

November 10, 2009

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**British Columbia Utilities Commission** 

Attention: Ms. Erica M. Hamilton, Commission Secretary

Dear Ms. Hamilton:

Re: Terasen Gas Inc. ("Terasen Gas")

Customer Care Enhancement Project Application for a Certificate of Public Convenience and Necessity ("CPCN") to Insource Customer Care Services and Implement a New Customer Information System ("CIS") (the "Application")

Response to the British Columbia Utilities Commission ("BCUC" or the "Commission") Information Request ("IR") No. 2

On June 2, 2009, Terasen Gas filed the Application as referenced above. In accordance with Commission Order No. G-107-09 setting out the Revised Regulatory Timetable for the Application, Terasen Gas respectfully submits the attached response to BCUC IR No. 2.

If you have any questions or require further information related to this Application, please do not hesitate to contact Danielle Wensink, Director, Customer Care & Services at (604) 592-7497.

Yours very truly,

**TERASEN GAS INC.** 

Original signed:

Tom A. Loski

Attachments

cc (email only): Registered Parties



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1.0 Reference: CURRENT CUSTOMER CARE PROGRAM Exhibit B-10, BCUC IR 1.2.1, p. 5

The Peace System

"The Company has spent over \$27 million to make required changes to the Pease CIS since 2002."

The following table shows the cost of significant changes to CIS since 1999.

Program Mercury	1999 - 2002	\$ 28.2 M
Commercial Unbundling	2004	\$ 6.2 M
Stable Rate	2004	\$ 150 K
Customer Privacy Changes	2004	\$ 18.8 K
Café (New Construction) Interface	2005	\$19 K
TGVI / TGW Conversion	2006	\$ 6 M
Customer Choice	2007	\$12.5 M
Ice Levy Implementation	2007	\$100 K
Squamish Amalgamation	2007	\$ 80 K
Carbon Tax Implementation	2008	\$ 159 K
Energy 8 Upgrade - Customer Choice	2008	\$ 781 K
Energy 8 Upgrade - Terasen Specific	2008	\$ 120 K
DSM Interface Support	2008	\$ 19 K
Customer Choice Enhancements	2008 - 2009	\$ 1.0 M
Carbon Tax Rate Change	2009	\$ 4.6 K
SAP Upgrade Testing Support	2009	\$ 6.7 K
Whistler Natural Gas Conversion EST	2009	\$ 68 K

1.1 Would any additional cost be required to make the same changes to the proposed SAP system? If yes, for each of the changes noted above, please estimate the cost to make a comparable change to an SAP system?



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#### **Response:**

The proposed SAP system will have all of the currently required applicable functionality<sup>1</sup> included at system go-live. The functional requirements were identified as part of the RFQ process, and the SAP response to the RFQ indicated that those functions can be accommodated. As such, there are no additional costs that will be required to accommodate the above functions when the new Project takes effect.

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Stable rate is not specifically included as that is no longer required. Squamish amalgamation was a one time event and is reflected in the current CIS data that will be converted. Future Energy upgrades will no longer be applicable and future SAP CIS upgrades have been included in the projected re-occurring capital in the financial analysis of the Application.



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2.0 Reference: CURRENT CUSTOMER CARE PROGRAM

**BCUC Letter L-08-04** 

Exhibit B-10, BCUC IR 1.7.3, pp. 16-17; BCUC IR 1.85.2, p. 193

Alternative Analysis

Pursuant to BCUC Letter L-08-04 a CPCN application should contain, "[A] study comparing the cost, benefits and associated risks of the project and alternatives, which estimated the value of all of the costs and benefits of each option or, where not quantifiable, identifies the cost or benefit and states that it cannot be quantified."

TGI has stated that "the approach to the alternatives analysis for the call centre and billing and back office function taken in the Application is appropriately robust and provides the necessary confidence that the Application offers a competitive solution for customers." (BCUC IR 1.7.3)

"In short, TGI believes that the market comparison contemplated in the preamble [RFQ relating to the call centre and billing and back office functions] would add limited value to the process." (BCUC IR 1.7.3)

Nor has the Company attempted to determine what the incremental cost would be for CWLP to continue providing call centre and back office function at the increased customer services level that TGI requires. (BCUC IR 1.85.2)

2.1 The Company has concluded that a full cost benefit analysis has been performed, as required under Letter L-08-04, however it has not obtained a quote from either CWLP or any other outsource provider? Please explain.

#### Response:

BCUC Letter L-18-04 "Certificate of Public Convenience and Necessity (CPCN) Application Guidelines" advises potential applicants that a CPCN should contain a comparison of cost, benefits and risks of the project and alternatives. In considering the Guidelines, TGI takes the view that the Company should be providing quantitative analysis of customer service models that meet the Company's requirements. Phrased in the converse, the Guidelines should not be interpreted as requiring quantitative analysis of options that, while technically feasible, do not meet the Company's requirements going forward for providing customer service.

The Company completed a qualitative analysis of strategic options prior to refining the Project scope. This detailed qualitative assessment, completed with the assistance of UtiliPoint, identified the outsourcing options that would meet the Company's requirements going forward for meeting customer needs. Once the requirements were refined, and the customer care



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model that would meet the requirements had been identified (i.e. Strategic Sourcing with insourcing of key customer care functions), TGI conducted a detailed quantitative assessment of the alternative means of delivering that strategic model and the associated functional requirements.

A discussion of the qualitative and quantitative analysis that TGI undertook in arriving at the CCE Project is described in Exhibit B-4, but is highlighted below.

#### **Qualitative Analysis: Selection of a Customer Care Model that Addresses Requirements**

The selection of an appropriate customer care model that addresses the key business challenges the Company faces was the primary decision that led to this Project. The result of that choice drove the need for all other Project components. As discussed in Exhibit B-4, Sections 1.1.3, 4.3.2.1, 4.3.2.2, 4.4.1.1 and 4.4.1.2, TGI began with a qualitative approach to this strategic assessment.

The potential customer care delivery models evaluated included:

- maintaining the current fully outsourced model and provider;
- pursuing alternative outsourcing providers;
- a strategic sourcing model with continued contact centre and / or billing and back office operations outsourcing;
- full insourcing; and
- a strategic sourcing model that brings key customer-interfacing functions into TGI's direct control.

The Company reviewed the advantages and disadvantages associated with the various options in the context of its current business environment and future planning. This evaluation took into account the Company's experience operating under the current model, customer feedback, key business challenges faced by TGI, and the Company's longer term strategic direction. Exhibit B-4, Section 3 discusses these drivers in detail.

This assessment concluded with the decision to move to a strategic sourcing model for customer care delivery, including the insourcing of key customer-facing functions. Critical factors in this decision included ensuring the long term sustainability of the customer care function, the Company's need for direct control of key customer processes, the need for greater flexibility to support and enhance customer contact and billing business processes, and the ability to most effectively take advantage of improvement opportunities for customers. The Company concluded that most service delivery requirements, the exception being specialized



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transactional requirements such as statement printing, could not be met on an outsourced basis.

As the Company's strategic assessment concluded that continuing with a full BPO service delivery model was not suited for continued use in the future and would be replaced by a strategic sourcing model with key customer-facing functions delivered in house, TGI determined that it was not necessary to pursue quotations from CWLP or other outsourcing providers.

TGI believes that pursuing such quotations would have essentially resulted in throwing a wide net to conduct quantitative analysis on options which would never be adopted because they do not support the type of strategic sourcing model that, in TGI's estimation, is needed.

TGI considered whether it was nonetheless appropriate to obtain quotations for outsource providers as a frame of reference, or benchmarking, for the preferred customer care delivery model. As discussed in Exhibit B-4, Section 4.3.2.1, and the response to BCUC IR 1.7.3, TGI did not believe it was appropriate to ask third party outsource service providers to go to significant time and expense to prepare a quotation when the Company did not consider outsourcing of key customer care functions to meet its requirements, regardless of price. TGI considered funding third parties to provide quotations; however, TGI concluded that this was not a good use of customer dollars as it was unlikely to be particularly fruitful in delivering reliable benchmark pricing.<sup>2</sup>

Similarly, TGI ruled out a fully insourced model based on qualitative considerations, namely that TGI is cognizant that statement printing and a number of other similar highly-specialized functions (see p. 93 of the Amended Application) are transactions from which TGI can benefit from economies of scale. Based on this decision, TGI did not cost the option of bringing these functions in house.

The Company's initial qualitative assessment of customer care requirements that resulted in the ruling out of full outsourcing and full insourcing is, in a very basic sense, not unlike the type of analysis that a utility will undertake in determining requirements for an infrastructure project. For example, if the load to be served by a gas pipeline or electric transmission line is X or will be X within the imminent future, then alternatives that do not transmit sufficient gas or electricity to serve that load ought to be eliminated based on the fact that they do not meet the project requirements. The difference in the context of a customer care project is that there is no empirical means of establishing the requirements as there would be with measuring capacity; however, the Company has identified its requirements based on considerable up front analysis of, for instance, trends in customer behaviour, developments in our policy and regulatory context, and the evolution of the outsourcing industry. To carry the analogy forward, TGI

<sup>&</sup>lt;sup>2</sup> The complication presented by the right of first refusal in the context where outsourcing has been eliminated based on qualitative factors is discussed in the response to BCUC Panel IR 1.2.3.



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believes that to adopt a customer care model that continues to see key customer interfaces in the hands of third parties is as short sighted as installing a transmission line or pipeline that will not be able to accommodate the existing or imminent load located at the end of the line and would require overall greater investment in the long term to put the project on a sustainable footing. TGI has appropriately dispensed with costing out alternatives that do not meet the requirements it has identified.

#### Quantitative Assessment of Alternatives that Meet the Company's Requirements

TGI has undertaken an appropriate quantitative assessment of the individual components required to deliver upon a Strategic Sourcing model to ensure that they can be delivered cost effectively, leading to an overall cost effective Strategic Sourcing solution. This assessment was undertaken at the level where the key service delivery elements reside, which centered on evaluating options for technology, facilities, and labour.

The Company's cost analysis related to the call centre and billing and back office operations components of the CCE Project, and possible alternatives available to TGI, is described in detail in Sections 4.3 and 4.4 of Exhibit B-4. As discussed in Sections 4.3.2.2 and 4.4.2, the primary components within both the call centre and billing and back office operations include: staffing, facilities and technology. The analysis and recommendations related to these components was approached as separate work streams to ensure that all viable options were considered. The outcomes were then assessed as an integrated solution to ensure the optimal mix of staffing, facilities and technologies to best meet the current and future needs of customers and Terasen Gas.

The Company determined staffing levels for the call centre based on consultation with a third party expert. As noted in Exhibit B-4, Section 4.3.2.2.1, TGI has assessed both current staffing requirements and conducted sensitivity analysis related to the potential to shift inbound calls as the use of alternative contact channels enabled by the Project grows. The Company also analyzed compensation for both union and non-union call centres in the region and has reached a market-based, competitive agreement with COPE regarding the future workforce, bringing significant cost certainty to the ongoing labour costs. This agreement has been provided in confidence to the Commission.

In assessing facility alternatives, TGI evaluated potential communities and site locations throughout Western Canada, narrowing its community focus based on the characteristics necessary to support business operations over the long term and determining the most beneficial site based on a market availability assessment, including alternatives related to current TGI property, leasing or purchasing existing facilities (turnkey call centre and space



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requiring configuration) and purchasing land suitable for building. Further detail regarding this analysis is available in Section 4.3.2.2.2 and 4.4.2.2 of Exhibit B-4.

Lastly, Terasen Gas undertook a competitive Request for Quotation process to evaluate alternatives related to supporting technologies for the call centre and the CIS utilized by both the call centre and billing and back office operations. The selected bid for the call centre supporting technologies provides the best combination of functional fit, implementation approach and cost. This bid was also the lowest cost alternative and was submitted to the Commission in confidence with Exhibit B-4. The competitive Request for Quotation processes for the CIS technology and its implementation are described in detail in Exhibit B-4, Sections 4.1 and 4.2. The selected bids for the CIS software and implementation, including the analysis on ongoing operating costs, provides the lowest total cost of ownership for Terasen Gas customers and provides a robust, flexible and sustainable platform into the foreseeable future.

In addition to the references in Exhibit B-4 noted above, the detail of the responses to BCUC IR 1.7.3 and BCUC IR 1.85.2, of which excerpts are provided in the preamble, further describe TGI's approach to call centre and billing and back office operations alternatives. For additional information regarding the Company's analysis, please refer to BCUC IR 1.77.8, 1.96.1 and 1.111.1.

#### Conclusion

In summary, TGI believes that it has provided an appropriate cost comparison of alternatives within the context of a Project that meets the Company's customer care requirements. TGI believes that this is consistent with the expectations of the CPCN Guidelines.



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3.0 Reference: CURRENT CUSTOMER CARE PROGRAM
Exhibit B-4, Appendix N
Quality Service Metrics

3.1 Please compare and contrast the performance metrics outlined in the CSA with the 'Utilities Industry Average' as outlined in Appendix N.

#### Response:

The comparison table below addresses BCUC IR 2.3.1 and 2.3.2. It highlights the CSA metrics with the greatest customer impact and compares them to those metrics reported in Exhibit B-4, Appendix N where comparisons are available. The study included in Exhibit B-4, Appendix N captured certain contact centre metrics. It did not capture results related to emergency calls or billing accuracy, thus these items are noted as "not available" in the "Utilities Industry Average" column.

It is important to note, as discussed in Exhibit B-4, Section 4.5.2.3, that the service metrics within the CSA were negotiated in 2001. Based on historical experience at that time, it was assumed that metrics would remain relatively stable, with little need for change going forward. Today TGI recognizes that service quality is not stagnant and metrics do require periodic review to reflect changing business needs and customer expectations. Table 4.4 in Exhibit B-4 highlights additional call centre metrics, such as First Call Resolution, that are common in today's utility call centres yet are not included in the CSA.

TGI has discussed developing new service metrics in Exhibit B-4, Section 4.5.2.3, including metrics to address a wider range of business processes than has been considered in the past (i.e. timely issuance of refund cheques for credit balances). These metrics will be developed in 2012, during the Project's stabilization period and first year of operation, and implemented in 2013. Examples include metrics that will be added such as First Call Resolution and Chat Response and metrics that are expected to increase such as Inquiry and Collections Telephone Service Levels and Email Response.



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Performance Metric	Client Services Agreement Performance Target	Current Benchmark Portal Utilities Industry Average	Comparison
Call Centre			
Billing Inquiries	75% answered in 30 seconds	Best Practice Target is 80% in 20 Seconds (Inbound performance Metric per the survey is 80% in 49 seconds)	CSA metric is lower than the Benchmark Portal industry best practice
Emergency Call	95% answered in 30 seconds	Not available	
Customer Satisfaction - Quarterly	Within 5% of industry average % "overall very satisfied with call centre experience"*	62.4% of callers gave perfect satisfaction score	CSA metric is in line with the Benchmark Portal industry average
Collection Inquiries	65% in 30 seconds	Best Practice Target is 80% in 20 Seconds (Inbound performance Metric per the survey is 80% in 49 seconds)	CSA metric is lower than the Benchmark Portal industry best practice
Mass Market Billing			
Accuracy	99.9%	Not available	
Timeliness	95%	Not available	
Completeness	95%	Not available	
Industrial Billing			
Accuracy	99.5%	Not available	
Timeliness	95.0%	Not available	

<sup>\*</sup> The service level target for Customer Satisfaction – Quarterly is determined to be met if the result is within 5% of the value representing the utility industry metric for % overall very satisfied with the call centre experience. The industry metric is redefined semi-annually and is currently 62%. The variance allows for the margin of error based on sample size.



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3.2 For each performance metric outlined in the CSA please identify what the 'Utilities Industry Average' is, and note if the metrics in the CSA are greater or less than 'Utilities Industry Average'?

#### Response:

Please refer to the response to BCUC IR 2.3.1.

3.3 Under the proposed call centre does the Company's anticipate that its performance metrics will greater or less than 'Utilities Industry Average" in the first six months, after one year, and after two years?

#### Response:

As discussed in BCUC IR 1.8.1, an updated approach to service metrics will be a key deliverable of the CCE Project. This is described in Exhibit B-4, Section 4.5.2.3 where TGI has stated the current service metrics as reflected in the CSA will be maintained during 2012, the first year of operations. New metrics will be developed and proposed during 2012 when TGI will stabilize operations and establish baseline performance under the new model. These will be implemented in 2013. TGI will consider broader industry performance metrics, such as the examples provided in Exhibit B-4, Appendix N, as the new metrics are developed and expects to implement certain metrics that are not currently measured today. Examples, as noted in BCUC IR 2.3.1, include First Call Resolution and Chat Response. TGI also plans to increase metrics such as Inquiry and Collections Telephone Service Levels and Email Response. The Company also expects to develop new metrics to address a wider range of business processes than has been considered in the past (i.e. timely issuance of refund cheques for credit balances).

Tables 4.4, 4.5, 4.6 and 4.7 within Exhibit B-4 provide specific examples of metrics that Terasen Gas currently expects will be included when the updated metrics are developed in 2012 for implementation in 2013.



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4.0 Reference: CURRENT CUSTOMER CARE PROGRAM

Exhibit B-10, BCUC IR 1.8.5, pp. 24-25; BCUC IR 1.8.8, p. 26; BCUC

IR 1.8.11, p. 28

Exhibit B-4, 1.1.2 Drivers for Change, p. 3

Quality Service Metrics - CWLP

In response to BCUC IR 1.8.5, fourteen exceptions were identified where service was below targets set out in the CSA. Based on the reasons provided by TGI, ten exceptions were directly or indirectly the result of issues with the Peace 8.04 upgrade, and three were the result of system upgrades required to implement the PST/ICE levy.

Based on the analysis provided by TGI it appears that almost all the exceptions identified relate to issues around system upgrades.

4.1 Given the potential complexity of upgrading software, would it not be expected that performance metrics would fall short during major system upgrade periods?

#### Response:

This response addresses BCUC IRs 2.4.1, 2.4.2, 2.4.3, and 2.4.4.

Prior to addressing the IRs, it is important to differentiate between a system upgrade, similar to the Peace upgrade discussed in the preamble, or, the introduction of new functionality to enhance an existing system as was the case of the PST/ICE Levy discussed in the preamble, and a new system implementation, such as the one proposed in the Application.

#### System Upgrades Undertaken by CWLP

A system upgrade is a less complex activity than a new system implementation, especially if the upgrade is a pure technical upgrade where no additional functionality is being introduced as was the case with the Peace upgrade discussed in the preamble. A technical system upgrade generally involves the movement of software from an existing software package to a newer version of the same software package. Therefore, the impact to other systems connecting to the software is relatively low, as are changes to business processes, and employee training. Further, a system upgrade will likely contain a small number of software code changes, as the base functionality of the existing system will be utilised by the newer version. This in turn leads to a lower probability of system issues during testing, and following deployment.

The introduction of new functionality into an existing system may or may not be more complex than a technical system upgrade. This will depend on how much new functionality is introduced and how much of the new functionality is inherent in the software that is being enhanced. If the



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software being upgraded requires major customization to the existing software to provide the needed functionality, this will increase the complexity. It is not clear to TGI if this was the case with the PST/ICE Levy.

It is possible to combine a technical upgrade with the introduction of new functionality which could increase the complexity of the upgrade. An example of this would be if the technical upgrade of Peace was combined with the implementation of the ICE Levy as a single project. TGI believes that performance metrics could fall short during major system upgrades of this nature, depending on the scope of the upgrade and the nature of the software that is being upgraded.

The preamble discusses exceptions resulting from the upgrading of the Peace software from version 6.4 to version 8.04. Although not without some degree of complexity, TGI does not believe that this activity was a major system upgrade as the scope of the project was to be a pure technical upgrade and did not include the introduction of significant new functionality. It was TGI's understanding that the Peace software platform (version 8.04) was an established product that was market tested, and operating in stable environments in other Utilities. Therefore, migrating from version 6.4 to 8.04 should, in TGI's opinion, have been a relatively simple and low risk upgrade. However, TGI believes that there were several deficiencies both during and after the upgrade that resulted in the issues described in BCUC IR 1.8.5. To the best of TGI's knowledge, these deficiencies were a combination of system and service delivery challenges. Specific service delivery issues that TGI is aware of include insufficient staffing levels, and inadequate staff knowledge and operation and system controls. TGI also believes that the degree of customization of the Peace system including the manual operational workarounds was also a major contributor to the complexity of the upgrade.

As a point of comparison for software upgrades of the nature being undertaken by CWLP, TGI has over 10 years of SAP experience in both deploying and upgrading SAP software. Over the course of this time, TGI has successfully performed 4 SAP technical upgrades (Refer to Figure 4.2 in the Amended Application) with no material downtime in system availability and functionality on the SAP platform. TGI is confident that it can continue to successfully manage SAP system upgrades post-deployment of the CCE Project.

As a result, TGI does not believe that the issues discussed in BCUC IR 1.8.5 can be resolved by moving the implementation of the CIS system from CWLP to TGI. Nor does TGI believe that an internally managed CIS solution combined with an outsourced call centre and billing and back-office operations provided by CWLP, as inferred in BCUC IR 2.4.4, would be a suitable model, given the service delivery issues experienced under the current arrangement. TGI has not seen significant changes in the outsourced operations since the service metric issues arose that would lead the Company to expect that service delivery issues will not continue to occur in the future.



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TGI wishes to highlight, however, that the most important drivers for the Project arise irrespective of whether CWLP, or some other third party, is the outsource provider. Please see, for instance, the response to BCUC IR 2.4.5.

#### **New System Implementation as Contemplated in the Project**

The Project, which involves a new system implementation, differs from the nature of the past Peace upgrades discussed above in terms of its scope and level of complexity. A new system implementation like the one contemplated in the Project involves, but is not limited to:

- Deploying a new software system
- The integration of the new system between other systems within the IT architecture are operational where necessary to support the new / enhanced business processes
- Migrating existing data from the incumbent system to the new system accurately
- Testing of the entire software application
- Educating users on the new system
- Developing new business processes that the new system will support
- Developing the system support model and procedures for the new system

These activities are larger in scale than a system upgrade, and these types of projects tend to be longer in duration, and as a result, are more complex and of higher risk. During the first year of deployment, TGI anticipates that there will be a stabilization period following the implementation of the project that may or may not impact TGI's ability to meet current performance metrics. At this time, it is unknown what potential issues will occur during this period. However, TGI will strive to minimise any impact to CSA performance metrics through the Project's risk and test management plans, proactive management of the stabilization period by the transition team, and execution of operational activities during the first year of the Project.

In sum, TGI believes that the issues encountered today with CWLP and upgrades to the Peace CIS system, as discussed in BCUC IR 1.8.5, would not be addressed by moving the IT system ownership to TGI, and leaving the customer care functions outsourced to CWLP or another party. TGI believes that the appropriate business model is as proposed in the Application, and is confident that it has the capabilities to manage the system implementation so as to minimize the potential for impacting business operations and our customers.



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4.2 Does TGI anticipate that it may fall short of the performance metrics outlined in the CSA during the first year of the proposed Project?

#### Response:

Please refer to the response to BCUC IR 2.4.1.

4.3 Under the proposed Project does TGI anticipate that it may fall short of the performance metrics outlined in the CSA during system upgrades?

#### Response:

Please refer to the response to BCUC IR 2.4.1.

"When service has fallen short of contractual standards, which has happened more frequently of late, CustomerWorks LP has been required to pay contractual penalties to Terasen Gas. The payment of penalties to Terasen Gas accompanied by service shortfalls is not a sustainable model going forward." (Exhibit B-4, p. 3)

4.4 Given that almost all of the exceptions identified with CWLP relate either directly or indirectly to system upgrades, would it not be logical to conclude that if an SAP software solution were to be implemented under the control of TGI the issue currently being experienced with CWLP would be reduced to an acceptable level?

#### Response:

Please see the response to BCUC IR 2.4.1.

4.5 Based on the analysis above, why does the Company believe that: "In TGI's opinion the improvement in customer service quality if the Company was to own and maintain an SAP CIS system as proposed in the Application but continue to outsource through CWLP or directly to Accenture would not



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address the drivers that lead to the Project or result in improvements for customers equivalent to those that will result from the implementation of the Project as outlined in the Application." (BCUC IR 1.8.8)

#### Response:

Although the Amended Application describes a number of service shortfalls in respect of CWLP, the primary drivers for this Project are independent of the identity of the outsource provider. Some of the shortfalls in service experienced to date are likely attributable to the way in which CWLP has executed its role or shortcomings associated with the Peace CIS (please see the response to BCUC IR 2.4.1), and this has certainly created immediate concerns about the service quality, the impact on TGI's reputation among its customers, and ultimately TGI's overall competitiveness as an energy provider. Many of these issues could potentially be addressed, at least on a short term basis, by changing the CIS and replacing CWLP with another outsource provider, which is the scenario advanced in the question.<sup>3</sup> Significantly, however, TGI has concluded that features inherent in a model involving outsourcing the key customer service functions of call centre and back office billing mean that this model will not deliver on the long term objectives the Company has identified in the Amended Application. Ultimately, the Strategic Sourcing model outlined in the Application will benefit customers more over the long term.

The remainder of this response represents a summary of the key Project drivers outlined in the Amended Application and other responses to information requests.

As discussed in Exhibit B-4, Section 3.4, the Company's decision to become an early adopter of Business Process Outsourcing in 2002 was a result of challenges faced at that time. In 2009, Terasen Gas faces very different challenges than those of 2001. In the nearly eight years since entering the Client Services Agreement with CWLP, TGI's business environment has changed significantly as a result of both energy policy and competitive factors. In order to respond and achieve continued growth in this new environment for the benefit of all customers, Terasen Gas has determined the Company must:

 Place greater emphasis on the delivery of quality customer service that anticipates and responds to the changing needs of our customers. This enhanced focus on quality customer service is an important means of addressing the competitive pressures facing the Company.

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This would, however, require significant investment by the outsourcer simply to elevate customer service standards and provide the additional functionality that TGI will require in the next few years. In the Amended Application we have characterized the levelized cost per customer of the current Client Service Agreement as "notional" because further investment is necessary provide additional functionality.



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 Revise its customer care strategy to address the changes in the Company's operating environment. The customer care model must be sufficiently flexible to adapt to change quickly and effectively.

There are several reasons that TGI believes this. These are discussed in Exhibit B-4, Sections 3.1, 3.2 and 3.3 and summarized below:

1. As discussed above, the business environment and regulated energy marketplace that Terasen Gas operates in has changed since 2002. TGI anticipates that it will continue to change in the future. Under the current outsourced operating model, a significant relocation of work has taken place since 2002. Today, front line customer care representatives are located in New Brunswick and Ontario and the majority of the Company's billing work is provided offshore in the Philippines. This model limits the ability for representatives to internalize and relate to customer experiences and regional issues, regardless of the amount of training provided. TGI has found that work relocation and staff turnover have resulted in a notable degradation of end to end business process knowledge which leads to preventable service delivery errors and change management challenges that can have a significant impact.

An internally managed customer care organization, based in British Columbia will provide customer care representatives with improved knowledge of our environment, the impact of events in our marketplace and regional competitive factors. Representatives will be better equipped to understand and relate to customer experiences as a result. TGI will also directly own employee selection and training, providing the ability to more effectively enhance the customer-focused culture at Terasen Gas without requiring a contractual change. For additional information regarding the benefits of moving to an insourced call centre, please refer to the responses to BCUC IR 1.77.2 and 1.77.8. Please also refer to the responses to BCUC IR 1.85.2, 1.89.1, 1.96.1, 1.96.2 and 1.102.1 for further information regarding implications of the scenario posed in the question.

2. Customer service is a long term critical success factor for any business and in response to changing customer expectations and enabling technologies, customer care delivery has advanced across industries. With products and services increasingly "commoditized", organizations often look at customer service as a means of competitive differentiation and customer requirements continue to change based on their experience with service providers.

Under the current model and the potential model discussed in the question, any changes to services provided under the contract would be subject to change provisions. For example, a new service channel implementation or change in service metrics would be subject to a negotiated change order and necessary fees, including profit, to support the



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change. In addition, the above-noted challenges related to representative knowledge and ability to relate to customer experiences would continue.

The CCE Project will bring a number of new service capabilities to customers upon implementation and any future changes would go through a business case process. Unlike an outsourced model, internal management and operation of the call centre and billing and back office operations will provide TGI with direct control of its customer experience and the ability to take advantage of efficiency gains and respond effectively to change as required.

In summary, looking forward and assessing the Company's current challenges and our experiences since 2002, TGI believes that the appropriate model required to address the CCE Project's drivers is as described in Exhibit B-4 rather than a model where the Company owns and maintains an SAP CIS system as proposed in the Application but continues to outsource through CWLP, Accenture or any other outsource provider.

In IR 1.8.11 BCUC asked: "If the Company were to own and maintain an SAP CIS system as proposed in the Application, would the Company consider the option to outsource the call centre and the billing and back office operations to CWLP/Accenture or another service provider?"

TGI responded: "The Company considered the option of an internally owned and operated CIS system combined with continued outsourcing in the call centre and billing and back office operations, but this was dismissed as the Company believes that the level of control and flexibility required to support call centre and billing and back office business processes requires that these key customer facing activities be supported through an internal organization."

4.6 Would it be correct to conclude that the Company's response to BCUC IR 1.8.11 is no, and that TGI would not consider a customer care solution where TGI owns and maintained an SAP CIS system while the call centre and billing and back office functions continue to be outsourced to CWLP/Accenture or another party?

#### Response:

TGI confirms that it would not willingly adopt a customer care model as described in the question unless it was precluded from pursuing the proposed model by Commission order in this Application. As noted in BCUC IR 1.8.11, TGI did consider this option, however, it



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determined that the approach presented as the CCE Project in Exhibit B-4 best positions the Company to address its evolving environment, meet customer needs and adapt to change going forward. Please refer to BCUC IR 2.4.5 for additional information. In a scenario where the Commission has rejected the Project, TGI might consider the model described in the question as a mitigation measure – i.e. it might be at least potentially be preferable to continuing operations under the current approach. This would have to be assessed further.

TGI believes it is important to emphasize that a decision on this Application for TGI to further investigate or pursue the model identified in the question would essentially mean starting from scratch on developing a customer care solution. If a partial decision was rendered on the CCE CPCN Application (e.g. approval of the CIS-related components of the Project but direction for TGI to pursue an outsourced model for call centre and billing and back office functions), this would significantly impact the Company's overall customer care delivery strategy implementation, as well as the timeline and the costs that have been put forth in the CCE CPCN Application. There are several reasons for this.

First, it would not be possible for the Commission to simply order a model of insourced CIS and outsourced call centre or billing and back office functions as part of this Application and have the altered project scope proceed on the same project timeline contemplated in this Amended Application. For instance, there are costs related to training, integration and implementation of the CIS solution that are impacted by the location of the end users for both the call centre and back office billing functions. If the location, numbers, call centre technology, etc. are unknown, there is no way to ensure accurate costs around individual resources and expenses to enable the CIS solution. It is a different resource and cost plan if the implementation is in Surrey, British Columbia vs. Fredericton, New Brunswick, vs. the Philippines or India or other possible location. In short, there will inevitably be a delay in implementing a CIS in house until the call centre and billing and back office functions are settled.

Second, the inevitable delay in pursuing a modified customer care project will have implications for software costs. As has been highlighted in the confidential response to BCUC IR 1.106.6, software vendors, like any commodity vendor, respond to market factors such as sales targets, market competition, the certainty as to when a deal can be completed and booked as revenue and their own internal policies, all which cumulatively impact the price of product. Through a competitive RFQ process, Terasen Gas has managed to obtain competitive pricing for the proposed CIS software from SAP based on the agreed to parameters (products, volumes and timing). The pricing was also influenced by their market conditions and the competitive nature in which they were obtained in December 2008, the date of the final proposals. The Company has also articulated the value and benefit to Terasen Gas customers that will be provided based on this proposed solution. If the CIS was delayed beyond the proposed dates as identified in the response to confidential BCUC IR 1.106.6, SAP has no contractual obligation to extend that pricing beyond those parameters.



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Third, the delay would also affect the arrangement with the System Integrator (SI) HCL Axon. All of the points discussed above with regards to the software are applicable to HCL Axon. Through the competitive process of evaluating the SIs, a key consideration is the specific individuals proposed on the project. The skills and relevant experience of the individuals is a key decision point in that evaluation. The additional commercial reality one also has to recognize is that these individuals are the revenue stream of service companies such as HCL Axon. Without the ability to definitively state a start and completion date, companies like HCL Axon cannot commit specific individuals. The absence of that commitment changes the factors that Terasen Gas has to consider when choosing a System Integrator in the first place. It is possible that the teams that other SIs proposed would be materially different given a materially different timeline than the one used as the basis for the Project. It is unrealistic to believe that HCL Axon, after almost a year of planning, would be in a position to ensure the same individuals would be available if the date was moved to some point in the future. It is also possible that other opportunities would be undertaken and HCL Axon would have to come up with a different team. If one does not consider that, then as noted above with the software, Terasen Gas loses most of the competitive advantage that drove the combination of team and price or would have to start the whole process over again. This is not only true of HCL Axon, but is even more problematic when considering the other, smaller companies and independents that the current Project has anticipated. A definitive start and stop date are imperative to cost certainty. This is also a commercial reality of the services business.

In summary, the costs associated with the CIS component of the solution are tied to decisions around the Call Centre and Billing and Back Office locations. The cost components of the proposed CIS will not remain the same if anything other than the proposed solution is implemented. The significance of the difference in costs would depend on how long it would take to determine the provider of the services, the location of the outsourced call centre and billing and back office functions, and the market conditions at the time of the decision. It is a near certainty that the costs associated with acquiring and implementing a CIS as part of a revised customer care model would be more expensive than the costs of those components outlined in the Amended Application.



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5.0 Reference: CURRENT CUSTOMER CARE PROGRAM

Exhibit B-10, BCUC IR 1.66.2, p. 153; BCUC IR 1.8.1, p. 21; BCUC IR

1.8.2, p. 22; BCUC IR 1.8.3, p. 23

Quality Service Metrics - Terasen

TGI has stated that they believe that "the [current] metrics need to be adjusted to reflect current industry standards and / or replaced with new industry standard metrics" (BCUC IR 1.8.1) and that "TGI is expecting to implement different call centre service metrics in the insourced call centre." (BCUC IR 1.66.2)

However TGI also noted that "In 2012 Terasen Gas will support the existing metrics as defined in the Client Services Agreement while working to define a new structure and new metrics going forward. After one year of operating under the new model, Terasen Gas will incorporate the learning taken from the first year of operations as well as the best practices in the utilities industry at that time and implement new metrics that more accurately and completely measure both customer service quality and operational efficiency." (BCUC IR 1.8.3)

Would it be correct to conclude that during the first year (2012) TGI will be evaluating itself under the current performance metrics as outlined in the CSA and only in 2013 will it adjust the performance metrics to reflect best practices in the utilities industry?

#### Response:

Yes, as described in Exhibit B-4, Section 4.5.2.3, TGI will target performance against the current metrics through to the end of 2012. The first year under the new model will focus on stabilizing operations and developing new performance metrics for 2013 and beyond as discussed in BCUC IR 2.3.3.

Terasen Gas anticipates working with stakeholders and customers through 2012 to confirm the new metrics that will begin in 2013. Examples of future metrics expected at this time are included in Tables 4.4, 4.5, 4.6 and 4.7 in Exhibit B-4 and discussed in the response to BCUC IR 1.8.1.

It is also expected that performance against these metrics will be reported to stakeholders and customers and the specifics of the reporting mechanism will be developed when the metrics are finalized.

Please refer to Exhibit B-4, Section 4.5.2.3 for additional information regarding TGI's approach to updating service metrics.



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5.2 Under the proposed Project does TGI intend to report its performance metric results to the public? If not, please explain why.

#### Response:

Please refer to the response to BCUC 2.5.1.

"In the call centre for example a customer should expect to receive the same quality of service regardless of the time of day, day of the week or time of the month. Other metrics that should be changed include the "call handling average speed to answer" metric of 75% in 30 seconds, which is too low and should be increased to 80% in 20 seconds. The billing accuracy metric of 99.9% is higher than the current standard industry metric for mass market billing of 98%. There are other metrics that are considered to be better indicators of service quality. In the call centre, for example, First Call Resolution is becoming the more common industry standard related to call centre service quality." (BCUC IR 1.8.1)

5.3 Does TGI intend to achieve all of the above noted quality performance metrics in 2012? In not, please explain?

#### Response:

Please refer to the response to BCUC IR 2.5.1.

"Terasen Gas is not aware of any published industry information related to the number of exceptions acceptable related to call centre activity in an outsourced environment. Our assumption, however, is that when metrics are established service pricing is set to ensure that the metrics can be achieved. The industry standard should therefore be zero exceptions." (BCUC IR 1.8.2)

Would it be correct to conclude that TGI is expecting to see zero exceptions in its performance measures in 2012 and beyond?

#### Response:

This response is broken into two parts: (i) 2012, and (ii) 2013 and beyond.



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As discussed in the response to BCUC IR 2.4.1, TGI anticipates that there will be a post-implementation "storm period" as full operation of the new model is implemented. This type of exception period can occur when a new operation is implemented – whether it is a new manufacturing facility or a new call centre start up. Such a period was experienced in 2002 when CWLP began delivering service to TGI's Lower Mainland customers after their transition from BC Hydro systems.<sup>4</sup> During this period, there are potentially instances where the existing performance measures are not achieved. TGI will strive to minimize any impact to performance metrics in 2012 through the project's risk management plan and execution of the first year's operational activities.

Although the above reference speaks to service metrics in a contractual outsourcing relationship, TGI expects that the performance metrics it will establish for 2013 and beyond will be targeted to achievable performance based on factors within the Company's control. Under normal circumstances there should be zero exceptions to those performance measures.

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<sup>&</sup>lt;sup>4</sup> The response to BCUC IR 2.4.1 discusses how the Project involves greater complexity than the upgrades undertaken by CWLP that resulted in service shortfalls.



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6.0 Reference: CURRENT CUSTOMER CARE PROGRAM

Exhibit B-4, Sec 2.2.2, Table 2.2, p. 17; Appendix K, Schedule 2 Exhibit B-10, BCUC IR 1.10.3, p. 33; BCUC IR 1.10.4, p. 34

**Current Customer Care Costs** 

Are the costs to provide credit checks by Trans Union, translation services by CanTalk, and braille services by Braille Plus (BCUC IR 1.10.3) included in the estimated future O&M costs of the Project in Appendix K, Schedule 2? Are the amounts the same as those included in Exhibit B-4, Table 2.2?

#### Response:

Yes, the costs to provide credit checks, translation and Braille services are included in the estimated future O&M costs as set out in Appendix K, Schedule 2. These amounts are the same as those included in Table 2.2 of Exhibit B-4.

6.2 In response to BCUC IR 1.10.4 it appears that the Company has prepared Table 2.2 under the cash based method of accounting when it would be expected that the accrual based method would have be used. Please explain.

#### Response:

The costs included in Table 2.2 of the Amended Application are based on the accrual method. The Company accrues for costs where they are known with sufficient certainty, such as those that are invoiced for on a regular basis. In 2008 some costs related to translation services were not invoiced promptly and faced considerable delay. This delay did not permit the Company to complete an accrual for these costs as it normally would have been able to complete.



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#### 7.0 Reference: CURRENT CUSTOMER CARE PROGRAM

Order C-15-05, directive 3 Exhibit B-4, Section 6, p. 119

Exhibit B-10, BCUC IR 10.9, p. 37; BCUC IR 1.143, p. 332;

Attachment 143.2; Attachment 127.1, Schedule 7

**Banner Conversion Costs** 

#### Order C-15-05 directive 3 states:

The Commissions approves the backstopping by TGVI for the risk of the peak cumulative deficit of \$335,000, or the *indicated deficit at any other such time*, in the event that the Customer Care activities transition to another provider, *prior to the benefits being realized*.

The directive goes on further to state that in the event that a *subsequent* conversion preserves or exceeds the benefits anticipated in this Application, TGVI may request at that time that the Commission consider whether this provision should be set aside.

In Exhibit B-4, page 119 TGI states "The issue of the impact of this Project on the Banner CIS Conversion has been raised by stakeholders. TGVI is of the view that the benefits of the Banner CIS Conversion have been substantially realized, and the Project will provide additional benefits to customers of TGVI and TGW."

"Terasen Gas is of the view that the Customer Care Enhancement Project preserves the benefits anticipated in TGVI's 2005 Customer Care Conversion Project and that as a result the deficit risk provision is not triggered by the implementation of the Customer Care Enhancement project."

In Exhibit B-10, IR 1.10.9 TGI goes on to states "The Banner Conversion Cost will be fully amortized by the end of 2014 per the approved treatment in Commission Order No. C-15-05 dated July 29, 2005, and will therefore not be fully eliminated prior to the commencement of the Customer Care Enhancement project. The Company is of the view that the treatment of Banner Conversion costs as set out in Order C-15-05 remains appropriate and should not change because the Customer Care Enhancement Project preserves the benefits anticipated and realized by the TGVI Customer Care Conversion Project."



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7.1 Is TGVI requesting that the Commission set aside the backstopping provision as set out in Order C-15-05?

#### **Response:**

No, TGVI is not making that request as part of this Application.

However, TGVI will ultimately seek to recover the portion of the cost of the Banner Conversion Project that remains unamortized as of the date the CCE Project goes into service, as the key benefits of the Banner Conversion Project have been realized. As discussed in the responses to BCUC IR 1.143.4 and BCUC IR 1.143.5, the critical benefit to customers was the establishment of a common customer care platform and service delivery model that provided TGVI's customers with the same scope and level of services enjoyed by TGI's customers. This benefit was realized immediately in 2006 when the Project was fully implemented and not at a later date.

The recoverability of the unamortized conversion costs in customer rates will be the subject matter of a future revenue requirements proceeding, when TGVI seeks to have rates set on the basis that those costs represent a legitimate part of TGVI's cost of service.

As TGVI believes that the unamortized costs are ultimately recoverable, the unamortized costs have been factored in to the levelized cost analysis for the Project to allow a proper comparison with the notional status quo.

7.2 If yes, is this TGVI official request?

#### **Response:**

No, please also refer to the response to BCUC IR 2.7.1.

In order to determine if TGVI is entitled to set aside the backstopping provision the following needs to be determined:

- 1) Have the benefits of the Banner conversion been met at the time of the proposed Project conversion date of January 1, 2012, and if not what is the indicated peak cumulative deficit at that time?
- 2) If the benefits of the Banner conversion have not been met at the time of the proposed Project conversion, has TGVI demonstrated that the proposed



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Project preserves or exceeds the benefits anticipated in the Banner conversion?

#### Analysis:

1) In Exhibit B-4, page 119 and Attachment 143.2, the NPV of the peak cumulative deficit of the Banner conversion occurs in 2013 and is \$335,000 resulting in a levelized cost savings per customer of \$1.26.

10 Year Evaluation as Filed 2005.06.16																					
			2006		2007		2008		2009	2	2010	2	011	20	012	20	13	20	14	201	5
Revenue Requirements																					
•	Retain Banner	5	5.115 S		5.356 \$	5	.648 \$	5	5.865 \$	5.	981 \$	6.2	231 S	6.4	73 S	6.6	87 \$	6.94	3 5	7.10	3
	Conversion to Energy	Š	3,281 \$		5,078 \$		.175 \$		5.274 \$		396 \$		520 S	6,6		6,7		5,70		5,89	
	Savings (Cost) to Convert	5	1,834 S		(722) \$		(527) \$		(409) \$		414) \$		289) \$		63) S		63) \$	1,24		1,21	
	PV each year		1,728	1	.087		645		323		15		88)	(29	96)	(33	35)	39	3	1,062	2
			2008		2007		2008		2008		2010		2011		2012		2013		2014		2016
Revenue Requirement Per Cucto	omer Retain Banner	5	58.33	ş	59.09	5	60.40	ş	60.98	\$	60.43	5	61.12	5	61.76	5	62.22	. 5	63.0	5 \$	63.06
	Conversion to Energy	5	37.42	s	67.05	s	66.04	5	65.23	5	64.62	5	63.95	5	63.32	5	62.80	5	51.8	3 5	52.33
Savings/(Cost) per Customer	•	5	20.91		(7.97)	\$	(5.64)	\$	(4.25)	\$	(4.19)	\$	(2.83)	\$	(1.56)		(0.59				10.73
Levelized Savings per Customer	•	5	1.26	\$	1.26	\$	1.26	\$	1.26	\$	1.26	\$	1.26	\$	1.26	\$	1.26	5	1.2	5	1.26

In IR 1.143.2 the BCUC requested TGI to recalculate the peak cumulative deficit based on actual benefits received by ratepayers as required under Order C-15-05. TGI filed the following table in Exhibit B-10, Attachment 143.2 which shown the indicated peak cumulative deficit now occurs in 2012 and has increased to \$1.164 million resulting in a levelized cost per customer of only \$1.00.

10 Year Restated based on Actua 2009.09.29	al																		
Note: Updated costs, debt/equity	y/tax rates, average customers																		
		_	2006		2007		2008		2009	2010		2011	2012		2013		2014	,	2015
Updated Revenue Requirements																			
openion revenue resquiremente	Retain Banner	s	5,111	s	5,355	S 5	.657	5	5,876 \$	5,993	s	6.243 S	6,477	s	6,689	5	6.943	s	7.112
	Conversion to Energy	š	4,165	š	-		.209	-	6,288 \$	6,373		6,459 S	-	š	6,645	š	5,703	š	5,899
	Savings (Cost) to Convert	5	946	š	(852)	_	(552)	_	(412) \$	(380)	_	(216) \$		_	44	5	1,240	5	1,213
	PV each year		897		132		339)	_	(672)	(962)		(1,119)	(1,164)		(1,135)	_	(368)	_	343
			2008		2007	2	800		2009	2010		2011	2012		2013		2014		2016
Updated Revenue Requirement Po	Retain Banner Conversion to Energy	5 5	48.42	5 5	59.69 ( 69.19 (	5 6	1.45 \$ 5.36 \$		60.60 \$ 64.84 \$		\$	61.12 \$ 63.24 \$	62.56		62.46 62.05	_		_	63.31 52.51
	mer	5	11.00	Ş	(9.50) (	5 (	5.90) \$		(4.25) \$	(3.81)	\$	(2.12) \$	(0.62)	\$	0.41	\$	11.31	\$	10.80



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7.3 Would it be fair to conclude that the benefits of the Banner conversion will not be realized at the time of the proposed Project conversion date considering that the levelized cost savings per customer has dropped to \$1.00 from the originally anticipated \$1.26 in 2005?

#### Response:

Before addressing the question directly, please note that TGVI is not seeking to recover Banner Conversion costs as a part of this Application. As described in the response to BCUC IR 2.7.1, that request will be included in a future TGVI revenue requirements application. As TGVI believes that the unamortized costs are ultimately recoverable, the unamortized costs have been factored in to the levelized cost analysis for the Project to allow a proper comparison with the notional status quo.

Terasen Gas does not agree with the premise implied in this question that "benefits" to customers only take the form of a cost savings or that a cost reduction is the most critical benefit to customers. As discussed in the responses to BCUC IR 1.143.4 and BCUC IR 1.143.5, the critical benefit to customers was the establishment of a common customer care platform and service delivery model that provided TGVI's customers with the same scope and level of services enjoyed by TGI's customers. This benefit was realized immediately in 2006 when the Project was fully implemented and not at a later date.

Addressing the issue of the timing of when customers will see a net cost savings benefit, no, it should not be concluded that the cost savings enabled by the Banner conversion will not be realized at the time of the proposed Project conversion date. Although the benefit of \$1.00 is less than the \$1.26 as estimated in 2005, the analysis shows that customers have realized real cost savings arising from the conversion from the Banner CIS to the Energy CIS. Additionally, the implementation of the Customer Care Enhancement Project will improve on the original level of cost savings anticipated by the Banner conversion as discussed in the response to BCUC IR 2.7.4. As always, the cost savings estimate of the Banner conversion is subject to normal variances in the level of future O&M costs from what they were estimated to be in 2005 when it was prepared for Approval. The Company is of the view that the cost savings of \$1.00 demonstrates that financial benefits associated with the Conversion, in addition to the key benefit identified at the outset of this response, were achieved.

Please also refer to the response to BCUC IR 2.7.5.



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#### Analysis:

2) In order to set aside the backstopping provision as the Company has proposed in the CCE CPCN, TGVI is required to demonstrate that the proposed Project preserves or exceeds the benefits anticipated in the Banner conversion.

In Exhibit B-10, Attachment 143.2 TGI proposes that the benefits of the Project exceed the benefits of the Banner conversion based on the analysis provided below:

		2006	2	2007		2008	2009	2010	201	1	2012	2013	2014	2016
Updated Levelized Savings per Customer	5	1.00 \$		1.00	5	1.00	\$ 1.00	\$ 1.00 \$	1.0	5	1.00	\$ 1.00	\$ 1.00	\$ 1.00
Levelized Savings per Customer CCE Project										\$	5.12	\$ 5.12	\$ 5.12	\$ 5.12
Net Levelized Savings per Customer	\$	1.00 \$		1.00	5	1.00	\$ 1.00	\$ 1.00 \$	1.0	3 \$	5.12	\$ 5.12	\$ 5.12	\$ 5.12

7.4 Please explain how the levelized savings per customer of \$5.12 was determined. Ensure that the explanation ties to Exhibit B-10, Appendix K.

#### Response:

Before responding to the question, TGI wishes to address the preamble. As discussed in the responses to BCUC IR 1.143.4, BCUC IR 1.143.5 and BCUC IR 2.7.3, the critical benefit to customers was the establishment of a common customer care platform and service delivery model that provided TGVI's customers with the same scope and level of services enjoyed by TGI's customers. This benefit was realized immediately in 2006 when the Project was fully implemented and not at a later date.

The \$5.12 levelized savings per customer was calculated by comparing the levelized cost per customer associated with the Customer Care Enhancement CPCN and the levelized cost per customer of the existing customer care services as follows:



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Line	<b>Particulars</b>	Cost	oer Customer	_	Reference
				_	
1	CCE CPCN		754,646,732	Costs	S7, Line 65
2			11,285,168	Customers	S7, Line 66
3		\$	66.87	Cost/Customer (\$)	S7, Line 67
4					
5	Existing Contract		812,374,461	Costs	S7, Line 76
6	-		11,285,168	Customers	S7, Line 77
7		\$	71.99	Cost/Customer (\$)	S7, Line 78
8				, ,	
9	Levelized Cost (Benefit)	\$	(5.12)	_	Line 3 - Line 7

In Exhibit B-10, Attachment 127.1, schedule 7, the difference between the levelized cost per customer under the current customer care contract and the levelized cost per customer under the proposed Project are as follows:

2012	\$2.19	savings to ratepayers
2013	\$7.98	additional cost to ratepayers
2014	\$5.92	additional cost to ratepayers
2015	\$5.31	additional cost to ratepayers

7.5 Would it be correct to conclude that if these amounts are added to the \$1.00 levelized savings per customer the proposed Project does not preserve or exceed the benefits of the Banner conversion and therefore the backstopping provision should not be set aside?

#### Response:

The amounts referred to in the preamble to this question should not be added to the \$1.00 levelized savings per customer of the Banner conversion. Completing this addition would result in an improper cost savings comparison of the Banner conversion with one that assumes the adoption of the Project. These costs instead indicate the difference in the levelized cost per customer of the current customer care function and the proposed restructured customer care function. This difference is caused by a number of factors not attributable to the Banner conversion.

As discussed in the response to BCUC IR 1.143.4, Terasen Gas does not agree with the premise implied in this question that "benefits" to customers only take the form of a cost savings



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or that a cost reduction is the most critical benefit to customers. The critical benefit to customers was the establishment of a common customer care platform and services delivery model that provided TGVI's customers with the same scope and level of services enjoyed by TGI's customers. This benefit was realized immediately in 2006 when the Project was fully implemented and not at a later date. Equally important, the benefits TGVI's customers receive from the service improvements that the Banner conversion enabled, including cost savings, do not stop at 2015 as implied in this question. They will continue well beyond that time, which the implemented Customer Care Enhancement Project helps to preserve. Additionally, without the Banner conversion to a common customer care platform, TGVI's customers would be faced with the cost of completing a conversion to a common customer care platform as part of the proposed Project. Arguably, the cost of a delayed conversion would not be any less than it was in 2006. Customers would also not have received any of the service improvements the Banner conversion delivered in 2006 until at least 2012.

The delivery of the service improvements that the Banner Conversion enabled in turn permitted a reduction in costs subject to normal variances in the level of future O&M costs from what they were estimated to be in 2005 when the Banner conversion project was prepared for Approval. The Company is of the view that the cost savings of \$1.00 demonstrates that financial benefits associated with the Conversion were achieved and that as result the backstopping provision should be set aside.



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8.0 Reference: CURRENT CUSTOMER CARE PROGRAM

Exhibit B-10, BCUC IR 13.1, p. 51; Attachment 13.1

**Current Customer Care Costs** 

In response to BCUC IR 1.13.1 TGI filed Attachment 13.1.

8.1 In calculating the Average Cost per Customer were the Banner conversion costs included?

#### Response:

BCUC IR1.13.1 and Attachment 13.1 do not include a reference to an average cost per customer.

The calculation of the cost per customer of both the current customer care function and that of the restructured customer care function as provided in the Amended Application and responses in the first set of Information Requests included the cost of the Banner conversion revenue requirement. TGVI ultimately expects to recover the full unamortized cost in a future revenue requirements application for the reasons described in the response to BCUC IR 2.7.5.

8.1.1 If not, should they have been?

#### Response:

Please refer to the response to BCUC IR 2.8.1.

8.1.2 If yes, please re-file Attachment 13.1 to include the Banner conversion costs.

#### **Response:**

Please refer to the response to BCUC IR 2.8.1.



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9.0 Reference: CURRENT CUSTOMER CARE PROGRAM Exhibit B-7, CWLP IR 1.5.1

**CSA** - Internal Dispute Resolution

"Yes, CustomerWorks has advised Terasen Gas of its objections and has advised Terasen Gas of its intention to resolve these matters pursuant to the Internal Dispute Resolution process set out in Section 16 of the CSA."

9.1 Would it be correct to conclude that there is a possibility that under the terms of the Internal Dispute Resolution process a decision could be rendered that would allow CWLP to continue to provide TGI with all the services currently included in the CSA, which would preclude TGI from proceeding with the CCE CPCN Project?

#### Response:

TGI and CustomerWorks have resolved the matter and reached an agreement in principle related to the CCE Project and related scope changes under the terms of the CSA. The companies are currently developing a detailed agreement. TGI anticipates being in a position in the near future to update the Project financials based on actual transition costs and will file an update to Appendix K – Financial Schedules at that time. TGI will also file the final agreement with the Commission when it is completed.



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10.0 Reference: CIS SOFTWARE ALTERNATIVES Exhibit B-10, BCUC IR 1.6.1, p. 13

SAP - Meter Reading

"The Project provides the technological foundation, through the SAP CIS platform, to accommodate any form of meter reading, whether manual, automated or some form of smart metering strategy."

10.1 Are any additional costs required for the SAP CIS platform to accommodate a manual, automated or smart metering strategy?

#### Response:

Currently, meter reads are collected manually and initially stored outside of the Peace CIS system. This system then feeds the meter read information via an automated interface into the Peace CIS system. When Terasen Gas goes live with the SAP CIS, this process will be the same with the only difference being that the SAP CIS would now receive the meter reads via the interface. The costs to convert and test this interface are included in the Project costs. The question is directed, however, to the manner in which the data ultimately fed into the CIS is originally collected from customers. The manner in which this information is initially gathered is not relevant to the SAP CIS system, i.e. it can accommodate manual, automated or smart metering, and therefore no additional costs other than those described above are anticipated for the CIS platform for the purposes of billing should the method in which the meter reads are collected change.

The business case for an automated meter reading solution (smart metering is just one example of such automation) may include requirements that may or may not be met by the functionality that Terasen Gas is planning on implementing in its SAP CIS. It is possible that additional software might be required to meet these new requirements. It is also possible that additional functionality to address these requirements is inherent in the SAP CIS solution. This can only be determined once the detailed requirements of any automated meter reading solution have been clearly identified and documented as part of that business case. Costs associated with any additional functionality deemed to be necessary would be subject to review as part of a CPCN for an automated meter reading solution and/or a future revenue requirements application.



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11.0 Reference: CIS SOFTWARE ALTERNATIVES

Exhibit B-4, Appendix C Selection Process for CIS and System

Integrator, p. 3

Exhibit B-10, BCUC IR 1.32.2, Attachment, p. 12

Insourcing Alternative – SAP CIS

"Adequate physical floor space will be available to house the project team and will not be charged to the project. The cost of furniture for the team will not be charged to the project, however, the cost to set up the project team (sic)"

11.1 Please comment on the project team space, its cost, and where the costs are paid if not by the project.

#### Response:

The referenced quote is an extract of the industry benchmark report provided to Terasen Gas executives by Micon Consulting. The referenced quote was one of the key estimating assumptions in the Strategies/Alternatives cost summary of the benchmark report, not an assumption of the Terasen Gas Project.

The Company's assumption is that all appropriate costs will be charged to the Project. The plan for the Terasen Gas project space is to convert existing meeting rooms at the Terasen Gas Surrey operations building into a project area. The Project will also cover the rental cost of an alternative meeting site for the rest of the Company on the rare occasions when a meeting facility for more than 30 people is required. The planned alternative meeting site is a motel facility next to the Terasen Gas office. The current plan has the Project initially paying for project facilities (furniture, PC's, printers, telephony, ongoing operational support, etc) with the intent to redeploy (with the appropriate financial treatment) those resources which can be redeployed (computer equipment and furniture) back into the operation. The computer equipment will be incorporated into the Terasen Gas refresh programs and the furniture into the facilities process. The total costs anticipated for Project facilities for the life of the Project are estimated at approximately \$600,000. The costs that will be transferred out of the Project costs and into operating budgets will be calculated once the Project is completed and the equipment and furniture are redeployed. It is anticipated that this would occur after the stabilization period of the project which is planned to be completed by the end of March, 2012.



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12.0 Reference: CALL CENTRE

Exhibit B-10, BCUC IR 1.64.1, p. 149

Exhibit B-4, Appendix N, Utilities Industry Benchmark Report, p. 28

Insourcing Alternative – Terasen

12.1 Please reconcile TGI response to BCUC IR 1.64.1 "Terasen Gas does not believe cost per call is the most comparable cost nor is it a well established industry benchmark as assumed above" with Appendix N, page 28, "Our research shows cost per call as the one of the most closely watched performance measures that call center managers use to determine their call centre performance."

#### Response:

TGI interprets the passage from Appendix N, page 28, as meaning that a company will closely watch its current cost per call against its own cost per call achieved in prior years, as this is a way of determining whether the call centre is directionally becoming more or less efficient. TGI's statement in BCUC IR 1.64.1 is that the cost per call is less useful when comparing different call centres, as this comparator may include different inputs for different organizations and can be influenced by a number of factors. These include specific performance metrics, prevailing labour rates in the region where a centre is located, costs specific to the facility where the centre is based and typical call duration which is dependent on a company's policies and business processes. The broad difference between the average cost per call value and the best of utilities average in Appendix N is an indication that there is a high degree of variability which illustrates the difficulty associated with using this information for direct comparison.

TGI was unable to acquire comparative cost per call information for Canadian or British Columbian call centres as discussed in BCUC IR 1.64.3. The utilities included in the Benchmark Portal study provided in Appendix N are primarily based in the United States. Given the nature of the study's question, it is difficult to ensure that the differences between individual respondents are directly comparable as a variety of factors can influence cost per call and it can be derived differently at different organizations.



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13.0 Reference: CALL CENTRE

Exhibit B-4, Chapter 2 Project Description and Schedule, Sec 2.3.2.1,

Call Centre Components, p. 24, par. 4

Exhibit B-4, Appendix N, Utilities Industry Benchmark Report, p. 28 Exhibit B-4, Appendix P, In Province Contact Centre Strategy, p. 4

Exhibit B-10, BCUC IR 1.64.1, p. 149

Insourcing Alternative - Terasen

"The calculated cost per inbound call based on average historical volumes is \$9.44 per call in 2013. This cost assumes all inbound contacts will continue to be handled via the traditional voice channel and that the volume and complexity of the calls will not be materially different in the future. This cost includes all of the ongoing variable costs including labour, technologies and facilities support. It does not include allocated capital."

13.1 According to Appendix N, 'Utilities Industry Average' the cost per inbound call is \$6.38, with the best of 'Utilities Industry Average' at \$2.61. In response to BCUC IR 1.64.1 TGI has stated that \$9.44 per call is indicatives of what the Company believes the cost will be in the short-term. Please explain why TGI believe it can provide a call centre at a competitive cost given that the cost per call expected in the short term is \$3.06 greater that the industry average.

### Response:

TGI does not agree with the premise of the question that TGI's higher cost per call as compared to the value reported in Appendix N speaks to the relative cost effectiveness and performance of the Project vis-a-vis other call centres. The figures are not directly comparable. As discussed in BCUC IRs 1.64.1, 1.64.2, 1.64.3 and 2.12.1, cost per call is not generally available and in cases where it is referenced may include significantly different cost inputs for different organizations. These inputs can be influenced by a number of factors including prevailing labour rates in the region where a centre is located, costs specific to the facility where the centre is based, and typical call duration which is dependent on a company's policies and business processes. Broad benchmarking can capture high level indicators; however, given the range of variables that can make up such a metric for an individual company, TGI does not believe they are necessarily appropriate as a direct comparison.

An illustration is helpful to show issues associated with such general benchmarks. Shorter call durations, for example, can allow a higher total number of calls to be handled by a centre, leading to a lower average cost per call, all else being equal. Shorter call durations can be driven by policies and business processes, subject matter or the agent. Depending on what is driving shorter calls, this can impact first call resolution and customer satisfaction (both



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important benchmarks noted in Appendix N). For example, first call resolution may require a longer handle time to achieve. This would result in a higher cost per call as opposed to the customer working through 3 shorter duration calls before reaching resolution. If the same total time is spent, overall costs would be the same however the cost per call for the 3 call resolution would be 1/3 of the cost per call for the first call resolution and the customer would in all likelihood be less satisfied. As a result, given the variability described above that can occur in such broad benchmarks, TGI does not believe that its calculated average cost per call is directly comparable to the value reported in Appendix N.

In terms of addressing the core issue implied in this question of the cost competitiveness of the call centres proposed in the Amended Application compared with outsourced call centres, Terasen Gas is of the view that its proposed call centres are at least as cost competitive as alternatives that may be available in British Columbia. As discussed in Exhibit B-4, pages 79-87 and BCUC IR 1.96.1, the Company completed a thorough cost evaluation process in determining the future cost of the call centres that will be established as part of the Project. This process included a thorough analysis of the three primary components that make up the call centre – technology, labour and facilities. This process ensured that a thorough market test of the key elements of these three components was completed.

- TGI identified the most suitable call handling technology and conducted a competitive process to cost that technology;
- TGI retained experts to identify the most suitable ownership model and buildings for the lowest cost to house the call centres;
- The Company also used third party expertise to determine the optimal staffing model given the scope and level of service it believes is needed to provide a high quality of service to customers. The cost of the labour required to staff the call centres was established based on a new separate collective agreement that contains a market competitive compensation package.

After aggregating the cost of these components and considering the quality and scope of services that the Company contemplates providing customers, and considering that third party outsourcers will add a profit margin "across the board", Terasen Gas believes it can provide call centre services for a cost that is competitive with third party centres in British Columbia. Given the quality of service that Terasen Gas intends to provide and the component based costing assessment that was performed, the Company does not believe that a third party operating under the same conditions of an in-province solution including redefined service metrics would result in a lower cost than has been put forward in this Application. This outcome contributes to demonstrating that the CCE Project is in the best interests of customers.



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13.2 Please provide the cost per call for 2013 including the costs of allocated capital for 2013.

### Response:

The cost per call in 2013 that includes direct and indirect O&M costs and allocated capital for the implementation of the two call centres is \$8.66. This cost of service per call excludes capitalized overheads so that it is consistent with the cost of service calculated in response to BCUC IR2.25.7. The same call volume was used to complete this cost per call calculation as for the \$9.44 referenced in the preamble above.

The calculated cost per call provided in this response is not comparable with either the estimated \$9.44 cost per call provided by the Company in response to BCUC IR1.64.1 or the utilities industry average cost per call referenced in the preamble above for the reasons discussed in the responses to BCUC IR 1.64.1, BCUC IR 2.12.1, and BCUC IR 2.13.1.

13.3 Please provide the CWLP cost per inbound call for 2013 using the total CWLP costs for 2013 as presented in the Application divided by the same average historical call volumes used above.

### Response:

The cost per call based on including the entire estimated cost of the Client Services Agreement with CWLP in 2013 is \$50.28. The same call volume was used to complete this cost per call calculation as for the \$9.44 referenced in the preamble above.

The calculated cost per "call" provided in this response is not comparable with either the estimated \$9.44 cost per call provided by the Company in response to BCUC IR 1.64.1 or the utilities industry average cost per call referenced in the preamble above. The cost of the Client Services Agreement includes the cost for all services provided by CWLP, not just those related to call handling. A discussion of additional issues related to the comparability of call handling costs is provided in the responses to BCUC IR 1.64.1, BCUC IR 2.12.1 and BCUC IR 2.13.1.



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14.0 Reference: CALL CENTRE

Exhibit B-4, Chapter 4, Sec. 4.3.2.2.2 Facilities, p. 85

Exhibit B-10, BCUC IR 1.77.2, p. 175

Insourcing Alternative - Terasen

"It is important to note, however, that a part of the training for these employees – i.e. the 'learning curve' – will be training in issues of particular relevance to Terasen Gas customers such as developments in energy policy and energy alternatives, and energy efficiency and conservation offerings. Developing this expertise to enhance the overall customer experience is an important aspect of the Project."

14.1 Please comment on the total training cost, and percentage of training costs, to train the call centre employees "in issues of particular relevance to Terasen Gas customers".

### Response:

The total training costs included in the \$122 million Project implementation cost estimate is approximately \$10.3 million. This cost includes all training costs related to the implementation of the new CIS, the Call Centres, and Billing Operations, with the most significant portion of this cost relating to the labour for the new employees as they are hired in the latter half of 2011. From a Project costing perspective, it was assumed that all new employees will be hired in early July 2011. This timing provides for a conservative estimate of these training costs given that the timing of the hiring of the entire group of new call centre employees will vary based on when they are recruited and actually hired. This process is expected to take place of over a number of months starting in mid 2011.

Of the \$10.3 million in total training costs, approximately 59% relate to the training of new employees that will staff the two new call centres. This training is planned to include, but is not limited to, topics such as:

- the energy industry,
- British Columbia's energy environment and the meaning of energy policies for Terasen Gas,
- the natural gas competitive environment, alternative energy sources, energy efficiency and conservation,
- Terasen Gas company training,
- Terasen Gas policies and procedures related to agents' customer contact responsibilities,



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- customer contact handling including soft skills (telephone and electronic channels),
- telephone system and agent phone operations, and
- CIS system usage including enhanced data capture and transaction processing.

As noted above in this list of topics, the training specifically for developments in energy policy, energy alternatives, and energy efficiency and conservation offerings forms only part of the overall training requirements. This regional and unique Company training will be integrated into a comprehensive training program as it is critical for customer service representatives to understand the options available to customers in managing their energy use. The specific cost of training related to issues of particular relevance to Terasen Gas customers will not be defined as a separate component of the training. The training strategy is to build the knowledge into each defined call type to the degree that it is relevant. High bill inquiries for example could lead to a discussion of energy efficiency and conservation programs.

After the initial training is provided to the new call centre employees as part of the call centre implementation in 2011, training costs are expected to be substantially reduced. Starting in 2012 existing employees will be provided with refresher training for key topics such as high bill inquiry handling prior to a new heating season. New employees will receive training in line with the initial Project training that is described above. Please also refer to the response to BCUC IR 2.33.1 for a discussion of training costs for the period after the Project is implemented in 2012.



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15.0 Reference: CALL CENTRE

Letter L-18-04 'CPCN Application Guidelines' clause 3(ii)

Exhibit B-10, BCUC IR 1.96.2, p. 215

Cost/Benefit Analysis

"3 (ii) a study comparing the costs, benefits and associated risks of the project and alternatives, which estimates the value of all of the costs and benefits of each option or, where not quantifiable, identifies the cost or benefit and states that it cannot be quantified;"

"The Amended Application contains a detailed alternatives analysis, comparing the costs, benefits and associated risks of the Project and the status quo."

15.1 Please confirm the Company did not estimate the value of all costs and benefits of the option to outsource the Call Centre to an entity other than CWLP, rather the Company compared the proposal to the status quo – CWLP.

### Response:

TGI did not seek quotations from third party outsourcers for the call centre and billing and back office functions. These options were excluded from the Project scope as a result of the Company's qualitative analysis of whether outsourcing the Call Centre and/or Billing and Back Office functions would provide the flexibility and responsiveness that the Company believes is required going forward. Similarly, TGI's qualitative analysis ruled out a fully insourced model because TGI recognizes that statement printing and similar highly specialized functions are best served by outsourcing. TGI believes that this type of initial qualitative analysis is appropriate and consistent with the CPCN Guidelines.

TGI has conducted a detailed quantitative assessment of alternatives that address the requirements identified through the initial qualitative screening analysis. Please refer to BCUC IR 2.2.1 for additional information regarding TGI's quantitative analysis.



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16.0 Reference: Call Centre

Exhibit B-4, Section 4.1.1, Figure 4.1, p. 58

Exhibit B-9, BCOAPO IR 1.8.1, p. 19

Exhibit B-4, Appendix N, p. 50

**Industry Trends** 

In response to BCOAPO IR 1.8.1 TGI states that 8% of utilities outsourced the call centre function in 2002 and according to Exhibit B-4, Figure 4.1, 12% of utilities outsourced the call centre function in 2009.

16.1 Comparing these two statistics, would it be fair to conclude that since 2002 there has been a 50% (8% X 1.5) increase in utilities who outsource the call centre function, supporting a trend of increased outsourcing by utilities rather than an insourcing trend as inferred in the Application.

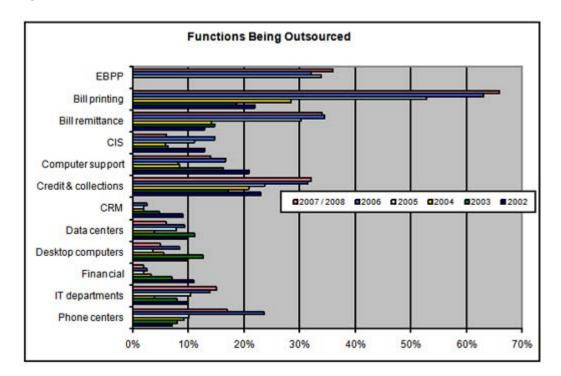
### Response:

No, TGI reconfirms that the figure of 12% in 2009 shown in Exhibit B-4, Figure 4.1 indicates a declining trend in call centre outsourcing by utilities. Figure 2.16.1, which was prepared by UtiliPoint, shows that call centre outsourcing peaked in 2006 at approximately 22% and declined to approximately 17% in 2007/2008. Taking a similar approach as in the question, the decline of 10% (from 22% to 12%) would in fact represent an approximate 45% (10%/22%) decrease since 2007.



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Figure 2.16.1: Outsourced Customer Care Functions 2002-2008



According to Exhibit B-4, Appendix N, the 'Utilities Industry Average' for outsourcing the call centre function is 29.17%.

16.2 Please reconcile Figure 4.1 which shows that 12% of utilities outsource the call centre function with Appendix N which shows that 29.17% of utilities outsource call centres.

### Response:

The 29.17% referenced above is the average response to the question "Does your center outsource any calls or functions?", that is, an outsourcing of certain components of what are deemed to be call centre activities. The following question asks "What percentage of your total calls do you outsource?" which received an average response of 3.36% (Appendix N, page 62). This low rate of total call outsourcing indicates that the broad question "Does your centre outsource any calls or functions?" can and does encompass a variety of activities and is not directly comparable to UtiliPoint's measure of utilities that are outsourcing "phone centres" per UtiliPoint's terminology.



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17.0 Reference: CALL CENTRE

Exhibit B-10, BCUC IR 1.67.5.4, p. 157

Sale of Land and Building

"Under the ATCO decision, when assets that are no longer used for utility purposes are sold, the shareholder obtains any gain and bears the risk of losses. The analysis in ATCO holds that this treatment is fair because customers do not acquire a property interest in the utility assets by virtue of paying rates for service."

17.1 Please confirm that if the land and building in Prince George are no longer required for utility purposes and sold, the profit/loss will go to the shareholder?

### Response:

Confirmed. If the land and building in Prince George are, at some future date deemed to be no longer required for utility purposes and are subsequently sold, under the ATCO decision any profit will go to the shareholder and the shareholder will bear the risk of any losses on the sale. However, as described in the responses to BCUC IR 1.67.5 and 1.67.5.1, TGI anticipates the land and building remaining used and useful for utility purposes for many years. The acquisition of the Prince George facility is the cheapest option for customers. TGI also observes that it has proposed leasing a facility in the Lower Mainland because it is the cheapest option for ratepayers based on facilities available at this time.

17.2 Does TGI own any land or building in British Columbia that is currently leases out to third parties?

### Response:

This response addresses BCUC IRs 2.17.2, 2.17.3 and 2.17.4.

Yes, TGI does own land or buildings in British Columbia that it currently leases to third parties. TGI did initially assess these locations as part of the review, but concluded upon review that they were unsuitable. The facility capacity requirements for the 2 call centre facilities as described in the Application were 50,000 square feet for the primary call centre, and 20,000 square feet for the secondary call centre. None of TGI's existing land or buildings that it currently leases to third parties are of the required size to satisfy these requirements.



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17.3 If yes, would any of these locations have the capacity to house a call centre?

## Response:

Please refer to BCUC IR 2.17.2.

17.4 If yes, were they considered for the Project? If no, please explain.

## Response:

Please refer to BCUC IR 2.17.2.



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18.0 Reference: CALL CENTRE

Exhibit B-10, BCUC IR 1.69.3, p. 160; BCUC IR 1.67.1, p. 154; BCUC IR 1.75.1, p. 169; BCUC IR 1.75.2, p. 169; Attachment 13.1

Two Call Centres

IR 1.75.2 the BCUC asked what the incremental cost of having a redundant second call centre would be and Terasen responded that "the Company is of the view that the cost to establish and operate either two call centres as set out in the Amended Application or just one in the Lower Mainland are roughly comparable."

However; in Exhibit B-10, Attachment 13.1 the "Total Cost of Service" for the Lower Mainland Call Centre for the period 2010-2020 is \$140 million while the "Total Cost of Service" for the Interior location is only \$74 million.

18.1 Given that the two call centres will operate in tandem, with calls being routed to the next available agent regardless of location (BCUC IR 1.75.2) and the handling requirements will be split approximately evenly between the two centres with roughly the same number of FTE (BCUC IR 1.69.3) would it not be correct to conclude that the total additional cost of service of having two call centers rather than one large call centre in Prince George is \$66 million (\$140 - \$74)? Please explain.

### Response:

The preamble to this question refers to Attachment 13.1 in Exhibit B-10 as the source for the total cost of service of the two call centres. That reference is incorrect. The correct reference is Attachment BCUC IR 1.124.1, page 1.

In reviewing page 1 of Attachment BCUC IR 1.124.1, Exhibit B-10, the Company identified a number of costs that were incorrectly allocated between the proposed Lower Mainland call centre and the Interior call centre. This misallocation resulted in an overstatement of the difference in the cost of service of the two call centres. The schedules provided in response to BCUC IR1.124.1 have been updated to reflect these corrected cost allocations and are included in Attachment 18.1 for reference.

A comparison of the cumulative cost of service for the period of 2012 to 2020 based on the updated allocation indicates that the Lower Mainland call centre is responsible for approximately 55% (\$117 million) of this cumulative cost of service and the Interior call centre for 45% (\$94 million), for a difference of 10%. Although the two call centres are roughly similar in size, the Lower Mainland call centre is in fact slightly larger. It will have for example, 52% of the total number of total call centre employees. The call handling volume is expected to be split



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approximately by the same proportion. Applying this same proportion to the cost of service suggests that the cost of service difference between the two call centres is much less at approximately 6%, than the 10% suggests at first glance. The cumulative cost of service amount of this 6% difference for the 2012 to 2020 period is approximately \$12.7 million. This amount is comprised of call centre cost allocation rounding differences and the incremental cost of the proposed lease of the Lower Mainland call centre compared with the purchase of the Interior call centre. As discussed in the Amended Application, the Lower Mainland call centre needs to be leased because no suitable building to purchase, or suitable land on which to build a call centre, was identified at this time. As well, the use of a leased facility for one of the two call centre locations will provide greater flexibility in the future should there be a need to reduce the need for call centre facilities.

Terasen Gas does not believe that it is fair to conclude that any difference in the cost of service between the two call centres represents in some manner an avoidable incremental cost that is caused by the decision to establish two call centres. The call centre assessment completed by Terasen Gas and described in the Amended Application in detail, concluded among other things, that the Interior of BC cannot support a single primary site. The subsequent search for a suitable building, or land on which to build a call centre in this region, did not identify a location suitable for anything other than for a secondary site. The reasons why the establishment of two separate, geographically distant, call centres are provided in the Amended Application.

In summary, customers benefit from the proposed approach of having two call centres, which is consistent with industry best practice.

An updated schedule for BCUC IR 1.124.1 is included in Attachment 18.1.

"In order to provide sustainable and uninterruptible service to customers, Terasen Gas believes that two call centre facilities are required to support a fully redundant emergency call handling environment. These two facilities must be significantly far apart to reduce the likelihood that a specific event or disaster will impact both sites at the same time. The types of events that could cause one of the two centres to be inoperable would be for example an earthquake in the Lower Mainland or a significant flood, storm or fire in the Interior." (BCUC IR 1.75.1)

18.2 The fully redundant call centres main purpose is to handle emergency call in the event of a disaster and will cost ratepayers an additional \$66 million in rates. Given that in 2008 only 6% of calls received related to emergencies



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(75,210/1,235,230 - BCUC IR 1.67.1) is there not a more economical solution for handling emergency calls in the event of a disaster.

### Response:

The assumptions underlying the math in the question are incorrect. In particular, as explained in BCUC IR 2.18.1, the cost of having two call centres with full redundancy for call handling is essentially the same as having one larger facility to accommodate the same number of employees required to handle the call volume and billing and back office functions. The proposed solution is economical, consistent with best practices, and in the best interests of customers.

As discussed in BCUC IR 1.75.1, the purpose of redundancy in the call handling environment is to provide sustainable and uninterruptible service to customers in the event one of the centres is lost due to a disaster such as those noted in BCUC IR 1.75.1. TGI would like to clarify that in addition to these larger scale disaster situations, a call centre can also be impacted by events such as an extended power outage or a fire that is isolated to the facility. BCUC IR 1.75.2 highlights that the second centre will be fully operational in supporting customer calls. In the event one centre is disabled, the second centre will be available to support the emergency calls specifically referenced in BCUC IR 1.75.1 as well as providing all other customer contact services (e.g. billing inquiries, move-in/move-out, account updates, emergency calls).



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19.0 Reference: RISK ANALYSIS

Exhibit B-10, BCUC IR 1.106.5 p. 242

Contingency Plan

19.1 What contingency plan does the Company have in place if for some reason CWLP does not agree to continue on with the currently provided services until such time as the proposed insourced call center and billing and back office operations are ready to go live?

### Response:

TGI and CustomerWorks have reached an agreement in principle related to the CCE Project and related scope changes under the terms of the CSA. The contract with CustomerWorks is in place and un-amended until December 31, 2011. TGI has the contractual right to extend the outsourced provision of services beyond December 31, 2011 in the event the Project go-live is delayed.



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20.0 Reference: RISK ANALYSIS

Exhibit B-10, BCUC IR 7, p. 20

**Transition Costs** 

"The Client Services Agreement was approved by the Commission in 2002. Terasen Gas, therefore, believes that any transitional costs that are incurred should be included in overall project costs and rightfully borne by the ratepayer."

20.1 Please confirm that shareholders are not prepared to bare any of the risk relating to transitional costs and therefore 100 percent should be recovered through rates?

### Response:

Confirmed. This is appropriate for the reasons discussed in the response to BCUC IR 1.7.8. As discussed in the response to BCUC IR 2.9.1, TGI and CustomerWorks have reached an agreement in principle related to the CCE Project and related scope changes under the terms of the CSA. The companies are currently developing a detailed agreement. In reaching the agreement in principle, the risk of change associated with the transitional costs has been eliminated.



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21.0 Reference: RISK ANALYSIS

Exhibit B-10, BCUC IR 1.98.1.1, p. 218; IR 1.106.11, p. 245

Exhibit B-8, CEC IR 1.47.7, p. 41

Cost Overruns

"No, the Company's shareholder is not willing to assume responsibility for any of the risks stated in BCUC IR 1.98.1 [budget, system failure, employee, process and organizational risk]. The Project is to provide service to customers and is in the long term best interests of customers. As such the prudently incurred costs associated with the Project are legitimately recoverable in rates. A cost collar can result in prudently incurred expenditures being disallowed, which has the effect of denying the shareholder its legal right to an opportunity to earn a fair return." (BCUC IR 1.98.1.1)

"The Company is of the view that cost escalations associated with delays in the regulatory process are a legitimate Project cost and thus should be recovered from ratepayers." (BCUC IR 1.106.11)

"TGI believes (and the law supports) that prudently incurred costs of serving customers should be recovered from customers. Prudence cannot be determined in advance with the blunt instrument of a cost collar." (CEC IR 1.47.7)

21.1 Would it be fair to conclude that the Company is not be willing to accept any form of cost collar for potential cost overruns relating to the \$122 million project costs or the estimated further O&M cost relating the proposed CCE CPCN Project?

### Response:

TGI confirms that it is not willing to accept any form of cost collar on this Project.

In any CPCN application the Commission's inquiry should be directed to determining the public interest and necessity of a project based on, among other things, the project estimate presented by the utility, while testing the appropriateness of the estimate based on the information available to the utility at the time regarding expected costs and the potential risk that actual costs could prove to be higher than expected. Put another way, the Commission's determination of public interest and necessity inherent in the issuance of a CPCN must be based on the available evidence before the Commission at that time. Unanticipated variances from an approved CPCN estimate are appropriately addressed in a future revenue requirements application(s).

Although the Commission cannot fetter its future ability to make decisions, the practical result of the Commission issuing a CPCN is that expenditures ultimately incurred by the utility within the



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estimate reviewed by the Commission in the CPCN application are presumed to be prudent in a future revenue requirements application. It would be very difficult for someone to rebut that presumption of prudence. Cost overruns from that CPCN estimate neither negate the Commission's finding that the project is in the public interest and necessity (which had based on the evidence available at the time the Commission issued a CPCN), nor demonstrate imprudent management on the part of the utility. Material overruns might trigger a more detailed examination of the prudence of those expenditures, but ultimately the Commission's determination regarding cost recovery in rates must recognize that overruns can be the result of factors beyond the utility's control. Prudently incurred costs of serving customers should be recovered from customers. TGI has characterized cost collars as an inappropriately "blunt instrument" for ensuring rates remain just and reasonable because the collar has as its objective precluding the Company from recovering costs over a predetermined amount regardless of whether those costs are prudently incurred. The Company is denied an opportunity to earn a fair return if the Commission were to disallow recovery of prudently incurred costs of serving customers.

In the case of this Project, there are any number of factors beyond the control of TGI that could result in cost overruns of varying magnitudes. TGI has made its best efforts, based on currently available information, to identify and assess those risks. With respect to those Project costs within the control of the Company, TGI intends to carefully manage the risks and costs through appropriate project management and the oversight described in the response to BCUC IR 1.104.1. TGI believes that, based on the current evidence, the Project is in the public interest.



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22.0 Reference: FINANCIAL ANALYSIS

Confidential Exhibit B-3, Volume 2A, Tab 1 SAP, Appendix E,

Schedule 4

Exhibit B-10, BCUC IR 1.22.1, p. 74 Exhibit B-10, BCUC IR 1.130.1, p. 306

**Appendix X Detailed Costs and Financial Model** 

"Terasen Gas currently does not have the SAP CRM module installed. The SAP CIS solution proposed by Terasen Gas is comprised of several modules and licenses3 but for the ease of description in the Application, the entire solution is described as "Industry Solution for Utilities – Customer Relationship & Billing (IS-U/RC&B)". The costs associated with the acquisition of the SAP CRM module are included in the financial analysis. The acquisition costs are reflected on line 123 of confidential Appendix X-2-CCE Project – Detailed Project Costs 280809.xls. The implementation costs associated with this module are included in the consulting costs reflected in lines 64 and 68 on the same spreadsheet." (BCUC IR 1.22.1)

"The SAP CIS solution is comprised of a few specific modules. The Company interprets "initial License fee" to mean the initial purchase cost of these modules. These costs for the new SAP CIS can be found on the CCE Project Costs tab of confidential spreadsheet 2 (Detailed Project Costs), on rows 122 to 127. PST applicable to these costs is calculated separately and included as part of row 132." (BCUC IR 1.130.1)

Confidential Exhibit B-3, Volume 2A, Tab 1 SAP, Appendix E, Schedule 4 presents a One-time/Initial License Fee revised 2008-12-03. This fee appears to be double the total of lines 122 to 127 of spreadsheet 2.

Please provide a confidential schedule, containing all the numbers required to balance the Initial License fee from Schedule 4 to the amounts in Spreadsheet 2. On this schedule include relevant line number references. If the items being licensed have changed since 2008-12-03, such as the addition of the CRM module, then provide the cost detail as well as identifying what has changed.

### Response:

This response is provided to the Commission confidentially under separate cover. The information regarding SAP's License Fee is commercially sensitive for SAP.



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23.0 Reference: FINANCIAL ANALYSIS

Confidential Exhibit B-3, Volume 2A, Tab 1 SAP, Appendix E,

Schedule 4

Exhibit B-10, BCUC IR 1.132.1, p. 308

Confidential Exhibit B-10-1, BCUC IR 1.132.1, p. 20 Appendix X Detailed Costs and Financial Model

"Line 147 of Confidential Spreadsheet 2 records the total annual future software maintenance Fee ... and is taken from row 37 of the same spreadsheet."

Ref: Confidential B-10-1, BCUC IR 1.132.1, p. 20

"The SAP annual maintenance fee is based on the information provided by SAP that forms part of Confidential Exhibit B-3 as referenced in the preamble to this question. This fee is however modified in a number of ways from how its cost was presented in Exhibit B-3 to better reflect what the Company believes its future requirements will be. The fee includes the cost of the SAP license, as well as those for Business Objects and Open Text, for which SAP is also the seller."

Ref: Confidential B-10-1, BCUC IR 1.132.1, p. 20

Confidential Exhibit B-3, Volume 2A, Tab 1 SAP, Appendix E, Schedule 4 presents a Year Two maintenance charge revised 2008-12-03. This fee is within \$10,000 of the amount presented in the confidential response to BCUC IR 1.132.1 however, it has been "modified in a number of ways from how its cost was presented in Exhibit B-3 to better reflect what the Company believes its future requirements will be."

23.1 Please confirm line 147 of Confidential Spreadsheet 3, not Spreadsheet 2, records the total annual software maintenance fee.

### Response:

Confirmed. Line 147 (taken from line 37) of Confidential Spreadsheet 3 records the total annual software maintenance fee for the new CIS.

23.2 Please provide a confidential schedule, containing all the numbers required to balance the Year Two maintenance charges from Schedule 4 to the amounts in Spreadsheet 3. Include relevant line number references on the schedule. Please provide the cost detail as well as identifying what has changed in the



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modifications from the cost presented in Exhibit B-3, including the "call centre" reference.

## Response:

This response is provided to the Commission confidentially under separate cover. The information regarding SAP's maintenance fee is commercially sensitive for SAP.



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24.0 Reference: FINANCIAL ANALYSIS

Confidential Exhibit B-4, Appendix U Aspect Software, p. 170

Exhibit B-10, BCUC IR 1.133.2, p. 309

Confidential Exhibit B-10-1, BCUC IR 1.133.2, p. 22

Insourcing Alternative – Terasen

24.1 Please provide a confidential schedule, containing all the numbers required to balance the Aspect costs from page 170 of Confidential Exhibit B-4 to the amounts on lines 295 to 298 of Confidential Spreadsheet 2. Please detail/explain all the other capital costs included on lines 295 to 298, including "software support".

Exhibit B-10, BCUC IR 1.133.2, p. 309 Confidential Exhibit B-10-1, BCUC IR 1.133.2, p. 22

Insourcing Alternative - Terasen

### Response:

This response is provided to the Commission confidentially under separate cover. Details of this response have commercial sensitivity to Aspect, the vendor of the call centre software.



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25.0 Reference: FINANCIAL ANALYSIS

Exhibit B-10, IR 1.113.2 p. 262; BCUC IR 1.120.1, p. 280; BCUC IR

1.64.1, p. 149, Attachment 127.1 Schedules 5&7

Exhibit B-9, BCOAPO IR 1.14.1, p. 26

Exhibit B-4, Confidential Spreadsheet 1 (Financial Model); Table 2.2,

p. 17

Accuracy of levelized cost

In IR 1.113.2 the BCUC asked TGI to provide a supporting calculation for the notional \$71.70 (Exhibit B-4, p. 8) levelized cost of the current customer care contract and was referred to confidential spreadsheet 1 (Financial Model). In summarized form the spreadsheet reflected the following:

As Filed		20 Years
Levelized Cost per Customer- Existing Contract	Costs	812,374,461
	Customers	11,285,168
	Cost/Customer (\$)	\$ 71.99

25.1 The confidential spreadsheet reflects a levelized cost per customer of \$71.99 while the CCE CPCN indicates \$71.70. Please reconcile the two amounts and provided an explanation for the variance. Update confidential spreadsheet 1 if required and recalculate the levelized cost per customer for the current customer care contract.

### Response:

The confidential spreadsheet inadvertently double counted the Banner conversion costs. The revised calculation is as follows:

Levelized Cost per Customer- Existing Contract

20 Years 809,363,768 Costs 11,285,168 Customers \$ 71.70 Cost/Customer (\$)

This updated spreadsheet is provided to the Commission confidentially under a separate cover as Confidential Attachment 25.1. In order to not prejudice dealings and negotiations with other parties TGI needs to maintain confidentiality of the information provided in this response and limit its disclosure.



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The 'Total Cost per Customer' as filed in response to BCUC IR 1.113.1 does not agree with the 'Total Cost per Customer' as filed in confidential spreadsheet 1. The following variances were identified.

<b>Total Custommer Care Costs</b>									
Per IR 1.113.1	62,819,000	64,850,000	66,125,000	66,433,000	67,813,000	69,234,000	70,466,000	72,321,000	73,757,000
As Filed	64,097,777	66,635,962	67,811,900	67,029,852	68,376,757	69,766,031	70,965,666	72,789,021	74,194,145
Difference	(1,278,777)	(1,785,962)	(1,686,900)	(596,852)	(563,757)	(532,031)	(499,666)	(468,021)	(437,145)

25.2 Please reconcile the two amounts and provided an explanation for the variance. Update confidential spreadsheet 1 if required and recalculate the levelized cost per customer for the current customer care contract.

### **Response:**

As noted in the response to BCUC IR 2.25.1, the customer care costs of the existing contract were inadvertently overstated for the period 2012-2015. A revised table is as follows:

Total Existing Customer Care Costs (\$000's)									
	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	2020
Per IR 1.113.1	62,819	64,850	66,125	66,433	67,813	69,234	70,466	72,321	73,757
Revised Schedule 1	62,896	65,504	66,751	67,019	68,377	69,766	70,966	72,789	74,194
Difference	(77)	(654)	(625)	(585)	(564)	(532)	(500)	(468)	(437)

A difference results because Schedule 1 reflects the total cost of service associated with the existing customer care contract so that it can be compared to the CCE CPCN, while the response to BCUC IR 1.113.1 only reflects the operating and maintenance expense of the existing client services agreement.

25.3 If the levelized cost post per customer were updated for the nine years of data provided in response to BCUC IR 1.113.1 would the levelized cost per customer drop by \$.46 per customer to \$71.43 as calculated below?

Table 2.2 Values		20 Years
Levelized Cost per Customer- Existing Contract	Costs	806,126,051
	Customers	11,285,168
	Cost/Customer (\$)	<b>\$</b> 71.43



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### Response:

Yes; however, the figures presented in the response to BCUC IR 1.113.1 reflect only the operating and maintenance expense and exclude other cost of service impacts (as noted in the response to BCUC IR 2.25.2).

As noted in the response to BCUC IR 2.25.1, the revised Schedule 1 figures result in a levelized cost per customer (operating and maintenance expense and other cost of service) of the existing contract of \$71.70 over the 20 year period.

25.4 Please project the expected annual cost of service of the existing customer care function for the years 2013 – 2031 is a similar manner as displayed in Exhibit B-4, Table 2.2, p. 17 and recalculate the levelized cost per customer under the existing contract based on a 20, 10 and 8 year period.

### Response:

Please see the table below for the expected annual operating and maintenance expense of the existing customer care function for the years 2013 -2031 in the format of Table 2.2:

All Customer Care Costs - in \$000s except for cost /customer amounts

	Service Component	2013p	2014p	2015p	2016p	2017p	2018p	2019p	2020p	2021p	2022p
1	Base Contract (CSA)	62,482	63,783	65,090	66,425	67,786	68,952	70,735	72,092	73,335	74,889
2	Other Services	235	239	242	245	248	252	255	259	263	266
3	Scope Changes	130	149	171	197	227	261	300	345	396	456
4	Subtotal	62,847	64,170	65,503	66,867	68,261	69,464	71,290	72,696	73,994	75,611
5	Cost /Customer	64.90	65.67	66.42	67.17	67.93	68.47	69.61	70.32	70.89	71.75
6	Administration	867	892	918	945	973	1,002	1,031	1,061	1,092	1,124
7	Banner & Conversion	<u>1,136</u>	1,063	11							
8	<b>Total Customer Care</b>	64,850	66,125	66,433	67,813	69,234	70,466	72,321	73,757	75,087	76,736
9	Cost /Customer	66.97	67.67	67.36	68.12	68.89	69.46	70.62	71.34	71.94	72.82
	Service Component	2023p	2024p	2025p	2026p	2027p	2028p	2029p	2030p	2031p	
1	Base Contract (CSA)	76,458	78,035	79,668	81,618	83,152	84,931	86,729	88,565	90,406	
2	Other Services	270	274	278	282	286	290	295	299	303	
3	Scope Changes	524	603	693	<u>797</u>	917	1,055	1,213	<u>1,395</u>	1,604	
4	Subtotal	77,252	78,912	80,640	82,697	84,355	86,276	88,236	90,259	92,314	
5	Cost /Customer	72.61	73.46	74.35	75.51	76.28	77.26	78.25	79.26	80.27	
6 7	Administration Banner & Conversion	1,157 -	1,191 -	1,226	1,262 -	1,299 -	1,338	1,377	1,417 -	1,459 -	
8 9	Total Customer Care Cost /Customer	<b>78,410</b> 73.70	<b>80,103</b> 74.57	<b>81,866</b> 75.48	<b>83,959</b> 76.67	<b>85,654</b> 77.46	<b>87,614</b> 78.46	<b>89,613</b> 79.47	<b>91,676</b> 80.50	<b>93,773</b> 81.54	

As noted in the responses to BCUC IR 2.25.2 and BCUC IR 2.25.3, the figures in table 2.2 represent only the operating and maintenance expense associated with the existing customer



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care arrangement and not the entire cost of service. Therefore, including the cost of service impacts as set out in the revised Confidential Spreadsheet 1 and Schedule 7 of Appendix K, the following are the levelized cost per customer amounts for the existing contract based on 20, 10 and 8 year periods.

00 V----

20 Years	
809,363,768	Costs
11,285,168	Customers
\$ 71.70	Cost/Customer (\$)
10 Years	
	Costs
, ,	Customers
\$ 68.88	Cost/Customer (\$)
8 Years	
410,201,703	Costs
6,000,869	Customers
\$ 68.34	Cost/Customer (\$)
\$	809,363,768 11,285,168 \$ 71.70 10 Years 491,674,780 7,135,830 \$ 68.88 8 Years 410,201,703 6,000,869

The levelized cost of service of the existing customer care function, including the amounts provided above for the 8, 10, and 20 year periods, are not comparable with the cost of service of the proposed Project. The cost of service of the existing customer care function does not contain costs necessary to place it on a sustainable footing for the reasons discussed in the Amended Application.

"The incremental capitalized overhead is calculated as sixteen per cent (eight per cent in the accounting changes and IFRS version) of the operating and maintenance expense difference between the existing client services agreement and the proposed customer care enhancement project." (BCUC IR 1.120.1)

25.5 Do the 'Total Customer Care' costs in BCUC IR 1.113.1 reflect TGI's capitalization policy where 16 percent of O&M is capitalized?

### Response:

The customer care costs of the existing arrangement as presented in both BCUC IR 1.113.1 and Appendix K do not include the impacts of capitalized overhead. This is because the



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existing customer care costs are outsourced and capitalized overhead would not apply. Furthermore, Terasen Gas has now removed the impacts of capitalized overhead associated with the CPCN from the financial analysis (please see BCUC IR 2.25.7).

As noted in the responses to BCUC IR 2.25.2 and BCUC IR 2.25.3, the costs reflected in the response to BCUC IR 1.113.1 represent operating and maintenance costs only and do not represent a comprehensive cost of service view.

25.6 If no, why and how would this affect the calculation?

### Response:

Please see the response to BCUC IR 2.25.5.

The impact of applying capitalized overhead to the existing customer care arrangement would decrease O&M expense but would affect rate base as a result of the plant additions associated with the capitalized overhead. Correspondingly, earned return, depreciation expense and tax expense would all be affected by this change. If capitalized overhead was applied to the existing contract, the levelized cost per customer would decrease by approximately \$0.37 to \$71.33 over the 20 year period.

25.7 Please explain how the levelized cost per customer as calculated in the Application is a true comparison of the two alternatives, given that the costs of the current customer care alternative does not take into account the 16 percent capitalization of O&M, and the cost of the proposed customer care alternative only reflects the capitalization of incremental O&M?

### Response:

Although capitalized overhead is not directly applied to CPCN projects, because of the large amount of operating and maintenance expense Terasen Gas had included the impacts of capitalized overhead to reflect the rate impact on customers of the implementation of the CCE CPCN. Upon further consideration, the Company agrees that applying capitalized overhead to the CCE CPCN does not provide for a true comparison of the two alternatives for the purpose of



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evaluating the Project from a cost of service perspective. Therefore, the financial model for the CCE CPCN has been updated to remove the affects of capitalized overhead.

This correction results in an immaterial increase to the levelized cost per customer of the CCE CPCN from \$66.87 to \$66.88. The impact of removing capitalized overhead has a minor impact on the levelized cost per customer because of the offsetting impacts of the change in the annual operating and maintenance expense with the changes in depreciation expense, earned return and tax expense.

Attachment 25.7 includes revised Appendix K financial schedules, which reflect this change.

As discussed in response to previous questions, a comparison of the cost of service of the current function with the cost of service of the proposed Project remains problematic because the cost of service of the existing customer care function does not include costs needed to place it on a sustainable footing for the reasons discussed in the Amended Application. What this comparison does however show, is that the cost of service of the proposed Project is less than the notional cost of the current customer care function. Additionally, the restructured customer care function will provide the Company with greater direct control and flexibility to manage future customer service requirements. This direct control and flexibility will provide a critical means for the Company to be able to more effectively manage the future cost of service of this function.

"The incremental capitalized overhead is also shown on schedule 5 [Revenue Requirement and Rate Impact Analysis] to demonstrate the net incremental operating and maintenance expense, which is a key component of the incremental cost of service associated with the Project."

"For the purposes of the Amended Application, a levelized cost is the average unit cost over the project period discounted to a present value expressed as \$ / GJ or \$ / Customer. The result, a levelized cost per unit, allows for a cost comparison of two or more alternatives." (BCOAPO IR 1.14.1)

25.8 Given that capitalized O&M is not accurately reflected in the levelized cost per customer for either alternative but due to its incremental nature is accurately reflected in the Revenue Requirements impact on schedule 5, would there not be more value in relying on the revenue requirements analysis rather than the levelized cost per customer in determining the cost/ benefits of the Project?



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### **Response:**

Please see the response to BCUC IR 2.25.7 where the Company confirms that the levelized cost per customer has been updated to remove the impacts of the capitalized overhead. This change overcomes the issue of how capitalized overhead was previously reflected in the levelized cost per customer for the two alternatives. Terasen Gas is of the view that both a levelized cost per customer and the revenue requirements analysis should be considered when evaluating the alternatives strictly from a cost perspective because they provide two different perspectives on the issue of the cost of service. However, for the reasons set out below, the difference in the cost of service of the current customer care arrangement and the proposed Project is best illustrated by a levelized cost per customer.

The Amended Application placed a greater emphasis on the levelized cost of service per customer because it is a simpler way of demonstrating the expected difference in the cost of the current arrangement with the cost of the Project. The use of a levelized cost per customer was also emphasised because it helps to capture the economies of scale benefits customers will realize over time as a growing number of customers use services for which costs are largely fixed. In contrast, the revenue requirements analysis does not capture this.

Less emphasis was placed on the revenue requirements analysis in the Amended Application because it is not only more complex to present and it does not capture economies of scale benefits as easily, but also because the timing of when cost savings may be realized is subject to the usual forecast to actuals variances that are associated with any forecast. Notwithstanding the issue of future forecast to actuals variances, the revenue requirements analysis is not more accurate than the levelized cost per customer but rather it is more detailed because it shows the potential timing of when costs savings may be realized.

For these reasons the Company is of the view that its representation in the Amended Application of the difference in the cost of service of the current customer care arrangement and the proposed Project is best illustrated by a levelized cost per customer.

"Given the uncertainty regarding future call types and their volume, it is not possible to complete the calculation of a levelized cost that the Company feels is reasonable. For this reason, an average cost per call in 2013 was calculated instead." (BCUC IR 1.64.1)

25.9 Given that it was not possible to compute a levelized cost per call calculation why does TGI believe that the levelized cost per customer as calculated in the CCE CPCN is robust and can be relied upon?



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### Response:

Levelized cost per call and a levelized cost per customer are unrelated measurements, and the question incorrectly presumes that an issue associated with the reasonable calculation of one invalidates the other.

The preamble to this question does correctly point out the difficulty in determining a reasonable levelized cost per call at this time. Once the Project is implemented in 2012 and the Company has gained experience managing the restructured customer care function it will be in a position to complete such a calculation. An additional challenge that the use of a levelized cost per call presents is the need to compare this cost to the cost per call of the current arrangement. Because the services provided by CWLP are provided as a bundle per the terms of the Client Services Agreement, the Company does not have a way of identifying these call handling costs by themselves. Without this key information it is not possible to complete a meaningful comparison of the levelized cost per call across all alternatives. Additionally, a simple division of the total cost of the current customer care arrangement by the number of calls also does not provide a meaningful result that can be used to complete a reasonable comparison because call handling represents only a portion of the total costs that should be included in such a calculation.

The calculation of a levelized cost per customer does not face the same challenges that the calculation of a levelized cost per call does at this time. The use of a levelized cost per customer is important because it not only helps to overcome our inability to break out the cost of the bundled services provided by CWLP, but it helps to capture the economies of scale benefits customers will realize over time as a growing number of customers use services for which costs are largely fixed. As a result, this measure can be easily used to help better compare Project alternatives. For these reasons, the use of a levelized cost per customer in the Amended Application is the most meaningful way of simply illustrating the cost customers will face in the future as a result of the implementation of the Project.



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26.0 Reference: FINANCIAL ANALYSIS

**Exhibit B-4, Confidential Spreadsheet 1** 

Exhibit B-10, BCUC IR 1.113.1, p. 262; BCUC IR 1.120.8, p. 283

Exhibit B-8, CEC IR 1.1.1, p. 2 Levelized costs – 20 years

Using the data provided in response to BCUC IR 1.113.1, please confirm that the levelized cost per customer for the existing contract would be as follows. If not, please calculate.

Values from IR 1.113.1		20 Years	10 Years	8 Years
Levelized Cost per Customer- Existing Contract	Costs	806,126,051	488,437,062	407,210,254
	Customers	11,285,168	7,135,830	6,000,869
	Cost/Customer (\$)	\$ 71.43	\$ 68.45	\$ 67.86

### **Response:**

Please refer to BCUC IR 2.25.4.

26.2 Please confirm that the levelized cost per customer for the proposed Project is as follows. If not, please calculate.

As Filed		20 Years	10 Years	8 Years
Levelized Cost per Customer of CCE CPCN	Costs	754,646,732	498,434,140	429,607,383
	Customers	11,285,168	7,135,830	6,000,869
	Cost/Customer (\$)	\$ 66.87	\$ 69.85	\$ 71.59

### Response:

The levelized cost per customer of the CCE CPCN has been updated to reflect the removal of capitalized overhead as discussed in the response to BCUC IR 2.25.7. As such the November 10, 2009 Revised Levelized Cost Per Customer of the CCE Project is:



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Levelized Cost Per Customer of CCE CPCN-
November 10, 2009 Revised Financial Schedules

 ed Financial Schedules
 20 Years
 10 Years
 8 Years

 Costs
 754,780,914
 493,384,865
 422,892,805

 Customers
 11,285,168
 7,135,830
 6,000,869

 Cost/Customer (\$)
 \$ 66.88
 \$ 69.14
 \$ 70.47

26.3 Please confirm that the levelized cost per customer for the proposed Project adjusted for IFRS and an increased equity return would be as follows. If not, please calculate.

IFRS & Proposed Equity Return		20 Years	10 Years	8 Years
Levelized Cost per Customer of CCE CPCN	Costs	773,034,025	505,241,780	432,902,721
	Customers	11,285,168	7,135,830	6,000,869
	Cost/Customer (\$)	\$ 68.50	\$ 70.80	\$ 72.14

### Response:

The levelized cost per customer of the CCE CPCN has been updated to reflect the removal of capitalized overhead as discussed in the response to BCUC IR 2.25.7.

Please note that the discounted average customers are different than those noted in BCUC IR 2.26.2 because the nominal WACC, used as the discount rate, has been updated to reflect the change in the equity return.

Levelized Cost Per Customer of CCE CPCN- November 10, 2009

Revised IFRS & Proposed Equity Return	<u>20 `</u>	<u>rears</u>	<u>10</u>	<u>Years</u>	<u>8 Years</u>
Costs	707,5	51,970	478,	189,608	414,097,920
Customers	10,2	288,636	6,	760,094	5,735,595
Cost/Customer (\$)	\$	68.77	\$	70.74	\$ 72.20



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"In terms of the 20 year period of time that the financial analysis was based on, it was selected because it represents the approximate foreseeable duration that the proposed solution will be used as the basis for providing customer care services." (CEC IR 1.1.1)

26.4 Please confirm that the levelized cost per customer for the proposed Project calculated over either an 8 or 10 year period result in additional costs to the ratepayer and it is only the 20 years calculation that results in the proposed Project having a levelized cost per customer lower than the levelized cost per customer under the current contract.

### Response:

Please see the table below for a comparison between the levelized cost per customer as it relates to the CCE CPCN and the Existing Contract and calculated over periods of 20, 10 and 8 years:

Levelized Cost Per Customer of CCE CPCN-							
November 10, 2009 Revised Financial Schedules	<u>20</u>	<b>Years</b>	<u>10</u>	<u> 0 Years</u>		8 Years	
Costs		754,780,914		493,384,865		422,892,805	
Customers	11	,285,168	7	7,135,830		6,000,869	
Cost/Customer (\$)	\$	66.88	\$	69.14	\$	70.47	
Levelized Cost Per Customer of Existing Contract-							
November 10, 2009 Revised Financial Schedules	\$	71.70	\$	68.88	\$	68.34	
Difference	\$	(4.82)	\$	0.26	\$	2.13	

As discussed in the Amended Application, any comparison of the cost of service of the current function with the cost of service of the proposed Project needs to be treated with caution because they are not directly comparable. The notional cost of service of the current function does not include the cost needed to place it on a sustainable footing, which the proposed Project does. Although the costs needed to place the current customer care function on a sustainable footing are unknown, any additional investment in the existing system over the next eight years will increase the levelized costs of that existing system and would not provide the quality and type of service that will be provided by the Project.



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"An amortization period of eight years was deemed reasonable and applied to the forecast deferral account balance because it is consistent with the depreciation period for the majority of the assets associated with this Project" (BCUC IR 1.120.8)

26.5 Given that the amortization and depreciation periods for the majority of the assets associated with the project are eight years please comment on the value of evaluating the project based on a levelized cost per customer calculated over an 8 year period?

### Response:

As discussed in the response to CEC IR 1.1.1, Terasen Gas is of the view that given the nature of the Project and its investment in long-term infrastructure, the most appropriate analysis period is 20 years. While an evaluation of the Project over 8 years is possible, this length of time does not reflect the duration that the proposed strategic sourcing solution will be used as the basis for providing customer care services. The reorganization of the customer care function will not only result in its direct control by the Company combined with an investment in key underlying infrastructure, like the new CIS, but will also provide a service delivery platform that is expected to used to provide customer care services to customers over the long run even though some of the core investments will be depreciated over a much shorter period of time. Regular technical upgrades will be made to all systems for a much smaller cost than the initial implementation requires in order to ensure that the new customer care function is able to provide benefits to customers over approximately 20 years starting in 2012.

Please also refer to the response to BCUC IR 2.31.2.



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27.0 Reference: FINANCIAL ANALYSIS

Exhibit B-10, Attachment 127.1, Schedule 5

Revenue Requirements Impact

Exhibit B-10, Attachment 127.1, schedule 5 calculates the incremental revenue requirement; however, it appears that the Banner conversion cost have not been included. Please re-file schedule 5 to include the Banner conversion costs or provide an explanation.

### Prepared by Commission staff

CONSOLIDATED			1	2		3	4	5	6		7	8	9	10		11
Incremetial Revenu Requiremen	2011		2012	2013		2014	2015	2016	2017	2018		2019	2020	2021		2022
Consolidated Incremential Cost	\$ 3,807	\$	(2,023)	\$ 8,367	\$	6,412	\$ 5,824	\$ 4,332	\$ 2,319	\$	548	\$ (1,615)	\$ (7,739)	\$ (15,237)	\$	(14,569)
Cummuliate Deficit	\$ 3,807	\$	1,784	\$ 10,151	\$	16,563	\$ 22,387	\$ 26,719	\$ 29,038	5	29,586	\$ 27,971	\$ 20,232	\$ 4,995	5	(9,574)
BCUC Proposed Adjustments																
1) Banner Conversion Costs	\$ 1,202	\$	1,132	\$ 1,061	\$	11										
Consolidated Incremential Cost	\$ 5,009	\$	(891)	\$ 9,428	\$	6,423	\$ 5,824	\$ 4,332	\$ 2,319	\$	548	\$ (1,615)	\$ (7,739)	\$ [15,237]	\$	(14,569)
Cummuliate deficit	\$ 5,009	5	4,118	\$ 13,546	5	19,969	\$ 25,793	\$ 30,125	\$ 32,444	5	32,992	\$ 31,377	\$ 23,638	\$ 8,401	5	(6,168)

See attached Excel Spreadsheet for Table

27.1 Please confirm that the peak cumulative deficit of \$33 million occurs in 2018 when the Banner conversion costs are considered?

### Response:

Please refer to Attachment 27.1 for a revised Schedule 5 reflecting the removal of capitalized overhead, as discussed in the response to BCUC IR 2.25.7, as well as the Banner conversion costs.

The revised Schedule 5 demonstrates that a peak cumulative deficit of \$27.4 million occurs in year 7 (2018).

27.2 Is it correct to conclude that ratepayers will receive a benefit from the proposed Project in 2022 after 11 years?

### Response:

Addressing the issue of the timing of when customers will see a net cost savings benefit, customers are expected to see cost savings in 2022 as shown on the revised Schedule 5



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(please see Attachment 27.1) and based on the cost assumptions made in the Amended Application. However, differences between the forecast O&M and actual costs incurred will affect the timing of when these cost saving will occur.

Based on the presently available information, the Company believes that the O&M estimate for delivering the level of customer service contemplated in the Amended Application is reasonable. O&M costs for customer care however may vary from forecast (and likely will, given the length of the forecast period used) due to any number of factors, but (as discussed in the response to BCUC IR 1.123.1), as with every CPCN project, the O&M associated with the customer care function will be assessed in future revenue requirements proceedings at the point where the Company seeks to recover those costs in rates.

27.3 Please confirm that, based on the analysis prepared in Exhibit B-10, Attachment 127.1, schedule 5, if Operating & Maintenance costs were to increase by 10% the impact on revenue requirements would be as follows:

### Prepared by Commission staff

CONSOLIDATED			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
Incremetial Revenu Requiremen	2011	2	012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Sensitivity Analysis																			
10% Increase in Expenses		5	4,453	\$ 4,584	5 4,737	\$ 4,895	\$ 5,060	\$ 5,185	\$ 5,293	\$ 5,463	\$ 5,591	\$ 5,708	\$ 5,857	\$ 6,009	\$ 6,161	\$ 6,320	\$ 6,511	\$ 6,836	\$ 7,014
Incremential Cost of Service	\$ 5,009	5	3,562	\$ 14,012	\$ 11,160	\$ 10,719	\$ 9,392	\$ 7,504	\$ 5,841	\$ 3,848	\$ (2,148)	\$ (9,529)	5 (8,712)	\$ (8,956)	\$ (9,167)	\$ (9,418)	\$ (9,661)	\$ (10,002)	\$ (10,187
Cummuliate Deficit	\$ 5,009	\$	8,571	\$ 22,583	\$ 33,743	\$ 44,462	\$ 53,854	\$ 61,358	\$ 67,199	\$ 71,047	\$ 68,899	\$ 59,370	\$ 50,659	\$ 41,703	\$ 32,536	\$ 23,118	\$ 13,457	\$ 3,455	\$ (6,731
5% Increase in Expenses		\$	2,227	\$ 2,292	\$ 2,368	\$ 2,448	\$ 2,530	\$ 2,592	\$ 2,646	\$ 2,731	\$ 2,796	\$ 2,854	\$ 2,929	\$ 3,004	\$ 3,081	\$ 3,160	\$ 3,255	\$ 3,418	\$ 3,507
Incremential Cost of Service	\$ 5,009	\$	1,336	\$ 11,720	\$ 8,791	\$ 8,272	\$ 6,862	\$ 4,911	\$ 3,194	\$ 1,116	\$ (4,944)	\$ (12,383)	\$ (11,640)	\$ (11,960)	\$ (12,248)	\$ (12,578)	\$ (12,917)	\$ (13,420)	\$ (13,694
Cummuliate Deficit	\$ 5,009	5	6,345	\$ 18,064	\$ 26,856	\$ 35,128	\$ 41,990	\$ 46,901	\$ 50,096	\$ 51,212	\$ 46,269	\$ 33,886	\$ 22,245	\$ 10,286	\$ (1,962)				

See attached Excel Spreadsheet for Table

### Response:

Please refer to Attachment 27.3; the table above has been updated to reflect the revised Schedule 5 as noted in the response to BCUC IR 2.27.1.

Please also refer to the response to BCUC IR 2.28.1 for a discussion of future O&M costs, including how they were estimated and how they will be managed in the future. Based on this discussion, the Company is of the view that unfavourable O&M cost variances of the magnitude suggested in this question are not reasonable. Terasen Gas also notes that approximately 90% of future O&M costs are comprised equally of internal labour and for services that continue to be outsourced. Given the new collective agreement the Company negotiated establishes labour rates for an initial period and that where TGI is continuing to outsource some transactional activities cost is known with relative certainty, this does not support the likelihood that additional future O&M costs of the magnitude suggested in the question are a reasonable assumption.



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The Company also observes that future cost pressures would be from the same factors that outsourcers also face. Customers would also face the consequent risk from such cost pressure if significant components of the new customer care function were outsourced, although a contractual arrangement may shield them from this for a period of time. As a result, it would not be correct to attribute all such cost increases solely to the Project.

27.4 Please confirm that if O&M costs were to increase by 10% the peak cumulative deficit would more than double to \$71 million in 2019 and ratepayers would not see a benefit until 2028.

### Response:

Please refer to Attachment 27.3. Based on the revised Schedule 5 as noted in the response to BCUC IR 2.27.1, the peak cumulative deficit is \$66.8 million in 2019 and ratepayers experience a cumulative benefit in 2029 when the forecast O&M costs are increased by 10%. Please also refer to the response to BCUC IR 2.28.1 for a discussion of future O&M costs, including how they were estimated and how they will be managed in the future. Based on this discussion, the Company is of the view that unfavourable O&M cost variances of the magnitude suggested in this and earlier questions are not reasonable.

The Company observes that outsourcers face similar factors that drive cost pressure. Customers would also face the consequent risk from such cost pressure if significant components of the new customer care function were outsourced, although a contractual arrangement may shield them from this for a period of time. As a result, it would not be correct to attribute all cost increases solely to the Project.

Further, Terasen Gas does not agree with the premise implied in this question that "benefits" to customers only take the form of a cost savings or that a cost reduction is the most critical benefit to customers. As discussed in the response to BCUC IR 2.28.1, although cost is always an important consideration in evaluating the merits of any Project, the Company is of the view that a more critical benefit of the Project is the placement of the customer care function on a sustainable footing. Importantly for customers, this benefit will be achieved immediately when the Project is implemented in 2012 and not at some later date. Achieving this benefit will enable significantly greater flexibility in the future management of the customer care function than what is possible today. The Company believes this flexibility is essential to the efficient management of this function in the future, so that new services can be introduced or existing services reconfigured quickly and cost effectively.



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27.5 Please confirm that if O&M costs were to increase by 5% the peak cumulative deficit would rise to \$51 million in 2019 and ratepayers would not see a benefit until 2024.

### Response:

Please refer to Attachment 27.3. Based on the revised Schedule 5 as noted in the response to BCUC IR 2.27.1, the peak cumulative deficit is \$46.9 million in 2019 and ratepayers experience a cumulative benefit in 2025 when the forecast O&M costs are increased by 5%. As noted in the response to BCUC IR2.27.3, given that approximately 90% of future O&M costs are comprised equally of internal labour and for services that continue to be outsourced whose costs are known with relative certainty, this does not support the likelihood that additional future O&M costs of the magnitude suggested in the question are a reasonable assumption.

Please also refer to the response to BCUC IR 2.27.4 for a discussion of the management of future O&M costs.



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28.0 Reference: FINANCIAL ANALYSIS

Exhibit B-8, CEC IR 1.5.11, p. 16; CEC IR 1.5.10, p. 15; CEC IR 1.11.1, p. 29

Exhibit B-10, Attachment 127.1, Schedule 5 & 7; BCUC IR BCUC 1.67.3 p. 155; BCUC IR 1.83.1 p. 190; IR 1.100.2, p. 2; BCUC IR 1.62.1.2 p. 143; BCUC IR 1.17.3.1 p. 62; BCUC IR 1.8.3, p.p. 22-23;; BCUC IR 1.141.1, p. 328; BCUC IR, 1.21.2 p. 72

Exhibit B-9, BCOAPO IR 1.9.2, p. 21 Exhibit B-7, CWLP IR 1.3.4(d), p. 10

**Future O&M Costs** 

"Terasen Gas cannot quantify specific support cost reductions until the enhanced self serve options are implemented and we can more accurately forecast customer adoption of this communication channel. The most likely area of cost reduction will be labour where the Company has the greatest flexibility. Assuming significant adoption of self serve, potential cost reductions would also be available related to equipment and facilities assuming the infrastructure was not required for other TGI operations or that new products and initiatives were not required that may offset the reduction." (Response to CEC IR 1.5.11)

"Realistically, depending on customer adoption of self serve, it may be possible over the very long term to see a 30% to 40% drop in call volumes. Through a flexible staffing model and normal call centre attrition, reductions of this magnitude over the long term would be able to be accommodated." (BCUC IR 1.67.3)

28.1 Over the next 20 years have the anticipated benefits of a reduction in call volumes been included in the levelized cost per customer or in the incremental revenue requirements calculation on schedules 7 & 5?

### **Response:**

The following response is intended to address not only BCUC IR 2.28.1 but also questions BCUC IR 2.28.2, 2.28.3, 2.28.3.1, 2.28.3.2, 2.28.4, 2.28.6, 2.28.7, 2.28.8, 2.28.9, 2.28.10, 2.28.13, 2.28.14, and 2.28.15. All of these questions relate to the expected level of future O&M costs after 2011, including their sensitivity to change given a potential increased use of self-service options by customers and the implementation of additional functionality to provide other services, or current services differently, in the future.

This response is structured to first provide an overview of the primary benefit to be delivered by the Project, followed by a discussion of the Company's view of the purpose of the future O&M costs included as part of the Amended Application in evaluating the merits of the Project. A discussion then follows describing how Terasen Gas approached estimating the future O&M



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cost of the restructured customer care function. The Company's approach to managing future O&M costs will also be discussed in recognition of the importance of the effect that the level of future O&M costs has on customers' rates. Specific issues raised in the questions referenced above will then be addressed where additional discussion is required.

The key benefit of the Project is that it will place the customer care function on a sustainable footing. A significant aspect associated with this benefit is the implementation of systems that are highly configurable, which will allow for more efficient service improvements using the Company's own employees. This benefit will be immediately realized upon the implementation of the Project in 2012. The reason why this benefit is critical is described in summary form in the responses to BCUC IR 1.37.1 and to CWLP IR 1.8.1. Achieving this benefit will enable significantly greater flexibility and direct control in the future management of the customer care function than what is possible today. The Company believes this flexibility and control is essential to the efficient management of this function in the future, so that new services can be introduced or existing services reconfigured quickly and cost effectively. This flexibility and control is also important because they are required to help efficiently manage both future capital requirements needed to enable new functionality not included in this Application and to efficiently manage future O&M costs.

TGI believes that it is important to keep in mind that the cost analysis provided in this Amended Application has been included primarily for the purposes of evaluating the Project against the notional cost of maintaining the current customer care model; TGI is not seeking to recover costs in rates at this time. Thus, the most important consideration in the context of a CPCN application is that the Project is being considered on a comparable basis to the current arrangement so as to yield a true picture of the incremental savings associated with the Project. TGI has included in its analysis factors that are known at this time. Changing external circumstances not accounted for in the analysis, but that necessitate future changes under the proposed Strategic Sourcing model, would generally also have to be addressed under any outsourcing arrangement and result in changed costs.

Although the primary benefit of the Project is placing the customer care function on a sustainable footing, TGI recognizes that customers are very interested in the Project cost. The Company has provided an estimate of Project O&M costs after 2011 in the Amended Application in order to allow for a comparison of the notional cost of maintaining the existing customer care function (excluding the cost of upgrades that would be necessary) with the cost of the restructured customer care function described in the Amended Application. The Project cost estimates are comprehensive and only exclude estimates where unknown new functionality may need to be supported or where service changes may need to be made in the future. The financial analysis indicates that the cost of the restructured customer care function will be less than the notional cost of the existing customer care function when considered over a 20 year period, even though the Company plans to provide a level of service in 2013 that is improved over what customers receive today. Terasen Gas recognizes that there is always going to be a



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risk that future O&M may be different than what is included in the Amended Application, as the future cannot be predicted with absolute certainty. However, based on currently available information, the Company believes that the estimate of O&M included in the Amended Application is reasonable and appropriate.

The O&M costs included in the Amended Application for the period after 2011 when the Project is implemented are based on the assumption that the Company continues to not only provide a level of service in 2012 that is similar to what customers receive today, but will also provide a number of service improvements. The Company has not attempted to include estimated costs or savings associated with future changes in the new customer care function that cannot be reasonably estimated at this time. For clarity, the Company does not believe that this approach leaves costs related to the provision of services as described in the Amended Application unknown or excluded. The only costs not included in the Amended Application are those related to how services may need to change in response to how customers may want these services delivered in the future. Such changes and their cost impact are simply too speculative at this time to accurately identify.

The Company intends to actively manage customer care costs in the future. Key in this regard is the Company's business casing process whereby the cost of new functionality or services needs to be formally justified before such changes are approved. Additionally, the Company's forecasted customer care costs will be scrutinized in future revenue requirement proceedings at the point where the Company seeks to recover those costs from customers in rates. The 2012 Revenue Requirements Application, for instance, will review the Company's forecast O&M costs for 2012, once the final detailed design of the restructured customer care function is completed and when anticipated customer adoption rates of additional self service options and alternative contact channels are expected to be better understood. The future cost of the new customer care function will be a key change that will be included in such proceedings and provide oversight by the Commission and invervenors in a manner not possible under the terms of the current customer care arrangement.

The following additional observations apply in particular reference to the questions this response addresses.

• In completing its estimate of future O&M costs, the Company assumed no increase in the number of call centre employees over time even though customer contact activities will increase as the total number of customers served by Terasen Gas grows over time. The efficiency improvement implied in this approach is included in the Amended Application and in schedules 7 and 5. However, the O&M cost estimate does not identify specific future O&M cost savings that may arise from such changes as the increased adoption of self service by customers or any other change in how services are delivered. Specific to BCUC IR 2.28.1, cost savings arising specifically from a reduction in call volumes have not been included in the 20-year levelized cost



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per customer or in the incremental revenue requirements calculation included in schedules 7 and 5 that form part of the Amended Application. Such changes and their cost impact are simply too speculative at this time to accurately identify. Not factoring in these potential savings represents a conservative approach to estimating these costs.

- In specific response to BCUC IR 2.28.2, the Amended Application does include an appropriate level of future O&M costs that the Company believes will be needed to meet the proposed service levels. Additionally, the Company expects that future efficiency savings will help to offset incremental costs that may be needed to meet any refinement of service level requirements, except possibly where a need for significantly different service levels is identified. What such significant changes may be are unknown at this time and excluded for that reason. The costs associated with such changes will be business cased separately and assessed in a future regulatory proceeding.
- In specific response to BCUC IR 2.28.3 and 2.28.6, the Company does not anticipate specific new functionality or requirements by the two call centres at this time but believes it is reasonable to assume that something will be required as is typical over an extended period of time in response to changing consumer and business demands. The cost of such requirements has not been included in the 20-year levelized cost per customer or in the incremental revenue requirements calculation for the reasons discussed earlier. Although the specific operating cost to support the new communications channels are not known with sufficient certainty at this time, the Company assumed in the Amended Application that this cost will be accommodated within the level of future estimated O&M. The Company expects that costs associated with additional changes in functionality will be business cased separately and will also be assessed in a future regulatory proceeding (i.e. revenue requirements proceeding, application for approval of an expenditure schedule, or CPCN depending on the circumstances).
- In specific response to BCUC IR 2.28.7 and 2.28.8, although the Company believes that the number of employees staffing the call centres may be adjusted in response to changing service needs after 2012, the savings or costs of such changes have not been included in the 20-year levelized cost per customer or in the incremental revenue requirements calculation for the reasons discussed earlier. However, as also discussed earlier the Company included efficiency improvements that are implied based on assuming no increase in the number of call centre employees over time even though the number of customer contact activities will increase as the total customers served by the Company grows over time.



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- In specific response to BCUC IR 2.28.9 and 2.28.10, the future O&M costs after 2011 are based on providing not only generally a similar level of service as what customers receive today but also include a number of service improvements that are currently not provided. This specifically means that the estimated future O&M cost includes the requirements to meet the metrics described in the Amended Application. However, any savings arising from meeting the service metrics set out in the Amended Application, or additional costs arising from needing to meet higher services levels than those set out in the Amended Application, have not been included in the 20-year levelized cost per customer or in the incremental revenue requirements calculation for the reasons discussed earlier.
- In specific response to BCUC IR 2.28.13 and 2.28.14, future O&M costs after 2011 do not include the potential need to accommodate any regulatory, legislative, or operational changes and have not been included in the 20-year levelized cost per customer or in the incremental revenue requirements calculation for the reasons discussed earlier. The Company believes, however, that such costs will be largely or entirely avoided given that the proposed systems are highly configurable and that such changes will be completed using the Company's own employees.
- In specific response to BCUC IR 2.28.15, there are no other future O&M costs that the Company is aware of at this time that have not been included in the Amended Application on the basis that the amounts are too speculative to estimate.

The Company believes that the use of the forecast O&M costs is an appropriate tool for allowing comparison of the cost of the Project with the notional costs of maintaining the existing model. Based on the presently available information, Terasen Gas believes that the O&M estimate for delivering the level of customer service contemplated in the Amended Application is reasonable. O&M costs for customer care may vary from forecast (and likely will, given the length of the forecast period used) due to any number of factors, but (as discussed in the response to BCUC IR 1.123.1), as with every CPCN project, the O&M associated with the customer care function will be assessed in future revenue requirements proceedings at the point where the Company seeks to recover those costs in rates.

"To the degree that these channels [call centre]require enhancement or configuration over time "To the degree that these channels [Call Centre] require enhancement or configuration over time to expand on the tools required by customers to meet changing customer expectations or increased self serve functions, additional costs may be required. Any additional future enhancements would be subject to the Company's standard business case and approval processes." (BCUC IR 1.17.3.1)



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28.2 Given the sensitivity of the revenue requirement calculation to a 5 or 10 percent change in projected O&M costs why has TGI considered it appropriate not to include costs they anticipate will be incurred to achieve the level of service they are proposing to provide in the Application?

### Response:

Please refer to the response to BCUC IR 2.28.1.

"If Terasen Gas decides to upgrade to a newer version of the software [Call Centre] based on new functional functions or features, it is the expectation that this upgrade would be business cased separately." (BCUC IR 1.83.1)

28.3 Does TGI anticipate that new functional features or requirements in the call centre will be required any time in the next 20 years?

#### Response:

Please refer to the response to BCUC IR 2.28.1.

28.3.1 If yes, have they been included in the levelized cost per customer on schedule 7, or in the incremental revenue requirement calculation on schedule 5?

#### Response:

Please refer to the response to BCUC IR2.28.1.

28.3.2 If no, please explain.

#### Response:

Please refer to the response to BCUC IR 2.28.1.



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"The new communications channels will not be enabled until January 1, 2012. The extent of the efficiencies will be dependent on customer adoption rates, which at this time are unknown. Excluding these anticipated efficiencies produced a more conservative benefits analysis for this Application. Any efficiencies would be more appropriately handled through a future revenue requirements/rate setting process." (BCUC IR 1.62.1.2)

"Terasen Gas has not determined at this time the specific cost structure for each channel that the Company expects to support. Although the new communications channels including email, online chat, and enhanced customer self serve are part of the inherent functionality of the call centre technology the Company proposes to implement, it does not use these channels today and therefore the operations costs of supporting these channels cannot be determined at this time. For the purposes of completing the Amended Application, the cost of the current traditional voice channel was used as the baseline to estimate call centre costs." (CEC IR 1.5.10)

28.4 Please confirm that traditional voice channel cost have been used to calculate the estimated future O&M cost over the next 20 years?

# Response:

Confirmed. Please see the response to BCUC IR 2.28.1.

In the Application TGI has stated that ratepayers are no longer happy with the traditional voice channel options currently offered by CWLP; however, these costs have been used to determine the levelized cost per customer in the Application. Please confirm that the ongoing O&M cost for the call center do not reflect all the additional cost required to provide customers with the services TGI is proposing to provide?

#### Response:

Before addressing the specific question, TGI is not aware of having stated "that ratepayers are no longer happy with the traditional voice channel". As discussed in Exhibit B-4, Section 3 and BCUC IR 1.11.1, 1.17.1 and 1.17.2, TGI has noted ongoing change in the delivery of customer service as a result of technological advancements and shifts in consumer behaviour. The Company has also detailed customer interest in alternate communication channels noting that different groups of customers will have different channel preferences. The voice channel will continue to be a preference for certain customer segments.



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The question, which seeks confirmation that "the ongoing O&M cost for the call center do not reflect all the additional cost required to provide customers with the services TGI is proposing to provide", appears to implicitly assume that the O&M costs will necessarily be higher than estimated if customers adopt other service channels over time. This is not an appropriate assumption for two reasons.

First, as discussed in BCUC IR 1.17.3.1, the costs of enabling these additional channels are inherent in the CCE Project, they do not represent incremental costs in addition to the Project costs.

Second, although the ongoing costs to provide these new services are unknown at this time, the ongoing costs associated with the traditional telephone channel tend to be higher than delivering other channels because they are more labour intensive. As customers move to other service channels, this should, all else equal, result in a lower O&M cost than what has been assumed in the Amended Application. Thus, assuming, for the purposes of the Amended Application, that costs of all delivery channels were equal to the cost of the traditional voice channel represents a conservative assumption.

28.6 TGI has stated that although the O&M costs to support these channels will be required they cannot be determined at this time and therefore have not been included in the analysis. Given the sensitivity of the revenue requirement calculation to a 5 or 10 percent change in projected O&M costs why has TGI considered it appropriate not to include costs they anticipate will be incurred to achieve the level of service they are proposing to provide in the Application?

### Response:

Please refer to the response to BCUC IR 2.28.1.

"For the purposes of the analysis in the Amended Application, Terasen Gas assumed that no changes to the number of FTEs would be required in 2013, 2014 and 2015. The Company believes that an increase or decrease in costs to address future business changes such as an increased number of customers or operational efficiencies is best addressed through a Revenue Requirements process." (BCUC IR 1.100.2)



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28.7 Please confirm that although the Company anticipates increasing or decreasing the number of FTE it has not been reflected in the levelized cost per customer calculation on schedule 7 or on the incremental revenue requirements calculation on schedule 5.

# Response:

Please refer to the response to BCUC IR 2.28.1.

28.8 Given the sensitivity of the revenue requirement calculation to a 5 or 10 percent change in projected O&M costs why has TGI considered it appropriate not to include costs they anticipate will be incurred to achieve the level of service they are proposing to provide in the Application?

### Response:

Please refer to the response to BCUC IR 2.28.1.

"In 2012 Terasen Gas will support the existing metrics as defined in the Client Services Agreement while working to define a new structure and new metrics going forward. After one year of operating under the new model, Terasen Gas will incorporate the learning taken from the first year of operations as well as the best practices in the utilities industry at that time and implement new metrics that more accurately and completely measure both customer service quality and operational efficiency." (BCUC IR 1.8.3)

"During 2012, the Company plans to work to achieve the current service metrics as defined in the Client Services Agreement. Beginning in 2013, new metrics will have been confirmed and reporting processes established to ensure that the defined metrics can be measured as required. Any costs incurred to change these metrics, including for example an increase in staffing in order to achieve a higher level of service in a specific area, would be addressed in future revenue requirements proceedings." (BCUC IR 1.141.1)

28.9 Please confirm that costs incurred to meet the proposed metrics have not been included in the levelized cost per customer on schedule 7 or the incremental revenue requirement calculation on schedule 5.



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# Response:

Please refer to the response to BCUC IR 2.28.1.

28.10 Given the sensitivity of the revenue requirement calculation to a 5 or 10 percent change in projected O&M costs why has TGI considered it appropriate not to include costs they anticipate will be incurred to achieve the level of service they are proposing to provide in the Application?

### Response:

Please refer to the response to BCUC IR 2.28.1.

"It should be noted however, that depending on the requirements associated with what is ultimately decided as the appropriate automated meter reading solution for Terasen Gas, additional software may be required to meet those specific requirements. This will be determined through the business casing process for an automated meter reading solution for Terasen Gas. Any additional costs would be the responsibility of the automated meter reading business case." (BCUC IR 1.21.2)

28.11 Would it be correct to conclude that ratepayers can anticipate additional costs for the adoption of an automated meter reading solutions which have not been reflected in the Application?

#### Response:

TGI can confirm that the costs and savings associated with an automated meter reading solution have not been factored into the estimates put forward as part of this Amended Application. Alternative meter reading solutions to replace the current arrangement will be addressed in a separate Application if and when a decision has been made to pursue automated meter reading. It is premature to conclude one way or the other at this time whether the implementation of an automated meter reading solution will result in incremental costs to customers or net cost savings relative to the present meter reading arrangement.

It is appropriate to consider costs associated with a meter reading solution separately from this Project. The SAP CIS proposed in this Amended Application will accommodate any meter reading solution as part of its off-the-shelf package; it is indifferent to how the data is obtained. Please see the response to BCUC IR 2.10.1 for further explanation.



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"Terasen Gas did not perform an independent labour force assessment related to billing and back office operations."

"Until 2002 Terasen Gas performed the billing and back office functions in the Lower Mainland for the interior customer base, approximately 270,000 customers at that time with 28 staff. Extrapolating this to the current customer base of 930,000 customers provided an initial staffing estimate of 96."

28.12 Terasen is relying on the estimated future O&M costs to support the \$66.87 levelized cost per customer used to support its position; however, it appears that the estimated number of employees required is an unsophisticated estimate and could potentially be much higher or lower and would impact the levelized cost per customer calculation on schedule 7 and the revenue requirements impact on schedule 5. Given the sensitivity of revenue requirements to a 5 or 10 percent change in projected O&M costs how certain is TGI of the future estimated O&M costs?

### Response:

The quotations in the preamble are from the response to BCUC IR 1.100.2, in which the Company explained why, unlike call centres, no independent labour force assessment is applicable to back office functions where business processes and activity volumes are driven by the supporting technologies and interfaces and individual company policies. TGI carefully examined its labour requirements related to back office operations, with an eye to the Companyspecific technologies and interfaces planned through this initiative and the policies, procedures and service quality expectations that will be in place. An element of this examination involved a reality check against both the staff complement in 2002 (referenced in the preamble) and TGI's understanding of the staff complement currently employed by Accenture to provide services to TGI. Contributing to this assessment was an analysis of current back office transaction volumes related to billing, payment, meter reading and collections activities as well as the types of configuration decisions that would allow the Company to optimize the efficiency of back office operations. These "reality check" assessments suggested that TGI's internal assessments were reasonable. Terasen Gas believes that its internal analysis of the labour requirements to manage the billing and back office processes is sufficiently robust to be confident that it provides a reasonable estimate of future O&M costs associated with this function. While the estimate may change during the blueprinting phase, the Company has no reason to believe at this time that this estimate is either unreasonably higher or lower than what it has prepared.



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"The Company is not currently aware of any specific regulatory, legislative or operational requirements that would not be able to be handled through this Project. TGI expects that, realistically, there will be at least some changes required to the technology and organization put in place as part of this Project in the next decade in response to unforeseen changes in customer needs or the Company's operating environment. It would be too speculative to provide cost estimates for unforeseen changes. The Company believes that the combined technologies and in-sourced solution proposed in this Application will provide the best platform for handling any changes in the future as efficiently and cost effectively as possible." (BCOAPO IR 1.9.2)

"Once Terasen Gas implements its new system in 2012, any changes necessitated by legislation or regulation could result in additional charges." (CWLP IR 1.3.4(d))

28.13 Please confirm that even though the Company believes that there will be some regulatory, legislative or operational changes required over the next twenty years they have not been included in the Project analysis because it would have been too speculative to estimate the expense?

# Response:

Confirmed. Please refer to the response to BCUC IR2.28.1.

28.14 Given the sensitivity of the revenue requirement calculation to a 5 or 10 percent change in projected O&M costs why has TGI considered it appropriate not to include costs they anticipate will be incurred to achieve the level of service they are proposing to provide in the Application?

#### Response:

Please refer to the response to BCUC IR 2.28.1.

28.15 Are there any other cost that TGI feels are likely to be required that have not been included because the amount is too speculative to estimate?

#### Response:

Please refer to the response to BCUC IR 2.28.1.



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When asked "Does Terasen expect there is a risk that ongoing annual operating and maintenance costs will exceed its estimates?" The response was "Terasen Gas believes it has presented a realistic estimate of the effort and cost to support the proposed CCE Project. Having said that, it is not possible to identify and therefore mitigate all risks that could occur.

"The Company expects that O&M costs commencing in 2012 and beyond will be the subject of future revenue requirements applications." (CEC IR 1.11.1)

28.16 Please confirm that the projected O&M cost as outlined in schedules 5 & 7 are a significant factor in calculating the incremental revenue requirements and the levelized cost per customer.

CONSOLIDATED			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
Incremetial Revenu Requiremen	2011	2	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Sensitivity Analysis																			
10% Increase in Expenses		\$	4,453	\$ 4,584	\$ 4,737	\$ 4,895	\$ 5,060	\$ 5,185	\$ 5,293	\$ 5,463	\$ 5,591	\$ 5,708	\$ 5,857	\$ 6,009	\$ 6,161	\$ 6,320	\$ 6,511	\$ 6,836	\$ 7,014
Incremential Cost of Service	\$ 5,009	5	3,562	\$ 14,012	\$ 11,160	\$ 10,719	\$ 9,392	\$ 7,504	\$ 5,841	\$ 3,848	\$ (2,148)	\$ (9,529)	\$ (8,712)	\$ (8,956)	\$ (9,167)	\$ (9,418)	\$ (9,661)	\$ (10,002)	\$ (10,187)
Cummuliate Deficit	\$ 5,009	\$	8,571	\$ 22,583	\$ 33,743	\$ 44,462	\$ 53,854	\$ 61,358	\$ 67,199	\$ 71,047	\$ 68,899	\$ 59,370	\$ 50,659	\$ 41,703	\$ 32,536	\$ 23,118	\$ 13,457	\$ 3,455	\$ (6,731)
5% Increase in Expenses		\$	2,227	\$ 2,292	\$ 2,368	\$ 2,448	\$ 2,530	\$ 2,592	\$ 2,646	\$ 2,731	\$ 2,796	\$ 2,854	\$ 2,929	\$ 3,004	\$ 3,081	\$ 3,160	\$ 3,255	5 3,418	\$ 3,507
Incremential Cost of Service	\$ 5,009	\$	1,336	\$ 11,720	\$ 8,791	\$ 8,272	\$ 6,862	\$ 4,911	\$ 3,194	\$ 1,116	\$ (4,944)	\$ (12,383)	\$ (11,640)	\$ (11,960)	\$ (12,248)	\$ (12,578)	\$ (12,917)	\$ (13,420)	\$ (13,694)
Cummuliate Deficit	\$ 5,009	\$	6,345	\$ 18,064	\$ 26,856	\$ 35,128	\$ 41,990	\$ 46,901	\$ 50,096	\$ 51,212	\$ 46,269	\$ 33,886	\$ 22,245	\$ 10,286	\$ (1,962)				

See attached Excel Spreadsheet for Table

#### Response:

Yes, the future O&M cost of the restructured customer care function is one of a number of significant inputs used to calculate the incremental revenue requirements and levelized cost per customer of the Project. However, Terasen Gas does not agree with the premise implied in this question based on the spreadsheet extract that future O&M costs will necessarily be higher than the estimated level included in the Amended Application. Please see the response to BCUC IR2.28.1 and 2.28.17 for a further discussion of this issue.

28.17 Given the uncertainty around the projected O&M cost as noted above would it be fair to conclude that it is likely that over the next 20 years O&M cost could be 10 percent greater than anticipated and could result in ratepayers not seeing a benefit until 2028?

#### Response:

The premise of the question appears to be that the primary or only benefit of the Project is cost savings. The Company is of the view that a key benefit associated with the implementation of the Customer Care Enhancement Project is the placement of the customer care function on a



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sustainable footing over the long term. This is discussed in the response to BCUC IR 2.28.1. This benefit, as well as the benefits discussed in Exhibit B-4, Section 4.5.2.1 and 4.5.2.2, will be realized in 2012 when the Project is fully implemented. This benefit is critical because it in turn enables the Company to deliver improved service levels and gain the flexibility to efficiently implement future service changes and improvements. TGI believes that the estimated cost savings is an outcome of the restructuring of the current customer care function, but it is not the primary driver for the Project.

The response to BCUC IR 2.28.1 discusses in detail the approach the Company took in determining the estimated future O&M costs for the period after 2011. In that discussion the Company set out its belief that its O&M cost estimate based on the initial functionality and service levels anticipated in the Amended Application is reasonable and likely to be conservative.



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29.0 Reference: FINANCIAL ANALYSIS

Exhibit B-8, CEC IR 1.6.1, p. 18

Levelized Cost per Customer

"...the graph provided in Appendix K of the Amended Application illustrates the annual levelized cost of service per customer and not the nominal annual cost of service per customer. The annual levelized cost of service per customer that is presented in the graph is calculated by determining the present value of the projected cost of service for each year of the analysis period and then dividing that cost by the forecast average number of customers for the same year. In this case, the number of customers is not discounted in any way."

"In contrast, the levelized \$67.50 [revised to \$66.87] cost per customer completes the same present value calculation of the cost of service and then completes a similar present value calculation to discount the forecast total average number of customers. The sum of the present value amounts of the cost of service divided by the sum of the present value amounts of the customer count yields a single levelized cost of service per customer for the entire Project. That single amount does not appear on the graph referenced in the question above. A single levelized cost per customer was used to illustrate the cost of the entire Project because it allows for a simple comparison of the cost of different scenarios. The key conclusion drawn from this comparison is that the cost to implement and operate the proposed customer care function is less than the notional cost of the current function."

29.1 If the levelized cost per customer of \$66.87 is calculated using the discounted present values of the projected costs over the discounted average number of customers, why is this graph not calculated in the same way? What is the value of this graph?

#### Response:

The response to CEC IR 1.6.1 incorrectly described the way in which the average customer figures are used in the graph for Appendix K. The graph in Appendix K is correctly calculated using the discounted average number of customers for each year; it is a graphical representation of the annual levelized cost of service as calculated on line 62 of Schedule 7.

The response to CEC IR 1.6.1 should have stated:

"The annual levelized cost of service per customer that is presented in the graph is calculated by determining the present value of the projected cost of service for each year



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of the analysis period and then dividing that cost by the forecast discounted average number of customers for the same year."

Given that the graph in Appendix K was correctly calculated, it has not been refiled as part of this response.

29.2 Please file the same graph using a discounted numerator and denominator as used to calculate the \$66.87 levelized cost per customer.

# Response:

Please refer to the response to BCUC IR 2.29.1.



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30.0 Reference: FINANCIAL ANALYSIS

Exhibit B-10, Attachment 80.1; Attachment 127.1

Capital Lease

In the capital lease/operating lease analysis in Attachment 80.1 the income tax expense is different under each alternative. Given that all leases are considered operating leases for tax purposes why is the tax expense different under each alternative?

2012

# Response:

The tax expense is different because of the depreciation and equity return components of the capitalized lease. The tax expense calculation for both alternatives includes the same lease payment, lease interest amount and CCA deduction as shown below:

# **Calculation of Lease Tax Expense (\$ Million)**

	2012
Operating Lease	
Tax Expense	
Equity Return	0.13
Lease Interest	0.84
Lease Payment	(1.70)
Depreciation Expense	0.50
Capital Cost Allowance	(0.25)
Taxable Income after Tax	(0.49)
Taxable Income	(0.65)
Current Tax Rate	25%
Tax Expense	(0.16)
Capital Lease	
Tax Expense	
Equity Return	0.42
Lease Interest	0.84
Lease Payment	(1.70)
Depreciation Expense	1.67
Capital Cost Allowance	(0.25)
Taxable Income after Tax	0.98
Taxable Income	1.30
Current Tax Rate	25%
Tax Expense	0.33



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30.2 Please confirm that the schedules filed in Attachment 127.1 are prepared under the assumption of a capital lease.

### Response:

Confirmed.

30.3 Please confirm that the annual lease payments are \$1.7 million.

# Response:

Confirmed, the forecast annual lease payment included in the financial model is \$1.7 million. The financial model will be updated to reflect the negotiated actual annual lease payment once it is available.

30.4 Please explain how the 'Earned Return' is derived on the operating lease option in Attachment 80.1?

# Response:

The earned return is calculated based on the mid year rate base associated with the forecast Leasehold Improvement additions in 2011 and 2021. The rate of return applied to the mid year rate base is comprised of TGI's approved equity return, financing associated with the lease obligation and a minor component of short term debt.

Line	Operating Lease	2012	Comments
1	Mid Year Rate Base	4.23 Le	easehold Mid Year Balance (GPIS + Accumulated Depreciation)
2			
3	Equity Return Component	2.97% A <sub>l</sub>	oproved TGI ROE x Approved TGI Equity Ratio
4	Lease Financing	19.88% Et	fective rate associated with Lease obligation
5	Short Term Debt	-0.28% SI	nort Term Rate x Short Term Ratio (adjusted to account for lease obligation)
6	Return on Lease Rate Base	22.57%	
7			
8	Earned Return	0.95 Li	ne 1 x Line 8



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30.5 Does the analysis in Attachment 80.1 include furniture & fixtures and leasehold improvements that would be treated the same way under either option?

#### Response:

Yes.

30.6 Please prepare Attachment 80.1 to include only the lease payment expense for the operating lease option and the capitalization of lease payments for the capital lease option. Do not include any leasehold improvements or furniture & fixtures in the analysis.

### Response:

Please refer to Attachment 30.6.

30.7 Please file Attachment 127.1, schedules 5 and 7 under the assumption of an operating lease and a capital lease as calculated in IR 2.30.5.

### Response:

The response was calculated based on the assumption that the question preamble intended to reference BCUC IR 2.30.6 and not BCUC IR 2.30.5. The response has also been updated to reflect the revision to capitalized overhead as noted in BCUC IR 2.25.7. The Company is of the view that a capital lease is the appropriate treatment of the proposed lease of the building that will house the Lower Mainland call centre for the reasons discussed in the Amended Application.

Please refer to Attachment 30.7.



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31.0 Reference: FINANCIAL ANALYSIS

Exhibit B-8, CEC IR 1.1.1, p. 2

**Depreciation Period** 

"Terasen Gas is of the view that the depreciation period it has used for determining the cost of service for the Project is reasonable and appropriate for the recovery of the Project costs. With the exception of the depreciation of the new CIS where it may be possible to extend its depreciation period by two years, the depreciation period of all other Project capital costs are bound by current accounting standards. The proposed depreciation period set out in the Amended Application ensures recovery over the useful life of the assets. It will ensure that current customers largely pay for an asset from which they will receive most of the benefit."

(CEC IR 1.1.1, p. 2)

31.1 Please confirm that the depreciation period is base on the useful lives of the assets?

#### Response:

Yes, the depreciation rates applied in the financial model are based on the useful lives of the assets as determined for accounting purposes; however, the life estimates and depreciation rates will require periodic review to ensure that they remain appropriate.

31.2 If the useful lives of all the assets are between 8 and 10 years is there a provision in the analysis to reflect the total replacement cost of all these assets at the end of their useful life? If no, please explain?

### Response:

The 20 year financial analysis does not include a provision for the total replacement cost of all of the assets after they are fully depreciated. This was not done because regular technical upgrades of the major systems will ensure that these assets will remain useful for a much longer period than the accounting treatment allows for. The cost of these regular technical upgrades is included in the financial analysis and affects most importantly, the new SAP based CIS platform. Other upgrades that would provide for additional functionality will be business cased separately following the standard process followed by the Company. This approach to upgrading the Company's major systems has been used successfully in ensuring that the SAP based financial system that was implemented 10 years ago, and continues in service for the foreseeable future, remains useful for a much longer period of time than the accounting treatment allowed for.



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"In order to ensure that the initial investment in the new CIS platform will continue to be useful over this period, recurring capital investment will be required on a regular basis." (CEC IR 1.1.1, p. 2)

31.3 Have all the recurring capital investments that may be required on a regular basis been included in the levelized cost per customer?

# Response:

Yes, confirmed.

31.4 Given the levelized cost per customer is discounted would it be correct to conclude that the reoccurring capital investment should be estimated at their expected future cost at the time of replacement and not in 2009 or 2012 dollars?

#### Response:

The recurring capital investment that was used in the analysis was estimated at their expected future cost at the time of replacement and is not in either 2009 or 2012 values. Although the dollar amount remains unchanged over time for this recurring capital investment, it was assumed that industry efficiency improvements, especially for such requirements as hardware replacements, will reduce this cost over time. As a result these amounts do not need to be inflated. That reduction in the cost that this approach implies is reflected in the analysis.

What dollars has been used in the calculation of the levelized cost per 31.5 customer relating to future replacement of assets?

#### Response:

The 20 year analysis assumed that \$450,000 for CIS system upgrades would be required every 8 years; \$900,000 for CIS and call centre server hardware replacements every 5 years; \$1.4 million for call centre and billing and back office operations desktop and printer hardware



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replacements every 5 years; and \$3.6 million for call centre and billing and back office operations furniture and fixtures replacements every 8 years.

As indicated in the response to BCUC IR 2.31.4, although the dollar amount of these recurring investments does not change over time, it was assumed that industry efficiency improvements will reduce this cost over time and that as a result these amounts do not need to be inflated.



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32.0 Reference: FINANCIAL ANALYSIS

Exhibit B-10, BCUC IR 1.114.4, pp. 265-266

**IFRS** 

"The Company prepared this Application under currently approved accounting practices, an approach that is typically followed in preparing these types of Applications. Specific to this Application, this approach is important for two reasons:

- 1. In this Application, Terasen Gas wanted to demonstrate the impact of the Customer Care Enhancement Project independently of any accounting changes, so that the real impact of the Project could be understood;
- 2. Terasen Gas believes that the issues related to the timing of adoption and treatment of IFRS changes for regulatory purposes should be largely confined to the RRA."
- 32.1 Would the REAL impact of the project not be better represented under IFRS given that the levelized cost per customer for the existing customer care contract will be the same under either current GAAP or IFRS and IFRS will be mandatory in 2012?

#### Response:

Should the changes to accounting policies that are reflected in the accounting changes and IFRS view be accepted as part of the TGI RRA Decision, then the accounting changes and IFRS view would better represent the levelized cost per customer. Once the TGI RRA Decision is finalized, TGI will determine whether the changes result in a material impact on the accounting changes and IFRS view, and if required will file an amendment.



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33.0 Reference: MISCELLANEOUS

**Exhibit B-10, BCUC IR 1.137.2**Alternative Programs and Products

"The customer care training costs for the period of the financial analysis is included within the financial model provided with the Amended Application."

As requested in BCUC 1.137.2, provide the dollar amount of the customer care training costs by year for 2012-2031, also provide the spreadsheet, tab and cell references to the amounts in the financial analysis included in the financial model provided with the Amended Application.

#### Response:

The training costs estimated for the restructured customer care function for 2012 to 2031 are provided in the following table. Labour costs are not included as a separate training cost because the time required to train new and existing employees is not considered an incremental cost. Labour costs will not be significantly impacted by the amount of training planned for customer care employees.



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# **BCUC IR2.33.1**

# All Call Centre Customer Care Training Costs - Future Estimated O&M

1		<u>x-ref</u>	2012	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	2018	2019	2020	2021
2	Instructional Designer (HR)	Conf spreadsheet 2 - line 17	133,150	137,144	141,259	145,496	149,861	154,357	158,988	163,758	168,670	173,730
3	Consulting	Conf spreadsheet 2 - included as part of line 95	53,060	54,122	55,204	56,308	57,434	58,583	59,755	60,950	62,169	63,412
4	Training Expenses	Conf spreadsheet 2 - included as part of line 98	130,131	132,733	135,388	138,096	140,858	143,675	146,548	149,479	152,469	155,518
5	Total		316,341	323,999	331,851	339,900	348,153	356,615	365,291	374,186	383,308	392,661
1		<u>x-ref</u>	2022	2023	2024	2025	2026	2027	2028	2029	2030	<u>2031</u>
1 2	Instructional Designer (HR)	<u>x-ref</u> Conf spreadsheet 2 - line 17	<u>2022</u> 178,942	<u>2023</u> 184,311	<u>2024</u> 189,840	<u>2025</u> 195,535	<u>2026</u> 201,401	<u>2027</u> 207,443	<u>2028</u> 213,666	<u>2029</u> 220,076	<u>2030</u> 226,679	<u>2031</u> 233,479
1 2 3	Instructional Designer (HR) Consulting						· · · · · · · · · · · · · · · · · · ·					
1 2 3 4	0 ( )	Conf spreadsheet 2 - line 17	178,942	184,311	189,840	195,535	201,401	207,443	213,666	220,076	226,679	233,479



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As indicated in the cross references provided in the table, these costs are included as part of future ongoing O&M required by the restructured customer care function. These costs are included as part of the costs in row 116 of the "Input" tab of the financial model.



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34.0 Reference: MISCELLANEOUS

Exhibit B-10, BCUC IR 1.138.3; BCUC IR 1.138.4

Alternative Programs and Products

"To account for the costs to serve the new AES customers, the Company has proposed, as part of the RRA of both TGI and TGVI, that as part of each AES cost of service ("COS"), an incremental 5% will be added to the capital cost of the AES project to account for the incremental overhead associated with service to that customer (this includes items such as sales and market development costs). In addition the ongoing O&M for the AES customer such as billing, metering and CIS activities would be part of the AES COS. The Company also expects that where requirements for new functionality to serve alternative energy customers result in an incremental cost, that cost will be recovered only from those customers and not from existing customers." (BCUC IR 1.138.3)

34.1 Please provide the analysis used to determine that 5 percent of the capital cost of an AES project is the appropriate overhead rate.

# Response:

The issue canvassed in this question is a subject matter of the TGI Revenue Requirement Application. The Company respectfully submits that the RRA is the most appropriate forum in which to address this issue.

34.2 Given the difference in capital cost and complexity of natural gas compression and refueling installations, biogas capture and upgrading systems and integrated energy solutions (geo-exchange, solar thermal, and district energy systems) why is an incremental 5 percent overhead rate for all AES projects appropriate?

#### Response:

The issue canvassed in this question is the subject matter of the TGI Revenue Requirement Application. The Company respectfully submits that the RRA is the most appropriate forum in which to address this issue.



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"The Company currently provides a billing service that is used by Terasen Energy Services for the monthly billing of a number of resorts. The cost to provide this service follows the requirements set out in the Transfer Pricing Policy." (BCUC IR 1.138.4)

34.3 Please provide 2008-2011 the costs by year recovered from Terasen Energy Services for providing monthly billing of a number of resorts.

# Response:

The actual and projected costs by year recovered from Terasen Energy Services for providing monthly resort billing are as follows:

2008 - \$19,519.63 (partial year).

2009 - \$42,968.36 (projected).

2010 - \$43,827.73 (projected).

2011 - \$44,704.28 (projected).



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35.0 Reference: MISCELLANEOUS

Exhibit B-10, BCUC IR 1.139.2 2009 TGI/TGVI EEC Decision

Order G-36-09

Demand Side Management ("DSM")

"The only DSM program that has been supported through the outsourcing arrangement is the Energy Star Heating Upgrade Program. Using 2008 as a representative year, the customer care costs to support this program were \$4,773 for system configuration, \$32,331 for inbound call handling, and \$19,643 for application handling and bill credit processing. All other DSM programs have been handled in-house with customer contact handled internally by Terasen DSM and Technical Sales and Support and Account Management staff, all of whom are very knowledgeable of the program offerings, payment processing handled by Terasen Accounts Payable staff, and participation tracking handled by Terasen DSM and Technical Sales Support staff using spreadsheets. Costs of these activities are not tracked by individual program, activity and resource."

35.1 Please provide the in-house cost of handling 2008 DSM programs.

#### Response:

In-house costs of handling 2008 DSM programs were comprised of the Company's labour costs to process applications, track and report participation in Excel spreadsheets, and send out cheques to program participants. Total labour costs for all DSM programs for 2008 were \$397,000. This figure includes all categories of labour cost including program administration associated with handling DSM programs, as in-house costs for program administration have not historically been tracked separately from other labour costs associated with DSM such as program design and evaluation.

Will any of the DSM programs approved in the 2009 TGI/TGVI EEC Decision be supported through the outsourcing arrangement? If yes, please provide the 2009-2010 the outsourcing arrangement costs by year.

#### Response:

It should be noted that the EEC Decision did not specifically approve any DSM programs, nor any budget or aspect of any budget, such as outsourcing associated with any DSM program.



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Rather, the Decision accepted at a high level the Companies' proposals for expenditures for various program areas.

The only DSM program that has been supported through the outsourcing arrangement with CustomerWorks is the Energy Star Heating Upgrade Program. This program is slated to end December 31, 2009. Estimated total costs for administering this program through 2009 are estimated to be similar to those for 2008, for a total of approximately \$57,000.

The new programs that will be implemented as a result of the EEC Decision are in the design stage at the time of writing, and no final decisions have been taken as to the administration processes for these programs; however, it is not anticipated at this time that any of the new programs will be supported by CustomerWorks.

Please provide the in-house cost of handling DSM programs approved in the 2009 TGI/TGVI EEC Decision by year for 2009-2010.

### Response:

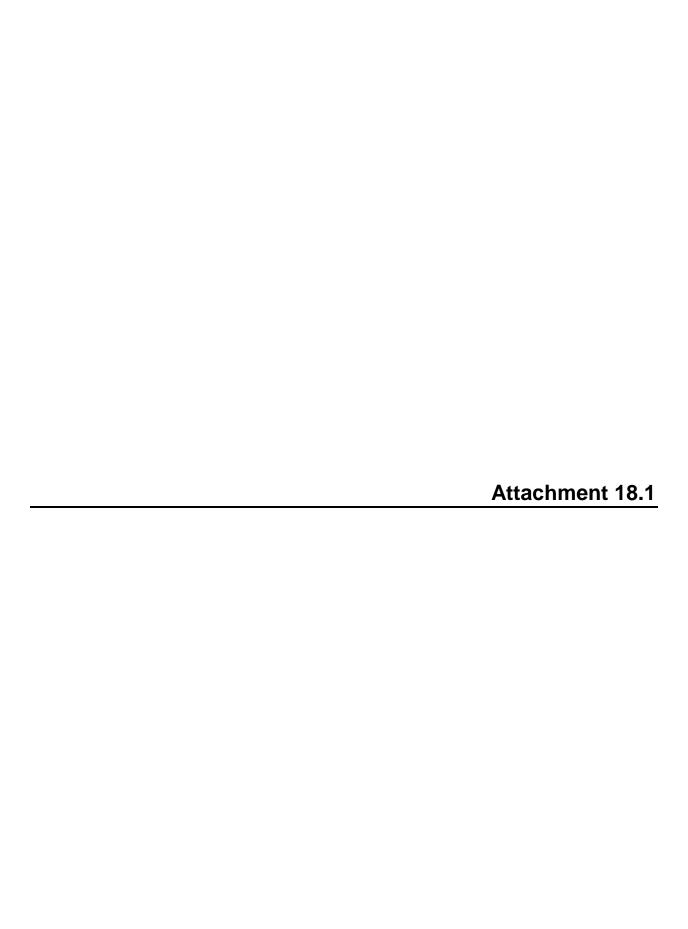
As noted in the response to BCUC IR 2.35.1, the Companies' in-house costs for program handling are primarily labour costs. Total labour costs for 2009 are estimated to be approximately \$848,000. This would include costs for program administration, however these have not historically been broken out from other labour costs associated with DSM.

As noted in the response to TGI RRA BCUC IR 2.66.3, an estimate has been made for costs for "design, administration and reporting" for 2010. Costs for these labour categories for programs approved in Order G-36-09 were \$3.583 million in 2010 out of a total projected EEC expenditure for 2010 of approximately \$23 million.

35.4 If the in-house cost of handling DSM programs are not tracked by individual program, activity and resource how will costs be allocated to various DSM programs for evaluation purposes?

### Response:

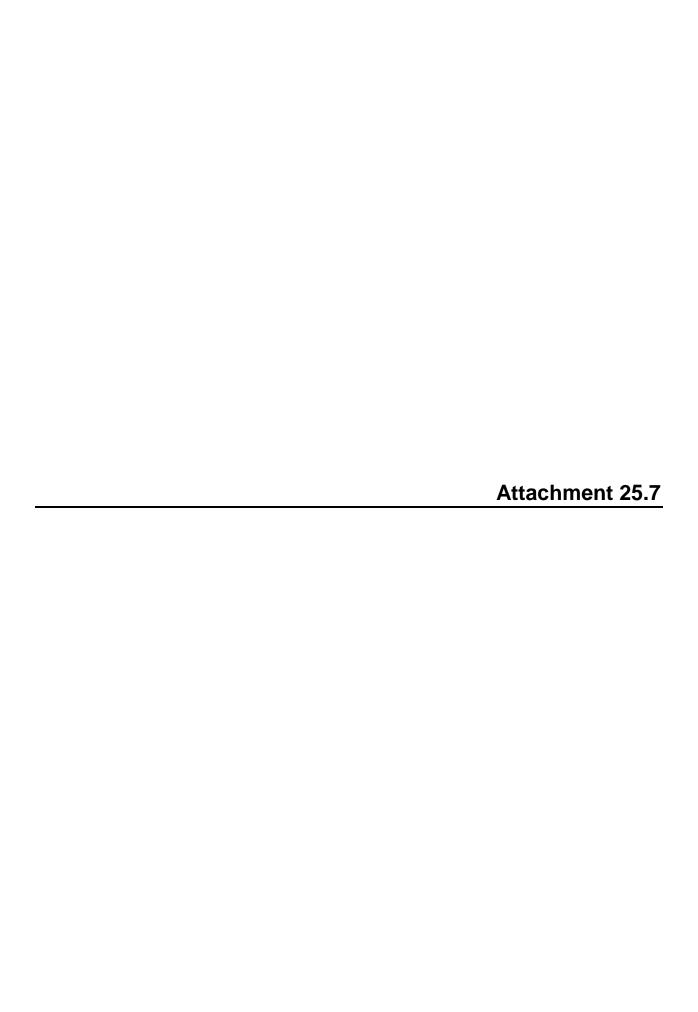
Effective October 1, 2009, the Companies implemented a system to report DSM costs by activity and program. Moving forward, new expenditures approved in Order G-36-09 will be allocated to various DSM programs for evaluation purposes.



#### Customer Care Enchancement CPCN Total Cost of Service

November 10, 2009 Revised

	2012	2013	2014	2015	2016	2017	2018	2019	2020
CIS Software									
CCE Customer Care O&M Costs	906	906	906	906	906	906	906	906	906
Overhead Capitalized	-	-	-	-	-	-	-	-	-
Amortization	-	-	-	-	-	-	-	-	-
Depreciation	-	739	654	654	654	654	654	654	654
Income Tax Expense	(86)	191	261	254	247	241	234	227	221
Property Tax	-	-	(2)	10	9	9	9	8	8
Earned Return	169	400	320	270	220	170	119	69	19
Total Cost of Service	989	2,236	2,139	2,095	2,037	1,980	1,922	1,865	1,807
CIS Implementation & Maintenance									
CCE Customer Care O&M Costs	1.758	2.147	2.179	2,212	2,247	2,284	2,342	2.401	2.463
Overhead Capitalized	-,	_,	_,	_,	_,	_,	_,0	_,	_,.00
Amortization	_	_	_	_	_	_	_	_	_
Depreciation	859	6,809	6,120	6,120	6,120	6,120	6,086	6,086	5,277
Income Tax Expense	(688)	1,761	2,364	2,320	2,270	2,176	2,081	2,039	1,732
Property Tax	(000)	(2)	14	114	106	103	98	92	87
Earned Return	1,829	3,597	2,890	2,419	1,949	1,513	1,078	626	203
Total Cost of Service	3,759	14,312	13,567	13,185	12,692	12,195	11,685	11,245	9,762
Call Cantra									
Call Centre									
Lower Mainland	7.040	7.500	7.000	0.040	0.570	0.704	0.000	0.000	0.440
CCE Customer Care O&M Costs Overhead Capitalized	7,643 -	7,539 -	7,869 -	8,213 -	8,573 -	8,784 -	9,000	9,220 -	9,446 -
Amortization	360	360	360	360	360	360	360	360	-
Depreciation	2,731	2,728	2,714	2,714	2,714	2,643	2,643	2,643	1,862
Income Tax Expense	761	895	857	797	698	581	524	154	(13)
Property Tax	-	32	17	17	14	13	10	6	3
Earned Return	1,872	1,654	1,413	1,177	969	763	533	366	243
Total Cost of Service	13,368	13,209	13,231	13,279	13,328	13,145	13,070	12,749	11,541
Interior									
CCE Customer Care O&M Costs	7,228	7,117	7,409	7,713	8,031	8,211	8,396	8,584	8,777
Overhead Capitalized	- ,	-	-	-	-	-,	-	-	-
Amortization	324	324	324	324	324	324	324	324	_
Depreciation	1,067	1,078	1,064	1,064	1,064	1,045	1,045	1,045	425
Income Tax Expense	275	438	458	460	429	399	411	136	88
Property Tax		3	3	4	3	4	3	1	0
Earned Return	1,247	1,155	1,044	937	857	776	671	625	616
Total Cost of Service	10,141	10,115	10,302	10,503	10,707	10,759	10,850	10,716	9,906
Billing Operations									
CCE Customer Care O&M Costs	26,998	28,125	29,006	29,909	30,844	31,665	32,286	33,517	34,318
Overhead Capitalized	20,990	20,123	29,000	29,909	30,044	31,003	32,200	33,317	34,310
Amortization	- 281	- 281	- 281	- 281	281	281	- 281	- 281	-
Depreciation	1,008	1,138	1,110	1,110	1,110	1,033	1,033	1,033	- 254
Income Tax Expense	309	492	510	499	487	448	435	421	254 59
Property Tax	309	492	(84)			(81)		(83)	(85)
Earned Return	- 766	704	(84) 587	(87) 481	(87) 374	(81) 270	(80) 169	(83) 68	(85) 8
Total Cost of Service	29,363	30.744	31,410	32,193	33,007	33,616	34,124	35,236	34,554
Total Gost of Gervice	23,303	30,7 44	31,410	JZ, 13J	55,007	55,010	J <del>T</del> , 12 <del>4</del>	55,250	UT,UU4
Average Cost per Customer	60.04	72.93	72.30	72.19	72.04	71.29	70.58	70.07	65.31



Financial Schedule 1

# Customer Care Enhancement Project- November 10, 2009 Revised Estimated Project Implementation Costs in \$000s

TGI Component	Reference	<u>Total</u>	2009	2010	2011	2012
Capital - CIS Implementation						
1 Consulting		33,782	862	12,944	16,439	3,537
2 Internal Labour		6,543	-	2,453	3,444	646
3 Expenses		9,145	-	1,283	6,350	1,512
4 Software		5,823	-	4,885	938	-
5 Hardware	_	996	<u> </u>	731	265	<u> </u>
6 Subtotal		56,289	862	22,296	27,436	5,695
Capital - Services Insourcing						
7 Consulting		29,892	770	3,564	21,056	4,502
8 Internal Labour		4,209	-	1,622	2,587	-
9 Facilities		7,821	-	1,207	6,614	-
10 Expenses		163	163	-	-	-
11 Software		1,193	-	605	588	-
12 <u>Hardware</u>	_	2,235	<u>-</u>	<u> </u>	2,235	<u>-</u>
13 Subtotal		45,513	933	6,998	33,080	4,502
Total Plant Additions						
14 CIS		56,289	862	22,296	27,436	5,695
15 Service Insourcing		45,513	933	6,998	33,080	4,502
16 Subtotal		101,803	1,795	29,294	60,517	10,197
17 AFUDC		3,239	-	919	2,320	-
18 Total Plant Additions	x-ref S3b, (2010 column, lines 25 + 237 + 449) + lines 37 + 249 + 461	105,042	1,795	30,213	62,837	10,197
Deferred O&M						
19 Internal Labour		9,210	-	77	9,133	-
20 Expenses		867	-	-	867	-
21 Subtotal	x-ref S3b, lines 203 + 415 + 627	10,077			10,000	-
22 AFUDC	x-ref S3b, lines 207 + 419 + 631	31 <u>6</u>	-	2	314	0
23 Total Deferred O&M	·	10,393	-	79	10,314	-
24 Capital Lease		6,677	50	104	6,523	
25 Total		122,112	1,845	30,395	79,674	10,197

Financial Schedule 2

Customer Care Enhancement Project- November 10, 2009 Revised
Estimated Customer Care O&M Costs in \$000s, Except Cost /Customer Amounts

	Reference	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
1 Labour				20,289 20,309	20,343 21,480	21,218	22,132	23,088	23,628	24,180	24,746	25,326	25,920	26,529 27,241	27,152	27,791	28,445	29,116 30.748	29,802 31.447	30,506	31,227	31,966 34,285	32,723
2 Outsourced Services 3 Technology Support 4 Facilities Support				20,309 1,479 3,189	1,464 3,253	22,069 1,448 3.318	22,669 1,433 3.384	23,287 1,418 3,452	23,921 1,402 3.521	24,351 1,407 3,591	25,386 1,412 3.663	25,987 1,417 3,736	26,464 1,422 3.811	27,241 1,427 3.887	28,021 1,432 3,965	28,799 1,438 4.044	29,622 1,443 4,125	30,748 1,448 4.208	31,447 1,454 4.292	32,380 1,459 4,378	33,319 1,465 4,465	34,285 1,470 4.554	35,243 1,476 4.646
5 Expenses				970	998	1,018	1,038	1,059	1,080	1,102	1,124	1,146	1,169	1,193	1,217	1,241	1,266	1,291	1,317	1,343	1,370	1,397	1,425
6 Total				46,237	47,538	49,071	50,657	52,303	53,552	54,632	56,332	57,613	58,786	60,276	61,787	63,313	64,901	66,810	68,312	70,066	71,846	73,673	75,513
7 Ave Customers				959,757	968,338	977,113	986,272	995,548	1,004,941	1,014,455	1,024,090	1,033,849	1,043,735	1,053,749	1,063,895	1,074,174	1,084,589	1,095,142	1,105,836	1,116,674	1,127,658	1,138,791	1,150,075
8 Cost /Customer				48.18	49.09	50.22	51.36	52.54	53.29	53.85	55.01	55.73	56.32	57.20	58.08	58.94	59.84	61.01	61.77	62.75	63.71	64.69	65.66

\*Note- Total costs include annual lease payment of \$1.7 million; the revenue requirement includes this as a capital lease and therefore it is accounted for through depreciation, tax and earned return.

	Reference	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
TGI	Kelerence	2010	2011	2012	2010	2014	2010	2010	2017	2010	2013	2020	2021	ZUZZ	2020	2024	2020	2020	ZUZI	2020	2023	2000	2001
Opening Gas Plant In Service	S3b, line 87	-	-	36,788	93,643	93,643	93,643	93,643	92,887	92,725	92,725	68,601	12,701	12,689	12,680	12,680	12,680	12,680	13,056	12,596	12,596	12,596	12,596
2 Additions	S3b, line 100	-	36,788	56,855	-	-	-	1,236	793	-	3,555	-	1,224	785	-	-	-	1,599	3,880	-	-	-	1,196
3 Retirements	S3b, line 113		-	-	-	-	-	(1,992)	(955)	-	(27,679)	(55,899)	(1,236)	(793)	-	-	-	(1,224)	(4,339)	-	-	-	(1,210)
4 Closing Gas Plant In Service	S3b, line 126	-	36,788	93,643	93,643	93,643	93,643	92,887	92,725	92,725	68,601	12,701	12,689	12,680	12,680	12,680	12,680	13,056	12,596	12,596	12,596	12,596	12,582
5																							
6 Opening Accumulated Depreciation	S3b, line 139	-	-	-	(3,958)	(15,094)	(26,230)	(37,367)	(46,511)	(56,540)	(67,493)	(50,767)	(2,804)	(2,518)	(2,672)	(3,617)	(4,563)	(5,508)	(5,230)	(1,882)	(2,815)	(3,749)	(4,682)
7 Depreciation	S3b, line 165	-	-	(3,958)	(11,136)	(11,136)	(11,136)	(11,136)	(10,985)	(10,953)	(10,953)	(7,937)	(950)	(947)	(945)	(945)	(945)	(945)	(991)	(933)	(933)	(933)	(933)
8 Retirements	S3b, line 152		-	-	-	-	-	1,992	955	-	27,679	55,899	1,236	793	-	-	-	1,224	4,339	-	-	-	1,210
9 Closing Accumulated Depreciation	S3b, line 178	-	-	(3,958)	(15,094)	(26,230)	(37,367)	(46,511)	(56,540)	(67,493)	(50,767)	(2,804)	(2,518)	(2,672)	(3,617)	(4,563)	(5,508)	(5,230)	(1,882)	(2,815)	(3,749)	(4,682)	(4,405)
10																							
11 Opening Contributions in Aid of Construction	S3b, line 190	-	-	(3,525)	(13,333)	(19,973)	(19,973)	(19,973)	(19,973)	(19,973)	(19,973)	(16,892)	(7,133)	(494)	(494)	(494)	(494)	(494)	(542)	(535)	(485)	(485)	(485)
12 Additions	S3b, line 191	-	(3,525)	(9,808)	(6,640)	-	-	-	-	-	(444)	(49)	-	-	-	-	-	(49)	(437)	-	-	-	-
13 Retirements	S3b, line 192		-	-	-	-	-	-	-	-	3,525	9,808	6,640	-	-	-	-	-	444	49	-	-	
14 Closing Contributions in Aid of Construction	S3b, line 193	-	(3,525)	(13,333)	(19,973)	(19,973)	(19,973)	(19,973)	(19,973)	(19,973)	(16,892)	(7,133)	(494)	(494)	(494)	(494)	(494)	(542)	(535)	(485)	(485)	(485)	(485)
15																							
16 Opening Amortization of Contributions in Aid of Construction	S3b, line 195	-	-	-	441	2,107	4,604	7,100	9,597	12,094	14,590	13,562	5,865	117	179	241	302	364	426	49	67	127	188
17 Amortization	S3b, line 196	-	-	-	-	-	-	-	-	-	(3,525)	(9,808)	(6,640)	-	-	-	-	-	(444)	(49)	-	-	-
18 Retirements	S3b, line 197	-	-	441	1,667	2,497	2,497	2,497	2,497	2,497	2,497	2,111	892	62	62	62	62	62	68	67	61	61	61
19 Closing Amortization of Contributions in Aid of Construction	S3b, line 198	-	-	441	2,107	4,604	7,100	9,597	12,094	14,590	13,562	5,865	117	179	241	302	364	426	49	67	127	188	249
20																							
21 Opening Net Plant In Service		-	-	33,263	76,793	60,684	52,044	43,404	36,001	28,305	19,849	14,504	8,629	9,794	9,694	8,810	7,926	7,042	7,709	10,229	9,362	8,490	7,617
22 Closing Net Plant In Service		-	33,263	76,793	60,684	52,044	43,404	36,001	28,305	19,849	14,504	8,629	9,794	9,694	8,810	7,926	7,042	7,709	10,229	9,362	8,490	7,617	7,940
23																							
24 Mid Year Net Plant in Service	(line 21 + line 22)/2	-	16,632	55,028	68,738	56,364	47,724	39,703	32,153	24,077	17,177	11,566	9,211	9,744	9,252	8,368	7,484	7,376	8,969	9,796	8,926	8,053	7,778
25																							
26 Opening Deferred Charges	S3b, line 202	-	51	6,879	6,019	5,159	4,299	3,440	2,580	1,720	860	-	-	-	-	-	-	-	-	-	-	-	-
27 Additions	S3b, line 205	51	6,828	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28 Amortization	S3b, line 206	-	-	(860)	(860)	(860)	(860)	(860)	(860)	(860)	(860)	-	-	-	-	-	-	-	-	-	-	-	-
29 Closing Deferred Charges	S3b, line 208	51	6,879	6,019	5,159	4,299	3,440	2,580	1,720	860	-	-	-	=	-	-	-	-	-	-	-	-	-
30																							
31 Mid Year Deferred Charges		-	-	6,449	5,589	4,729	3,870	3,010	2,150	1,290	430	-	-	-	-	-	-	-	-	-	-	-	-
32 Capital Lease Rate Base		-	14,114	12,605	11,102	9,603	8,111	6,623	5,141	3,665	2,194	730	13,838	12,355	10,877	9,406	7,941	6,482	5,030	3,584	2,145	713	-
33 13 Month Adjustment (row 211, S3b)	S3b, line 211	-	-	(5,820)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34																							
35 TGI Rate Base	x-ref S3b, line 212		30,745	68,263	85,429	70,696	59,705	49,335	39,444	29,032	19,801	12,296	23,050	22,099	20,129	17,774	15,425	13,858	13,999	13,380	11,071	8,767	7,778

## Customer Care Enhancement Project- November 10, 2009 Revised

Rate Base Summary in \$000s
\* Note- the revenue requirement and tax expense amount showing in 2011 are for financial model purposes only; as requested in the CPCN Application from June 2, 2009, all costs prior to January 1, 2012 will be captured in an AFUDC earning non-rate base deferral account.

		Reference	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
TGVI																								
	ening Gas Plant In Service	S3b, line 299	-		4,360	11,117	11,117	11,117	11,117	11,041	11,032	11,032	8,237	1,593	1,605	1,613	1,613	1,613	1,613	1,687	1,697	1,697	1,697	1,697
37 Addi		S3b, line 312	-	4,360	6,757	-	-	-	160	104	-	484	-	173	113	-	-	-	246	607	-	-	-	201
	irements	S3b, line 325		-	-	-	-	-	(237)	(113)	-	(3,280)	(6,644)	(160)	(104)	-	-	-	(173)	(597)	-	-	-	(186)
39 Clos 40	sing Gas Plant In Service	S3b, line 338	-	4,360	11,117	11,117	11,117	11,117	11,041	11,032	11,032	8,237	1,593	1,605	1,613	1,613	1,613	1,613	1,687	1,697	1,697	1,697	1,697	1,711
41 Oper	ening Accumulated Depreciation	S3b, line 351	-	-	-	(469)	(1,791)	(3,114)	(4,436)	(5,521)	(6,715)	(8,020)	(6,046)	(357)	(323)	(346)	(475)	(605)	(734)	(691)	(233)	(375)	(516)	(658)
42 Depr	reciation	S3b, line 377	-	-	(469)	(1,322)	(1,322)	(1,322)	(1,322)	(1,307)	(1,305)	(1,305)	(956)	(125)	(128)	(129)	(129)	(129)	(129)	(140)	(142)	(142)	(142)	(142)
43 Retir		S3b, line 364	-	-	-	-			237	113	-	3.280	6.644	160	104	,	,	` -'	173	597	` -′	` _	` -′	186
44 Clos 45	sing Accumulated Depreciation	S3b, line 390	-	-	(469)	(1,791)	(3,114)	(4,436)	(5,521)	(6,715)	(8,020)	(6,046)	(357)	(323)	(346)	(475)	(605)	(734)	(691)	(233)	(375)	(516)	(658)	(613)
	ening Contributions in Aid of Construction	S3b. line 402		_	_	_	_	_		_	_	_	_		_	_	_	_	_	_	_	_	_	_
47 Addi		S3b, line 403		_	_		_	_	_	_	_	_	_		_	_	_	_	_		_	_	_	_
48 Retir		S3b, line 404		_	_	_	_	_	_	_	_	_	_		_	_	_	_	_		_	_	_	_
	sing Contributions in Aid of Construction	S3b, line 405		-	-	-		-	-	-	_	_	-	-		-		_		-	-	_		
50																								
	ening Amortization of Contributions in Aid of Construction	S3b, line 407	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
52 Amo		S3b, line 408	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
53 Retir		S3b, line 409		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
54 Clos 55	sing Amortization of Contributions in Aid of Construction	S3b, line 410	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
56 Oper	ening Net Plant In Service		-	-	4,360	10,648	9,326	8,004	6,682	5,519	4,317	3,012	2,191	1,235	1,283	1,268	1,138	1,009	879	996	1,464	1,322	1,181	1,039
57 Clos	sing Net Plant In Service		-	4,360	10,648	9,326	8,004	6,682	5,519	4,317	3,012	2,191	1,235	1,283	1,268	1,138	1,009	879	996	1,464	1,322	1,181	1,039	1,098
58																								
59 Mid Ye 60	ear Net Plant in Service	(line 21 + line 22)/2	2 -	2,180	7,504	9,987	8,665	7,343	6,101	4,918	3,664	2,601	1,713	1,259	1,275	1,203	1,074	944	938	1,230	1,393	1,251	1,110	1,069
61 Oper	ening Deferred Charges	S3b, line 414	-	6	820	718	615	513	410	308	205	103	-	-	-	-	-	-	-	-	-	-	-	-
62 Addi	litions	S3b, line 417	6	814	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
63 Amo	ortization	S3b, line 418	-	-	(103)	(103)	(103)	(103)	(103)	(103)	(103)	(103)	-	-	-	-	-	-	-	-	-	-	-	-
	sing Deferred Charges	S3b, line 420	6	820	718	615	513	410	308	205	103	-	-	-	-	-	-	-	-	-	-	-	-	-
65																								
	ear Deferred Charges		-	-	769	666	564	461	359	256	154	51	-	-	-	-	-	-	-	-	-	-	-	-
	al Lease Rate Base		-	1,678	1,524	1,365	1,201	1,031	857	677	491	299	101	1,952	1,773	1,588	1,398	1,200	997	787	571	348	118	-
	onth Adjustment	S3b, line 423	-	-	(691)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
69 70 <b>TGVI F</b>	Rate Base	x-ref S3b, line 424		3,858	9,107	12,019	10,430	8,835	7,316	5,851	4,309	2,952	1,814	3,211	3,048	2,791	2,471	2,145	1,935	2,017	1,964	1,599	1,228	1,069

## Customer Care Enhancement Project- November 10, 2009 Revised

Rate Base Summary in \$000s
\* Note- the revenue requirement and tax expense amount showing in 2011 are for financial model purposes only; as requested in the CPCN Application from June 2, 2009, all costs prior to January 1, 2012 will be captured in an AFUDC earning non-rate base deferral account.

		Reference	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
TGW		Reference	2010	2011	2012	2013	2014	2015	2016	2017	2010	2019	2020	2021	2022	2023	2024	2025	2020	2021	2020	2029	2030	2031
71 Opening Gas	Plant In Service	S3b, line 511		_	110	281	281	281	281	279	278	278	206	39	39	39	39	39	39	40	39	39	39	39
72 Additions	Tidat iii Gorvico	S3b, line 524	_	110	171	201		201	4	2	2.0	11	-	4	2	-	-	-	5	13	-	-	-	4
73 Retirements		S3b, line 537	_		-	-	-	_	(6)	(3)	_	(83)	(168)	(4)	(2)	_	_	-	(4)	(14)	_	-	-	(4)
74 Closing Gas F	Plant In Service	S3b, line 550		110	281	281	281	281	279	278	278	206	39	39	39	39	39	39	40	39	39	39	39	39
75		,																						
	umulated Depreciation	S3b, line 563	-	-	_	(12)	(45)	(79)	(112)	(139)	(170)	(202)	(152)	(9)	(8)	(8)	(11)	(14)	(17)	(16)	(6)	(9)	(12)	(15)
77 Depreciation		S3b, line 589	_	_	(12)	(33)	(33)	(33)	(33)	(33)	(33)	(33)	(24)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
78 Retirements		S3b, line 576	_	_	(,	()	()	(,	6	3	(,	83	168	4	2	-	-	-	4	14	-	-	-	4
	mulated Depreciation	S3b, line 602	-	-	(12)	(45)	(79)	(112)	(139)	(170)	(202)	(152)	(9)	(8)	(8)	(11)	(14)	(17)	(16)	(6)	(9)	(12)	(15)	(14)
80		,			, ,	( - /	( - /	, ,	(,	,	( - )	,	(-)	(-/	,	` '	` '	. ,	( - /	(-)	(-)	, ,	( - /	` '
81 Opening Cont	tributions in Aid of Construction	S3b, line 614	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
82 Additions		S3b, line 615	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
83 Retirements		S3b, line 616	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
84 Closing Contri	ibutions in Aid of Construction	S3b, line 617	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
85																								
86 Opening Amo	rtization of Contributions in Aid of Construction	S3b, line 619	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
87 Amortization		S3b, line 620	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
88 Retirements		S3b, line 621	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
89 Closing Amort 90	tization of Contributions in Aid of Construction	S3b, line 622	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
91 Opening Net F	Plant In Service		-	-	110	269	236	202	169	139	109	76	54	30	31	31	28	25	22	24	33	30	27	24
92 Closing Net P	Plant In Service		-	110	269	236	202	169	139	109	76	54	30	31	31	28	25	22	24	33	30	27	24	25
93																								
94 Mid Year Net PI	lant in Service	(line 21 + line 22)/2		55	190	252	219	185	154	124	92	65	42	30	31	29	26	23	23	29	32	29	26	25
95																								
96 Opening Defe	erred Charges	S3b, line 626	-	0	21	18	16	13	10	8	5	3	-	-	-	-	-	-	-	-	-	-	-	-
97 Additions		S3b, line 629	0	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98 Amortization		S3b, line 630		-	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	-	-	-	-		-	-	-		-	-	-
99 Closing Defen	red Charges	S3b, line 632	0	21	18	16	13	10	8	5	3	-	-	-	-	-	-	-	-	-	-	-	-	-
100																								
101 Mid Year Deferr			-	-	19	17	14	12	9	6	4	1	-	-	-	-	-	-	-	-	-	-	-	-
102 Capital Lease R			-	42	38	33	29	25	20	16	11	7	2	44	39	35	30	26	21	16	12	7	2	-
103 13 Month Adjust	stment	S3b, line 635	-	-	(17)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
104																								
105 TGW Rate Base	e	x-ref S3b, line 636		97	229	302	262	222	183	146	107	73	44	74	70	64	56	49	44	45	44	36	28	25

## Financial Schedule 3b

	Reference	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
											-												
tal Spending Hardware		653	2,228																				
oftware		4,902	1,361																				
and		-	652	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Buildings		1,078	5,244	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
endor Fees		14,742 1,146	20,568 18,513	3,147 1,345	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
nstaller Fees Internal Labour		1,146 2,447	4,397	1,345 575	-		-	-		-	-		-	-	-	-	-			-			
nternal Materials		873	408	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
raining		319	571	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
ncremental O&M			-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
al Spend	x-ref S6, line 31	26,159	53,942	5,067	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ning WIP			074	055																			
dardware oftware		-	671 5,038	955 5,620									-								-		
and		_	-	5,020	_	-	-	_	_	-	-	-	-	-	-	_	_	_	-	-	-	_	
Buildings		108	1,222	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
'endor Fees		1,349	16,574	28,571	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
nstaller Fees		-	1,177	7,083 5,553	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
nternal Labour nternal Materials		146	2,515 1,050	5,555				-	-				-					-	- :			-	
raining		-	328	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ncremental O&M			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
tal Opening WIP	x-ref S1, line 18 &	1,603	28,575	47,782	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ions łardware	x-ref S6, line 31	671	2,277																				
Software		5,038	1,661																			-	
and		-	652	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Buildings		1,114	5,244	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
'endor Fees		15,225	21,795	3,147	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
nstaller Fees nternal Labour		1,177 2,515	18,759 4,629	1,345 575	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
nternal Materials		905	4,629	5/5				-	-				-		-			-	- :			-	
raining		328	571	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ncremental O&M		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
al Additions	x-ref S1, line 18	26,972	55,995	5,067	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
rvice lardware		_	(1,992)	(955)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	
Software		_	(1,079)	(5,620)	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-	-	
and		-	(652)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Buildings		-	(6,466)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
endor Fees		-	(9,798) (12,853)	(31,719) (8,428)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
nternal Labour		-	(1,591)	(6,127)				-	-				-				-	-				-	
nternal Materials		_	(1,458)	(0,127)	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-	-	
raining		-	(899)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ncremental O&M			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
al In-service ng WIP		-	(36,788)	(52,849)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ng WIP lardware		671	955	_	_		_	_	_	_		-	-		_	_			_				
Software		5,038	5,620	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	
and		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Buildings		1,222	20.574	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
'endor Fees nstaller Fees		16,574 1,177	28,571 7,083	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
nstaller Fees Internal Labour		2,515	7,083 5,553	-	-	-			-	-	-	-	-	-	-		-		-		-		
nternal Materials		1,050	-,	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-			
raining		328	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	
ncremental O&M			47.700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
I Total Closing WIP		28,575	47,782	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
rring Plant Additions																							
lardware Software		-	-	-	-	-	-	1,236	793	-	395	-	1,224	785	-	-	-	1,210 389	776	-	-	-	1,19
and		-	-		-				-	-	393		-		-	-		369	-	-			
Buildings		-	-	-	-	-	-	_	-	-	_	-	-	-	-	-	-	-	-	-	-	-	
endor Fees		-	-	245	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
nstaller Fees		-	-	3,559	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		-	-	167	-	-	-	-	-	-	2 160	-	-	-	-	-	-	-	3,104	-	-	-	
nternal Labour					-	-	-	-	-	-	3,160	-	-	-	-	-	-	-	3,104	-	-	-	
nternal Labour nternal Materials		-	-		_	_	_	_	_	_	_	-	_	-	_	-	-	-		_	-	-	
nternal Labour		-	-	35	-		-	-	-	-	3,555	-	-	-	-	-	-	-			-	-	1,19

	Defense	- 0046	004	4 0040	0040	0044	0045	0040	0047	0040	0040	0000	0004	0000	0000	0004	0005	0000	0007	0000	0000	0000	0004
76 Opening Plant Balance	Reference	e 2010	201	1 2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
76 Opening Flant Balance 77 Hardware				- 1,992	2,948	2,948	2.948	2,948	2,192	2,029	2,029	2,029	2,029	2,017	2,008	2,008	2,008	2,008	1,995	1,986	1,986	1,986	1,986
78 Software			-	- 1,079		6,699	6,699	6,699	6,699	6,699	6,699	6,014	395	395	395	395	395	395	784	389	389	389	389
79 Land			-	- 652	652	652	652	652	652	652	652	652	652	652	652	652	652	652	652	652	652	652	652
80 Buildings			-	- 6.466	6,466	6,466	6,466	6,466	6.466	6,466	6,466	6,466	6,466	6,466	6,466	6,466	6,466	6,466	6,466	6,466	6,466	6,466	6.466
81 Vendor Fees			-	- 9,798	41,761	41.761	41,761	41,761	41.761	41,761	41.761	31,964	0,400	0,400	0,400	0,400	0,400	0,400	0,400	0,400	0,400	0,400	0,400
82 Installer Fees			-	- 12,853	24,840	24,840	24,840	24,840	24,840	24,840	24,840	11,987	_	_	_	_	_	_	_	_	_	_	_
83 Internal Labour				- 1.591	7.718	7,718	7,718	7,718	7.718	7,718	7,718	6.127	_	_	_	_	_	_	_	_	_	_	_
84 Internal Materials				- 1,458	1,626	1,626	1,626	1,626	1,626	1,626	1,626	3,327	3,160	3 160	3,160	3,160	3,160	3,160	3,160	3,104	3,104	3,104	3,104
85 Training			_	- 899	934	934	934	934	934	934	934	35	-	-	-	-	-	-	-	-	-	-	
86 Incremental O&M and	Capitalized Overhead		_		-	-	-	-	-	-	-	-	_	-	_	_	-	_	_	-	_	_	_
87 Total Opening Plant Bal		ne 1	-	- 36,788	93,643	93,643	93,643	93,643	92,887	92,725	92,725	68,601	12,701	12,689	12,680	12,680	12,680	12,680	13,056	12,596	12,596	12,596	12,596
88		-		,	,	,	,	,	,	,	,	,	,	,	,	,	,	,	,	,	,	,	,
89 Additions																							
90 Hardware			- 1.9	992 955	_	_	_	1,236	793	-	_	_	1,224	785	_	_	_	1,210	776	_	_	_	1,196
91 Software				079 5,620		_	_	-,	-	-	395	_	-,	-	_	_	-	389		_	_	_	-,,
92 Land				652 -	_		_	_	_		-	-	-		-	_	_	-			-	_	-
93 Buildings				166 -	_	_	_	_	_	-	_	_	_	-	_	_	_	_	_	_	_	_	_
94 Vendor Fees				798 31.964	_		_	_	_		_		-		-	_	_	-			_	_	-
95 Installer Fees			- 12.8		_	-	_	_	_	-	_	_	_	-	_	_	_	_	_	_	_	_	_
96 Internal Labour			- 1,5		_	_	_	_	_	-	_	_	_	-	_	_	_	_	_	_	_	_	_
97 Internal Materials				158 167	_	_	_	_	_	-	3,160	_	_	-	_	_	_	_	3,104	_	_	_	_
98 Training				399 35	_	_	_	_	_	-	-,	_	_	-	_	_	_	_	-,	_	_	_	_
99 Incremental O&M and	Capitalized Overhead				_	_	_	_	_	-	_	_	_	-	_	_	_	_	_	_	_	_	_
100 Total Additions 101	x-ref S3a, lii	ne 2	- 36,7	788 56,855	-	-	-	1,236	793	-	3,555	-	1,224	785	-	-	-	1,599	3,880	-	-	-	1,196
102 Retirements																							
103 Hardware			-		_	_	_	(1.992)	(955)	-	_	_	(1,236)	(793)	_	_	_	(1.224)	(785)	_	_	_	(1,210
104 Software			-		-	-	-	-	-	-	(1.079)	(5.620)		-	-	-	-		(395)	-	-	-	
105 Land			-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_
106 Buildings			-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_
107 Vendor Fees			-		-	-	-	-	-	-	(9,798)	(31,964)	-	-	-	-	-	-	-	-	-	-	_
108 Installer Fees			-		_	-	-	-		-	(12,853)	(11,987)	_	_	_	-	_	-	_	-	-		_
109 Internal Labour			-		-	-	-	-	-	-	(1,591)	(6,127)	-	-	-	-	-	-	-	-	-	-	_
110 Internal Materials			-		-	-	-	-	-	-	(1,458)	(167)	-	-	-	-	-	-	(3,160)	-	-	-	_
111 Training			-		-	-	-	-	-	-	(899)	(35)	-	-	-	-	-	-	-	-	-	-	_
112 Incremental O&M and	Capitalized Overhead		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_
113 Total Retirements	x-ref S3a, lin	ne 3	-		-	-	-	(1,992)	(955)	-	(27,679)	(55,899)	(1,236)	(793)	-	-	-	(1,224)	(4,339)	-	-	-	(1,210)
114																							
115 Closing Plant Balance																							
116 Hardware				992 2,948		2,948	2,948	2,192	2,029	2,029	2,029	2,029	2,017	2,008	2,008	2,008	2,008	1,995	1,986	1,986	1,986	1,986	1,972
117 Software				079 6,699		6,699	6,699	6,699	6,699	6,699	6,014	395	395	395	395	395	395	784	389	389	389	389	389
118 Land				652 652	652	652	652	652	652	652	652	652	652	652	652	652	652	652	652	652	652	652	652
119 Buildings				166 6,466	6,466	6,466	6,466	6,466	6,466	6,466	6,466	6,466	6,466	6,466	6,466	6,466	6,466	6,466	6,466	6,466	6,466	6,466	6,466
120 Vendor Fees				798 41,761	41,761	41,761	41,761	41,761	41,761	41,761	31,964	-	-	-	-	-	-	-	-	-	-	-	-
121 Installer Fees			- 12,8			24,840	24,840	24,840	24,840	24,840	11,987	-	-	-	-	-	-	-	-	-	-	-	-
122 Internal Labour			- 1,5		7,718	7,718	7,718	7,718	7,718	7,718	6,127												
123 Internal Materials				1,626	1,626	1,626	1,626	1,626	1,626	1,626	3,327	3,160	3,160	3,160	3,160	3,160	3,160	3,160	3,104	3,104	3,104	3,104	3,104
124 Training			- 8	399 934	934	934	934	934	934	934	35	-	-	-	-	-	-	-	-	-	-	-	-
	Capitalized Overhead		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12,596	12.582
<ul> <li>125 Incremental O&amp;M and</li> <li>126 Total Closing Plant Bala</li> </ul>			- 36,7	788 93.643	93,643	93,643	93,643	92,887	92,725	92,725	68,601	12,701	12,689	12,680	12.680	12,680	12.680	13.056	12.596	12.596	12.596		

	Reference	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
128 Opening Accumulated Depreciation				-																			
129 Hardware		-	-	-	(398)	(988)	(1,577)	(2,167)	(764)	(247)	(653)	(1,059)	(1,465)	(635)	(245)	(646)	(1,048)	(1,450)	(628)	(242)	(639)	(1,036)	(1,434)
130 Software		-	-	-	(135)	(972)	(1,810)	(2,647)	(3,484)	(4,322)	(5,159)	(4,917)	(49)	(99)	(148)	(197)	(247)	(296)	(346)	(49)	(97)	(146)	(194)
131 Land		-	-	-			-	-	-		-					-							-
132 Buildings		-	-	-	(99)	(199)	(298)	(398)	(497)	(597)	(696)	(796)	(895)	(995)	(1,094)	(1,194)	(1,293)	(1,393)	(1,492)	(1,592)	(1,691)	(1,790)	(1,890)
133 Vendor Fees		-	-	-	(1,225)	(6,445)	(11,665)	(16,885)	(22,105)	(27,326)	(32,546)	(27,968)	0	0	0	0	0	0	0	0	0	0	0
134 Installer Fees		-	-	-	(1,607)	(4,712)	(7,817)	(10,922)	(14,027)	(17,132)	(20,237)	(10,489)	-	-	-	-	-	-	-	-	-	-	-
135 Internal Labour		-	-	-	(199)	(1,164)	(2,129)	(3,093)	(4,058)	(5,023)	(5,988)	(5,361)	-	-	-	-	-	-	-	-	-	-	-
136 Internal Materials		-	-	-	(182)	(385)	(589)	(792)	(995)	(1,198)	(1,401)	(146)	(395)	(790)	(1,185)	(1,580)	(1,975)	(2,370)	(2,765)	(0)	(388)	(776)	(1,164)
137 Training		-	-	-	(112)	(229)	(346)	(463)	(579)	(696)	(813)	(30)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
138 Incremental O&M and Capitalized Overhead		-	-	-	` -		-	-	-	-	-	,	-	-	-	-	-	-	-	-	-	-	-
139 Total TGI Depreciation Expense	x-ref S3a, line 6		-	-	(3,958)	(15,094)	(26,230)	(37,367)	(46,511)	(56,540)	(67,493)	(50,767)	(2,804)	(2,518)	(2,672)	(3,617)	(4,563)	(5,508)	(5,230)	(1,882)	(2,815)	(3,749)	(4,682)
140					, , ,	,	,	,	,	,		,	,	,			,	,	, , ,	, ,	,		
141 Retirements																							
142 Hardware		-	-	-	-	-	-	1.992	955	-	-	-	1,236	793	-	-	-	1.224	785	-	-	-	1.210
143 Software		-	-	-	-	-	-	-	-	-	1.079	5,620		-	-	-	-	· -	395	-	-	-	
144 Land		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
145 Buildings		_	_	_	_	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_
146 Vendor Fees		-	_	-	-	-	-	-	-	-	9,798	31,964	-	-	-	-	-	-	-	-	-	-	_
147 Installer Fees		-	_	-	-	-	-	-	-	-	12,853	11,987	-	-	-	-	-	-	-	-	-	-	-
148 Internal Labour		-	_	-	-	-	-	-	-	-	1,591	6,127	-	-	-	-	-	-	-	-	-	-	-
149 Internal Materials		-	_	-	-	-	-	-	-	-	1,458	167	-	-	-	-	-	-	3,160	-	-	-	_
150 Training		-	_	-	-	-	-	-	-	-	899	35	-	-	-	-	-	-		-	-	-	_
151 Incremental O&M and Capitalized Overhead		-	_	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	_
152 Total Closing Accumulated Depreciation	x-ref S3a, line 8	-	-	-	-	-	-	1,992	955	-	27,679	55,899	1,236	793	-	-	-	1,224	4,339	-	-	-	1,210
153								.,			,	,	.,===					-,	.,				-,
154 Depreciation Expense																							
155 Hardware		_	_	(398)	(590)	(590)	(590)	(590)	(438)	(406)	(406)	(406)	(406)	(403)	(402)	(402)	(402)	(402)	(399)	(397)	(397)	(397)	(397)
156 Software		_	_	(135)	(837)	(837)	(837)	(837)	(837)	(837)	(837)	(752)	(49)	(49)	(49)	(49)	(49)	(49)	(98)	(49)	(49)	(49)	(49)
157 Land		_	_	(,	(/	(,	(,	(/	(,	(/	(,	(/	( /	(,	( /	( /	(,	(,	()	( /	( /	( /	( /
158 Buildings		_	_	(99)	(99)	(99)	(99)	(99)	(99)	(99)	(99)	(99)	(99)	(99)	(99)	(99)	(99)	(99)	(99)	(99)	(99)	(99)	(99)
159 Vendor Fees			_	(1,225)	(5,220)	(5,220)	(5,220)	(5,220)	(5,220)	(5,220)	(5,220)	(3,995)	(00)	0	0	(00)	(00)	(00)	0	(00)	(00)	0	(00)
160 Installer Fees		_	_	(1,607)	(3,105)	(3,105)	(3,105)	(3,105)	(3,105)	(3,105)	(3,105)	(1,498)	-	-	-	-	-	-	-	-	-	-	-
161 Internal Labour			_	(199)	(965)	(965)	(965)	(965)	(965)	(965)	(965)	(766)		_	_				_		_	_	_
162 Internal Materials		_	_	(182)	(203)	(203)	(203)	(203)	(203)	(203)	(203)	(416)	(395)	(395)	(395)	(395)	(395)	(395)	(395)	(388)	(388)	(388)	(388)
163 Training		-	-	(112)	(117)	(117)	(117)	(117)	(117)	(117)	(117)	(410)	(353)	(353)	(333)	(353)	(353)	(353)	(353)	(300)	(300)	(300)	(300)
164 Incremental O&M and Capitalized Overhead		-	-	(112)	(117)	(117)	(117)	(117)	(117)	(117)	(117)	(4)	-	-	-	-	-	-	-	-	-	-	-
165 Total TGI Depreciation Expense	x-ref S3a, line 7			(3,958)	(11,136)	(11,136)	(11,136)	(11,136)	(10,985)	(10,953)	(10,953)	(7,937)	(950)	(947)	(945)	(945)	(945)	(945)	(991)	(933)	(933)	(933)	(933)
166	X-161 33a, III16 7			(3,530)	(11,130)	(11,130)	(11,130)	(11,130)	(10,505)	(10,555)	(10,933)	(1,531)	(930)	(547)	(343)	(343)	(343)	(343)	(551)	(933)	(555)	(555)	(933)
167 Closing Accumulated Depreciation																							
168 Hardware		_	_	(398)	(988)	(1,577)	(2,167)	(764)	(247)	(653)	(1,059)	(1,465)	(635)	(245)	(646)	(1,048)	(1,450)	(628)	(242)	(639)	(1,036)	(1,434)	(621)
169 Software			_	(135)	(972)	(1,810)	(2,647)	(3,484)	(4,322)	(5,159)	(4,917)	(49)	(99)	(148)	(197)	(247)	(296)	(346)	(49)	(97)	(146)	(194)	(243)
170 Land			_	(155)	(312)	(1,010)	(2,047)	(5,404)	(4,522)	(5,155)	(4,517)	(43)	(33)	(140)	(137)	(241)	(230)	(340)	(43)	(31)	(1-0)	(13-1)	(243)
171 Buildings				(99)	(199)	(298)	(398)	(497)	(597)	(696)	(796)	(895)	(995)	(1,094)	(1,194)	(1,293)	(1,393)	(1,492)	(1,592)	(1,691)	(1,790)	(1,890)	(1,989)
172 Vendor Fees		-	_	(1,225)	(6,445)	(11,665)	(16,885)	(22,105)	(27,326)	(32,546)	(27,968)	0	(555)	(1,034)	(1,134)	(1,200)	(1,555)	(1,102)	(1,552)	(1,031)	(1,730)	(1,000)	(1,303)
173 Installer Fees		-	_	(1,607)	(4.712)	(7,817)	(10,922)	(14,027)	(17,132)	(20,237)	(10.489)	-	-	-	-	-	-	-	-	-	-	-	-
174 Internal Labour		_	_	(199)	(1,164)	(2,129)	(3,093)	(4,058)	(5,023)	(5,988)	(5,361)	_			_	_		_	_	_	_	_	_
175 Internal Materials		_	_	(182)	(385)	(589)	(792)	(995)	(1,198)	(1,401)	(146)	(395)	(790)	(1,185)	(1.580)	(1.975)	(2,370)	(2.765)	(0)	(388)	(776)	(1,164)	(1,552)
176 Training		_	_	(112)	(229)	(346)	(463)	(579)	(696)	(813)	(30)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
177 Incremental O&M and Capitalized Overhead		-	_	(2)	(==3)	(0.0)	()	(0.0)	(000)	(0.0)	(00)	- (0)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	- (3)	(5)	(5)	- (0)
178 Total Closing Accumulated Depreciation	x-ref S3a, line 9			(3,958)	(15,094)	(26,230)	(37,367)	(46,511)	(56,540)	(67,493)	(50,767)	(2,804)	(2,518)	(2,672)	(3,617)	(4,563)	(5,508)	(5,230)	(1,882)	(2,815)	(3,749)	(4,682)	(4.405)
179	x 101 000, 1110 0			(0,000)	(10,004)	(20,200)	(01,001)	(10,011)	(50,0.0)	(01, 100)	(00,101)	(2,004)	(2,0.0)	(2,0,2)	(0,0)	(1,000)	(0,000)	(0,200)	(1,002)	(2,0.0)	(0,1.0)	(1,002)	(1,100)
180 Opening GPIS		_	_	36.788	93,643	93,643	93.643	93,643	92,887	92,725	92,725	68,601	12,701	12.689	12.680	12,680	12,680	12,680	13,056	12,596	12,596	12,596	12,596
181 Closing GPIS		-	36,788	93.643	93,643	93,643	93,643	92,887	92,725	92,725	68,601	12,701	12,689	12,680	12,680	12,680	12,680	13,056	12,596	12,596	12,596	12,596	12,582
182 Mid-Year GPIS			18.394	65,216	93,643	93,643	93,643	93,265	92,806	92,725	80.663	40.651	12,695	12,684	12,680	12,680	12,680	12,868	12,826	12,596	12,596	12,596	12,589
183			10,034	00,210	33,043	30,043	30,043	30,200	32,000	32,123	00,000	70,001	12,000	12,004	12,000	12,000	12,000	12,000	12,020	12,000	12,000	12,000	12,000
184 Opening Accumulated Depreciation		_	_	_	(3.958)	(15,094)	(26,230)	(37,367)	(46,511)	(56,540)	(67.493)	(50,767)	(2.804)	(2.518)	(2,672)	(3,617)	(4,563)	(5.508)	(5,230)	(1,882)	(2.815)	(3.749)	(4,682)
185 Closing Accumulated Depreciation				(3.958)	(15,094)	(26,230)	(37,367)	(46,511)	(56.540)	(67,493)	(50,767)	(2,804)	(2,518)	(2,672)	(3,617)	(4,563)	(5,508)	(5,230)	(1,882)	(2,815)	(3,749)	(4,682)	(4,405)
186 Mid-Year Accumulated Depreciation				(1,979)	(9,526)	(20,662)	(31,798)	(41,939)	(51,526)	(62,017)	(59,130)	(26,786)	(2,661)	(2,572)	(3,145)	(4,090)	(5,036)	(5,230)	(3,556)	(2,349)	(3,749)	(4,215)	(4,544)
187		-	-	(1,5/3)	(3,320)	(20,002)	(31,130)	(41,555)	(31,320)	(02,017)	(35,130)	(20,700)	(2,001)	(2,050)	(3,143)	(4,050)	(3,030)	(5,503)	(3,330)	(2,343)	(3,202)	(4,213)	(4,544)
187 188 TGI Mid-Year Net Plant in Service			18,394	63,237	84.117	72,981	61.845	51,326	41,281	30.708	21.533	13.865	10.034	10.089	9.536	8.590	7.645	7.499	9.270	10.247	9.314	8.381	8.045
189		-	10,394	03,237	04,117	12,901	01,040	51,320	41,201	30,706	21,533	13,003	10,034	10,069	5,556	0,390	1,045	1,499	5,270	10,247	5,314	0,301	0,045
103																							

		Reference	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
190	TGI Software CIAOC Opening Balance	x-ref S3a, line 11	-	-	(3,525)	(13,333)	(19,973)	(19,973)	(19,973)	(19,973)	(19,973)	(19,973)	(16,892)	(7,133)	(494)	(494)	(494)	(494)	(494)	(542)	(535)	(485)	(485)	(485)
191		x-ref S3a, line 12	-	(3,525)	(9,808)	(6,640)	-	-	-	-	-	(444)	(49)	-	-	-	-	-	(49)	(437)	-	-	-	-
192	TGI Software CIAOC Retirements	x-ref S3a, line 13	-	-	-	-	-	-	-	-	-	3,525	9,808	6,640	-	-	-	-	-	444	49	-	-	-
193	TGI Software CIAOC Closing Balance	x-ref S3a, line 14	-	(3,525)	(13,333)	(19,973)	(19,973)	(19,973)	(19,973)	(19,973)	(19,973)	(16,892)	(7,133)	(494)	(494)	(494)	(494)	(494)	(542)	(535)	(485)	(485)	(485)	(485)
194																								
195	TGI Software CIAOC Opening Balance Accumulated Depreciation	x-ref S3a, line 16	-	-	-	441	2,107	4,604	7,100	9,597	12,094	14,590	13,562	5,865	117	179	241	302	364	426	49	67	127	188
196	TGI Software CIAOC Retirements	x-ref S3a, line 17	-	-	-	-	-	-	-	-	-	(3,525)	(9,808)	(6,640)	-	-	-	-	-	(444)	(49)	-	-	-
197	TGI Amortization of Software CIAOC	x-ref S3a, line 18	-	-	441	1,667	2,497	2,497	2,497	2,497	2,497	2,497	2,111	892	62	62	62	62	62	68	67	61	61	61
198	TGI Software CIAOC Closing Balance Accumulated Depreciation	x-ref S3a, line 19	-	-	441	2,107	4,604	7,100	9,597	12,094	14,590	13,562	5,865	117	179	241	302	364	426	49	67	127	188	249
199																								
200	TGI Mid Year Software CIAOC		-	(1,763)	(8,209)	(15,379)	(16,617)	(14,121)	(11,624)	(9,127)	(6,631)	(4,356)	(2,299)	(822)	(346)	(284)	(222)	(160)	(123)	(301)	(452)	(388)	(328)	(267)
201																								
202	TGI Opening Deferred Charges	x-ref S3a, line 26	-	51	6,879	6,019	5,159	4,299	3,440	2,580	1,720	860	0	0	0	0	0	0	0	0	0	0	0	0
203	TGI O&M Deferred Charge Additions	S1, line 21	68	8,914	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
204	TGI O&M Tax on Deferred Charge Additions		(19)	(2,362)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
205	TGI O&M Net Deferred Charge Additions	x-ref S3a, line 27	49	6,552	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
206	TGI O&M Amortization Expense	x-ref S3a, line 28	-	-	(860)	(860)	(860)	(860)	(860)	(860)	(860)	(860)	-	-	-	-	-	-	-	-	-	-	-	-
207	TGI O&M Deferred Charge AFUDC	S1, line 22	2	276	-	-	-	-		-			-	-	-	-	-	-	-	-	-	-	-	-
208	TGI Closing Deferred Charges	x-ref S3a, line 29	51	6,879	6,019	5,159	4,299	3,440	2,580	1,720	860	0	0	0	0	0	0	0	0	0	0	0	0	0
209	Capital Lease Rate Base		-	14,114	12,605	11,102	9,603	8,111	6,623	5,141	3,665	2,194	730	13,838	12,355	10,877	9,406	7,941	6,482	5,030	3,584	2,145	713	-
210	TGI Mid-Year Deferred Charges		-	-	6,449	5,589	4,729	3,870	3,010	2,150	1,290	430	-	-	-	-	-	-	-	-	-	-	-	-
211	In-Service Adjustment	x-ref S3a, line 33	-	-	(5,820)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
212	TGI Ratebase	x-ref S3a, line 35	-	30,745	68,263	85,429	70,696	59,705	49,335	39,444	29,032	19,801	12,296	23,050	22,099	20,129	17,774	15,425	13,858	13,999	13,380	11,071	8,767	7,778

		Reference	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
1	rgvi																							
	Capital Spending																							
214 215	Hardware Software		76 573	265 162	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-
216	Land		-	77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
217 218	Buildings Vendor Fees		126 1,723	623 2,445	381	-		-	-	-	-		-		-	-	-	-	-	-	-		-	-
219	Installer Fees		134	2,201	163	-			-			-		-		-				-			-	-
220	Internal Labour		286	523	69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
221 222	Internal Materials Training		102 37	48 68	-	-	-		-	-		-		-	-	-	-			-	- :	-	-	-
223	Incremental O&M		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
224 225	Total Spend	x-ref S6, line 48	3,057	6,412	613	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
226	Opening WIP																							
227 228	Hardware Software		-	79 590	113 662	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
229	Land		-	-		-				-		-					-			-				
230	Buildings		13	143		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
231 232	Vendor Fees Installer Fees		158	1,941 138	3,385 842	-				-		-		-		-				-		-		-
233	Internal Labour			295	658	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
234 235	Internal Materials Training		17	123 38	-	-	-	-	-	-	- :	-	- :	-	- :			- :	- :	-	-	-	-	-
236	Incremental O&M			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
237 238	Total Opening WIP Additions	x-ref S1, line 18 & x-ref S6, line 48	187	3,347	5,660	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
239	Hardware	X-161 30, III16 40	79	271	_	-	_	_	_	-	_	-	_	-	-	-	_	_	_	-	_	-	_	-
240	Software		590	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
241 242	Land Buildings		130	77 623	-	-			-	-	-				-	-	-	-	-	-			-	-
243	Vendor Fees		1,784	2,601	381	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
244 245	Installer Fees Internal Labour		138 295	2,232 552	163 69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
246	Internal Materials		106	48	-	-				-		-				-	-			-		-		
247	Training		38	68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
248 249	Incremental O&M Total Additions	x-ref S1, line 18	3,160	6,673	613	-	-			-		-		-				-		-			<del></del>	<del></del>
250	In-service		-,																					
251 252	Hardware Software		-	(237) (127)	(113) (662)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
253	Land		-	(77)	(002)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
254 255	Buildings Vendor Fees		-	(766) (1,158)	(3,765)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
256	Installer Fees		-	(1,156)	(1,005)			-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-
257	Internal Labour		-	(189)	(728)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
258 259	Internal Materials Training		-	(172) (106)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-
260	Incremental O&M				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
261 262	Total In-service Closing WIP		-	(4,360)	(6,273)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
263	Hardware		79	113	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
264 265	Software Land		590	662	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
266	Buildings		143	-		-				-		-		-		-	-			-			-	
267	Vendor Fees		1,941	3,385	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
268 269	Installer Fees Internal Labour		138 295	842 658	-	-		-	-	-	-		-		-	-	-	-	-	-			-	-
270	Internal Materials		123	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
271 272	Training Incremental O&M		38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
273	TGVI Total Closing WIP		3,347	5,660	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		<del></del>
274																								
275 276	Recurring Plant Additions Hardware		_	_	_			_	160	104	_	_	_	173	113	_	_	_	186	121	_		_	201
277	Software		-	-	-	-	-	-	-	-	-	54	-	-	-	-	-	-	60	-	-	-	-	-
278 279	Land Buildings		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- :	-	-	-
280	Vendor Fees		-	-	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
281 282	Installer Fees Internal Labour		-	-	430	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
282	Internal Labour Internal Materials			-	20	-	-	-	-	-		431	-	-	-	-	-	-	-	486	-	-	-	-
284	Training		-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
285 286	Capitalized Overhead Total Recurring Plant Additions				484			-	160	104	-	484	-	173	113	-	-		246	607				201
287	•																							

		Reference	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
288 Opening	Plant Balance	received	2010	2011	2012	20.0	20.7	2010	20.0	2011	20.0	20.0	2020	LULI	LULE		LULT			LVLI	2020		2000	2001
289 Hardy					237	350	350	350	350	273	264	264	264	264	277	285	285	285	285	299	308	308	308	308
290 Softw			-	-	127	790	790	790	790	790	790	790	716	54	54	54	54	54	54	114	60	60	60	60
290 Soliw 291 Land			-	-	77	790	790	790	790	790	790	790	716	77	77	77	77	77	77	77	77	77	77	77
			-	-																				766
292 Buildi			-	-	766	766	766	766	766	766	766	766	766	766	766	766	766	766	766	766	766	766	766	766
	dor Fees		-	-	1,158	4,953	4,953	4,953	4,953	4,953	4,953	4,953	3,795	-	-	-	-	-	-	-	-	-	-	-
	ller Fees		-	-	1,528	2,963	2,963	2,963	2,963	2,963	2,963	2,963	1,435	-	-	-	-	-	-	-	-	-	-	-
	nal Labour		-	-	189	916	916	916	916	916	916	916	728	-	-	-	-	-	-	-	-	-	-	-
	nal Materials		-	-	172	192	192	192	192	192	192	192	451	431	431	431	431	431	431	431	486	486	486	486
297 Traini	ning		-	-	106	110	110	110	110	110	110	110	4	-	-	-	-	-	-	-	-	-	-	-
298 Increr	emental O&M and Capitalized Overhead			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
299 Total O	Opening Plant Balance	x-ref S3a, line 36	-	-	4,360	11,117	11,117	11,117	11,117	11,041	11,032	11,032	8,237	1,593	1,605	1,613	1,613	1,613	1,613	1,687	1,697	1,697	1,697	1,697
300	· -																							
301 Additions																								
302 Hardy			_	237	113	_	_	-	160	104	_	_	_	173	113	_	_	_	186	121	_	_	_	201
303 Softw			-	127	662	_	_	_				54	-			_	_	_	60		_	_	_	
304 Land			_	77	-	_	_	_	_	_	_	-	_	_	_	_	_	_	-	_	_		_	_
305 Buildi			_	766	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
	dor Fees		_	1,158	3.795	_	_	_	_	_	_	_	_	_	_	_		_	_	_	_	_	_	_
	ller Fees			1,528	1,435																			
	nal Labour		-	189	728	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	nal Materials		-		20	-	-	-	-	-	-	431	-	-	-	-	-	-	-	400	-	-	-	-
			-	172		-	-	-	-	-	-	431	-	-	-	-	-	-	-	486	-	-	-	-
310 Traini			-	106	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	emental O&M and Capitalized Overhead			<u> </u>		-	-	-		<u> </u>	-	<u> </u>	-		-	-	-	-			-	-	-	
	Additions	x-ref S3a, line 37	-	4,360	6,757	-	-	-	160	104	-	484	-	173	113	-	-	-	246	607	-	-	-	201
313																								
314 Retireme																								
315 Hardy			-	-	-	-	-	-	(237)	(113)	-	-	-	(160)	(104)	-	-	-	(173)	(113)	-	-	-	(186)
316 Softw	vare		-	-	-	-	-	-	-	-	-	(127)	(662)	-	-	-	-	-	-	(54)	-	-	-	-
317 Land	I		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
318 Buildi	lings		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
319 Vend	dor Fees		-	-	-	-	-	-	-	-	-	(1,158)	(3,795)	-	-	-	-	-	-	-	-	-	-	-
320 Instal	ller Fees		_	-	-	-	-	-	-	-	_	(1,528)	(1,435)	_	-	-	_	-	_	_	-	_	-	-
	nal Labour		_	_	_	_	_	-	_	_	_	(189)	(728)	_	_	_	_	_	_	_	_	_	_	_
	nal Materials		_	_	_	_	_	_	_	_	_	(172)	(20)	_	_	_	_	_	_	(431)	_		_	_
323 Traini			_	_	_	_	_	_	_	_	_	(106)	(4)	_	_	_	_	_	_	(101)	_	_	_	_
	emental O&M and Capitalized Overhead			_		_	_	_	_	_	_	(100)	(-1)	_	_					_				_
	Retirements	x-ref S3a, line 38							(237)	(113)	-	(3,280)	(6,644)	(160)	(104)				(173)	(597)			-	(186)
326 Total K	Ketilements	X-161 33a, iii le 36	-	-	-	-	-	-	(237)	(113)	-	(3,200)	(0,044)	(100)	(104)	-	-	-	(173)	(351)	-	-	-	(100)
	Dignt Balanca																							
	Plant Balance																							
328 Hardy			-	237	350	350	350	350	273	264	264	264	264	277	285	285	285	285	299	308	308	308	308	322
329 Softw			-	127	790	790	790	790	790	790	790	716	54	54	54	54	54	54	114	60	60	60	60	60
330 Land			-	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77
331 Buildi			-	766	766	766	766	766	766	766	766	766	766	766	766	766	766	766	766	766	766	766	766	766
	dor Fees		-	1,158	4,953	4,953	4,953	4,953	4,953	4,953	4,953	3,795	-	-	-	-	-	-	-	-	-	-	-	-
	ller Fees		-	1,528	2,963	2,963	2,963	2,963	2,963	2,963	2,963	1,435	-	-	-	-	-	-	-	-	-	-	-	-
334 Intern	nal Labour		-	189	916	916	916	916	916	916	916	728	-	-	-	-	-	-	-	-	-	-	-	-
335 Intern	nal Materials		-	172	192	192	192	192	192	192	192	451	431	431	431	431	431	431	431	486	486	486	486	486
336 Traini			-	106	110	110	110	110	110	110	110	4												
	mental O&M and Capitalized Overhead		-										-	_	-	_	_	_	_	_	_	_	_	_
	Closing Plant Balance	x-ref S3a, line 39		4,360	11,117	11,117	11,117	11,117	11,041	11,032	11,032	8,237	1,593	1,605	1,613	1,613	1,613	1,613	1,687	1,697	1,697	1,697	1,697	1,711
339	g Data.100	x 10. 00a, iiile 00		.,000	,	,	,	,	,	,002	,002	0,207	.,000	.,000	.,0.0	.,0.0	.,0.0	.,0.0	.,007	.,00.	.,00.	.,007	.,00.	.,

	Reference	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
340 Opening Accumulated Depreciation																							
341 Hardware		-	-	-	(47)	(117)	(187)	(257)	(90)	(32)	(85)	(138)	(191)	(84)	(35)	(92)	(149)	(206)	(90)	(37)	(99)	(160)	(222)
342 Software		-	-	-	(16)	(115)	(213)	(312)	(411)	(510)	(608)	(580)	(7)	(13)	(20)	(27)	(34)	(40)	(47)	(7)	(15)	(22)	(30)
343 Land 344 Buildings		-	-	-	(40)	(0.4)	(05)	(47)	(50)	(74)	(00)	(0.4)	(400)	(118)	(400)	(141)	(450)	(405)	(477)	(400)	(000)	(040)	(224)
344 Buildings 345 Vendor Fees		-	-	-	(12) (145)	(24) (764)	(35) (1,383)	(47) (2,002)	(59) (2,621)	(71) (3,240)	(83) (3,859)	(94) (3,320)	(106) (0)	(118)	(130)		(153) (0)	(165) (0)	(177)	(189)	(200)	(212)	(224)
346 Installer Fees		-	-		(145)	(561)	(932)	(1,302)	(1,672)	(2,043)	(2,413)	(1,256)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
347 Internal Labour			_	-	(24)	(138)	(253)	(367)	(482)	(596)	(711)	(637)	0	0	0	0	0	0	0	0	0	0	0
348 Internal Materials		-	_	-	(21)	(45)	(69)	(93)	(117)	(141)	(165)	(18)	(54)	(108)	(161)	(215)	(269)	(323)	(377)	0	(61)	(121)	(182)
349 Training		-	_	-	(13)	(27)	(41)	(55)	(69)	(82)	(96)	(4)	0	0	0	0	0	0	0	0	0	0	0
350 Incremental O&M and Capitalized Overhead		-	-	-	,	` -	` -	-	-		-	`-'	-	-	-	-	-	-	-	-	-	-	-
351 Total TGVI Depreciation Expense	x-ref S3a, line 41	-	-	-	(469)	(1,791)	(3,114)	(4,436)	(5,521)	(6,715)	(8,020)	(6,046)	(357)	(323)	(346)	(475)	(605)	(734)	(691)	(233)	(375)	(516)	(658)
352																							
353 Retirements																							
354 Hardware		-	-	-	-	-	-	237	113	-	-		160	104	-	-	-	173	113	-	-	-	186
355 Software		-	-	-	-	-	-	-	-	-	127	662	-	-	-	-	-	-	54	-	-	-	-
356 Land 357 Buildings		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
357 Buildings 358 Vendor Fees		-	-	-	-	-	-	-	-	-	1,158	3.795	-	-	-	-	-	-	-	-	-	-	-
358 Vendor Fees 359 Installer Fees		-		-	-		-	-		-	1,158	1,435			-			-			-	-	-
360 Internal Labour		-	-	-		-	-		-	-	189	728	-						-		-		
361 Internal Materials		_		_		_	-	_			172	20		_		_	_	_	431		_	_	-
362 Training		-	-	-	-	-	-	-	-	-	106	4	-	-	-	-	-	-	-	-	-	-	-
363 Incremental O&M and Capitalized Overhead		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
364 Total Closing Accumulated Depreciation	x-ref S3a, line 43	-	-	-	-	-	-	237	113	-	3,280	6,644	160	104	-	-	-	173	597	-	-	-	186
365																							
366 Depreciation Expense																							
367 Hardware		-	-	(47)	(70)	(70)	(70)	(70)	(55)	(53)	(53)	(53)	(53)	(55)	(57)	(57)	(57)	(57)	(60)	(62)	(62)	(62)	(62)
368 Software		-	-	(16)	(99)	(99)	(99)	(99)	(99)	(99)	(99)	(90)	(7)	(7)	(7)	(7)	(7)	(7)	(14)	(7)	(7)	(7)	(7)
369 Land		-	-	-	-	- (4.0)	-	- (40)	-	-	-	-	-	-	-		-	- (40)	-	- (4.0)	-	- (40)	-
370 Buildings 371 Vendor Fees		-	-	(12)	(12) (619)	(12)	(12)	(12)	(12)	(12)	(12)	(12) (474)	(12)	(12)	(12)	(12)	(12)	(12)	(12)	(12)	(12)	(12)	(12)
371 Veridor Fees 372 Installer Fees		-	-	(145) (191)	(370)	(619) (370)	(619) (370)	(619) (370)	(619) (370)	(619) (370)	(619) (370)	(179)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
373 Internal Labour				(24)	(115)	(115)	(115)	(115)	(115)	(115)	(115)	(91)											
374 Internal Materials			_	(21)	(24)	(24)	(24)	(24)	(24)	(24)	(24)	(56)	(54)	(54)	(54)	(54)	(54)	(54)	(54)	(61)	(61)	(61)	(61)
375 Training			_	(13)	(14)	(14)	(14)	(14)	(14)	(14)	(14)	(1)	(54)	(34)	(34)	(34)	(34)	(34)	(34)	(01)	(01)	(01)	(01)
376 Incremental O&M and Capitalized Overhead		-	_	(.0)	(,	()	(,	- ()	()	()	()	- (.,	_	_		-	-	-	_		-	-	-
377 Total TGVI Depreciation Expense	x-ref S3a, line 42	-	-	(469)	(1,322)	(1,322)	(1,322)	(1,322)	(1,307)	(1,305)	(1,305)	(956)	(125)	(128)	(129)	(129)	(129)	(129)	(140)	(142)	(142)	(142)	(142)
378																							
379 Closing Accumulated Depreciation																							
380 Hardware		-	-	(47)	(117)	(187)	(257)	(90)	(32)	(85)	(138)	(191)	(84)	(35)	(92)	(149)	(206)	(90)	(37)	(99)	(160)	(222)	(97)
381 Software		-	-	(16)	(115)	(213)	(312)	(411)	(510)	(608)	(580)	(7)	(13)	(20)	(27)	(34)	(40)	(47)	(7)	(15)	(22)	(30)	(37)
382 Land		-	-	- (46)	-	-	-	(50)	(74)	-	- (0.0)	(400)	(440)	(400)	(4.44)	(4.50)	(405)	(477)	(400)	(000)	(040)	-	(000)
383 Buildings 384 Vendor Fees		-	-	(12)	(24)	(35)	(47)	(59)	(71)	(83)	(94)	(106)	(118)	(130)	(141)	(153)	(165)	(177)	(189)	(200)	(212)	(224)	(236)
384 Vendor Fees 385 Installer Fees		-	-	(145) (191)	(764) (561)	(1,383) (932)	(2,002) (1,302)	(2,621) (1,672)	(3,240)	(3,859) (2,413)	(3,320)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
386 Internal Labour		-	-	(24)	(138)	(253)	(367)	(482)	(2,043)	(2,413)	(637)	0	0	0	0	0	0	0	0	0	0	0	0
387 Internal Materials		-	-	(24)	(45)	(253)	(93)	(117)	(141)	(165)	(18)	(54)	(108)	(161)	(215)	(269)	(323)	(377)	0	(61)	(121)	(182)	(243)
388 Training		_		(13)	(27)	(41)	(55)	(69)	(82)	(96)	(4)	0	(100)	0	0	0	0	0	0	0	0	0	0
389 Incremental O&M and Capitalized Overhead		-	-	()	(=-/)	,	(-3)	(-5)	( <del></del> )	()	-		-	-	-	-	-		-	-		-	
390 Total Closing Accumulated Depreciation	x-ref S3a, line 44	-	-	(469)	(1,791)	(3,114)	(4,436)	(5,521)	(6,715)	(8,020)	(6,046)	(357)	(323)	(346)	(475)	(605)	(734)	(691)	(233)	(375)	(516)	(658)	(613)
391				,	,	,	,	,	,	,	,	. ,	. /	` '	. ,	. ,	` ′	. ,	. ,	. ,	` ′	. ,	. /
392 Opening GPIS		-	-	4,360	11,117	11,117	11,117	11,117	11,041	11,032	11,032	8,237	1,593	1,605	1,613	1,613	1,613	1,613	1,687	1,697	1,697	1,697	1,697
393 Closing GPIS			4,360	11,117	11,117	11,117	11,117	11,041	11,032	11,032	8,237	1,593	1,605	1,613	1,613	1,613	1,613	1,687	1,697	1,697	1,697	1,697	1,711
394 Mid-Year GPIS		-	2,180	7,739	11,117	11,117	11,117	11,079	11,036	11,032	9,634	4,915	1,599	1,609	1,613	1,613	1,613	1,650	1,692	1,697	1,697	1,697	1,704
395																							
396 Opening Accumulated Depreciation		-	-	-	(469)	(1,791)	(3,114)	(4,436)	(5,521)	(6,715)	(8,020)	(6,046)	(357)	(323)	(346)	(475)	(605)	(734)	(691)	(233)	(375)	(516)	(658)
397 Closing Accumulated Depreciation			-	(469)	(1,791)	(3,114)	(4,436)	(5,521)	(6,715)	(8,020)	(6,046)	(357)	(323)	(346)	(475)	(605)	(734)	(691)	(233)	(375)	(516)	(658)	(613)
398 Mid-Year Accumulated Depreciation		-	-	(235)	(1,130)	(2,452)	(3,775)	(4,978)	(6,118)	(7,368)	(7,033)	(3,201)	(340)	(334)	(411)	(540)	(669)	(712)	(462)	(304)	(446)	(587)	(636)
399 400 TGVI Mid-Year Net Plant in Service			2,180	7,504	9,987	8,665	7.343	6.101	4.918	3,664	2,601	1.713	1,259	1.275	1.203	1.074	944	938	1,230	1,393	1.251	1.110	1.069
400 I GVI Mid-Year Net Plant in Service 401		-	2,160	7,504	9,907	0,005	1,343	0,101	4,910	3,004	2,001	1,713	1,259	1,2/0	1,203	1,074	944	936	1,230	1,393	1,201	1,110	1,009
TO 1																							

	Reference	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	x-ref S3a, line 46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
403 TGVI Software CIAOC Additions	x-ref S3a, line 47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
404 TGVI Software CIAOC Retirements	x-ref S3a, line 48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
405 TGVI Software CIAOC Closing Balance	x-ref S3a, line 49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
406																							
407 TGVI Software CIAOC Opening Balance Accumulated Depreciation	x-ref S3a, line 51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
408 TGVI Software CIAOC Retirements	x-ref S3a, line 52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
409 TGVI Amortization of Software CIAOC	x-ref S3a, line 53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
410 TGVI Software CIAOC Closing Balance Accumulated Depreciation	x-ref S3a, line 54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
411																							
412 TGVI Mid Year Software CIAOC		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
413																							
414 TGVI Opening Deferred Charges	x-ref S3a, line 61	-	6	820	718	615	513	410	308	205	103	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
415 TGVI O&M Deferred Charge Additions	S1, line 21	8	1,060	-	-	-	-	-	-	-	-	-			-	-			-			-	
416 TGVI O&M Tax on Deferred Charge Additions		(2)	(281)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
417 TGVI O&M Net Deferred Charge Additions	x-ref S3a, line 62	6	779	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
418 TGVI O&M Amortization Expense	x-ref S3a, line 63	-	-	(103)	(103)	(103)	(103)	(103)	(103)	(103)	(103)	-	-	-	-	-	-	-	-	-	-	-	-
419 TGVI O&M Deferred Charge AFUDC	S1, line 22	0	35	-	-	-		-	-		-	-	-	-	-	-	-	-	-	-	-	-	-
420 TGVI Closing Deferred Charges	x-ref S3a, line 64	6	820	718	615	513	410	308	205	103	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
421 Capital Lease Rate Base		-	1,678	1,524	1,365	1,201	1,031	857	677	491	299	101	1,952	1,773	1,588	1,398	1,200	997	787	571	348	118	
422 TGVI Mid-Year Deferred Charges		-	-	769	666	564	461	359	256	154	51	-	-	-	-	-	-	-	-	-	-	-	-
423 In-Service Adjustment	x-ref S3a, line 68	-	-	(691)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
424 TGVI Ratebase	x-ref S3a, line 70	-	3,858	9,107	12,019	10,430	8,835	7,316	5,851	4,309	2,952	1,814	3,211	3,048	2,791	2,471	2,145	1,935	2,017	1,964	1,599	1,228	1,069

	Reference	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
TGW	Kelelelice	2010	2011	2012	2013	2014	2013	2010	2017	2010	2019	2020	2021	2022	2023	2024	2023	2020	2021	2020	2029	2030	2031
425 Capital Spending																							
426 Hardware		2	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
427 Software 428 Land		15	4 2	-	-	-	-	-	-	-	-	-	-	-	-			-	-		-	-	-
429 Buildings		3	16																-				-
430 Vendor Fees		44	62	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
431 Installer Fees 432 Internal Labour		3 7	55 13	4 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
433 Internal Materials		3	1	-					-	-	-		-					-				-	-
434 Training		1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
435 Incremental O&M 436 Total Spend	x-ref S6, line 65	78	162	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
437	X-161 30, III.6 03	76	102	13	-		-	-	-	•	-	-	-	-	-		-		-		-	•	-
438 Opening WIP																							
439 Hardware 440 Software		-	2 15	3 17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
441 Land		_	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
442 Buildings		0	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
443 Vendor Fees 444 Installer Fees		4	50 4	86 21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
445 Internal Labour		-	8	17												-			-				-
446 Internal Materials		0	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
447 Training 448 Incremental O&M		-	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
449 Total Opening WIP	x-ref S1, line 18 &	5	85	143		-																	
450 Additions	x-ref S6, line 65	_																					
451 Hardware 452 Software		2 15	7 5	-	-	-	-	-	-	-	-	-	-	-	-			-	-		-	-	-
453 Land		-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
454 Buildings		3	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
455 Vendor Fees 456 Installer Fees		45 4	66 56	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
457 Internal Labour		8	14	2					-														
458 Internal Materials		3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
459 Training 460 Incremental O&M		1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
461 Total Additions	x-ref S1, line 18	81	168	15																			<del></del>
462 In-service																							
463 Hardware 464 Software		-	(6) (3)	(3) (17)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
465 Land		-	(2)	(17)															-				-
466 Buildings		-	(19)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
467 Vendor Fees 468 Installer Fees		-	(29)	(95) (25)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
469 Internal Labour		_	(5)	(18)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
470 Internal Materials		-	(4)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
471 Training 472 Incremental O&M		-	(3)	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		-	-	-
473 Total In-service		-	(110)	(159)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
474 Closing WIP		•																					
475 Hardware 476 Software		2 15	3 17		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
477 Land		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
478 Buildings 479 Vendor Fees		4 50	86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
480 Installer Fees		4	21	-		-		-	-	-	-							-	-		-		-
481 Internal Labour		8	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
482 Internal Materials 483 Training		3	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
484 Incremental O&M			-																-				-
485 TGW Total Closing WIP		85	143	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
486 487 Recurring Plant Additions																							
488 Hardware		_	-	-	-		-	4	2	-	-	-	4	2	-	-	-	4	3	-	-	-	4
489 Software		-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-
490 Land 491 Buildings		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
492 Vendor Fees				1	-	-		-	-	-	-	-	-	-	-		-	-	-		-	-	-
493 Installer Fees		-	-	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
494 Internal Labour 495 Internal Materials		-	-	- 1	-	-	-	-	-	-	- 10	-	-	-	-	-	-	-	- 10	-	-	-	-
495 Internal Materials 496 Training		-	-	0	-	-	-	-	-	-	10	-	-	-	-	-	-	-	10	-	-	-	
497 Capitalized Overhead			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
498 Total Recurring Plant Additions 499		-	-	12	-	-	-	4	2	-	11	-	4	2	-	-	-	5	13	-	-	-	4
433																							

Section		Reference	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
50    Sufficient	500 Opening Plant Balance	Kererenee	2010	2011	2012	2013	2014	2010	2010	2017	2010	2013	2020	2021	2022	2020	2024	2020	2020	2021	2020	2023	2000	2031
Solvanes				_	6	q	q	9	9	7	6	6	6	6	6	6	6	6	6	6	6	6	6	6
March			_		3				20	20	20		18	1	1	1	1	1	1	2	1	1	1	1
50   10   10   10   10   10   10   10					2									2	2	2	2	2	2		2	2	2	2
Verder			_	_	10									10					10		10			
Decomposition   1			_	_										13	13	13	13	13	15	13	13	15	13	13
Second column			-	-			74							-	-	-	-	-	-	-	-	-	-	-
Internal I																								
Tailing			-	-	4									10	10	10	10	10	10	10	10	10	10	10
Incomposition   Continuous			-	-	-	-			-								10		10	10	10			10
151   Total Opening Plante Balances   151   152   151			-	-	3	3	3	3	3	3	3	3	U	-	-	-	-	-	-	-	-	-	-	-
Same									-		-	-								-	-			
515   Additione    14		x-ret S3a, line 71	-	-	110	281	281	281	281	279	2/8	2/8	206	39	39	39	39	39	39	40	39	39	39	39
Hardware																								
Solvare																								
State			-			-	-	-	4	2	-	-	-	4	2	-	-	-	4	3	-	-	-	4
Still display   19			-		17	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-
Second   S			-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Installar   Fees			-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	39		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Training			-	5	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	521 Internal Materials		-	4	1	-	-	-	-	-	-	10	-	-	-	-	-	-	-	10	-	-	-	-
Total Additions	522 Training		-	3	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Additions	523 Incremental O&M and Capitalized Overhead		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
See Reliements  Fee Herbards	524 Total Additions	x-ref S3a, line 72		110	171	-	-	-	4	2	-	11	-	4	2	-	-	-	5	13	-	-	-	4
527   Hardware	525																							
Seg   Software	526 Retirements																							
Seg   Software			-	-	-	-	-	-	(6)	(3)	-	-	-	(4)	(2)	-	-	-	(4)	(2)		-	-	(4)
Signatur			_	_	_	_	_	_	-	-	_	(3)	(17)	`-'	`-'	_	_	_	`-'			_	_	
Sign			-	_	_	_	_	-	_	_	-			_	_	-	_	_	_		_	_	_	_
531   Vendor Fees			-	_	_	_	_	-	_	_	-	_	_	_	_	-	_	_	_	_	-	_	_	_
Saza   Installer Fees			_	_	_	_	_	_	_	_	_	(29)	(96)	_	_	_	_	_	_	_	_	_	_	_
Figure   F			_	_	_	_	_	_	_	_	_			_	_	_	_	_	_	_	_	_	_	_
Figure   F			_		_	_		_		_	_			_		_		_		_		_	_	_
Training																				(40)				
Fig.			-	-	-	-	-	-	-	-	-			-	-	-	-	-	-	(10	-	-	-	-
537 Total Retirements x-ref S3a, line 73			-	-	-	-	-	-	-	-	-		(0)	-	-	-	-	-	-	-	-	-	-	-
538 Closing Plant Balance 540 Hardware		v ref C2e line 72		-					(6)	(2)			(460)	(4)	(2)				(4)	(4.4)		-		- (4)
Signature		x-rer S3a, line 73	-	-	-	-	-	-	(6)	(3)	-	(83)	(168)	(4)	(2)	-	-	-	(4)	(14,	-	-	-	(4)
540         Hardware         -         6         9         9         9         9         9         7         6																								
541 Software - 3 20 20 20 20 20 20 20 20 20 20 20 20 20									_															
542 Land			-					9					6	6	6	6	6	6	6	6	6	6	6	6
543 Buildings			-										1	1	1	1	1	1	2	1	1	1	1	1
544 Vendor Fees - 29 125 125 125 125 125 125 125 96			-											2					2					2
545 Installer Fees			-										19	19	19	19	19	19	19	19	19	19	19	19
546     Internal Labour     - 5     23     23     23     23     23     23     18			-	29									-	-	-	-	-	-	-	-	-	-	-	-
547 Internal Materials - 4 5 5 5 5 5 5 5 5 5 10 10 10 10 10 10 10 10 10 10 10 10 10			-										-	-	-	-	-	-	-	-	-	-	-	-
548 Training - 3 3 3 3 3 3 3 0			-	5	23	23	23	23	23	23	23	18	-	-	-	-	-	-	-	-	-	-	-	-
549 Incremental O&M and Capitalized Overhead	547 Internal Materials		-	4	5	5	5	5	5	5	5	10	10	10	10	10	10	10	10	10	10	10	10	10
549 Incremental O&M and Capitalized Overhead	548 Training		-	3	3	3	3	3	3	3	3	0	-	-	-	-	-	-	-	-	-	-	-	-
550 Total Closing Plant Balance x-ref S3a, line 74 - 110 281 281 281 281 279 278 278 206 39 39 39 39 39 39 39 39 39 39 39 39 39			-	-	-	-	-	-	-	_	-	-	-	-	-	-	-	-	-	-	-	-	-	-
551		x-ref S3a, line 74	-	110	281	281	281	281	279	278	278	206	39	39	39	39	39	39	40	39	39	39	39	39
	551	, 11																						

	Reference	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
552 Opening Accumulated Depreciation																							
553 Hardware		-	-	-	(1)	(3)	(5)	(6)	(2)	(1)	(2)	(3)	(4)	(2)	(1)	(2)	(3)	(5)	(2)	(1)	(2)	(3)	(5)
554 Software		-	-	-	(0)	(3)	(5)	(8)	(10)	(13)	(15)	(15)	(0)	(0)	(0)	(1)	(1)	(1)	(1)	(0)	(0)	(0)	(1)
555 Land		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
556 Buildings		-	-	-	(0)	(1)	(1)	(1)	(1)	(2)	(2)	(2)	(3)	(3)	(3)	(4)	(4)	(4)	(4)	(5)	(5)	(5)	(6)
557 Vendor Fees		-	-	-	(4)	(19)	(35)	(51)	(66)	(82)	(98)	(84)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
558 Installer Fees			_	-	(5)	(14)	(23)	(33)	(42)	(51)	(61)	(31)	- '-	`-		`-'	- '-	`-'		- '-		- '-	`-'
559 Internal Labour		_	_	_	(1)	(3)	(6)	(9)	(12)	(15)	(18)	(16)	_	_	_	_	_	_	_	_	_	_	_
560 Internal Materials		_	_	_	(1)	(1)	(2)	(2)	(3)	(4)	(4)	(0)	(1)	(2)	(4)	(5)	(6)	(7)	(9)	_	(1)	(3)	(4)
561 Training		_	_	_	(0)	(1)	(1)	(1)	(2)	(2)	(2)	(0)	0	0	0	0	0	0	0	0	0	0	0
562 Incremental O&M and Capitalized Overhead					(0)	(1)	(1)	(1)	(2)	(2)	(2)	(0)	U	U	U	U	U	U	U	U	U	U	U
563 Total TGW Depreciation Expense	x-ref S3a, line 76				(12)	(45)	(79)	(112)	(139)	(170)	(202)	(152)	(9)	(8)	(8)	(11)	(14)	(17)	(16)	(6)	(9)	(12)	(15)
564	X-161 33a, III16 70	-	-	-	(12)	(43)	(15)	(112)	(133)	(170)	(202)	(132)	(5)	(0)	(0)	(11)	(14)	(17)	(10)	(0)	(5)	(12)	(13)
565 Retirements																							
566 Hardware		-	-	-	-	-	-	6	3	-			4	2	-	-	-	4	2	-	-	-	4
567 Software		-	-	-	-	-	-	-	-	-	3	17	-	-	-	-	-	-	1	-	-	-	-
568 Land		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
569 Buildings		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
570 Vendor Fees		-	-	-	-	-	-	-	-	-	29	96	-	-	-	-	-	-	-	-	-	-	-
571 Installer Fees		-	-	-	-	-	-	-	-	-	39	36	-	-	-	-	-	-	-	-	-	-	-
572 Internal Labour		-	-	-	-	-	-	-	-	-	5	18	-	-	-	-	-	-	-	-	-	-	-
573 Internal Materials		-	-	-	-	-	-	-	-	-	4	1	-	-	-	-	-	-	10	-	-	-	-
574 Training		-	-	-	-	-	-	-	-	-	3	0	-	-	-	-	-	-	-	-	-	-	-
575 Incremental O&M and Capitalized Overhead		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
576 Total Closing Accumulated Depreciation	x-ref S3a, line 78	-	-	-	-	-	-	6	3	-	83	168	4	2	-	-	-	4	14	-	-	-	4
577																							
578 Depreciation Expense																							
579 Hardware		_	_	(1)	(2)	(2)	(2)	(2)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
580 Software		_	_	(0)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
581 Land				(0)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
582 Buildings		-	-			(0)	(0)	(0)		(0)	(0)	(0)	(0)										
		-	-	(0)	(0)				(0)				(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
583 Vendor Fees		-	-	(4)	(16)	(16)	(16)	(16)	(16)	(16)	(16)	(12)	-	-	-	-	-	-	-	-	-	-	-
584 Installer Fees		-	-	(5)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(4)	-	-	-	-	-	-	-	-	-	-	-
585 Internal Labour		-	-	(1)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(2)	-	-	-	-	-	-	-	-	-	-	-
586 Internal Materials		-	-	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
587 Training		-	-	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	-	-	-	-	-	-	-	-	-	-	-
588 Incremental O&M and Capitalized Overhead			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	
589 Total TGW Depreciation Expense	x-ref S3a, line 77	-	-	(12)	(33)	(33)	(33)	(33)	(33)	(33)	(33)	(24)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
590																							
591 Closing Accumulated Depreciation																							
592 Hardware		-	-	(1)	(3)	(5)	(6)	(2)	(1)	(2)	(3)	(4)	(2)	(1)	(2)	(3)	(5)	(2)	(1)	(2)	(3)	(5)	(2)
593 Software			_	(0)	(3)	(5)	(8)	(10)	(13)	(15)	(15)	(0)	(0)	(0)	(1)	(1)	(1)	(1)	(0)	(0)	(0)	(1)	(1)
594 Land		-	_	-	-	,	-	,	( /	` -'	(,	-	-	-	- (-)	`-'	- (-)	,	-	,	-	-	- (-)
595 Buildings		-	_	(0)	(1)	(1)	(1)	(1)	(2)	(2)	(2)	(3)	(3)	(3)	(4)	(4)	(4)	(4)	(5)	(5)	(5)	(6)	(6)
596 Vendor Fees		_	_	(4)	(19)	(35)	(51)	(66)	(82)	(98)	(84)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
597 Installer Fees		-	_	(5)	(14)	(23)	(33)	(42)	(51)	(61)	(31)	(0)	(0)	(5)	(0)	(5)	(0)	(3)	(0)	(0)	(0)	(3)	(3)
598 Internal Labour		-	-	(1)	(3)	(6)	(9)	(12)	(15)	(18)	(16)					_			-				-
599 Internal Materials		-	-	(1)				(3)	(4)	(4)	(0)		(2)			(6)	(7)	(9)	-	(1)	(3)	(4)	(E)
		-	-		(1)	(2)	(2)					(1)		(4) 0	(5) 0	(6)	(/)	(9)	0	(1)	(3)	(4)	(5) 0
600 Training		-	-	(0)	(1)	(1)	(1)	(2)	(2)	(2)	(0)	0	0	U	U	U	U	U	0	0	U	U	0
601 Incremental O&M and Capitalized Overhead			-	-	-	-	-		- (1990)	(000)	-	-	-	-	-	-	-	- (4.0)	-	-	- (10)		
602 Total Closing Accumulated Depreciation	x-ref S3a, line 79	-	-	(12)	(45)	(79)	(112)	(139)	(170)	(202)	(152)	(9)	(8)	(8)	(11)	(14)	(17)	(16)	(6)	(9)	(12)	(15)	(14)
603																							
604 Opening GPIS		-		110	281	281	281	281	279	278	278	206	39	39	39	39	39	39	40	39	39	39	39
605 Closing GPIS			110	281	281	281	281	279	278	278	206	39	39	39	39	39	39	40	39	39	39	39	39
606 Mid-Year GPIS		-	55	195	281	281	281	280	278	278	242	122	39	39	39	39	39	39	40	39	39	39	39
607																							
608 Opening Accumulated Depreciation		-	-	-	(12)	(45)	(79)	(112)	(139)	(170)	(202)	(152)	(9)	(8)	(8)	(11)	(14)	(17)	(16)	(6)	(9)	(12)	(15)
609 Closing Accumulated Depreciation		-	_	(12)	(45)	(79)	(112)	(139)	(170)	(202)	(152)	(9)	(8)	(8)	(11)	(14)	(17)	(16)	(6)	(9)	(12)	(15)	(14)
610 Mid-Year Accumulated Depreciation			-	(6)	(29)	(62)	(95)	(126)	(155)	(186)	(177)	(80)	(8)	(8)	(10)	(13)	(16)	(17)	(11)	(7)	(10)	(13)	(14)
611				(3)	(23)	(02)	(00)	(.20)	()	(.00)	()	(00)	(0)	(0)	()	(.0)	(.0)	(,	()	(1)	(.5)	(.5)	( - +)
612 TGW Mid-Year Net Plant in Service			55	190	252	219	185	154	124	92	65	42	30	31	29	26	23	23	29	32	29	26	25
012 1 GVV WIIU-TEAL NEL FIAITLITI DELVICE		-	35	190	202	219	COI	104	124	92	60	42	30	31	29	20	23	23	29	32	29	20	20

		Reference	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
613																								
614	TGW Software CIAOC Opening Balance	x-ref S3a, line 81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
615	TGW Software CIAOC Additions	x-ref S3a, line 82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
616	TGW Software CIAOC Retirements	x-ref S3a, line 83	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-
617	TGW Software CIAOC Closing Balance	x-ref S3a, line 84	-	-	-	-	-	-	-	-	-	-	-	-	-	=	-	-	-	-	-	-	-	-
618																								
619	TGW Software CIAOC Opening Balance Accumulated Depreciation	x-ref S3a, line 86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-
620	TGW Software CIAOC Retirements	x-ref S3a, line 87	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-
621	TGW Amortization of Software CIAOC	x-ref S3a, line 88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
622	TGW Software CIAOC Closing Balance Accumulated Depreciation	x-ref S3a, line 89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
623																								
624	TGW Mid Year Software CIAOC		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-
625																								
626	TGW Opening Deferred Charges	x-ref S3a, line 96	-	0	21	18	16	13	10	8	5	3	0	0	0	0	0	0	0	0	0	0	0	0
627	TGW O&M Deferred Charge Additions	S1, line 21	0	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-
628	TGW O&M Tax on Deferred Charge Additions		(0)	(7)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-
629	TGW O&M Net Deferred Charge Additions	x-ref S3a, line 97	0	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-
630	TGW O&M Amortization Expense	x-ref S3a, line 98	-	-	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	-	-	-	-	-	-	-	_	-	-	-	-
631	TGW O&M Deferred Charge AFUDC	S1, line 22	0	1	-	-	-	-	-		-		-	-	-	-	-	-	-	_	-	-	-	-
632	TGW Closing Deferred Charges	x-ref S3a, line 99	0	21	18	16	13	10	8	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0
633	Capital Lease Rate Base		-	42	38	33	29	25	20	16	11	7	2	44	39	35	30	26	21	16	12	7	2	-
634	TGW Mid-Year Deferred Charges		-	-	19	17	14	12	9	6	4	1	-	-	-	-	-	-	-	_	-	-	-	-
635	In-Service Adjustment	x-ref S3a, line 103	-	-	(17)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-
636	TGW Ratebase	x-ref S3a, line 105	-	97	229	302	262	222	183	146	107	73	44	74	70	64	56	49	44	45	44	36	28	25

## Financial Schedule 4a

## Customer Care Enhancement Project- November 10, 2009 Revised

Capital Cost Allowance Summary in \$000s
\*Note- the revenue requirement and tax expense amount showing in 2011 are for financial model purposes only; as requested in the CPCN Application from June 2, 2009, all costs prior to January 1, 2012 will be captured in an AFUDC earning non-rate base deferral account.

	Reference	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
TGI	_																						
1 Opening UCC Balance	S4b, line 11	-	-	34,268	86,914	85,962	85,224	84,628	85,187	85,132	84,353	85,720	85,237	85,884	85,912	85,217	84,684	84,269	85,355	86,989	86,351	85,871	85,504
2 Additions	S4b, line 23	-	35,918	54,208	-	-	-	1,236	793	-	3,555	-	1,224	785	-	-	-	1,599	3,880	-	-	-	1,196
3 CCA	S4b, lines 26, 28, 32, 33 & 34	-	(1,650)	(1,562)	(951)	(738)	(596)	(677)	(849)	(779)	(2,187)	(483)	(577)	(756)	(696)	(532)	(415)	(512)	(2,246)	(638)	(480)	(367)	(466)
4 Closing UCC Balance		-	34,268	86,914	85,962	85,224	84,628	85,187	85,132	84,353	85,720	85,237	85,884	85,912	85,217	84,684	84,269	85,355	86,989	86,351	85,871	85,504	86,234
5																							
6 TGVI																							
7 Opening UCC Balance	S4b, line 60	-	-	2,569	4,082	814	726	656	733	732	635	802	500	598	610	517	446	392	537	771	436	367	315
8 Additions	S4b, line 72	-	4,255	6,421	-	-	-	160	104	-	484	-	173	113	-	-	-	246	607	-	-	-	201
9 CCA	S4b, line 84	-	(1,687)	(4,907)	(3,269)	(87)	(71)	(82)	(106)	(97)	(318)	(302)	(74)	(101)	(93)	(71)	(55)	(101)	(373)	(335)	(69)	(52)	(70)
10 Closing UCC Balance		-	2,569	4,082	814	726	656	733	732	635	802	500	598	610	517	446	392	537	771	436	367	315	446
11																							
12 TGW																							
13 Opening UCC Balance	S4b, line 109	-	-	65	105	23	21	19	21	21	18	22	20	22	22	20	18	17	20	25	23	21	20
14 Additions	S4b, line 121	-	107	162	-	-	-	4	2	-	11	-	4	2	-	_	-	5	13	-	-	-	4
15 CCA	S4b, line 133	-	(43)	(122)	(82)	(2)	(2)	(2)	(3)	(2)	(7)	(2)	(2)	(2)	(2)	(2)	(1)	(2)	(8)	(2)	(2)	(1)	(1)
16 Closing UCC Balance	_		65	105	23	21	19	21	21	18	22	20	22	22	20	18	17	20	25	23	21	20	22
17																							
18																							

17
18
19
20 CCA Rates Used
21
22 Hardware\_CCA
23 Software\_CCA
24 Buildings\_CCA
25 VendorFees\_CCA
26 InstallerFees\_CCA
27 InternalLabour\_CCA
28 InternalMatenials\_CCA
29 Overhead\_Cap\_CCA
30
31 Amortization of Software CIAOC 30.00% 100.00% 6.00% 100.00% 100.00% 100.00% 100.00% 4.00%

12.50%

Financial Schedule 4b

		Reference	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	TGI Capital Cost Allowance																							
	1100.0																							
1 2	UCC Opening				1,693	4.044	4.050	054	000	4.547	4 700	4.045	851	595	4 457	4.007	1.181	007	579	4 404	4.000	4.404	815	570
2	Hardware Software		-	-	532	1,941 2,599	1,359	951	666	1,517	1,736	1,215	197	595	1,457	1,687	1,181	827	5/9	1,434 194	1,663	1,164	815	570
3	Buildings		-	-	6.237	5.863	5,511	5.180	4,869	4,577	4,303	4.044	3.802	3,574	3.359	3.158	2.968	2,790	2,623	2,465	2,317	2,178	2,048	1.925
- 4	Vendor Fees		-	-	4,839	15,187	5,511	5,100	4,009	4,577	4,303	4,044	3,002	3,374	3,339	3,130	2,900	2,790	2,023	2,463	2,317	2,170	2,040	1,925
6	Installer Fees		-	-	6,427	5,855	-	-		-	-	-	-	-	-	-	-	-		-		-	-	-
7	Internal Labour			-	792	2,917				-		-		-	-		-					-		
,	Internal Materials			-	752	2,517				-		-		-	-		-					-		
a	Training		_		445	17		-			-		_	-								-		-
10	Incremental O&M and Capitalized Overhead			_	-	- ''			_	_	_	_	_		_		_		_	_	_	_		
11	Total UCC Opening Balance	x-ref S4a, line 1			20,965	34,379	6.870	6.131	5,535	6.094	6,039	5,260	4.850	4.169	4.816	4.845	4.149	3,617	3,201	4.093	3.981	3,343	2.863	2,495
12	Total 600 Opening Balance	x ici o-a, iiic i			20,505	04,073	0,070	0,101	0,000	0,004	0,000	3,200	4,000	4,100	4,010	4,040	4,143	5,017	0,201	4,055	0,501	0,040	2,000	2,400
13	UCC Additions																							
14	Hardware		-	1,992	889	-	-	-	1,236	793	-	-	-	1,224	785	-	-	-	1,210	776	-	-	-	1,196
15	Software		-	1,064	5,198	-	-	-		-	-	395	-	-	-	-	-	-	389	-	-	-	-	· -
16	Buildings		-	6,430	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	Vendor Fees		-	9,678	30,374	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	Installer Fees		-	12,853	11,710	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	Internal Labour		-	1,584	5,835	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	Internal Materials		-	1,426	167	-	-	-	-	-	-	3,160	-	-	-	-	-	-	-	3,104	-	-	-	-
21	Training		-	890	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	Incremental O&M and Capitalized Overhead			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
23	Total UCC Additions	x-ref S4a, line 2	-	35,918	54,208	-	-	-	1,236	793	-	3,555	-	1,224	785	-	-	-	1,599	3,880	-	-	-	1,196
24																								
25	CCA																							
26	Hardware	x-ref S4a, line 3	-	(299)	(641)	(582)	(408)	(285)	(385)	(574)	(521)	(365)	(255)	(362)	(555)	(506)	(354)	(248)	(355)	(546)	(499)	(349)	(244)	(350)
27	TGI Software CCA		-	(532)	(3,131)	(2,599)	-	-	-	-	-	(197)	(197)	-	-	-	-	-	(194)	(194)	-	-	-	-
28	Buildings	x-ref S4a, line 3	-	(193)	(374)	(352)	(331)	(311)	(292)	(275)	(258)	(243)	(228)	(214)	(202)	(189)	(178)	(167)	(157)	(148)	(139)	(131)	(123)	(115)
29	Vendor Fees CCA		-	(4,839)	(20,026)	(15,187)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30 31	Installer Fees CCA		-	(6,427)	(12,281) (3,709)	(5,855) (2,917)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	Internal Labour CCA Internal Materials CCA	x-ref S4a, line 3	-	(792) (713)	(3,709)	(2,917)	-	-	-	-	-	(1,580)	-	-	-	-	-	-	-	(1,552)	-	-	-	-
33	Training	x-iei 34a, iiile 3	-	(445)	(462)	(17)	-	-	-	-	-	(1,560)	-	-	-	-	-	-	-	(1,552)	-	-	-	-
34	Incremental O&M and Capitalized Overhead	x-ref S4a, line 3	-	(445)	(462)	- (17)	-	-		-	-	-	-	-	-	-	-	-		-		-	-	-
35	Total TGI CCA	X-161 34a, III16 3		(14,240)	(40.710)	(27,510)	(738)	(596)	(677)	(849)	(779)	(2.385)	(681)	(577)	(756)	(696)	(532)	(415)	(707)	(2.441)	(638)	(480)	(367)	(466)
36	Total Tol GoA			(14,240)	(40,710)	(21,510)	(100)	(550)	(011)	(043)	(113)	(2,505)	(001)	(377)	(750)	(000)	(552)	(413)	(101)	(2,441)	(000)	(400)	(501)	(400)
37	UCC Ending Balance																							
38	Hardware		_	1,693	1,941	1,359	951	666	1,517	1,736	1,215	851	595	1,457	1,687	1,181	827	579	1,434	1,663	1,164	815	570	1,416
39	Software		-	532	2,599	-	-	-	-	-	-,	197	-		-	-,	-	-	194	-	-	-	-	-
40	Buildings		-	6,237	5,863	5,511	5.180	4.869	4.577	4.303	4,044	3,802	3.574	3.359	3.158	2,968	2.790	2,623	2,465	2,317	2,178	2,048	1,925	1,809
41	Vendor Fees		-	4,839	15,187		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42	Installer Fees		-	6,427	5,855	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	Internal Labour		-	792	2,917	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	Internal Materials		-	713	84	-	-	-	-	-	-	1,580	-	-	-	-	-	-	-	1,552	-	-	-	-
45	Training		-	445	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-
46	Incremental O&M and Capitalized Overhead		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	Total UCC Ending Balance		-	21,678	34,463	6,870	6,131	5,535	6,094	6,039	5,260	6,430	4,169	4,816	4,845	4,149	3,617	3,201	4,093	5,533	3,343	2,863	2,495	3,225
48 49	TGI Software CIAOC Addition		-	(3,525)	(9,808)	(6,640)	-	-	-	-	-	(444)	(49)	-	-	-	-	-	(49)	(437)	-	-	-	-

	Reference	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
TGVI Capital Cost Allowance																							
50 UCC Opening																							
51 Hardware		_	_	201	230	161	113	79	191	222	156	109	76	200	236	165	116	81	215	254	178	124	87
52 Software		_	_	63	305	-	-	-	-	-	-	27	-	-	-	-	-	-	30	-	-	- 12-7	-
53 Buildings		_	_	739	695	653	614	577	542	510	479	451	423	398	374	352	331	311	292	275	258	243	228
54 Vendor Fees		_	_	571	1,796	-		-		-		-	-	-	-	-	-	-	-	-	-	-	-
55 Installer Fees		_	_	764	700	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
56 Internal Labour		-	-	94	345	_	-	_	_	_	-	-	_	_	-	-	-	_	-	-	-	-	-
57 Internal Materials		-	_	-	-	_	_	-	_	-	_	_	-	_	_	-	_	_	-	-	-	-	-
58 Training		-	_	53	2	_	_	-	_	-	_	_	-	_	_	-	_	_	-	-	-	-	-
59 Incremental O&M and Capitalized Overhead		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
60 Total UCC Opening Balance	x-ref S4a, line 7		-	2.485	4,072	814	726	656	733	732	635	586	500	598	610	517	446	392	537	528	436	367	315
61																							
62 UCC Additions																							
63 Hardware		-	237	104	-	-	-	160	104	-	-	-	173	113	-	-	-	186	121	-	-	-	201
64 Software		-	125	609	-	-	-	-	-	-	54	-	-	-	-	-	-	60	-	-	-	-	-
65 Buildings		-	762	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
66 Vendor Fees		-	1,143	3,593	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
67 Installer Fees		-	1,528	1,400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
68 Internal Labour		-	188	690	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
69 Internal Materials		-	167	20	-	-	-	-	-	-	431	-	-	-	-	-	-	-	486	-	-	-	-
70 Training		-	105	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
71 Incremental O&M and Capitalized Overhead			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
72 Total UCC Additions	x-ref S4a, line 8	-	4,255	6,421	-	-	-	160	104	-	484	-	173	113	-	-	-	246	607	-	-	-	201
73																							
74 CCA																							
75 Hardware		-	(36)	(76)	(69)	(48)	(34)	(48)	(73)	(67)	(47)	(33)	(49)	(77)	(71)	(50)	(35)	(52)	(83)	(76)	(53)	(37)	(56)
76 TGVI Software CCA		-	(63)	(367)	(305)						(27)	(27)						(30)	(30)		· .		
77 Buildings		-	(23)	(44)	(42)	(39)	(37)	(35)	(33)	(31)	(29)	(27)	(25)	(24)	(22)	(21)	(20)	(19)	(18)	(16)	(15)	(15)	(14)
78 Vendor Fees CCA		-	(571)	(2,368)	(1,796)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
79 Installer Fees CCA		-	(764)	(1,464)	(700)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80 Internal Labour CCA		-	(94)	(439)	(345)	-	-	-	-	-	(045)	(0.4.5)	-	-	-	-	-	-	(0.40)	(0.40)	-	-	-
81 Internal Materials CCA		-	(84)	(94)	(10)	-	-	-	-	-	(215)	(215)	-	-	-	-	-	-	(243)	(243)	-	-	-
82 Training		-	(53)	(55)	(2)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<ul> <li>83 Incremental O&amp;M and Capitalized Overhead</li> <li>84 Total TGVI CCA</li> </ul>			(1,687)	(4,907)	(3,269)	(87)	(71)	(82)	(106)	(97)	(318)	(302)	(74)	(101)	(93)	(71)	(55)	(101)	(373)	(335)	(69)	(52)	(70)
84 Total TGVI CCA 85	x-ref S4a, line 9	-	(1,007)	(4,907)	(3,209)	(07)	(71)	(02)	(100)	(97)	(310)	(302)	(74)	(101)	(93)	(71)	(55)	(101)	(373)	(333)	(69)	(52)	(70)
86 UCC Ending Balance																							
87 Hardware			201	230	161	113	79	191	222	156	109	76	200	236	165	116	81	215	254	178	124	87	231
88 Software			63	305	-	-	-	-	-	-	27	-	-	-	-	-	-	30	-	-	- 124	-	-
89 Buildings			739	695	653	614	577	542	510	479	451	423	398	374	352	331	311	292	275	258	243	228	214
90 Vendor Fees			571	1,796	-	014	-	342	510				-	574	-	-	-	202		200	-	-	-1-7
91 Installer Fees		_	764	700	_	_	-	_	-	_	_	-	_	-	_	_	_	-	-	_	_	_	_
92 Internal Labour		_	94	345	_	_	-	_	-	_	_	-	_	-	_	_	_	-	-	_	_	_	_
93 Internal Materials		_	84	(74)	(10)	_	_	_	-	_	215	(215)	_	-	_	_	_	-	243	(243)	_	_	_
94 Training		_	53	2	- (10)	_	_	_	-	_		(2.0)	_	-	-	_	_	-		- (2.0)	_	_	_
95 Incremental O&M and Capitalized Overhead			-			-	-	-	-	-	-	-	-	-	-	-	-	-	-				-
96 Total UCC Ending Balance		-	2,569	3,999	804	726	656	733	732	635	802	285	598	610	517	446	392	537	771	193	367	315	446
97			_,	-,0		. =0		. 50					230	0									
98 TGVI Software CIAOC Addition		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

		Reference	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	TGW Capital Cost Allowance																							
99	UCC Opening																							
100			-	_	5	6	4	3	2	5	5	4	3	2	5	5	4	3	2	5	5	4	3	2
101			-	-	2	8	- '	-				- '	1				- '	- "		1	- "		- "	
102			-	-	19	18	16	16	15	14	13	12	11	11	10	9	9	8	8	7	7	7	6	6
103			-	-	14	45	-		-	-	-	-	-	-	_		-	-	-	-	-	-	- '	-
104			-	-	19	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
105			-	-	2	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
106			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
107			-	-	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
108			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
109		x-ref S4a, line 1	3 -	-	63	103	21	18	17	18	18	16	15	13	15	15	13	11	10	13	12	10	9	8
110																								
111																								
112			-	6	3	-	-	-	4	2	-	-	-	4	2	-	-	-	4	3	-	-	-	4
113			-	3	16	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-
114			-	19		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
115			-	29	91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
116			-	39	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
117			-	5	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
118	Internal Materials		-	4	1	-	-	-	-	-	-	10	-	-	-	-	-	-	-	10	-	-	-	-
119	Training		-	3	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
120	Incremental O&M and Capitalized Overhead		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
121		x-ref S4a, line 1-	4 -	107	162	-	-	-	4	2		11	-	4	2	-	-	-	5	13		-	-	4
122																								
123	CCA																							
124	Hardware		-	(1)	(2)	(2)	(1)	(1)	(1)	(2)	(2)	(1)	(1)	(1)	(2)	(2)	(1)	(1)	(1)	(2)	(2)	(1)	(1)	(1)
125			-	(2)	(9)	(8)		- ' '			- '	(1)	(1)		- ' '		- ' '	- '	(1)	(1)	- ' '		- ' '	- '
126	Buildings		-	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(0)	(0)	(0)	(0)	(0)	(0)
127	Vendor Fees CCA		-	(14)	(60)	(45)		- ' '			- '		- '		- ' '		- ' '	- '	- '	- ' '	- ' '		- ' '	- '
128	Installer Fees CCA		-	(19)	(37)	(18)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
129	Internal Labour CCA		-	(2)	(11)	(9)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
130	Internal Materials CCA		-	(2)	(0)	- '	-	-	-	-	-	(5)	-	-	-	-	-	-	-	(5)	-	-	-	-
131			-	(1)	(1)	(0)	-	-	-	-	-		-	-	-	-	-	-	-	- '	-	-	-	-
132			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
133		x-ref S4a, line 1:	5 -	(43)	(122)	(82)	(2)	(2)	(2)	(3)	(2)	(7)	(2)	(2)	(2)	(2)	(2)	(1)	(2)	(8)	(2)	(2)	(1)	(1)
134																								
135																								
136	Hardware		-	5	6	4	3	2	5	5	4	3	2	5	5	4	3	2	5	5	4	3	2	5
137			-	2	8	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-
138	Buildings		-	19	18	16	16	15	14	13	12	11	11	10	9	9	8	8	7	7	7	6	6	5
139			-	14	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
140			-	19	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
141			-	2	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
142			-	2	0	-	-	-	-	-	-	5	-	-	-	-	-	-	-	5	-	-	-	-
143			-	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
144				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
145			-	65	103	21	18	17	18	18	16	20	13	15	15	13	11	10	13	17	10	9	8	10
146																								
147	TGW Software CIAOC Addition		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

## Financial Schedule 5

		Reference	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	TGI																							
1	Revenue Requirement																							
2	Revenue Requirement																							
3	Operating & Maintenance Expense																							
4	CCE Customer Care O&M Costs	S2, line 6	-	-	39,624	40,706	41,989	43,316	44,684	45,695	46,551	47,947	48,969	49,890	51,081	52,284	53,492	54,747	56,271	57,435	58,808	60,194	61,611	63,030
5	Avoided Costs- Existing customer care contract		-	-	(55,893)	(57,593)	(58,615)	(58,781)	(59,883)	(61,016)	(61,975)	(63,475)	(64,599)	(65,624)	(66,920)	(68,230)	(69,548)	(70,918)	(72,564)	(73,856)	(75,367)	(76,901)	(78,480)	(80,076)
6	Less: Overhead Capitalized			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7			-	-	(16, 269)	(16,887)	(16,626)	(15,465)	(15,199)	(15,321)	(15,423)	(15,528)	(15,631)	(15,734)	(15,839)	(15,946)	(16,056)	(16,171)	(16,293)	(16,422)	(16,559)	(16,707)	(16,869)	(17,047)
8																								
9	Property & Other Taxes		-			38	(34)	57	36	39	31	19	- 8	(6)	(56)	(122)	(115)	(118)	(121)	(124)	(128)	(135)	(133)	(136)
10	Amortization & Depreciation Expense	line 19 + line 20	-	1,486	5,860	11,810	10,977	10,974	10,971	10,817	10,782	10,779	7,285	1,515	2,339	2,334	2,331	2,328	2,324	2,361	2,300	2,303	2,299	873
11	Income Tax Expense Earned Return	line 29	-	125 2.235	1,903	4,224	3,834 5.400	3,733 4.560	3,562 3,768	3,313 3.013	3,177	2,568 1.512	1,847 939	301 1.760	401 1.688	366 1.537	360 1.358	337 1,178	249 1.058	(357) 1.069	109 1.022	94 846	59 670	212 594
12	Earned Return		-	2,235	5,144	6,525	5,400	4,560	3,768	3,013	2,217	1,512	939	1,760	1,688	1,537	1,358	1,178	1,058	1,069	1,022	846	670	594
14	TGI Total Cost of Service	x-ref S6, line 33		3.845	(3.362)	5.709	3.551	3.859	3,138	1.861	784	(650)	(5,551)	(12,165)	(11,467)	(11,830)	(12,123)	(12,447)	(12,783)	(13,473)	(13,256)	(13,599)	(13,973)	(15,503)
15	TOT TOTAL COST OF CETVICE	X-161 00, III16 00		5,045	(0,002)	3,703	0,001	0,000	5,150	1,001	704	(000)	(0,001)	(12,100)	(11,401)	(11,000)	(12,120)	(12,447)	(12,700)	(10,470)	(10,200)	(10,000)	(10,370)	(10,000)
16																								
17	Income Tax Expense Calculation																							
18	Equity Earned Return		-	912	2,024	2,533	2,096	1,770	1,463	1,170	861	587	365	684	655	597	527	457	411	415	397	328	260	231
19	Add: Depreciation Expense- excluding capital lease	S3b, line 165	-	-	3,517	9,470	8,640	8,640	8,640	8,489	8,456	8,456	5,826	58	885	884	884	884	884	924	866	873	873	873
20	Add: Amortization Expense	S3b, line 206	-	-	860	860	860	860	860	860	860	860	-	-	-	-	-	-	-	-	-	-	-	-
21	Less: CCA	S4a, line 3	-	(1,650)	(1,562)	(951)	(738)	(596)	(677)	(849)	(779)	(2,187)	(483)	(577)	(756)	(696)	(532)	(415)	(512)	(2,246)	(638)	(480)	(367)	(466)
22	Less: Overhead Capitalized timing difference			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
23	Taxable Income After Tax		-	(738)	4,840	11,911	10,858	10,674	10,285	9,669	9,398	7,716	5,707	165	784	785	878	926	782	(908)	625	721	765	637
24	- · · ·			(4.004)																				
25	Taxable Income		-	(1,004)	6,453	15,882	14,477	14,232	13,714	12,893	12,531	10,288	7,609	220	1,046	1,047	1,171	1,234	1,043	(1,210)	834	961	1,020	850
26 27	Current Income Tax Rate		29%	27%	25%	25%	25%	25%	25%	25%	25%	25%	250/	25%	25%	25%	250/	25%	250/	25%	25%	25%	25%	25%
28	Capital Lease Tax Expense		29%	391	290	25%	25%	176	134	90	25% 44	(4)	25% (55)	25%	139	104	25% 67	25%	25% (12)	(55)	(99)	(146)	(196)	25%
29	Total Income Tax Expense			125	1.903	4.224	3.834	3.733	3.562	3.313	3.177	2.568	1.847	301	401	366	360	337	249	(357)	109	94	59	212
30	Total moone Tax Expense		-	123	1,503	7,224	5,054	5,755	0,002	5,515	0,177	2,300	1,047	301	+01	300	300	331	243	(337)	103	34	35	212
- 00	Customer Impact- Residential																							
	(95 GJ annual use)																							
	Approximate Annual Bill- Burner Tip Increase/(Decrease) %				-0.27%	0.45%	0.28%	0.31%	0.25%	0.14%	0.07%	-0.06%	-0.44%	-0.96%	-0.91%	-0.94%	-0.96%	-0.98%	-1.00%	-1.07%	-1.04%	-1.07%	-1.11%	-1.23%

TGVI	201	110	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
34 Revenue Requirement																							
36 Operating & Maintenance Expense																							
37 CCE Customer Care O&M Costs S2, line	6	-	-	4,791	5,006	5,253	5,507	5,780	6,014	6,234	6,533	6,789	7,037	7,331	7,635	7,947	8,276	8,655	8,988	9,364	9,752	10,156	10,571
38 Avoided Costs- Existing customer care contract		-	-	(6,759)	(7,083)	(7,333)	(7,473)	(7,746)	(8,031)	(8,299)	(8,649)	(8,956)	(9,257)	(9,604)	(9,963)	(10,333)	(10,721)	(11,161)	(11,558)	(12,000)	(12,459)	(12,936)	(13,430)
39 Less: Overhead Capitalized	-			(1,967)	(2,077)	(2,080)	(1,966)	(1,966)	(2,017)	(2,065)	(2,116)	(2,167)	(2,219)	(2,273)	(2,328)	(2,386)	(2,445)	(2,506)	(2,570)	(2,637)	(2,707)	(2,781)	
41				(1,001)	(2,011)	(2,000)	(1,000)	(1,000)	(2,011)	(2,000)	(2,)	(2,101)	(2,210)	(2,270)	(2,020)	(2,000)	(2,110)	(2,000)	(2,070)	(2,007)	(2,707)	(2,701)	
42 Property & Other Taxes		-	-	-	(0)	(18)	1	9	9	8	6	4	1	(6)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(22)
43 Amortization & Depreciation Expense line 52 + li		-	177	751	1,607	1,610	1,612	1,615	1,603	1,604	1,607	1,158	331	336	341	344	348	351	364	370	373	377	142
44 Income Tax Expense line 6 45 Earned Return	<u>'</u>	-	(511) 297	(1,299) 721	(437) 961	600 834	582 707	554 585	518 468	495 345	399 236	233 145	91 257	66 244	61 223	60 198	55 172	31 155	(62) 161	(56) 157	20 128	13 98	37 85
46		-	231	121	301	004	101	303	400	343	230	145	231	244	223	150	172	100	101	137	120	30	00
47 TGVI Total Cost of Service x-ref S6, li	ne 50	-	(37)	(1,794)	54	946	935	798	582	387	132	(627)	(1,540)	(1,633)	(1,718)	(1,800)	(1,887)	(1,987)	(2,125)	(2,186)	(2,207)	(2,315)	242
48																						•	error
49 50 Income Tax Expense Calculation																							
51 Equity Earned Return		_	142	334	441	383	324	268	215	158	108	67	118	112	102	91	79	71	74	72	59	45	39
52 Add: Depreciation Expense- excluding capital lease S3b, line		-	-	469	1,322	1,322	1,322	1,322	1,307	1,305	1,305	956	125	128	129	129	129	129	140	142	142	142	142
53 Add: Amortization Expense S3b, line		-	-	103	103	103	103	103	103	103	103	-	-	-	-	-	-	-	-	-	-	-	-
54 Less: CCA S4a, lin 55 Less: Overhead Capitalized timing difference	9	-	(1,687)	(4,907)	(3,269)	(87)	(71)	(82)	(106)	(97)	(318)	(302)	(74)	(101)	(93)	(71)	(55)	(101)	(373)	(335)	(69)	(52)	(70)
56 Taxable Income After Tax			(1,545)	(4,001)	(1,403)	1,720	1,678	1,611	1,518	1,468	1.198	720	169	139	139	149	154	100	(159)	(122)	131	135	111
57			( )/	,	, , ,														. ,	, ,			
58 Taxable Income		-	(2,102)	(5,335)	(1,871)	2,293	2,238	2,148	2,025	1,958	1,598	961	225	185	185	199	205	133	(213)	(163)	175	180	148
59 60 Current Income Tax Rate		29%	27%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
61 Capital Lease Tax Expense		-	46	35	31	27	22	17	12	6	(1)	(8)	35	20	15	10	4	(2)	(9)	(16)	(24)	(32)	-
62 Total Income Tax Expense		-	(511)	(1,299)	(437)	600	582	554	518	495	399	233	91	66	61	60	55	31	(62)	(56)	20	13	37
63																							
64 65 Customer Impact- Residential																							
66 (59 GJ annual use)																							
67 Approximate Annual Bill- Burner Tip Increase/(Decrease) %				-0.69%	0.02%	0.37%	0.36%	0.31%	0.23%	0.15%	0.05%	-0.24%	-0.60%	-0.64%	-0.68%	-0.70%	-0.74%	-0.77%	-0.83%	-0.86%	-0.87%	-0.91%	-1.02%

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
TGW																						
68 Revenue Requirement 69																						
70 Operating & Maintenance Expense 71 CCE Customer Care O&M Costs S2, line 6 72 Avoided Costs - Existing customer care contract	-	-	119 (168)	123 (173)	127 (177)	132 (179)	137 (183)	141 (188)	144 (192)	149 (197)	153 (202)	157 (206)	161 (212)	166 (217)	171 (222)	176 (228)	182 (235)	187 (240)	192 (246)	198 (253)	204 (259)	209 (266)
73 Less: Overhead Capitalized 74 75		-	(49)	(51)	(50)	(47)	(46)	(47)	(48)	(48)	(49)	(49)	(50)	(51)	(51)	(52)	(53)	(53)	(54)	(55)	(56)	(57)
76 Property Taxes 77 Amortization & Depreciation Expense line 86 + line 87	-	4	- 19	(0) 40	(0) 40	0 40	0 40	0 40	0 40	0 40	0 28	0 8	(0) 8	(0) 8	(0) 8	(0) 8	(0) 8	(0) 8	(0) 8	(0) 8	(0) 8	(0) 3
78 Income Tax Expense line 96 79 Earned Return 80	-	(13) 7	(32) 18	(11) 24	15 21	15 18	14 15	13 12	12 9	10 6	8 4	2 6	1 6	1 5	1 4	1 4	1	(1) 4	1	0 3	0 2	1 2
81 TGW Total Cost of Service x-ref S6, line 67	-	(1)	(44)	3	26	26	23	18	14	8	(9)	(34)	(36)	(37)	(38)	(40)	(41)	(44)	(43)	(44)	(46)	(51)
82 83 84 Income Tax Expense Calculation									е	rror												
85 Equity Earned Return 86 Add: Depreciation Expense- excluding capital lease S3b, line 589	-	3	8 12	11 33	9 33	8 33	7 33	5 33	4 33	3 33	2 24	3	3	2	2	2	2	2	2	1 3	1	1
87 Add: Amortization Expense S3b, line 630 88 Less: CCA S4a, line 15	-	(43)	3 (122)	3 (82)	3 (2)	3 (2)	3 (2)	3 (3)	3 (2)	3 (7)	(2)	(2)	(2)	(2)	(2)	(1)	(2)	(8)	(2)	(2)	(1)	(1)
Less: Overhead Capitalized timing difference     Taxable Income After Tax 91		(39)	(99)	(35)	43	42	41	38	37	31	23	4	3	3	3	3	2	(3)	3	3	3	2
92 Taxable Income 93	-	(53)	(132)	(47)	58	56	54	51	49	41	31	5	4	4	4	5	3	(4)	3	4	4	3
94 Current Income Tax Rate 95 Capital Lease Tax Expense 96 Total Income Tax Expense	29% - -	27% 1 (13)	25% 1 (32)	25% 1 (11)	25% 1 15	25% 1 15	25% 0 14	25% 0 13	25% 0 12	25% (0) 10	25% (0) 8	25% 1 2	25% 0 1	25% 0 1	25% 0 1	25% 0 1	25% (0) 1	25% (0) (1)	25% (0) 1	25% (0) 0	25% (1) 0	25% - 1
97 98 Customer Impact- Residential 99 (90 GJ annual use) 100 Approximate Annual Bill- Burner Tip Increase/(Decrease) %			-0.62%	0.04%	0.36%	0.36%	0.32%	0.26%	0.19%	0.11%	-0.13%	-0.48%	-0.50%	-0.52%	-0.55%	-0.56%	-0.58%	-0.62%	-0.61%	-0.63%	-0.65%	-0.73%

1 (	Consolidated Project Discounted Cash Flow																							
2		Reference	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
3	Capital Spending- Hardware		(731)	(2,500)		-	-		(1,400)	(900)			-	(1,400)	(900)			-	(1,400)	(900)	-		-	(1,400)
4	Capital Spending- Software		(27,890)	(50,944)	(10,009)	-	-	-	-	-	-	(450)	-	-	-	-		-	(450)	-	-	-	-	-
5	Capital Spending- Buildings & Structures		(2,468)	(7,072)	(188)	-	-	-	-	-	-	(3,600)	-	-	-	-		-	-	(3,600)			-	
6	Capital Expenditure Cash Flow	S1, line 16	(31,089)	(60,516)	(10, 197)	-	-	-	(1,400)	(900)	-	(4,050)	-	(1,400)	(900)	-		-	(1,850)	(4,500)	-	-	-	(1,400)
7																								
8	Revenue Requirement	line 33 + 50 + 67		3,807	(5,200)	5,766	4,523	4,820	3,959	2,460	1,184	(510)	(6,187)	(13,738)	(13,135)	(13,586)	(13,961)	(14,373)	(14,811)	(15,642)	(15,484)	(15,851)	(16,334)	(18,172)
9	Incremental O&M	line 34 + 51 + 68	(77)	(10,001)	18,285	19,015	18,756	17,479	17,212	17,385	17,536	17,692	17,847	18,003	18,162	18,325	18,493	18,667	18,852	19,045	19,250	19,469	19,706	19,962
10	Property Tax 1% in Lieu	line 35 + 52 + 69		-	-	(38)	52	(58)	(45)	(48)	(40)	(25)	(12)	5	62	137	131	136	140	144	148	156	155	159
11	Operating & Other Expense Cash Flow		(77)	(6,194)	13,085	24,743	23,331	22,241	21,125	19,797	18,681	17,157	11,647	4,270	5,088	4,877	4,663	4,430	4,180	3,547	3,913	3,775	3,526	1,949
12	Tax Expense Cash Flow	line 37 + 54 + 71	22	1,641	(3,271)	(6,186)	(5,833)	(5,560)	(5,281)	(4,949)	(4,670)	(4,289)	(2,912)	(1,067)	(1,272)	(1,219)	(1,166)	(1,107)	(1,045)	(887)	(978)	(944)	(882)	(487)
13	After Tax Operating & Other Expense Cash Flow		(55)	(4,552)	9,814	18,557	17,499	16,681	15,844	14,847	14,011	12,868	8,735	3,202	3,816	3,658	3,497	3,322	3,135	2,660	2,935	2,831	2,645	1,462
14																								
15	Terminal Value Cash Flow		-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-
16																								
17	Annual Cash Flow		(31,144)	(65,068)	(383)	18,557	17,499	16,681	14,444	13,947	14,011	8,818	8,735	1,802	2,916	3,658	3,497	3,322	1,285	(1,840)	2,935	2,831	2,645	62
18																								
19 A	Annual Discounted Cash Flow (mid year)		(30,285)	(59,373)	(315)	14,820	13,090	11,699	9,497	8,598	8,098	4,777	4,438	855	1,303	1,532	1,373	1,223	444	(595)	891	805	705	16
20																								
21	Total Project Discounted Cash Flow		(6,407)																					

NOTE	e- the revenue requirement and tax expense amount sin	lowing in 2011 are for illiancial mo	uei puiposes only,	, as requeste	su iii iiie Cr	січ Арріісаі	JOH HOHI JU	116 2, 2009,	ali cosis pii	oi to Janua	Iy 1, 2012 W	iii be captu	ieu iii aii Ai	-ODC earns	ig non-rate	Jase delett	ai account.							
	Terasen Gas Inc.																							
23																								
24		Reference	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	Assumptions																							
	Tax Rate		28.50%	26.50%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%
	Inflation		2.00%																					
	Cost of Capital																							
	Nominal WACC Pre-Tax		6.77%	7.40%	7.68%	7.79%	7.79%	7.79%	7.79%	7.79%	7.79%	7.79%	7.79%	7.79%	7.79%	7.79%	7.79%	7.79%	7.79%	7.79%	7.79%	7.79%	7.79%	7.79%
	Nominal WACC Post-Tax		5.68%	6.23%	6.50%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%
	Real WACC Pre-Tax		4.67%	5.30%	5.57%	5.68%	5.68%	5.68%	5.68%	5.68%	5.68%	5.68%	5.68%	5.68%	5.68%	5.68%	5.68%	5.68%	5.68%	5.68%	5.68%	5.68%	5.68%	5.68%
	Real WACC Post-Tax		3.61%	4.14%	4.41%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%
	CCA Rates																							
34	Hardware		30%																					
35	Software		100%																					
36	Meters		6%																					
37	Overhead Capitalized		4%																					
38	Overhead Capitalized UCC Addition Ratio		0.0% (1	10/16)																				
39	Overhead Capitalized Rate		0%																					
	Project Inservice Year		2011 & 2012																					
41																								
	Discounted Cash Flow Analysis																							
43																								
44	Capital Spending- Hardware		(653)	(2,228)	-	-	-	-	(1,236)	(793)	-	-	-	(1,224)	(785)	-	-	-	(1,210)	(776)	-	-	-	(1,196)
45	Capital Spending- Software		(24,905)	(45,410)	(8,905)	-	-	-	-	-	-	(395)	-	-	-		-	-	(389)	-	-	-	-	-
46	Capital Spending- Buildings & Structures		(2,204)	(6,303)	(167)	-	-	-			-	(3,160)	-	-	-		-		-	(3,104)	-		-	
47	Capital Expenditure Cash Flow	S3b, line 12 + 25 (2010 only)	(27,762)	(53,942)	(9,073)	-	-	-	(1,236)	(793)	-	(3,555)	-	(1,224)	(785)		-	-	(1,599)	(3,880)	-	-	-	(1,196)
48																								
49	Revenue Requirement	S5, line 14	-	3,845	(3,362)	5,709	3,551	3,859	3,138	1,861	784	(650)	(5,551)	(12,165)	(11,467)	(11,830)	(12,123)	(12,447)	(12,783)	(13,473)	(13,256)	(13,599)	(13,973)	(15,503)
50	Incremental O&M	S5, line 4 + 5	(68)	(8,914)	16,269	16,887	16,626	15,465	15,199	15,321	15,423	15,528	15,631	15,734	15,839	15,946	16,056	16,171	16,293	16,422	16,559	16,707	16,869	17,047
51	Property Tax 1% in Lieu	S5, line 9			-	(38)	34	(57)	(36)	(39)	(31)	(19)	(8)	6	56	122	115	118	121	124	128	135	133	136
52	Operating & Other Expense Cash Flow		(68)	(5,069)	12,907	22,558	20,211	19,268	18,302	17,143	16,176	14,859	10,072	3,576	4,427	4,237	4,048	3,843	3,631	3,073	3,431	3,243	3,028	1,679
53	Tax Expense Cash Flow	line 36 x line 26	19	1,343	(3,227)	(5,640)	(5,053)	(4,817)	(4,575)	(4,286)	(4,044)	(3,715)	(2,518)	(894)	(1,107)	(1,059)	(1,012)	(961)	(908)	(768)	(858)	(811)	(757)	(420)
54	After Tax Operating & Other Expense Cash Flow		(49)	(3,726)	9,680	16,919	15,158	14,451	13,726	12,857	12,132	11,144	7,554	2,682	3,321	3,178	3,036	2,882	2,723	2,304	2,573	2,432	2,271	1,259
55																								
56	Terminal Value Cash Flow		-	-	-	-	-	-	-	-	-		-	-	-		-		-		-	-	-	-
57																								
58	Annual Cash Flow		(27,811)	(57,668)	607	16,919	15,158	14,451	12,490	12,064	12,132	7,590	7,554	1,458	2,536	3,178	3,036	2,882	1,124	(1,576)	2,573	2,432	2,271	64
59																								
60	Annual Discounted Cash Flow (mid year)		(27,053)	(52,673)	519	13,535	11,377	10,176	8,252	7,479	7,056	4,142	3,867	700	1,143	1,344	1,204	1,073	393	(516)	791	701	615	16
61																								
62	Total Project Discounted Cash Flow		(5,859)																					

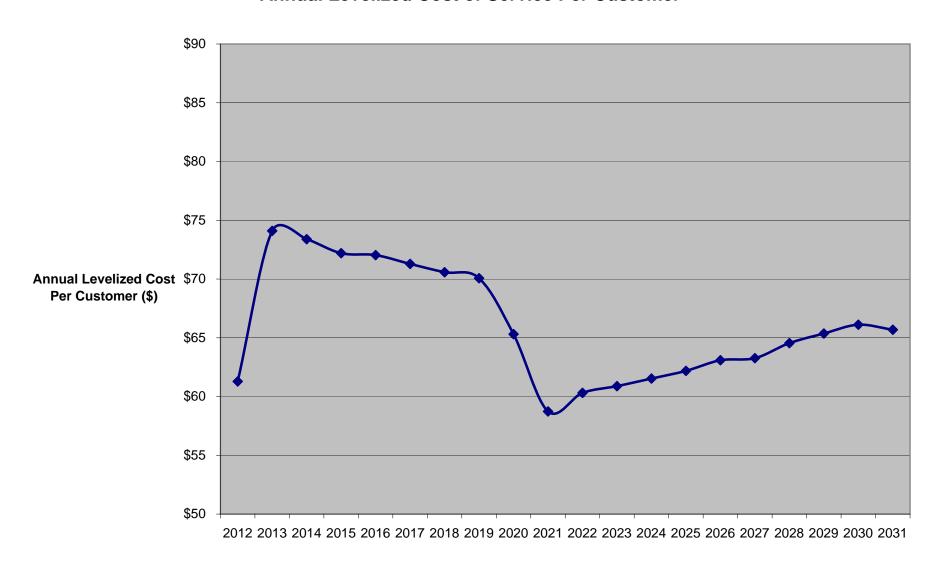
- Note	- tne revenue requirement and tax expense amount sr	nowing in 2011 are for financial mod	ei purposes only	; as requeste	a in the CP	CN Applica	tion from Ju	ne 2, 2009,	all costs pri	or to Janua	ry 1, 2012 v	/III be captu	red in an Ai	-UDC earnir	ng non-rate	base deterr	ai account.							
63 <u>1</u>	erasen Gas (Vancouver Island) Inc.																							
65		Reference	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
66 4	Assumptions																							
67	Tax Rate		28.50%	26.50%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%
68	Inflation		2.00%																					
69	Cost of Capital																							
70	Nominal WACC Pre-Tax		7.42%	8.00%	8.26%	8.36%	8.36%	8.36%	8.36%	8.36%	8.36%	8.36%	8.36%	8.36%	8.36%	8.36%	8.36%	8.36%	8.36%	8.36%	8.36%	8.36%	8.36%	8.36%
71	Nominal WACC Post-Tax		6.35%	6.85%	7.11%	7.19%	7.19%	7.19%	7.19%	7.19%	7.19%	7.19%	7.19%	7.19%	7.19%	7.19%	7.19%	7.19%	7.19%	7.19%	7.19%	7.19%	7.19%	7.19%
72	Real WACC Pre-Tax		5.31%	5.89%	6.14%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%
73	Real WACC Post-Tax		4.26%	4.76%	5.01%	5.09%	5.09%	5.09%	5.09%	5.09%	5.09%	5.09%	5.09%	5.09%	5.09%	5.09%	5.09%	5.09%	5.09%	5.09%	5.09%	5.09%	5.09%	5.09%
74																								
	Discounted Cash Flow Analysis																							
76																								
77	Capital Spending- Hardware		(76)	(265)	-	-	-	-	(160)	(104)	-	-	-	(173)	(113)	-		-	(186)	(121)	-		-	(201)
78	Capital Spending- Software		(2,910)	(5,398)	(1,077)	-	-	-	-	-	-	(54)	-	-	-	-	-	-	(60)	-	-	-	-	-
79	Capital Spending- Buildings & Structures	_	(258)	(749)	(20)	-	-	-	-	-	-	(431)	-	-	-	-		-		(486)	-		-	
80	Capital Expenditure Cash Flow	S3b, line 224 + 237 (2010 only)	(3,244)	(6,412)	(1,097)	-			(160)	(104)	-	(484)	-	(173)	(113)	-	-	-	(246)	(607)	-	-	-	(201)
81																								
82	Revenue Requirement	S5, line 47	-	(37)	(1,794)	54	946	935	798	582	387	132	(627)	(1,540)	(1,633)	(1,718)	(1,800)	(1,887)	(1,987)	(2,125)	(2,186)	(2,207)	(2,315)	(2,617)
83	Incremental O&M	S5, line 37 + 38	(8)	(1,060)	1,967	2,077	2,080	1,966	1,966	2,017	2,065	2,116	2,167	2,219	2,273	2,328	2,386	2,445	2,506	2,570	2,637	2,707	2,781	2,859
84	Property Tax 1% in Lieu	S5, line 42				0	18	(1)	(9)	(9)	(8)	(6)	(4)	(1)	6	15	16	17	18	19	20	21	22	22
85	Operating & Other Expense Cash Flow		(8)	(1,097)	173	2,132	3,044	2,901	2,755	2,589	2,444	2,242	1,536	678	646	626	602	575	537	464	470	521	488	264
86	Tax Expense Cash Flow	line 53 x line 43	2	291	(43)	(533)	(761)	(725)	(689)	(647)	(611)	(561)	(384)	(170)	(162)	(156)	(150)	(144)	(134)	(116)	(118)	(130)	(122)	(66) 198
87	After Tax Operating & Other Expense Cash Flow		(6)	(806)	130	1,599	2,283	2,176	2,066	1,942	1,833	1,682	1,152	509	485	469	451	431	403	348	353	391	366	198
88																								
89	Terminal Value Cash Flow		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-
90		-																						
91	Annual Cash Flow	=	(3,250)	(7,218)	(967)	1,599	2,283	2,176	1,906	1,837	1,833	1,197	1,152	336	372	469	451	431	157	(259)	353	391	366	(3)
92																								
93	Annual Discounted Cash Flow (mid year)		(3,151)	(6,535)	(814)	1,254	1,671	1,485	1,214	1,092	1,016	619	556	151	156	184	165	147	50	(77)	98	101	88	(1)
94																								
95	Total Project Discounted Cash Flow	<u>[</u>	(532)																					

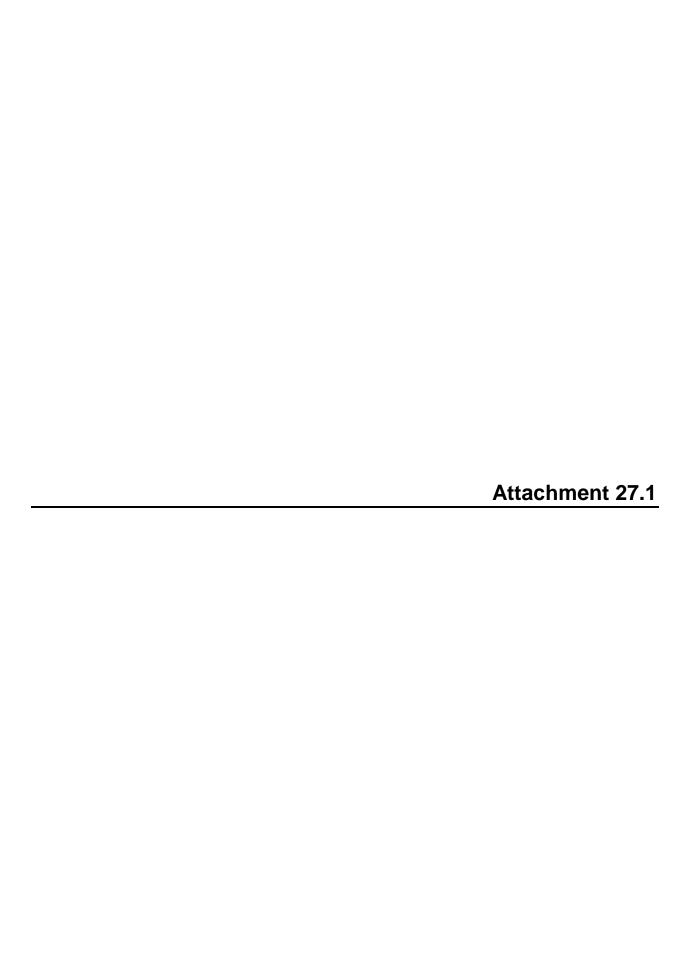
NOU	e- the revenue requirement and tax expense amount si	lowing in 2011 are for financial mod	ei purposes only	r; as requeste	a in the CP	CN Applica	uon irom Ju	ne 2, 2009,	an costs pri	or to Janua	IY 1, 2012 W	iii be captu	red in an Ar	ODC earnin	ig non-rate	base delen	ai account.							
96 : 97	Terasen Gas (Whistler) Inc.																							
98		Reference	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
99 .	Assumptions																							
	Tax Rate		28.50%	26.50%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%
101	Inflation		2.00%																					
102	Cost of Capital																							
103	Nominal WACC Pre-Tax		7.34%	7.92%	8.18%	8.28%	8.28%	8.28%	8.28%	8.28%	8.28%	8.28%	8.28%	8.28%	8.28%	8.28%	8.28%	8.28%	8.28%	8.28%	8.28%	8.28%	8.28%	8.28%
104	Nominal WACC Post-Tax		6.27%	6.77%	7.03%	7.11%	7.11%	7.11%	7.11%	7.11%	7.11%	7.11%	7.11%	7.11%	7.11%	7.11%	7.11%	7.11%	7.11%	7.11%	7.11%	7.11%	7.11%	7.11%
105	Real WACC Pre-Tax		5.23%	5.81%	6.06%	6.16%	6.16%	6.16%	6.16%	6.16%	6.16%	6.16%	6.16%	6.16%	6.16%	6.16%	6.16%	6.16%	6.16%	6.16%	6.16%	6.16%	6.16%	6.16%
106	Real WACC Post-Tax		4.19%	4.68%	4.93%	5.01%	5.01%	5.01%	5.01%	5.01%	5.01%	5.01%	5.01%	5.01%	5.01%	5.01%	5.01%	5.01%	5.01%	5.01%	5.01%	5.01%	5.01%	5.01%
107																								
108	Discounted Cash Flow Analysis																							
109																								
110	Capital Spending- Hardware		(2)	(7)		-	-		(4)	(2)		-		(4)	(2)	-	-	-	(4)	(3)	-	-		(4)
111	Capital Spending- Software		(74)	(136)	(27)	-	-	-	-	-	-	(1)	-	-	-	-	-	-	(1)	-	-	-	-	-
112	Capital Spending- Buildings & Structures		(7)	(19)	(1)	-	-	-	-	-	-	(10)	-	-	-	-	-	-	-	(10)			-	
113	Capital Expenditure Cash Flow	S3b, line 436 + 449 (2010 only)	(83)	(162)	(27)	-	-	-	(4)	(2)	-	(11)	-	(4)	(2)	-	-	-	(5)	(13)	-	-	-	(4)
114																								
115	Revenue Requirement	S5, line 81	-	(1)	(44)	3	26	26	23	18	14	8	(9)	(34)	(36)	(37)	(38)	(40)	(41)	(44)	(43)	(44)	(46)	(51)
116	Incremental O&M	S5, line 71 + 72	(0)	(27)	49	51	50	47	46	47	48	48	49	49	50	51	51	52	53	53	54	55	56	57
117	Property Tax 1% in Lieu	S5, line 76	-	-	-	0	0	(0)	(0)	(0)	(0)	(0)	(0)	(0)	0	0	0	0	0	0	0	0	0	0
118	Operating & Other Expense Cash Flow		(0)	(28)	5	53	76	73	69	65	61	56	40	15	15	14	13	13	12	10	12	11	10	6
119	Tax Expense Cash Flow	line 70 x line 60	0	7	(1)	(13)	(19)	(18)	(17)	(16)	(15)	(14)	(10)	(4)	(4)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(1)
120	After Tax Operating & Other Expense Cash Flow		(0)	(20)	4	40	57	55	52	49	46	42	30	12	11	10	10	10	9	8	9	8	8	4
121																								
122	Terminal Value Cash Flow		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
123																								
124	Annual Cash Flow		(83)	(182)	(24)	40	57	55	48	46	46	31	30	8	8	10	10	10	4	(5)	9	8	8	0
125																								
126	Annual Discounted Cash Flow (mid year)		(80)	(165)	(20)	32	42	37	31	28	26	16	14	4	4	4	4	3	1	(2)	2	2	2	0
127																								
128	Total Project Discounted Cash Flow		(16)																					

# Financial Schedule 7 Customer Care Enhancement Project- November 10, 2009 Revised Cost Per Customer Analysis

	Reference	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
1 Gas Segment 2 3 Customer Care Costs (\$000's)																							
CCE Customer Care O&M CCE other Cost of Service TGVI Banner to Energy Conversion	S2, line 6 line 17 + 28 +40 line 29	- - 1,367	3,807 1,290	44,534 13,085 1,202	45,835 24,781 1,132	47,369 23,279 1,061	48,954 22,299 11	50,601 21,171 -	51,849 19,845	52,929 18,721	54,629 17,182	55,910 11,659	57,084 4,265	58,574 5,027	60,085 4,739	61,610 4,532	63,199 4,294	65,108 4,040	66,609 3,403	68,364 3,765	70,144 3,618	71,971 3,371	73,8 1,7
Total Customer Care Costs  Average Customers		1,367 943,278	5,096 951,379	58,821 959,757	71,749 968.338	71,710 977,113	71,265 987,030	71,772 996,311	71,694 1,005,709	71,650 1,015,228	71,811 1,024,868	67,570 1,034,633	61,348 1,044,524	63,600 1.054.543	64,824 1,064,694	66,142 1.074,979	67,493 1,085,399	69,148 1,095,957	70,013 1,106,657	72,129 1,117,500	73,762 1.128.490	75,342 1.139.628	75,6 1,150,9
Cost Per Customer		\$ 1.45 \$	5.36 \$	61.29	74.09	73.39							\$ 58.73	\$ 60.31 5		\$ 61.53		\$ 63.09			\$ 65.36	\$ 66.11	\$ 65.6
TGI		* * *																					•
TGI Customer Care Costs (\$000's) TGI CCE Customer Care O&M TGI CCE other Cost of Service	S5, line 4 S5, line 14 - (S5, line 4 + S5, line 5)	-	3.845	39,624 12,907	40,706 22.597	41,989 20.177	43,316 19.325	44,684 18.337	45,695 17.182	46,551 16.207	47,947 14.878	48,969 10.080	49,890 3.569	51,081 4.372	52,284 4.115	53,492 3.933	54,747 3.724	56,271 3.510	57,435 2.948	58,808 3.303	60,194 3.108	61,611 2.896	63,0 1.5
TGI Total Customer Care Costs	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-	3,845	52,530	63,302	62,166	62,641	63,021	62,876	62,759	62,825	59,048	53,459	55,453	56,399	57,425	58,471	59,781	60,383	62,111	63,302	64,507	64,5
TGI Average Customers		842,337	848,033	853,935	859,977	866,135	873,338	879,808	886,327	892,893	899,508	906,173	912,886	919,649	926,463	933,327	940,241	947,207	954,225	961,294	968,416	975,591	982,8
TGI Cost Per Customer		\$ - \$	4.53 \$	61.52	73.61	71.77	71.73	71.63	70.94 \$	70.29	69.84 \$	65.16	\$ 58.56	60.30	60.88	\$ 61.53	\$ 62.19	\$ 63.11	\$ 63.28	\$ 64.61	\$ 65.37	\$ 66.12	\$ 65.
TGVI																							
TGVI Customer Care Costs (\$000's) TGVI CCE Customer Care O&M TGVI CCE other Cost of Service TGVI Banner to Energy Conversion	\$5, line 37 \$5, line 47 - (\$5, line 37 + \$5, line 38)	- - 1,367	(37) 1,290	4,791 173 1,202	5,006 2,131 1,132	5,253 3,026 1,061	5,507 2,901 11	5,780 2,764	6,014 2,598	6,234 2,452	6,533 2,248	6,789 1,540	7,037 680	7,331 640	7,635 610	7,947 585	8,276 557	8,655 519	8,988 445	9,364 451	9,752 500	10,156 466	10,5 2
TGVI Total Customer Care Costs	•	1,367	1,252	6,167	8,270	9,341	8,420	8,544	8,612	8,686	8,781	8,328	7,717	7,971	8,245	8,533	8,833	9,174	9,433	9,814	10,252	10,621	10,8
TGVI Average Customers		98,430	100,805	103,258	105,770	108,356	111,036	113,812	116,657	119,573	122,563	125,627	128,768	131,987	135,286	138,669	142,135	145,689	149,331	153,064	156,891	160,813	164,83
TGVI Cost Per Customer		\$ 13.89 \$	12.42 \$	59.72	78.19	86.20	75.83	75.08	73.83 \$	72.64	71.64	66.29	\$ 59.93	60.39	60.95	\$ 61.53	\$ 62.15	\$ 62.97	\$ 63.17	\$ 64.12	\$ 65.34	\$ 66.05	\$ 65.
TGW																							
TGW Customer Care Costs (\$000's) TGW CCE Customer Care O&M TGW CCE other Cost of Service TGW Total Customer Care Costs	S5, line 71 S5, line 81 - (S5, line 71 + S5, line 72)	:	(1) (1)	119 5	123 53	127 76 203	132 73 204	137 69 206	141 65 205	144 61 205	149 56 205	153 40 193	157 16 172	161 14	166 14 180	171 13	176 12 188	182 11	187 10	192 11 203	198 11 208	204 10 213	2
TGW Average Customers		2,511	2,541	2,564	2,591	2,622	2,656	2,691	2,726	2,761	2,797	2,833	2,870	2,907	2,945	2,984	3,022	3,062	3,101	3,142	3,183	3,224	3,2
TGW Cost Per Customer		s - s	(0.41) \$	48.26						74.30													\$ 65.
Notes: Other Cost of Service amounts equal to total cost	st of service as shown on subsequent Re	venue Requirement s	chedule (S5) les	s O&M (net of	CCE customer	care and avoid	ed costs)																
Levelized Cost Per Customer Calculation				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
Discount Rate (TGI) (Nominal After Tax WACC)				6.50%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58
Average Customers Discounted Average Customers				959,757 901,183	968,338 852,404	977,113 806,998	987,030 764,835	996,311 724,339	1,005,709 686,007	1,015,228 649,724	1,024,868 615,379	1,034,633 582,868	1,044,524 552,092	1,054,543 522,959	1,064,694 495,378	1,074,979 469,268	1,085,399 444,550	1,095,957 421,147	1,106,657 398,991	1,117,500 378,013	1,128,490 358,151	1,139,628 339,344	1,150,9 321,5
CCE Total Customer Care Costs Discount Rate Discounted Costs Annual Levelized Cost Per Customer	line 7 x 1000 S6, line 29			6.50% 55,230,967		71,709,637 6.58% 59,225,068 73.39	71,264,715 6.58% 55,221,977 72.20	71,771,564 6.58% 52,179,409 72.04	6.58% 48,903,581	6.58% 45,854,509	71,810,811 6.58% 43,118,598 70.07	67,569,512 6.58% 38,065,797 65.31	6.58% 32,426,264	6.58% 31,540,090	6.58% 30,161,204	66,141,905 6.58% 28,873,421 \$ 61.53	6.58% 27,643,153	6.58% 26,571,734	6.58% 25,242,112		6.58% 23,410,069	6.58% 22,434,444	75,600,7- 6.50 21,120,9: \$ 65.0
Levelized Cost per Customer- CCE CPCN	754,780,914 11,285,168 \$ 66.88																						
Existing Customer Care Contract Discount Rate Discounted Costs Annual Levelized Cost Per Customer	S6, line 29			6.50% 59,057,473	65,503,539 6.58% 57,661,171 67.65	66,750,508 6.58% 55,129,318 68.31	67,018,528 6.58% 51,931,669 67.90 \$	68,376,757 6.58% 49,711,314 68.63	6.58% 47,588,291		6.58% 43,705,960	74,194,145 6.58% 41,797,834 71.71	6.58% 39,675,243	6.58% 38,043,357	6.58% 36,471,202	6.58% 34,958,572	6.58% 33,522,180	6.58%	6.58% 30,876,076	6.58% 29,632,396	6.58% 28,437,122	6.58% 27,295,555	93,765,60 6.58 26,195,73 \$ 81.4
5 6 Levelized Cost per Customer- Existing Contract 7 8	11,285,168																						

# **Customer Care Enhancement Project Annual Levelized Cost of Service Per Customer**





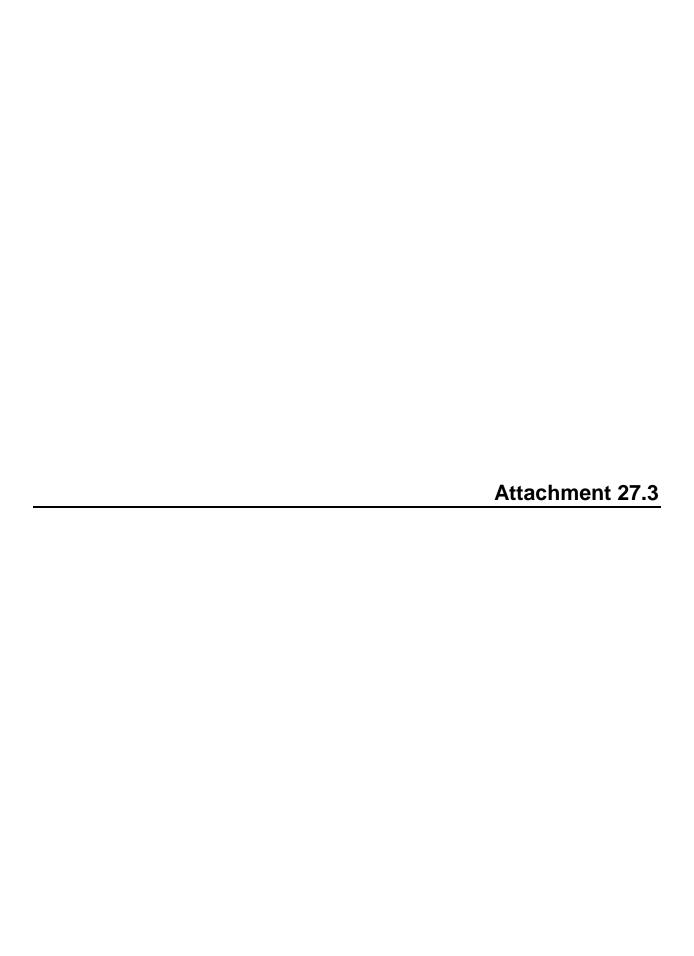
## Financial Schedule 5

Customer Care Enhancement Project- Revised November 10, 2009 Consolidated
Revenue Requirement & Rate Impact Analysis in \$000s

\* Note- the revenue requirement and tax expense amount showing in 2011 are for financial model purposes only; as requested in the CPCN Application from June 2, 2009, all costs prior to January 1, 2012 will be captured in an AFUDC earning non-rate base deferral account.

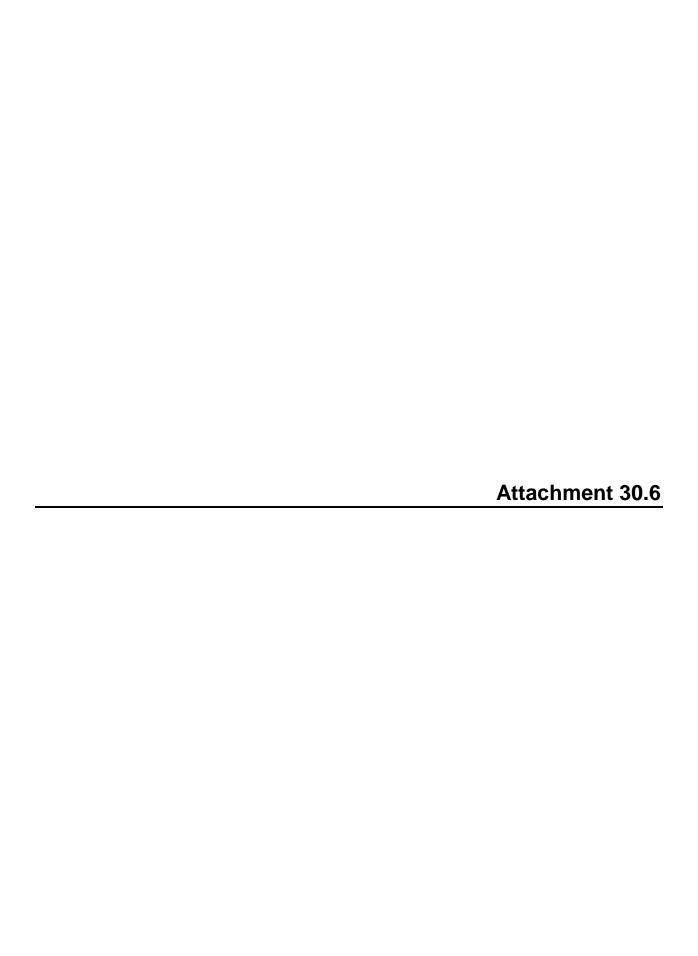
		Reference	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	Consolidated	110,0161106	2010	2071	2012	20.0	20.4	20.0	20.0	20.7	20.0	20.0	2020	LULI	LULE	2020	2024	2020	2020	LULI	2020	2020	2000	200.
4	Revenue Requirement																							
2	Kevenue Kequirement																							
3	Operating & Maintenance Expense																							
4	CCE Customer Care O&M Costs	S2, line 6			44.534	45.835	47.369	48.954	50.601	51.849	52.929	54 620	55.910	57.084	58.574	60.085	61.610	63,199	65 108	66,609	68.364	70.144	71.971	73,810
5	Avoided Costs- Existing customer care contract	02, iii 6 0			(62,819)	(64.850)	(66,125)	(66,433)	(67,813)	(69,234)	(70.466)	(72,321)	(73,757)	(75,087)	(76,736)	(78,410)	(80,103)	(81.866)	(83,959)	(85,654)	(87,614)	(89,613)	(91,676)	(93,773)
	Less: Overhead Capitalized				(02,013)	(04,030)	(00,123)	(00,400)	(07,013)	(03,234)	(10,400)	(12,321)	(13,131)	(13,001)	(10,130)	(70,410)	(00,103)	(01,000)	(00,000)	(00,004)	(07,014)	(03,013)	(31,070)	(33,773)
7	, Less. Overnead Capitalized				(18,285)	(19,015)	(18,756)	(17.479)	(17.212)	(17.385)	(17.536)	(17.692)	(17.847)	(18,003)	(18,162)	(18.325)	(18.493)	(18.667)	(18.852)	(19.045)	(19.250)	(19,469)	(19,706)	(19,962)
,					(10,200)	(13,013)	(10,750)	(17,473)	(17,212)	(17,505)	(17,550)	(17,032)	(17,047)	(10,000)	(10,102)	(10,323)	(10,433)	(10,007)	(10,002)	(13,043)	(13,230)	(13,403)	(13,700)	(13,302)
٥	Property & Other Taxes					38	(52)	58	45	48	40	25	12	(5)	(62)	(137)	(131)	(136)	(140)	(144)	(148)	(156)	(155)	(159)
10	Amortization & Depreciation Expense	line 19 + line 20		1.667	6.630	13.457	12,627	12,627	12,627	12.460	12,426	12.426	8.472	1,853	2,683	2,683	2,683	2,683	2,683	2.733	2,678	2,684	2,684	1.017
11	Income Tax Expense	line 29	_	(399)	572	3,776	4,450	4,330	4,130	3,844	3,685	2,977	2,088	394	468	428	421	394	281	(420)	53	115	72	250
12	! Earned Return	11116 23		2.539	5.883	7.510	6.255	5,284	4,368	3,492	2.571	1.754	1.088	2.023	1.937	1.766	1.560	1.354	1.217	1.234	1.182	976	770	682
	Banner Conversion Costs		1.367	1.290	1,202	1,132	1.061	11	4,500	3,432	2,571	1,754	1,000	2,025	1,337	1,700	1,500	1,554	1,217	1,254	1,102	310	770	002
1/	Consolidated Total Cost of Service	x-ref S6, line 33	1,367	5.096	(3,999)	6.899	5,585	4.831	3,959	2.460	1.184	(510)	(6.187)	(13,738)	(13,135)	(13.586)	(13,961)	(14.373)	(14.811)	(15,642)	(15,484)	(15,851)	(16,334)	(18,172)
15	Cumulative Deficit	x 101 00, III10 00	1,007	6,463	2.465	9,363	14,948	19,779	23,738	26,198	27,382	26,873	20,685	6,947	(6,188)	(19,774)	(33,735)	(48,108)	(62,920)	(78,562)	(94,046)	(109,897)	(126,231)	(144,402)
16	Cumulative Delicit			0,403	2,400	9,303	14,340	19,779	23,730	20,190	27,302	20,073	20,000	0,947	(0, 100)	(19,774)	(33,730)	(40, 100)	(02,920)	(76,302)	(94,040)	(109,091)	(120,231)	(144,402)
17	Income Tax Expense Calculation																							
18	Equity Earned Return			1.057	2.366	2.985	2,488	2,102	1.738	1,390	1,023	698	433	804	770	702	620	538	483	491	470	388	306	271
10	Add: Depreciation Expense- excluding capital lease	S3b. line 165		1,007	3,998	10,825	9,995	9,995	9,995	9,828	9,794	9,794	6,805	186	1.016	1.016	1.016	1.016	1.016	1.066	1.011	1.017	1,017	1.017
20		S3b, line 206			965	965	965	965	965	965	965	965	0,000	100	1,010	1,010	1,010	1,010	1,010	1,000	.,	1,017	1,017	.,
21		S4a, line 3		(3,379)	(6,590)	(4,302)	(828)	(669)	(762)	(957)	(879)	(2,512)	(787)	(653)	(859)	(791)	(605)	(471)	(615)	(2,627)	(975)	(550)	(420)	(537)
22		014, 11100		(0,070)	(0,000)	(1,002)	(020)	(000)	(102)	(001)	(0.0)	(2,0.2)	(101)	(000)	(000)	(,,,,	(000)	(,	(0.0)	(2,027)	(0.0)	(000)	(120)	(007)
23				(2,322)	739	10.473	12.621	12.394	11.937	11.226	10.903	8.945	6.451	338	926	927	1.031	1.083	884	(1,070)	506	855	903	751
24				(2,022)	, 00	10,110	12,021	12,001	11,001	,220	10,000	0,010	0, 10 1	000	020	02.	1,001	1,000	001	(1,010)	000	000	000	, , ,
25				(3,160)	986	13,964	16,828	16,526	15,915	14.968	14.538	11,927	8,601	450	1,235	1,236	1,375	1.444	1.179	(1,427)	675	1.140	1,204	1,001
26				(5,100)	300	.5,504	10,020	10,020	.0,010	,300	,000	,521	5,001	450	.,200	1,200	.,575	.,	.,173	(1,421)	313	.,140	.,204	.,501
27			29%	27%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
28				438	325	285	243	198	152	102	50	(5)	(63)	281	160	119	77	33	(14)	(63)	(115)	(170)	(229)	-
29	Total Income Tax Expense			(399)	572	3.776	4.450	4.330	4.130	3.844	3.685	2.977	2.088	394	468	428	421	394	281	(420)	53	115	72	250
30				(000)	0.2	2,110	., 100	.,000	.,100	2,511	2,000	_,011	_,000	001	100	120		001	20.	(120)	00			_00

Attachment 27.1 RR - 1 / 1

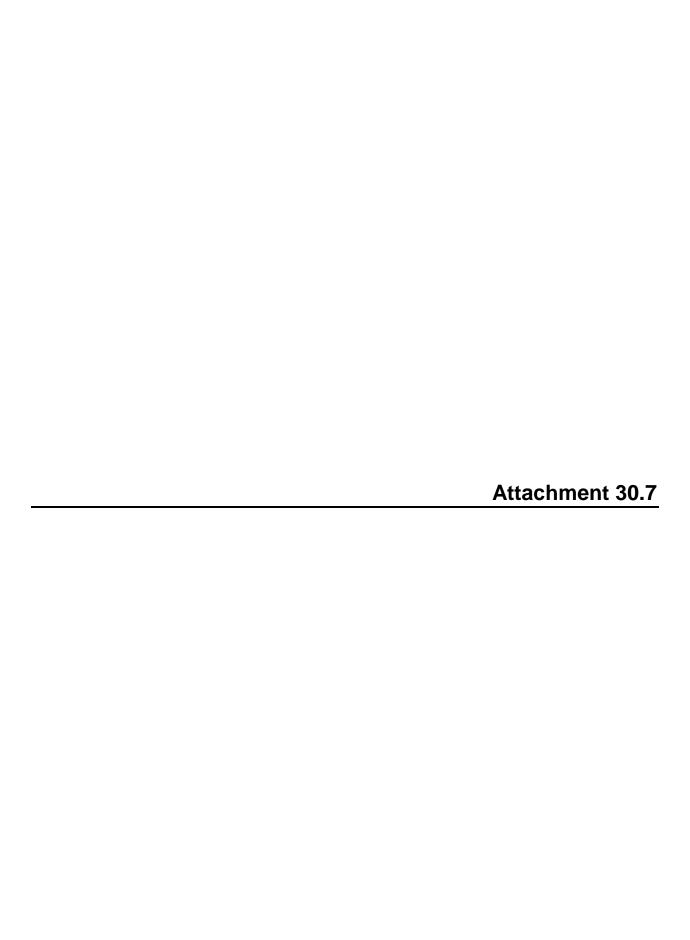


# CONSOLIDATED Incremental Revenue Requirement Sensitivity Analysis (\$000's)

(40000)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
10% Increase to O&M	4,453	4,584	4,737	4,895	5,060	5,185	5,293	5,463	5,591	5,708	5,857	6,008	6,161	6,320	6,511	6,661	6,836	7,014	7,197	7,381
Cost of Service	455	11,482	10,366	9,773	9,067	7,694	6,528	5,005	(543)	(7,975)	(7,221)	(7,519)	(7,741)	(7,993)	(8,239)	(8,917)	(8,582)	(8,769)	(9,068)	(10,720)
Cumulative Deficit	6,918	18,400	28,766	38,539	47,606	55,300	61,828	66,834	66,291	58,316	51,095	43,575	35,834	27,841	19,603	10,686	2,104	(6,665)	(15,733)	(26,453)
5% Increase to O&M	2,227	2,292	2,368	2,448	2,530	2,592	2,646	2,731	2,796	2,854	2,929	3,004	3,081	3,160	3,255	3,330	3,418	3,507	3,599	3,691
Cost of Service	(1,772)	9,191	7,975	7,302	6,513	5,077	3,856	2,248	(3,365)	(10,856)	(10,178)	(10,553)	(10,851)	(11,183)	(11,525)	(12,279)	(12,033)	(12,310)	(12,701)	(14,446)
Cumulative Deficit	4 691	13 882	21 857	29 159	35 672	40 749	44 605	46 853	43 488	32 631	22 453	11 901	1 050	(10 134)	(21 659)	(33 938)	(45 971)	(58 281)	(70.982)	(85 428)



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Lease Cost of Service Analysis (\$ Million)																				
Operating Lease																				
Operating & Maintenance Expense- Lease Payment Depreciation Expense	1.70 -	1.70 -	1.70	1.70 -	1.70 -	1.70 -	1.70	1.70 -	1.70	1.70 -	1.70	1.70 -	1.70 -	1.70	1.70	1.70	1.70	1.70	1.70	1.70
Income Tax Expense Earned Return	(0.29)	(0.29)	(0.31)	(0.34)	(0.36)	(0.40)	(0.43)	(0.46)	(0.50)	(0.54)	(0.27)	(0.29)	(0.31)	(0.34)	(0.36)	(0.40)	(0.43)	(0.46)	(0.50)	(0.54)
Total Operating Lease Cost of Service	\$ 1.42	\$ 1.42	\$ 1.39	\$ 1.37	\$ 1.34	\$ 1.31	\$ 1.27	\$ 1.24	\$ 1.20	\$ 1.16	\$ 1.44	\$ 1.42	\$ 1.39	\$ 1.37	\$ 1.34	\$ 1.31	\$ 1.27	\$ 1.24	\$ 1.20	\$ 1.16
Capital Lease																				
Depreciation Expense	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17
Income Tax Expense Earned Return	0.25 1.08	0.20 0.98	0.17 0.88	0.13 0.77	0.09 0.66	0.05 0.55	0.00 0.44	(0.04) 0.32	(0.09)	(0.15) 0.07	0.23 1.08	0.20 0.98	0.17 0.88	0.13 0.77	0.09 0.66	0.05 0.55	0.00 0.44	(0.04) 0.32	(0.09) 0.20	(0.15) 0.07
Total Capital Lease Cost of Service		\$ 2.35			\$ 1.92		\$ 1.61					\$ 2.35						\$ 1.44		\$ 1.09
Present Value Comparison	PV 20Yrs																			
Operating Lease Cost of Service Capital Lease Cost of Service	\$12.78 \$18.48																			
Variance	\$ (5.70)																			
Annual Difference	\$ 1.09	\$ 0.93	\$ 0.82	\$ 0.70	\$ 0.59	\$ 0.46	\$ 0.34	\$ 0.21	\$ 0.07	\$ (0.07)	\$ 1.05	\$ 0.93	\$ 0.82	\$ 0.70	\$ 0.59	\$ 0.46	\$ 0.34	\$ 0.21	\$ 0.07	\$ (0.07)



## Financial Schedule 5

Financial Schedule 5
Customer Care Enhancement Project- Revised November 10, 2009 Consolidated
Revenue Requirement & Rate Impact Analysis in \$000s

\*Note: The revenue requirement and tax expenses amount showing in 2011 are for financial model purposes only; as requested in the CPCN Application from June 2, 2009, all costs prior to January 1, 2012 will be captured in an AFUDC earning non-rate base deferral account.

Response to BCUC IR 2.30.7- Operating Lease

		Reference	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	Consolidated																							•
1	Revenue Requirement																							
2																								
3	Operating & Maintenance Expense																							
4	CCE Customer Care O&M Costs	S2, line 6	-	-	44,534	45,835	47,369	48,954	50,601	51,849	52,929	54,629	55,910	57,084	58,574	60,085	61,610	63,199	65,108	66,609	68,364	70,144	71,971	73,810
5	Avoided Costs- Existing customer care contract Less: Overhead Capitalized		-	-	(62,819)	(64,850)	(66,125)	(66,433)	(67,813)	(69,234)	(70,466)	(72,321)	(73,757)	(75,087)	(76,736)	(78,410)	(80,103)	(81,866)	(83,959)	(85,654)	(87,614)	(89,613)	(91,676)	(93,773)
	Less: Overnead Capitalized			-	(18,285)	(19,015)	(18,756)	(17.479)	(17,212)	(17,385)	(17.536)	(17.692)	(17.847)	(18,003)	(18,162)	(18.325)	(18,493)	(18.667)	(18,852)	(19.045)	(19,250)	(19,469)	(19,706)	(19,962)
8			-	-	(10,200)	(19,015)	(10,750)	(17,479)	(17,212)	(17,305)	(17,536)	(17,092)	(17,047)	(16,003)	(10,102)	(10,325)	(10,493)	(10,007)	(10,002)	(19,045)	(19,250)	(19,469)	(19,706)	(19,962)
9	Property & Other Taxes					16	(72)	39	28	33	26	12	1	(14)	(69)	(158)	(150)	(153)	(155)	(158)	(161)	(167)	(164)	(166)
10	Amortization, Depreciation & Operating Lease Expense	line 19 + line 20	-	1,518	6,478	13,302	12,469	12,467	12,464	12,294	12,256	12,253	8,296	1,674	2,501	2,498	2,494	2,491	2,488	2,534	2,476	2,478	2,475	1,017
11	Income Tax Expense	line 29		(1,298)	(184)	3,053	3,760	3,673	3,507	3,255	3,129	2,454	1,598	(314)	(123)	(130)	(104)	(97)	(177)	(844)	(337)	(242)	(251)	250
12	Earned Return			1,381	4,810	6,550	5,423	4,580	3,792	3,044	2,251	1,562	1,024	807	849	805	727	649	640	786	862	784	706	682
13	Banner Conversion Costs		1,367	1,290	1,202	1,132	1,061	11																
14	Consolidated Total Cost of Service	x-ref S6, line 33	1,367	2,890	(5,980)	5,039	3,886	3,292	2,580	1,241	125	(1,409)	(6,927)	(15,850)	(15,004)	(15,310)	(15,525)	(15,778)	(16,056)	(16,727)	(16,410)	(16,616)	(16,940)	(18,179)
15	Cumulative Deficit			4,257	(1,724)	3,315	7,201	10,493	13,073	14,313	14,438	13,029	6,102	(9,748)	(24,753)	(40,063)	(55,588)	(71,366)	(87,423)	(104, 150)	(120,560)	(137,176)	(154,117)	(172,296)
16	i																							
17	Income Tax Expense Calculation																							
18	Equity Earned Return		-	575	1,935	2,604	2,159	1,823	1,509	1,212	896	622	407	320	337	320	288	257	254	312	343	312	280	271
19	Add: Depreciation Expense- excluding capital lease	S3b, line 165	-	-	3,998	10,825	9,995	9,995	9,995	9,828	9,794	9,794	6,805	186	1,016	1,016	1,016	1,016	1,016	1,066	1,011	1,017	1,017	1,017
20	Add: Amortization Expense	S3b, line 206	-	(0.070)	965	965	965	965	965	965	965	965	(707)	(050)	(050)	(704)	(005)	(474)	(045)	(0.007)	(075)	(550)	(400)	(507)
21 22	Less: CCA Less: Overhead Capitalized timing difference	S4a, line 3	-	(3,379)	(6,590)	(4,302)	(828)	(669)	(762)	(957)	(879)	(2,512)	(787)	(653)	(859)	(791)	(605)	(471)	(615)	(2,627)	(975)	(550)	(420)	(537)
23				(2,804)	308	10,092	12.291	12.115	11.708	11.048	10.776	8.869	6.425	(146)	493	545	700	802	655	(1,249)	378	779	877	751
24				(2,004)	300	10,032	12,291	12,113	11,700	11,046	10,770	0,009	0,423	(140)	433	343	700	002	033	(1,249)	370	115	6//	751
25				(3,815)	411	13.457	16.388	16.153	15.611	14.731	14.368	11.825	8,567	(195)	658	726	933	1,070	873	(1,665)	504	1,038	1,170	1,001
26				(2,010)		, 101	. 2,000	, 100	,011	,,,	,000	,020	2,007	(100)	000		300	.,010	0.0	(.,000)	001	.,000	.,	.,501
27			29%	27%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
28	Capital Lease Tax Expense		-	(287)	(287)	(311)	(337)	(365)	(395)	(428)	(464)	(502)	(544)	(265)	(287)	(311)	(337)	(365)	(395)	(428)	(464)	(502)	(544)	-
29	Total Income Tax Expense		-	(1,298)	(184)	3,053	3,760	3,673	3,507	3,255	3,129	2,454	1,598	(314)	(123)	(130)	(104)	(97)	(177)	(844)	(337)	(242)	(251)	250
30	·																							

Attachment 30.7 RR - 1 / 2

# Financial Schedule 7 Customer Care Enhancement Project- Revised November 10, 2009 Consolidated Cost Per Customer Analysis

Response to BCUC IR 2.30.7- Operating Lease																							
	Reference	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
1 Consolidated		•																					•
2 3 Customer Care Costs (\$000's)																							
4 CCE Customer Care O&M	S2, line 6			44,534	45.835	47,369	48,954	50,601	51,849	52,929	54,629	55,910	57,084	58.574	60.085	61,610	63.199	65,108	66.609	68,364	70.144	71,971	73,810
5 CCE other Cost of Service	line 17 + 28 +40		1.601	11.103	22,922	21.580	20,760	19.791	18.625	17,661	16.282	10.919	2.153	3.157	3.015	2,968	2.889		2.318	2,840	2.853	2.765	1.783
6 TGVI Banner to Energy Conversion	line 29	1.367	1,290	1.202	1,132	1.061	11	10,701	10,020	17,001	10,202	10,010	2,100	0,107	0,010	2,000	2,000		2,010	2,040	2,000	2,700	1,700
7 Total Customer Care Costs		1,367	2,890	56,839	69,889	70,011	69,725	70,392	70,475	70,591	70,911	66,830	59,237	61,731	63,099	64,578	66,088	67,903	68,927	71,204	72,996	74,736	75,593
8 9 Average Customers		943,278	951,379	959,757	968,338	977,113	987,030	996,311	1,005,709	1,015,228	1,024,868	1,034,633	1,044,524	1,054,543	1,064,694	1,074,979	1,085,399	1,095,957	1,106,657	1,117,500	1,128,490	1,139,628	1,150,918
10 11 Cost Per Customer		\$ 1.45 \$	\$ 3.04	\$ 59.22	\$ 72.17	\$ 71.65	70.64	\$ 70.65	\$ 70.07	\$ 69.53	\$ 69.19	\$ 64.59	\$ 56.71	\$ 58.54	\$ 59.27	\$ 60.07	\$ 60.89	\$ 61.96	\$ 62.28	\$ 63.72	\$ 64.69	\$ 65.58	\$ 65.68
12																							
13																							
14																							
15 Notes: 16 Other Cost of Service amounts equal to total cost of s				0011/																			
16 Other Cost or Service amounts equal to total cost or s	service as snown on subsequent R	evenue Requirement	t schedule (55)	iess O&M (net o	r CCE custome	r care and avoide	od costs)																
17																							
19 <u>Levelized Cost Per Customer Calculation</u>				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
21 Discount Rate (TGI) (Nominal After Tax WACC)				6.50%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%
23 Average Customers				959,757	968,338	977,113	987,030	996,311	1,005,709	1,015,228	1,024,868	1,034,633	1,044,524	1,054,543	1,064,694	1,074,979	1,085,399	1,095,957	1,106,657	1,117,500	1,128,490	1,139,628	1,150,918
24 Discounted Average Customers				901,183	852,404	806,998	764,835	724,339	686,007	649,724	615,379	582,868	552,092	522,959	495,378	469,268	444,550	421,147	398,991	378,013	358,151	339,344	321,537
25																							
26 CCE Total Customer Care Costs	line 7 x 1000			56,838,891	69,889,131	70,010,642	69,725,487	70,392,277	70,474,927	70,590,629	70,911,288	66,829,902		61,731,284	63,099,336	64,577,674	66,087,994						75,593,088
27 Discount Rate 28 Discounted Costs	S6, line 29			6.50% 53.370.059	6.58% 61.521.702	6.58% 57.821.867	6.58% 54.029.251	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%		6.58%	6.58%	6.58%	6.58%	6.58%
28 Discounted Costs 29 Annual Levelized Cost Per Customer				\$ 59.22	\$ 72.17		54,029,251	51,176,639 \$ 70.65	48,071,838 \$ 70.07	45,176,491 \$ 69.53	42,578,481 \$ 69.19	37,649,132 \$ 64.59					27,067,831 \$ 60.89			24,085,786 \$ 63,72			21,118,792 \$ 65.68
29 Annual Levelized Cost Per Customer 30				\$ 59.22	\$ 72.17	\$ /1.65	70.64	\$ 70.65	\$ 70.07	\$ 69.53	\$ 69.19	\$ 64.59	\$ 56.71	\$ 58.54	\$ 59.27	\$ 60.07	\$ 60.89	\$ 61.96	\$ 62.28	\$ 63.72	\$ 64.69	\$ 65.58	\$ 65.68
31																							
32 Levelized Cost per Customer- CCE CPCN	739.505.431	Costs																					
33		3 Customers																					
34	65.53	Cost/Customer (\$)																					
35		_																					
36																							
37 Existing Customer Care Contract				62,895,963	65,503,539	66,750,508	67,018,528	68,376,757	69,766,031	70,965,666	72,789,021	74,194,145			78,385,888	80,081,489	81,846,735						93,765,601
38 Discount Rate	\$6, line 29			6.50%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%		6.58%	6.58%	6.58%	6.58%			6.58%	6.58%		6.58%
39 Discounted Costs				59,057,473	57,661,171	55,129,318	51,931,669	49,711,314	47,588,291	45,416,506	43,705,960					34,958,572							26,195,731
40 Annual Levelized Cost Per Customer				\$ 65.53	\$ 67.65	\$ 68.31	67.90	\$ 68.63	\$ 69.37	\$ 69.90	\$ 71.02	\$ 71.71	\$ 71.86	\$ 72.75	\$ 73.62	\$ 74.50	\$ 75.41	\$ 76.59	\$ 77.39	\$ 78.39	\$ 79.40	\$ 80.44	\$ 81.47
41																							
42	809.363.768																						
43 Levelized Cost per Customer- Existing Contract		3 Costs 3 Customers																					
45		Cost/Customer (\$)																					
46	71.70	= =====================================																					

Attachment 30.7 CpC - 2 / 2

## Financial Schedule 5

Financial Schedule 5
Customer Care Enhancement Project- Revised November 10, 2009 Consolidated
Revenue Requirement & Rate Impact Analysis in \$000s

\*Note: The revenue requirement and tax expenses amount showing in 2011 are for financial model purposes only; as requested in the CPCN Application from June 2, 2009, all costs prior to January 1, 2012 will be captured in an AFUDC earning non-rate base deferral account.

Response to BCUC IR 2.30.7- Capital Lease

		Reference	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	Consolidated	1.0.0161106	2010	2011	2012	20.0	20.7	20.0	20.0	20.7	20.0	20.0	2020	2021	LULE	2020	LULT	2020	2020	LULI	2020		2000	2001
1	Revenue Requirement																							
2																								
3	Operating & Maintenance Expense																							
4	CCE Customer Care O&M Costs	S2, line 6	-	-	44,534	45,835	47,369	48,954	50,601	51,849	52,929	54,629	55,910	57,084	58,574	60,085	61,610	63,199	65,108	66,609	68,364	70,144	71,971	73,810
5	Avoided Costs- Existing customer care contract		-	-	(62,819)	(64,850)	(66, 125)	(66,433)	(67,813)	(69,234)	(70,466)	(72,321)	(73,757)	(75,087)	(76,736)	(78,410)	(80,103)	(81,866)	(83,959)	(85,654)	(87,614)	(89,613)	(91,676)	(93,773)
6	Less: Overhead Capitalized	.=	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
7			-	-	(18,285)	(19,015)	(18,756)	(17,479)	(17,212)	(17,385)	(17,536)	(17,692)	(17,847)	(18,003)	(18,162)	(18,325)	(18,493)	(18,667)	(18,852)	(19,045)	(19,250)	(19,469)	(19,706)	(19,962)
8																								
	Property & Other Taxes		-	-	-	27	(62)	48	36	40	32	17	5	(12)	(68)	(147)	(140)	(144)	(147)	(151)	(155)	(162)	(160)	(163)
	Amortization & Depreciation Expense	line 19 + line 20	-	1,169	6,132	12,960	12,130	12,130	12,130	11,963	11,928	11,928	7,975	1,356	2,185	2,185	2,185	2,185	2,185	2,236	2,180	2,187	2,187	1,017
	Income Tax Expense	line 29	-	(636)	404	3,618	4,302	4,192	4,003	3,727	3,577	2,879	2,000	299	466	436	439	421	318	(372)	111	183	150	250
	Earned Return		-	2,193	5,563	7,224	6,006	5,074	4,196	3,359	2,475	1,697	1,069	1,660	1,612	1,479	1,311	1,143	1,045	1,100	1,087	919	751	682
13	Banner Conversion Costs		1,367	1,290	1,202	1,132	1,061	11																
14	Consolidated Total Cost of Service	x-ref S6, line 33	1,367	4,017	(4,984)	5,947	4,681	3,977	3,153	1,703	475	(1,170)	(6,799)	(14,700)	(13,966)	(14,371)	(14,697)	(15,061)	(15,450)	(16,232)	(16,026)	(16,343)	(16,778)	(18,177)
15	Cumulative Deficit			5,383	399	6,346	11,027	15,004	18,157	19,860	20,335	19,165	12,366	(2,334)	(16,299)	(30,670)	(45,368)	(60,428)	(75,879)	(92,110)	(108,136)	(124,480)	(141,258)	(159,435)
16																								
17	Income Tax Expense Calculation																							
18	Equity Earned Return		-	913	2,238	2,871	2,390	2,019	1,670	1,336	985	675	425	660	640	588	521	454	415	437	432	365	298	271
19	Add: Depreciation Expense- excluding capital lease	S3b, line 165	-	-	3,998	10,825	9,995	9,995	9,995	9,828	9,794	9,794	6,805	186	1,016	1,016	1,016	1,016	1,016	1,066	1,011	1,017	1,017	1,017
20	Add: Amortization Expense	S3b, line 206	-	-	965	965	965	965	965	965	965	965	-	-	-	-	-	-	-	-	-	-	-	-
21	Less: CCA	S4a, line 3	-	(3,379)	(6,590)	(4,302)	(828)	(669)	(762)	(957)	(879)	(2,512)	(787)	(653)	(859)	(791)	(605)	(471)	(615)	(2,627)	(975)	(550)	(420)	(537)
22	Less: Overhead Capitalized timing difference		-	-	-	-	-	-	-	-		-	-	-	-	-	-			-	-	-	-	
23	Taxable Income After Tax	•		(2,466)	611	10,359	12,522	12,311	11,868	11,173	10,865	8,922	6,443	193	797	813	932	999	816	(1,124)	468	832	895	751
24																								
25	Taxable Income		-	(3,355)	814	13,812	16,696	16,415	15,824	14,897	14,487	11,896	8,591	258	1,063	1,084	1,243	1,332	1,088	(1,498)	624	1,110	1,194	1,001
26																								
27	Current Income Tax Rate		29%	27%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
28	Capital Lease Tax Expense		-	253	201	165	128	88	47	2	(45)	(95)	(148)	234	201	165	128	88	47	2	(45)	(95)	(148)	-
29	Total Income Tax Expense		-	(636)	404	3,618	4,302	4,192	4,003	3,727	3,577	2,879	2,000	299	466	436	439	421	318	(372)	111	183	150	250
30	•																							

Attachment 30.7 RR - 1 / 2

# Financial Schedule 7 Customer Care Enhancement Project- Revised November 10, 2009 Consolidated Cost Per Customer Analysis

## Response to BCUC IR 2.30.7- Capital Lease

State   Control Cont	lesponse to BCUC IR 2.30.7- Capital Lease																							
State   Control Cont		Reference	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
CCC Control Come   Control C	Consolidated																							
CCC Code Corner Cannot Cash   S.Z. Irve   1.00																								
Configuration   Service	3 Customer Care Costs (\$000's)																							
TOTIO Biomente Celess  1,207  1,208  1,209	4 CCE Customer Care O&M	S2, line 6		-	44,534	45,835	47,369	48,954	50,601	51,849	52,929	54,629	55,910	57,084	58,574	60,085	61,610	63,199	65,108	66,609	68,364	70,144	71,971	73,81
TOTI Beamer Centes 1200 1200 1200 1200 1200 1200 1200 120	5 CCE other Cost of Service	line 17 + 28 +40		2,727	12,100	23.829	22.376	21,444	20.365	19.087	18.012	16.522	11.048	3.303	4.196	3.954	3.796	3.607	3,402	2.813	3.224	3.126	2.927	1.78
Total Counters Course (Crist Counters Course (Crist Counters Course)    1,327	6 TGVI Banner to Energy Conversion	line 29	1.367	1,290	1.202				-		-	-		-		-		-			-	-	-	
State   Stat				4,017	57,835	70,797	70,807	70,410	70,966	70,937	70,941	71,151	66,958	60,387	62,770	64,038	65,406	66,805	68,509	69,422	71,588	73,270	74,898	75,596
Notes:    Control Cost of Service amounts equal to total cost of service as shown on subsequent Revenue Requirement schedule (SS) less O&M (net of CCE customer care and avoided costs)    Levelized Cost Per Customer Calculations   1	8 9 Average Customers		943,278	951,379	959,757	968,338	977,113	987,030	996,311	1,005,709	1,015,228	1,024,868	1,034,633	1,044,524	1,054,543	1,064,694	1,074,979	1,085,399	1,095,957	1,106,657	1,117,500	1,128,490	1,139,628	1,150,918
Note: Other Customer Calculations of Service amounts equal to total cost of Service amounts equa	1 Cost Per Customer		\$ 1.45 \$	\$ 4.22	\$ 60.26	\$ 73.11	\$ 72.47	\$ 71.34	\$ 71.23	\$ 70.53	\$ 69.88	\$ 69.42	\$ 64.72	\$ 57.81	\$ 59.52	\$ 60.15	\$ 60.84	\$ 61.55	\$ 62.51	\$ 62.73	\$ 64.06	\$ 64.93	\$ 65.72	\$ 65.68
Note: Other Customer Calculations of Service amounts equal to total cost of Service amounts equa	2																							
New Control of Service amounts equal to total cost of Ser	3																							
Exercised Cost Per Customer Calculations   1   2   3   3   4   5   6   7   8   9   10   11   12   13   14   15   16   17   18   19   2   2   2   3   4   5   6   5	4																							
Exercised Cost Per Customer Calculations   1   2   3   3   4   5   6   7   8   9   10   11   12   13   14   15   16   17   18   19   2   2   2   3   4   5   6   5	5 Notes:																							
Everlitad Cost Per Customer Calculations   1 2 3 4 5 6 7 8 9 10 10 11 12 13 14 15 16 17 18 19 2   10 5 10 17 18 19 2   10 5 10 17 18 19 2   10 5 10 17 18 19 2   10 5 10 17 18 19 2   10 5 10 17 18 19 19 2   10 5 10 17 18 19 19 2   10 5 10 17 18 19 19 2   10 5 10 17 18 19 19 2   10 5 10 17 18 19 19 2   10 5 10 17 18 19 19 19 2   10 5 10 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19		ervice as shown on subsequent R	Revenue Requirement	t schedule (S5) I	less O&M (net of	CCF custome	r care and avoid	ed costs)																
Part	7							,																
Discount Rate (TGI) (Nominal After Tax WACC)   6.59%																								
Discount Rate (TGI) (Nominal After Tax WACC)   6.59%	Loyalized Cost Bor Customer Calculation				1	2	2	4		6	7		0	10	- 11	12	12	1.4	16	16	. 17	10	10	-
Average Customers	Levelized Cost Fer Customer Calculation					2	3	4	5		,	۰	9	10	- 11	12	13	14	15	10	17	10	19	-
Average Customers	D:				0.500/	0.500/	0.500/	0.500/	0.500/	0.500/	0.500/	0.500/	0.500/	0.500/	0.500/	0.500/	0.500/	0.500/	0.500/	0.500/	0.500/	0.500/	0.500/	0.50
Average   September   Septem					6.50%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58
Discounted Average Customers   901,183   852,404   808,098   764,835   724,339   888,007   649,724   615,79   582,886   52,092   522,699   495,378   496,286   444,509   421,417   398,919   378,013   398,014   321,317   398,014   398,0	2																							
CCE Total Customer Care Costs   Ine 7 x 1000   57,835,480   70,796,592   70,806,522   70,806,522   70,806,523   70,916,592   70,906,593																								
Discounted Rate   Discounted Costs   Discounted C	4 Discounted Average Customers				901,183	852,404	806,998	764,835	724,339	686,007	649,724	615,379	582,868	552,092	522,959	495,378	469,268	444,550	421,147	398,991	378,013	358,151	339,344	321,537
Discounted Rate   Discounted Costs   Discounted C	5																							
Discounded Costs   54,305,827   62,202,517   58,479,185   54,559,718   51,593,411   43,886,928   45,400,922   42,722,42   37,721,340   31,917,905   31,128,577   29,796,679   29,552,074   27,216,1570   29,226,282   25,023,447   24,215,740   22,205,891   22,302,294   21,119,554   24,000,922	6 CCE Total Customer Care Costs	line 7 x 1000			57,835,480	70,796,592					70,941,315	71,150,711	66,958,077	60,386,644	62,770,178	64,038,492	65,405,778	66,805,178		69,422,448	71,587,768	73,269,566	74,898,089	75,595,820
Annual Levelized Cost per Customer- CCE CPCN  746,492,518 Costs 11,285,188 Customers  8 60.26 \$ 73.11 \$ 72.47 \$ 71.34 \$ 71.23 \$ 70.53 \$ 69.88 \$ 69.42 \$ 64.72 \$ 57.81 \$ 59.52 \$ 60.15 \$ 60.84 \$ 61.55 \$ 62.51 \$ 62.73 \$ 64.06 \$ 64.93 \$ 65.72 \$ 65.65 \$ 65.72 \$ 65.65 \$ 65.72 \$ 65.65 \$ 60.15 \$ 746,492,518 \$ 62.51 \$	7 Discount Rate	S6, line 29			6.50%	6.58%	6.58%	6.58%	6.58%	6.58%			6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	6.58%	
Levelized Cost per Customer- CCE CPCN  746,492,518 Costs 11,285,168 Customers  62,895,963 Cost/Customer (\$)  Existing Customer Care Contract Discounted Costs 85, line 29  62,895,963 65,503,509 66,750,508 65,998 6	B Discounted Costs				54,305,827	62,320,517	58,479,185	54,559,718	51,593,411	48,386,952	45,400,922	42,722,242	37,721,340	31,917,905	31,128,357	29,795,679	28,552,074	27,361,570	26,326,252	25,029,347	24,215,740	23,253,691	22,302,234	21,119,555
Levelized Cost per Customer-CCE CPCN 746,492,518 Costs 11,285,168 Customers 11,285,168 Customers (\$\$11,285,168 Customer (\$\$]\$	9 Annual Levelized Cost Per Customer				\$ 60.26	73.11	\$ 72.47	\$ 71.34	\$ 71.23	\$ 70.53	\$ 69.88	\$ 69.42	\$ 64.72	\$ 57.81	\$ 59.52	\$ 60.15	\$ 60.84	\$ 61.55	\$ 62.51	\$ 62.73	\$ 64.06	\$ 64.93	\$ 65.72	\$ 65.68
Levelized Cost per Customer-CCE CPC 76,496,219 Costs 11,295,168 Customers (\$\$ 11,295,168 Customers (\$\$ \$\$ 11,295,168 Customers (\$\$ \$\$ \$\$ 11,295,168 Customers (\$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$	0																							
Levelized Cost per Customer-CCE CPC 76,496,219 Costs 11,295,168 Customers (\$\$ 11,295,168 Customers (\$\$ \$\$ 11,295,168 Customers (\$\$ \$\$ \$\$ 11,295,168 Customers (\$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$	1																							
11,285,f88 Customer S    S   66.55   Cost/Customer (Sar Customer (Sar Cu		746 492 518	R Coete																					
Existing Customer Care Contract Discounted Costs Annual Levelized Cost per Customer Existing Contract  809,383,788  809,387  809,505  80,505  80,505,505  80,505  80,505,505  80,505,505  80,505	3																							
Existing Customer Care Contract   62,885,683   65,503,593   66,750,508   67,018,528   68,376,757   89,766,011   70,985,666   72,789,021   74,194,145   75,083,023   76,714,241   78,385,888   80,081,489   81,846,725   83,442,34   85,631,82   86,589, 86,589   6.589	4																							
Existing Customer Care Contract    62,895,963   65,503,509   66,503,509   66,503,509   66,503,509   66,503,509   66,503,509   66,509,50	·	00.10	Cosc Customer (4)																					
Discount Rate S6, line 29 6.56% 6.58	5																							
Discounted Costs   5,6 line 29   6,55%	5																							
Discounted Costs 59,057,473 57,661,171 55,129,318 51,931,669 49,711,314 47,588,291 45,416,506 43,705,960 41,797,834 39,675,243 38,043,357 38,471,202 34,988,572 33,522,180 32,256,800 30,876,076 29,632,396 28,437,142 27,205,555 26,195,73 Annual Levelized Cost per Customer Existing Contract    Evelized Cost per Customer Existing Contract																								
Annual Levelized Cost Per Customer - Existing Contract  809,383,788 Costs 11,285,168 Customers (S)  809,383,788 Costs 71,70 S 71,86 S 72,75 S 73,82 S 74.50 S 75,41 S 76.59 S 77,39 S 78,39 S 79,40 S 80,44 S 81,45  809,383,788 Costs 11,285,168 Customers (S)		S6, line 29																						
Levelized Cost per Customer - Existing Contract 809,363,768					59,057,473	57,661,171	55,129,318	51,931,669	49,711,314	47,588,291	45,416,506	43,705,960	41,797,834	39,675,243	38,043,357	36,471,202	34,958,572	33,522,180	32,256,800	30,876,076	29,632,396	28,437,122	27,295,555	26,195,73
Levelized Cost per Customer- Existing Contract 809,363,768 Costs 11,285,168 Customers 11,285,168 Customers 5 71,70 CostCustomer (\$)	Annual Levelized Cost Per Customer				\$ 65.53	67.65	\$ 68.31	\$ 67.90	\$ 68.63	\$ 69.37	\$ 69.90	\$ 71.02	\$ 71.71	\$ 71.86	\$ 72.75	\$ 73.62	\$ 74.50	\$ 75.41	\$ 76.59	\$ 77.39	\$ 78.39	\$ 79.40	\$ 80.44	\$ 81.47
Levelized Cost per Customer- Existing Contract 809,363,768 Costs 11,285,168 Customers 11,285,168 Customers 5 71,70 CostCustomer (\$)	İ																							
11,285,168 Cushmers 71,70 CoSU(cushmer (§)	2																							
11,285,168 Customers 71,70 CoSU(customer (§)		809 363 769	R Coets																					
\$ 71.70 Cost/Customer (\$)	4																							
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	5	71.70	COSC CUSTOTTIET (\$)																					

Attachment 30.7

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