325.90	-R	1 513 229.41	-R	944 086.13	-R	456 945.67	-R	76 604.59	R	192 207.65	R	360 370.35	R	447 883.23	R	477 554.35	R	470 330.00	R	442 769.78	R	406 400.52	R	368 295.71	R	332 197.31	R	299 677.86	