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Log No. 19174

VIA E-MAIL regulatory.affairs@terasengas.com

August 2, 2007

Mr. Scott Thomson Vice President, Finance and Regulatory Affairs Terasen Gas Inc. 16705 Fraser Highway Surrey, B.C. V4N 0E8

Dear Mr. Thomson:

Re: Terasen Gas Inc. ("TGI", "the Company") Project No. 3698463/Order No. C-5-07 Certificate of Public Convenience and Necessity Application for the Distribution Mobile Solution Project

Regarding Commission Order No. C-5-07 dated July 5, 2007, enclosed are the Commission's Reasons for Decision. In the review of TGI's application for a Certificate of Public Convenience and Necessity ("CPCN") for the Distribution Mobile Solution Project ("DMS") (the "Application"), the Commission identified several deficiencies.

#### **Regulatory Process**

On April 19, 2007, TGI informed Commission staff of the Company's plans to file the Application, during the week of April 22-27. The Commission did not receive the Application, dated May 7, 2007, until the end of the day on Thursday May 10, 2007 (Exhibit B-2, Commission IR No. 1, Question 18.1). TGI stated that it was unable to file the Application at an earlier date due to the application by Fortis Inc. to acquire of the all of the issued and outstanding shares of Terasen Inc. The Company considered it prudent to delay any filings with the Commission until a decision was reached in the acquisition application (Exhibit B-2, Commission IR No. 1, Question 18.1.3). The Commission was able to accommodate TGI's request for an expedited review, but the approval of such requests should not be assumed. TGI is reminded that the Company is responsible for submitting applications on a timely basis for Commission review.

#### Life-Cycle Costing

TGI did not provide a comprehensive life-cycle cost analysis in the Application when comparing the Syclo's and Sybase's solutions. A life-cycle cost analysis takes into account the upfront software acquisition and implementation cost, as well as ongoing application and system sustainment costs over the useful life of the asset. Examples of such costs include software upgrade costs, annual maintenance costs, network costs, licensing fees, user fees, and product warranty periods. At the request of the Commission, TGI provided additional information regarding ongoing annual costs and estimated software upgrade costs (likely in year 4) between the two solutions in its updated response (Exhibit B-4, Updated Response to Commission IR No. 1, Question 13.3). The Commission encourages TGI to consider a life-cycle costing approach and the long-term viability of the vendors in the evaluation of alternatives in future CPCN applications.

#### **Asset Retirement**

If a CPCN application proposes a replacement of existing assets, the utility should submit an asset retirement plan with estimated Net Book Value ("NBV") or salvage values when the assets are no longer actively used. When components of a specific asset are to be replaced, the Commission expects the utility to identify the components and provide reasonable estimates of their carve-out values, if feasible. The Commission considers it important that TGI identify and disclose the NBVs or salvage values of replaced assets in future CPCN applications.

Yours truly,

Robert J. Pellatt

SPS/dlf Enclosure

#### BRITISH COLUMBIA UTILITIES COMMISSION

Order Number C-5-07

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## IN THE MATTER OF the Utilities Commission Act, R.S.B.C. 1996, Chapter 473

and

An Application by Terasen Gas Inc. for a Certificate of Public Convenience and Necessity for the Distribution Mobile Solution Project

BEFORE: L.F. Kelsey, Commissioner July

## CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY

## WHEREAS:

- A. On May 10, 2007, the Commission received an Application for a Certificate of Public Convenience and Necessity ("CPCN") from Terasen Gas Inc. ("TGI") dated May 7, 2007 (the "Application"), pursuant to Section 45 of the Utilities Commission Act (the "Act"), to implement a new Distribution Mobile Solution ("DMS") for an expected total capital expenditure of \$5.98 million. TGI requests that the Commission review this Application in an expedited fashion such that the project work can commence at the beginning of July 2007 with target completion by approximately August 31, 2008; and
- B. The Application was copied to the Registered Intervenors of the TGI 2004-2007 Multi-Year Performance-Based Rate ("PBR") Plan and TGI 2006 Annual Review & Mid-Term Assessment Review; and
- C. In accordance with the Settlement Agreement for the 2004-2007 Multi-Year PBR Plan approved by Commission Order No. G-51-03 and extended by Order No. G-33-07 to 2008-2009, TGI is required to submit a CPCN for any capital project in excess of \$5 million; and
- D. TGI proposes that 10 percent of project costs be proportionally allocated to Terasen Gas (Vancouver Island) Inc. ("TGVI"), consistent with Order No. G-112-04, where 10 percent of the TGI's SAP-related costs were allocated to TGVI; and
- E. The Commission, by Order No. G-54-07, established a public hearing process and regulatory timetable for the review of the Application; and
- F. The Commission issued Information Request ("IR") No. 1 on May 29, 2007 and TGI responded on June 5, 2007; and



#### July 5, 2007

Order Number

G. On June 11, 2007, the Commission submitted a letter to TGI regarding incomplete responses to Commission IRs 1.1 - 1.3. The letter requested that TGI provide the 2007 edition of the "Magic Quadrant for Field Service Management" article dated May 11, 2007 and update its responses to Commission IRs 1.1 - 1.3. TGI responded to the Commission's letter on June 14, 2007; and

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- H. On June 14, 2007, TGI filed its Final Submission. TGI submits that the new DMS Project results in the lowest revenue requirement impact while addressing the fragile state of the current system; and
- I. The Commission has reviewed the Application, the evidence adduced in relation thereto and Final Submission and finds that approval is warranted.

NOW THEREFORE the Commission orders with Reasons to follow that:

- 1. A Certificate of Public Convenience and Necessity is granted for the DMS Project, effective July 2, 2007, subject to TGI's acceptance of the condition in Directive No. 2.
- 2. Additions to Rate Base related to the DMS Project will be limited to a maximum of 110 percent of the capital cost estimate in Commission IR 26.6 and savings below 90 percent of the estimate will accrue to the shareholder, similar to the treatment in Commission Order No. C-11-99 regarding the TGI Southern Crossing Pipeline project. TGI must file by August 4, 2007 a statement regarding its willingness to accept a CPCN for the DMS that includes, as a condition, this mechanism to limit ratepayer exposure to capital cost overruns.
- 3. TGI's Internal Audit department is to perform a formal post-implementation review of the DMS Project and provide a written report to the Commission in conjunction with the filing of the 2008 Annual Review material consistent with Commission Order No. G-33-07.
- 4. The cost of the DMS Project is accepted; however, should the DMS need replacement before 8 years, TGI will be at risk for a portion of the costs.
- 5. The Commission accepts the 10 percent proportional allocation of the DMS Project costs to TGVI.

**DATED** at the City of Vancouver, in the Province of British Columbia, this 5<sup>th</sup> day of July 2007.

BY ORDER

Original signed by:

L.F. Kelsey, Commissioner

#### TERASEN GAS INC.

## CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR THE DISTRIBUTION MOBILE SOLUTION

#### **REASONS FOR DECISION**

#### **1.0 INTRODUCTION**

#### 1.1 Application

In accordance with the Settlement Agreement approved by Commission Order No. G-51-03 and extended by Commission Order No. G-33-07, Terasen Gas Inc. ("TGI", the "Company") is not required to submit a CPCN application for capital projects below \$5 million, except in unusual circumstances. On May 7, 2007 and pursuant to Section 45 of the Utilities Commission Act (the "Act"), TGI applied to the British Columbia Utilities Commission (the "Commission") for approval of a Certificate of Public Convenience and Necessity ("CPCN") to implement a new Distribution Mobile Solution ("DMS") (the "Application").

The capital cost of the DMS is estimated to be \$5.98 million. TGI requested that the Commission expedite the review of the Application in order to facilitate the commencement of work at the beginning of July 2007 with a forecasted completion date of August 31, 2008. TGI also proposed that 10 percent of project costs be proportionally allocated to Terasen Gas (Vancouver Island) Inc. ("TGVI"), consistent with Commission Order No. G-112-04, where 10 percent of TGI's SAP related costs were allocated to TGVI.

#### **1.2 Background**

The Company considers the aging technology components used to manage its mobile workforce to be a threat to reliable service. Current system outages are short in duration, but they are becoming more frequent. With the increase in the number of outages, there is also the possibility of sustained outages that would affect the Company's ability to effectively and efficiently perform full day-to-day customer service work. Some of the hardware in the existing system is at the end of its useful life, while the

software has limited vendor support. TGI submits that the implementation of the proposed DMS is in the public interest (Exhibit B-1, Application letter, p.1).

#### **1.3 Regulatory Process**

In determining the appropriate process to review the Application, the Commission considered the complexity of the Application, the need for public participation and the cost associated with the process selected. The Application is not complex and no Intervenors or Interested Parties registered to participate in the proceeding. Given the absence of Intervenors and TGI's request for an expedited review of the Application, the Commission determined that a written process should be used to examine the Application. On May 24, 2007, Commission Order No. G-54-07 established a written public hearing process and a regulatory timetable for the review of the Application.

# 2.0 CURRENT STATE TECHNOLOGY AND CHALLENGES

#### 2.1 Field Work

TGI's Distribution field or "mobile" workforce performs three types of field work: Customer Service ("CS"), Construction and Preventive Maintenance ("PM") (Exhibit B-1, Application, p.8). The work performed by CS includes emergency response, high bill complaints, meter investigation, residential and commercial meter exchanges and disconnect/reconnects. The work performed by Construction includes the installation and abandonment of mains and services, the installation of meters, system improvements, and various types of repairs. The work performed by PM includes the installation, repair, exchange and upgrade of industrial meters, station maintenance and abandonment, propane system upgrades and meter set consolidations (Exhibit B-2, Commission IR No. 1, Question 4.1).

#### 2.2 Resource Management

The management of the field work involves scheduling work (matching the skills of specific individuals or crews and their availability for the work required), dispatching individuals and crews to locations, and providing work instructions to field staff (Exhibit B-1, Application, p. 8). In 1999, TGI developed a resource management strategy based on the creation of a single centralized centre that would coordinate the management of TGI's mobile workforce. As a result of technological constraints, the resource management strategy was implemented over a number years as applications were developed. In March

2001, TGI implemented "MobileUp", a data dispatch application to manage work assignments for CS. The planned addition of Construction and PM work to MobileUp was never undertaken due to the lack of development of MobileUp. PM work activities were migrated to SAP R/3 in 2002 and a manual process for the dispatch and receipt of work was implemented. In 2003, Construction work activities were migrated to SAP R/3 and a manual process was also adopted for dispatching and receiving work (Exhibit B-1, Application, pp. 8-9).

## 2.3 Customer Service

CS field work is generated in the Energy Customer Information System ("Energy") as the result of customer calls to the call centre, or the identification of metering irregularities. Energy creates work orders which are sent on a periodic basis to MobileUp which assigns the jobs to the available technicians with the appropriate skills. Using wireless communication, jobs are sent to the technicians who update the status of jobs. The status updates are stored in MobileUp and converted to timesheet information which is then exported to SAP's costing system. When a job is completed, the completion information entered by the technician updates MobileUp which interfaces with Energy for job closing (Exhibit B-2, Commission IR No. 1, Question 21.3, Attachment 21.3, p. 13).

Since the implementation of MobileUp, several customer service issues have developed. Customer care was outsourced to Accenture Business Services for Utilities in 2002 and implementing process or technology improvements to the Customer Service process became increasingly complex and costly. The expected improvements in MobileUp's functionality did not materialize and customer appointment setting was removed from customer care outsourcing. This function was added to the operations support group and the Company was required to absorb the cost. CS payroll is based on paper timesheets completed by technicians, while the costing system uses the timesheet information from MobileUp. Discrepancies between costing and payroll data in SAP create problems when cost data is reconciled to payroll data (Exhibit B-2, Commission IR No. 1, Question 21.3, Attachment 21.3, p. 13).

## 2.4 Construction

Construction work is generated in the Café application and is often the result of a customer request for a new service. Based on information from the customer, ClickSchedule checks for crew availability. When the customer agrees to the quoted price and appointment time, the quote is automatically submitted to SAP. For each field activity in the quote, SAP creates an SAP work order and the SAP

work order generates an equivalent ClickSchedule task. ClickSchedule optimizes the scheduling variables (rules, job dependencies and appointment time) to produce an effective work schedule. When work is sent to the field, ClickSchedule causes SAP to download the associated work orders to SAP's Mobile Asset Management. As the work is completed in the field, status updates are sent to SAP which updates ClickSchedule.

Significant portions of the construction process have been automated, but paper permits, drawings and field sketches are still used. When a job is completed, the paper documents are returned to the office for data entry in SAP and Automated Mapping and Facilities Management (Exhibit B-2, Commission IR No. 1, Question 21.3, Attachment 21.3, p. 14).

## 2.5 Maintenance

Maintenance work is initiated directly in SAP's Plant Maintenance (PM) module. Preventative maintenance work orders are automatically created in SAP based on the maintenance plans and corrective work orders manually generated by the Maintenance Analysts. Lists of work orders are exported to Excel and the work orders are manually assigned to technicians. The work assignments are emailed to the technicians and technicians use wireless "aircards" to periodically connect to the local area network and retrieve the lists of work orders. The scheduling of the work is at the discretion of the technician and no work status or progress updates are provided. When jobs are completed, the completion information is emailed to the office using Microsoft Word and Excel forms. The clerical staff convert the forms into input files and the files are loaded into SAP's PM module SAP (Exhibit B-2, Commission IR No. 1, Question 21.3, Attachment 21.3, pp. 13-14).

# 2.6 Strategic Challenges

TGI plans to increase customer attachment rates, but Distribution is functioning at nearly maximum capacity. The limited functionality and diverse technologies used in CS, Construction and PM constrain Distribution's ability to process additional work. The December 2006 Customer Satisfaction Survey result of 77.9 percent was within the target range of 76 percent to 80 percent. Given the constraints on Distribution resources, increasing customer attachments could have a negative impact on customer satisfaction (Exhibit B-2, Commission IR No. 1, Question 21.3, Attachment 21.3, p. 15).

Increasing the efficiency and effectiveness of Distribution would allow TGI to process additional work with its existing resources. In order to optimize its resources, Distribution plans to create a multi-tasking workforce that is not constrained by specific job roles. Under the current system, field personnel that perform more than one type of work must use separate technologies to receive, update and complete CS, Construction and PM work. This is a substantial barrier to the creation of a multi-tasking workforce. The use of disparate technologies also requires the duplication of resource management procedures and complicates the processes for managing work (Exhibit B-2, Commission IR No. 1, Question 21.3, Attachment 21.3, p. 15). For performance reporting, information in the various applications must be consolidated and this also reduces TGI's ability to make timely informed decisions (Exhibit B-2, Commission IR No. 1, Question 21.3, Attachment 21.3, p. 16).

# 2.7 Operational Challenges

The TGI version of MobileUp is approximately 7 years old and is not currently supported by ViryaNet (Exhibit B-2, Commission IR No. 1, Question 21.3, Attachment 21.3, p. 17). MobileUp does not provide the scheduling, optimization, appointment booking, validation of field data captured, dependencies between tasks, access to historical information and premise data functionality required by Distribution (Exhibit B-2, Commission IR No. 1, Question 21.3, Attachment 21.3, pp. 18-19). The deficiencies in MobileUp's functionality have resulted in additional manual field data capture processes that require data entry, verification and correction. To overcome MobileUp's deficiencies, Distribution implemented other technologies for Construction and PM work, but this has created training and technology support issues. Field personnel must receive separate training for the processes, procedures and technology for CS, Construction and PM work. Technology support issues include the need for multiple support contracts and possible conflicts between the disparate technologies (Exhibit B-2, Commission IR No. 1, Question 21.3, pp. 20-21).

## **3.0** Identification and Evaluation of Alternatives

In the Application, TGI considered three options:

- 1. A completely manual process ("Option 1")
- 2. Continued use of the current solution ("Option 2")
- 3. Replacement of the current solution ("Option 3")

(Exhibit B-1, Application, Section 2.3, p. 18-20)

# **3.1** Option 1

In Option 1, TGI describes "a completely manual process" that utilizes cellular, radio, fax and paper to manage the dispatching and field functionality associated with the CS workforce without the existing MobileUp application (Exhibit B-2, Commission IR No. 1, Question 11.1). TGI estimates that a minimum 10 additional office staff and 6 additional field staff would be required at a cost of \$1.1 million per year. The increase in non-labour operating costs for additional cellular use, radio, fax and paper is approximately \$200,000 per year. The cost increases would be partially offset by a \$270,000 reduction in technology licensing and support costs; this results in a net cost increase of approximately \$1.03 million per year (Exhibit B-1, Application, Section 2.3, p. 19).

## **3.2 Option 2**

With regard to Option 2, TGI notes that major components of the current (mobile data) system are approximately 7 years old and are becoming increasingly unstable. TGI advises that the original MobileUp vendor sought Chapter 11 bankruptcy protection after TGI's initial implementation in 1999. The vendor was subsequently purchased by another software company, ViryaNet, whose mobile dispatch application no longer supports TGI's current needs (Exhibit B-1, Application, Section 2.2, p. 9). TGI notes that support from the vendor is on a "best efforts" basis, TGI is the only customer on this version and support skills are very scarce (Exhibit B-2, Commission IR No. 1, Question 3.2). In addition, TGI considers the consequences of choosing Option 2 effectively the same as those found under a completely manual process (i.e. Option 1) as the possibility of extended periods of system outages increases (Exhibit B-1, Application, Section 2.3, p. 19). Since Option 1 and 2 do not address the shortcomings of the current solution and the shortcomings inherent with the current manual processes and multiple applications, TGI identified candidates to replace the current solution (i.e. Option 3).

TGI conducted a pilot project to determine the suitability of SAP's Mobile Infrastructure as a possible replacement for MobileUp. The conclusion of the pilot and discussions with SAP indicated that SAP Mobile Infrastructure's current synchronization method did not support the highly dynamic nature of CS work (Exhibit B-2, Commission IR No. 1, Question 14.1). SAP recognized architectural deficiencies in their mobile product line and acknowledged that the product is about 5 to 6 years away from being in a position to meet TGI's current needs (Exhibit B-2, Commission IR No. 1, Question IR No. 1, Qu

## **3.3 Option 3**

TGI appears to be cognizant of the evolutionary trend in respect of Multichannel Access Gateways solutions that provide broad based mobile access to back-end corporate applications and deliver robust tools for managing mobile workers. Based on its research, TGI issued a Request for Proposal to a short list of vendors, namely, Antenna Software, Syclo and Sybase. After the first-round evaluation, TGI issued a Request for Quotation to Sybase and Syclo which included a 78-page listing of TGI's functional requirements, requiring a detailed response of their applications' ability to support the requirements and detailed implementation plans and costs. TGI indicates that Sybase's solution requires more customization, hence is considerably more complex and costly to implement and support. In comparison, Syclo's SMART solution provides more generic and pre-defined modules for all companies and aligns better with TGI's strategy of implementing package applications. Moreover, Syclo's wireless middleware solution is compatible with ClickSchedule. The integrated solution of Syclo's SMART and Click Software's ClickSchedule provide a single resource management and schedule optimization platform for all work types (Exhibit B-1, Application, Section 2.3.1, p. 20-22).

## 4.0 Project Risk Management/Mitigation

#### 4.1 Vendor Risk

The Application did not acknowledge that Syclo is a private-held small company, whereas Sybase is an established large public-traded company (Exhibit B-4, Updated Response to Commission IR No. 1, Question 1.3). TGI states that it was fully aware of the cautions raised by Gartner Inc. in respect of Syclo's product development and its long-term viability as an independent company. The Company also discussed these issues in detail internally as well as directly with Syclo during the evaluation process. As a result of its analysis, TGI considers Syclo a stable company with strong growth targets (Exhibit B-4, Updated Response to Commission IR No. 1, Question 1.2). In the Updated Response to Commission IR No. 1, Question 1.3, it appears that TGI is taking steps to mitigate the risks of Syclo being acquired or encountering financial difficulties which would result in the discontinuance of product development or suspension of product support.

#### 4.2 Budget Risk

TGI states that extensive work was undertaken to confirm the DMS scope and business requirements. Syclo responded to a lengthy requirements document and Click Software conducted two requirements workshops. Both vendors provided fixed price bids for their costs and a project manager will prepare monthly reports and monitor change management (Exhibit B-1, Application, p. 32). In addition to the fixed price contracts with key vendors, the Company has included a contingency of approximately \$395,000 in its cost estimate.

The Commission accepts TGI's findings and recommended solution. However the Commission has concerns regarding the identification of meaningful alternatives and the omission of important details (e.g. long-term stability and viability of the vendor, and life-cycle costing) in the alternative analysis in the Application. The Commission does not consider Option 1 meaningful. The Commission questions the value of presenting Option 1 -"a completely manual process", since reverting to a manual processes suggests giving back the automation and field efficiencies gained through the existing MobileUp solution.

Option 2 is essentially a "do-nothing" or "keep status quo" alternative. A "do-nothing" alternative should provide the frequency and diagnosis of system outages, an estimate of the increasing costs to sustain the existing solution, and other tangible and intangible losses as a result of operational problems or disruptions. TGI does not retain historical information of system outages beyond two years or track maintenance costs and business losses associated with outage incidents (Exhibit B-2, Commission IR No. 1, Questions 3.1 and 11.2.1). In its response to the Commission IR No. 1, Question 3.2, TGI acknowledges that the majority of system outages are related to server operating failures. System outages also occur due to the incompatibility of security patches with the operating system or Telus wireless network outages (Exhibit B-2, Commission IR No. 1, Question 3.2).

Due to concerns regarding an irreparable system collapse and limited support resources, TGI decided not to make any changes or improvements to MobileUp. Each outage is considered unique and is dealt with on an individual basis (Exhibit B-2, B Commission IR No. 1, Question 3.2). TGI estimates that third party support costs to cover all occurrences of ongoing corrective actions to be between \$40,000 to \$70,000 annually over the last couple of years (Exhibit B-2, Commission IR No. 1, Question 11.2). The

Commission is mindful of potentially higher troubleshooting and outage resolution expenses in the near term under Option 2, but is not persuaded that the results would be the same as those found under "a completely manual process".

In its response to Commission IRs, TGI provided a redacted version of the DMS Business Case ("Business Case") for the purpose of internal approval (Exhibit B-2, Commission IR No. 1, Question 21.3). The Business Case compared the recommended solution with an alternative – pure replacement of MobileUp with the SAP, Syclo and ClickSchedule Solution without migrating all work types to a common platform. The Commission considers this "like for like" replacement alternative a logical decision step towards the final recommended course of action; hence a "like for like" replacement option in the internal Business Case should have been included in the Application (Exhibit B-2, Commission IR No. 1, Question 17.1).

# In future CPCN applications, the Commission directs the Company to provide a business case for the project and complete financial schedules that include depreciation and CCA continuity schedules. The Commission found the following information in the Business Case beneficial:

- Financial Analysis of the alternatives
- Project Costs and Financial Analysis
- Project Implementation Costs
- On going Operating Costs
- Financial Return and Cash Flow Costs
- Strategic Benefits
- Operational Benefits

(Exhibit B-2, Commission IR No. 1, Question 21.3, Attachment 21.3, pp. 9-37)

# 5.0 CPCN APPROVAL

# 5.1 Cost/Benefit Analysis

The estimated capital cost of the DMS is \$5.96 million (Exhibit B-2, Commission IR No. 1,

Question 26.6) and the Company forecasts annual O&M Savings of \$576,000. Using a discount rate of

5.8 percent, the 10 year Net Present Value of the DMS is -\$652,000 (Exhibit B-2, Commission IR No. 1,

Question 21.3, Attachment 21.3, p. 24). The Company states that the recommend solution of

implementing SAP R/3, Syclo and ClickSchedule for all Distribution work will allow TGI to accomplish its strategic objectives of creating a multi-tasking workforce, optimizing Distribution resources, improving decision making, maintaining customer satisfaction and increasing customer attachment rates (Exhibit B-2, Commission IR No. 1, Question 21.3, Attachment 21.3, p. 24).

The use of ClickSchedule for all for resource management and scheduling will eliminate duplicate resource management procedures, discrepancies between timesheet and mobile time costing data, manual data entry, data validation, and error handling procedures. The DMS will result in a single technology for field workers to process work, reduce training time, provide additional information for field personnel, enable standardized reporting and simplify system support requirements (Exhibit B-2, Commission IR No. 1, Question 21.3, Attachment 21.3, pp. 19-20). The Company's recommended solution will also address the limitations with the current MobileUp functionality and increase the efficiency of field personnel (Exhibit B-2, Commission IR No. 1, Question 21.3, Attachment 21.3, pp. 19-20).

A Certificate of Public Convenience and Necessity is granted for the DMS Project, effective July 2, 2007, subject to TGI's acceptance of certain conditions. Given the labour and cost guarantees provided by the proposed vendors and the inclusion of a \$395,000 contingency in TGI's cost estimate, the additions to Rate Base related to the DMS Project will be limited to a maximum of 110 percent of the capital cost estimate in Commission IR 26.6 and savings below 90 percent of the estimate will accrue to the shareholder, similar to the treatment in Commission Order No. C-11-99 regarding the TGI Southern Crossing Pipeline project. TGI is directed to file by August 4, 2007 a statement regarding its willingness to accept a CPCN for the DMS that includes, as a condition, this mechanism to limit ratepayer exposure to capital cost overruns.

To ensure that DMS achieves the forecast savings and efficiency gains, TGI's Internal Audit department is directed to perform a formal post-implementation review of the DMS Project and provide a written report to the Commission in conjunction with the filing of the 2008 Annual Review material consistent with Commission Order No. G-33-07.

#### 6.0 Retirement of Current Systems and Applications

Other than Figure 2.2.3 and Figure 2.3.1 that depict graphical representations of current and future state technology solutions, the Application provides limited details concerning which assets are to be replaced and how they are retired from the TGI's balance sheet and rate base. A high level comparison of Figure 2.2.3 and Figure 2.3.1 suggests that two groups of assets, namely, the MobileUp application and its supporting Mobile Gateway, and SAP Mobile Asset Management ("MAM") module with its supporting SAP Mobile Infrastructure ("MI"), will be replaced and potentially retired as a result of this project. TGI confirms that the MobileUp application and supporting servers will be retired and reports a total Net Book Value ("NBV") of approximately \$353,352 on June 30, 2008 (a month after the expected system go-live date of May 30, 2008) (Exhibit B-2, Commission IR No. 1, Question 26.4.3). The Company notes that the accounting practice for General Plant is to retire the asset costs when the NBV equals zero to ensure that no over or under recovery of original costs occurs. As far as SAP MAM and MI assets are concerned, TGI states that the Mobile SAP components are not individual assets but components of the overall application (Exhibit B-2, Commission IR No. 1, Questions 26.4 and 26.4.4). Since the overall SAP application will continue to be used, it appears no asset retirement will be recognized in spite of the displacement of SAP MAM and MI by Syclo's SMART suite of products (Exhibit B-2, Commission IR No. 1, Question 26.4).

The Commission is concerned with TGI's response to Commission IR 26.5 that states that there are no specific assets from the 2004/2005 Utilities Strategy Project ("USP") that will be retired. Commission Order No. G-113-04 approved the TGVI capital additions of \$3.6 million in 2004 and \$4.4 million in 2005 to harmonize Information Technology platforms between TGI and TGVI. Of the \$8 million USP capital additions, \$0.1 million in 2004 and \$1.7 million in 2005 were budgeted for the Meter Management & Mobile Systems Integration (Exhibit B2-4, TGVI 2004 Annual Review Commission IR No. 1, Question 9.10.1). If TGVI has a MobileUp installation and a wireless infrastructure, which is similar TGI's, the Commission expects that it will also be replaced and retired as a result of DMS.

The Commission accepts TGI's accounting practice to continue with existing depreciation schedules on replaced assets until their NBVs reach zero, barring specific regulatory instructions from the Commission. The cost of the DMS Project is accepted; however, should the DMS need replacement before 8 years, TGI will be at risk for a portion of the costs.

## 7.0 Allocation of CPCN Costs to TGVI

In the Application, TGI also proposes that 10 percent of project costs be proportionally allocated to TGVI, consistent with Order No. G-112-04, where 10 percent of the TGI's SAP-related costs were allocated to TGVI. Since the project cost allocated to TGVI is less than \$600,000, TGVI is not required to apply for a CPCN (Exhibit B-2, Commission IR No. 1, Question 17.2).

The Commission accepts the 10 percent proportional allocation of the DMS Project costs to TGVI.