BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Application of)
THE GAS COMPANY, LLC

For Approval to Commit Funds in Excess of $500,000 to Comply with
the Pipeline Safety Improvement Act of 2002 and the New Federal
Pipeline Integrity Management Regulations at 49 CFR Part 192,
Subpart O.

DOCKET NO. 2006-0402

DECISION AND ORDER NO. 23174

Filed Dec. 29, 2006
At 11 o'clock A.M.

Karen Higashi
Chief Clerk of the Commission

ATTEST: A True Copy
KAREN HIGASHI
BEFORE THE PUBLIC UTILITIES COMMISSION
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DECISION AND ORDER

By this Decision and Order, the commission approves THE GAS COMPANY, LLC's ("TGC") request to commit funds estimated at $1,170,346 to implement the first phase of a federally mandated, multi-year, pipeline integrity management program ("IMP") applicable to TGC's synthetic natural gas ("SNG") transmission system ("Proposed Project") in accordance with Rule 2.3(f)(2) of the commission's Standards for Gas Service in the State of Hawaii, General Order No. 9 ("G.O. No. 9").

I.

Background

A.

TGC

TGC is a Hawaii limited liability company duly franchised to supply utility gas in the State of Hawaii. On the island of Oahu, TGC operates facilities used in the manufacture
of SNG, and a transmission and distribution system for the
delivery of the SNG by pipeline, as well as various facilities
used for the delivery of liquefied petroleum gas to over 33,000
utility customers on the island.

B.

Application

By application filed on October 6, 2006, TGC seeks
authorization to commit funds in excess of $500,000, (estimated
to be $1,170,346 in capital costs to be incurred through
December 2007), and include them in rate base in its next rate
case.1 These costs will be incurred to implement the first phase
of a federally mandated, multi-year, pipeline IMP applicable to
TGC’s SNG gas transmission system.

The IMP is mandated by the Pipeline Safety Improvement
Act of 2002 (the “Act”). Section 14 of the Act, which amends
49 U.S.C. § 60109, requires each gas pipeline operator, in
accordance with regulations promulgated by the United States
Department of Transportation (“DOT”), to adopt and implement an
IMP, beginning with baseline assessments of its transmission
facilities. The Act prescribes the: (1) timing of the
assessments; (2) prioritizing of the areas to be assessed;

1Application, Exhibits 1-5, Verification and Certificate of
Service, filed October 6, 2006 (“Application”). TGC also served
copies of the Application on the DIVISION OF CONSUMER ADVOCACY,
DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS (“Consumer
Advocate”), an ex officio party to this proceeding.

TGC incorporates by reference, pursuant to Hawaii
Administrative Rules (“HAR”) § 6-61-76, financial information to
satisfy the requirements of HAR § 6-61-75. Application at 3.
(3) methods of integrating historical and new information; (4) analysis and evaluation of integrity issues raised by the assessments; (5) measures required to repair, prevent, and mitigate the consequence of gas releases; (6) monitoring protocols; and (7) reassessment intervals, and other matters.

In August 2002, the Research and Special Programs Administration ("RSPA") of the DOT issued a rule prescribing the methods to be used for prioritizing "high consequence areas" for gas pipelines subject to the Act, and in December 2003, RSPA issued its rule entitled "Pipeline Safety: Pipeline Integrity Management in High Consequence Areas (Gas Transmission Pipelines)." These regulations were incorporated in the new Subpart O of 49 CFR Part 192 ("Subpart O") and are applicable to locations where a leak or rupture of a gas transmission could severely harm humans or the environment.

TGC explains that under Subpart O pipeline operators are required to: (1) identify the pipeline segments that are in high consequence areas, rank them by risk, and prepare a Baseline Assessment Plan ("BAP") to conduct an initial assessment of the condition of the identified segments of pipeline; (2) document the chosen testing methods\(^2\) for each high consequence area, including a testing and inspection schedule; (3) prepare the transmission lines for testing; (4) perform the assessment of the transmission lines for testing; (5) document the
decision making process for selecting the testing methods; and (6) complete the assessment of the condition of the identified segments of pipeline.

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\(^2\)TGC states that the following testing methods have been approved by the DOT for testing transmission lines: (1) internal in-line inspection ("ILI") devices; (2) pressure testing; (3) direct assessment; or (4) any other method at least as reliable for which the pipeline operator had previously sought and received DOT approval. Application at 5 n.6.
identified segments to locate anomalies such as cracks, dents, corrosion; and (5) identify and correct any defects within prescribed time limits. TGC states that it "must also conduct training and drills, enhance damage prevention programs, conduct public awareness programs, and meet periodic DOT reporting requirements." According to TGC, failure to conform to Subpart O can result in substantial financial fines and penalties, and either diminishment of the gas flow rate permitted through the pipeline, or a shut-down of operations, depending on the seriousness of the violation.

With regard to compliance with the Act and implementation of an IMP, TGC states that it has conservatively deemed its entire transmission line to be in a high consequence area as defined by Subpart O. Consequently, in compliance with 49 CFR § 192.907(a), TGC completed a written Pipeline Integrity Management ("PIM") Plan applicable to TGC's twenty-two (22) miles of pipeline. TGC also prepared the initial BAP that divides TGC's transmission line into nine discrete segments for assessment purposes as follows:

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3Id. at 7.

'TGC states that it "owns and operates a 22-mile SNG transmission pipeline that runs from its SNG plant at Campbell Industrial Park to Pier 38, adjacent to Kapalama Canal." Id. at 9. This line was built in 1974, and is primarily 16" in diameter, with some 6" and 10" segments. Id.

549 CFR § 192.907(a) provides, in relevant part, that a written PIM Plan must be submitted by December 17, 2004.
<table>
<thead>
<tr>
<th>Segment</th>
<th>Pipe Size</th>
<th>Location</th>
<th>Length (in miles)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6&quot;</td>
<td>SNG Plant (4&quot; temporary line now in place)</td>
<td>0.04</td>
</tr>
<tr>
<td>2</td>
<td>16&quot;</td>
<td>Tesoro</td>
<td>0.47</td>
</tr>
<tr>
<td>3</td>
<td>10&quot;</td>
<td>Komohana</td>
<td>0.03</td>
</tr>
<tr>
<td>4</td>
<td>16&quot;</td>
<td>Kalaeloa</td>
<td>3.01</td>
</tr>
<tr>
<td>5</td>
<td>10&quot;</td>
<td>Kapolei Shopping Center</td>
<td>0.08</td>
</tr>
<tr>
<td>6</td>
<td>16&quot;</td>
<td>Pearl Harbor</td>
<td>16.54</td>
</tr>
<tr>
<td>7</td>
<td>6&quot;</td>
<td>Keehi</td>
<td>0.66</td>
</tr>
<tr>
<td>8</td>
<td>16&quot;</td>
<td>Kalihi</td>
<td>1.20</td>
</tr>
<tr>
<td>9</td>
<td>6&quot;</td>
<td>Pier 38</td>
<td>0.04</td>
</tr>
</tbody>
</table>

TGC then ranked the nine segments based on the potential threats to their integrity. TGC’s SMEs used an ILI device called a “smart pig,” which contains sensors that scan inner pipe walls for defects, to conduct most of its assessments.

The rankings were done internally by DOT-qualified, subject matter experts (“SMEs”).

The considerations were: (1) time-dependent threats such as internal and external corrosion, stress corrosion cracking; (2) static threats such as fabrication or construction defects; (3) time-dependent threats such as third-party damage or outside force damage; and (4) human error. See Application at 10.

Citing the definition of the American Society of Mechanical Engineers (“ASME”), TGC defines an ILI as “a pipeline inspection technique that uses devices known in the industry as ‘smart pigs’. These devices run inside the pipe and provide indications of metal loss, deformation, and other defects.” Id. at 5 n.6.

The term “pig” is a historical term, based on the sound made when metal pipes are cleaned by running a ball of barbed wire through them, resulting in a noise similar to a squealing pig. Id. The pig contains sensors that scan inner pipe walls.
According to TGC, it has divided the initial round of assessments into two phases; the first of which will be completed by December 2007, as required by 49 CFR § 192.921(d). Phase I will involve preparing for, assessing via ILI, and correcting Segment 6 (which received the highest risk score in the BAP, thus pushing it to the forefront for assessment and remediation), i.e., the Pearl Harbor Segment (Makakilo to Keehi). Phase I also includes preparing for assessments of Segments 1-4 and certain appurtenances.

To comply with the new federal pipeline safety regulations, in Phase I of the Proposed Project, TGC will replace portions of its transmission line and purchase and install certain equipment at a cost of $1,170,346, which includes 10% for contingencies. The following is a description of the proposed Phase I work and an explanation of the associated costs:

1. TGC plans to use a smart pig to assess the 16" pipeline segments of its transmission line, including the Pearl Harbor segment. Thus, it will fabricate and install a pig launcher at Makakilo10 and a receiver at Lagoon Drive Park, and for defects and record data regarding the internal condition of the pipe. Id. at 11.

10 49 CFR § 192.921(d) provides, in relevant part, that a pipeline operator must assess at least 50% of the covered segments, beginning with the highest risk segments, by December 17, 2007. A baseline assessment of all covered segments must be done by December 17, 2012.

11 Installation of the launcher at Makakilo involves excavating eight (8) feet at the block ball valve, adding a section of pipe twenty (20) to thirty (30) feet long and extending the vault and cover, placing a valve on the end and inserting a twenty (20) foot spool piece. The spool piece will be removed and the pig inserted. Pressure in the line will carry
install an associated 16" pipe, valves, and vaults to accommodate launching and receiving the ILI device. TGC represents that the work at each of the launching and receiving sites requires the removal of existing pipe, installation of replacement pipe and new valves, and vault work to accommodate the ILI launcher or receiver. The estimated cost is $343,784.

2. TGC states that it is necessary to remove a wooden plug at Waipahu originally installed to repair a leak, to allow the pig to move past the point of the plug. In order to provide a continuous path for the pig through Segment 6, TGC must replace a section of the 16" pipe. The estimated cost is $156,885.

3. During an earlier repair, TGC says that a plug accidentally fell through a line at the Pearl City Block valve. This plug is virtually the same diameter as the 16" pipe. The plug must be removed to allow the pig to move through the line. The estimated cost is $93,454.

4. To avoid service interruptions, TGC states that it needs to purchase a portable propane air unit to provide back-up supply during and immediately after pigging. The estimated cost is $94,824.

the pig along the segment until it reaches the receiver at Lagoon Drive Park. Application at 14-15.

3'TGC states that the plug was not removed earlier because it does not inhibit gas flow, but must now be removed in order to conduct the ILI.
5. TGC states that the pigging process is expected to result in a combination of gas and condensate stream at the receivers. Thus, TGC plans to purchase a liquid/gas separator to enable TGC to recover all condensate from the line before removal of the pigging device. The estimated cost is $71,500.

6. Pursuant to 49 CFR § 192.933, TGC is required to perform pipeline remediation either immediately or in accordance with the schedule prescribed by the ASME B31.8S, section 7.\textsuperscript{13} The need for remediation is determined by assessments of the pipeline which involve construction and replacement of the transmission line and appurtenances. The estimated cost for remediation is $171,744.

7. While most of the actual assessments for Segments 1-4 will take place in Phase 2 of TGC's IMP, TGC states that certain preliminary design and engineering work for Segments 1-4 needs to be commenced in advance of the December 2007 DOT deadline. Accordingly, TGC seeks authorization to commit funds to cover the engineering and design capital costs for Segments 1-4 at this time at an estimated cost of $131,760.

Although TGC is not regulated by the Federal Energy Regulatory Commission ("FERC"), and FERC's accounting guidance is strictly applicable only to those entities subject to FERC jurisdiction, TGC proposes to follow the Uniform System of

\textsuperscript{13}See 49 CFR §§ 192.933(c) and (d).
Accounts for Natural Gas Companies, as interpreted by FERC, in connection with all costs incurred with implementing its IMP.¹⁴

In sum, TGC seeks approval in its Application to incur the capital costs to prepare, assess, analyze and remediate Segment 6 of its transmission line (to be completed by December 2007) and to incur the capital costs for preliminary design and engineering work for the "Kauhi Bypass," a modification of facilities in Segments 1-4 that is designed to prepare them for assessment in Phase 2. TGC intends to file a separate application for the remaining capital expenditures associated with Phase 2, which will include ILI and other DOT-approved types of assessment for the remaining segments and certain transmission laterals and appurtenances that DOT requires be assessed.

C.

Consumer Advocate's Statement of Position

On October 26, 2006, the Consumer Advocate filed a preliminary statement of position stating that it was reviewing the Application and considering (1) whether the work proposed by TGC was compliant with the federally mandated IMP, and

¹⁴On June 30, 2005, FERC issued an Order on Accounting for Pipeline Assessment Costs incurred by operators following the pipeline integrity management program requirements of Subpart O. On September 19, 2005, FERC issued a detailed Order Denying Rehearing and Providing Clarification of its prior order. Application at 8.
(2) whether the estimated costs for the Proposed Project were reasonable.\footnote{On December 6, 2006, the Consumer Advocate met with TGC personnel to review TGC's IMP. Statement of Position at 2.}

On December 21, 2006, the Consumer Advocate filed a statement of position informing the commission that it does not object to the commission's approval of TGC's Application, provided that a determination of the project costs that may be included in rate base be made in the rate proceeding following the Proposed Project's completion date ("Statement of Position").

The Consumer Advocate considered four issues. The first issue was whether TGC's IMP plan was reasonable. In considering the reasonableness of the plan, the Consumer Advocate was concerned about the additional cost incurred by TGC's decision to deem the entire transmission line a high consequence area. Acknowledging the importance of TGC's transmission lines and the deadline for assessment, the Consumer Advocate states that it will not take issue at this time with TGC's decision to designate the entire transmission line a high consequence area. The Consumer Advocate was also concerned with TGC's decision to select the smart pigging device to assess Segment 6. The Consumer Advocate indicated that it would review this concern as well as the high consequence area concern, in connection with future applications filed by TGC related to the PIM Plan.

The second issue considered by the Consumer Advocate was whether the scope of TGC's Proposed Project was reasonable. Of concern to the Consumer Advocate was the scope of the remediation work. The Consumer Advocate recommended that TGC be
required to file a description of the remediation work and a revised cost estimate once the scope of the remediation work is determined.

The third issue considered by the Consumer Advocate was the reasonableness of the estimated project costs. The Consumer Advocate recognized that the project costs presented in the Application were estimates and, thus, stated that it would review and determine the reasonableness of such costs when the final cost report is submitted. The Consumer Advocate stated that it would follow up on any concerns it may have regarding the reasonableness of such costs at TGC's first rate proceeding following completion of the Proposed Project.

The fourth issue identified by the Consumer Advocate was the reasonableness of the proposed accounting treatment of the Proposed Project's costs. While the Consumer Advocate did not object to TGC's proposed accounting treatment, it requested that it be allowed to determine the reasonableness of TGC's proposed accounting treatment in comparison with guidelines set forth by the National Association of Regulatory Utility Commissioners Uniform System of Accounts.

In addition, the Consumer Advocate requested that TGC file a copy of its initial PIM Plan and the semi-annual performance measure reports required by 49 CFR § 192.945 with the commission and the Consumer Advocate.16

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1649 CFR § 192.945 provides, in part, that an operator must include in its integrity management program, methods to measure whether the program is effective in assessing and evaluating the integrity of each covered pipeline segment and in protecting the high consequence areas.
II.

Discussion

Rule 2.3(f)(2) of G.O. No. 9 states, in relevant part:

Proposed capital expenditures for any single project related to plant replacement, expansion or modernization, in excess of $500,000 or 10 percent of the total plant in service, whichever is less, shall be submitted to the Commission for review at least 60 days prior to the commencement of construction or commitment for expenditure, whichever is earlier. If the Commission determines, after hearing on the matter, that any portion of the proposed project provides facilities which are unnecessary or are unreasonably in excess of probable future requirements for utility purposes, then the utility shall not include such portion of the project in its rate base. If the utility subsequently convinces the Commission that the property in question has become necessary or useful for public utility purposes, it may then be included in the rate base.

Here, the commission finds TGC’s proposed commitment of funds to comply with the mandates of the Pipeline Safety Improvement Act of 2002 to be reasonable. The regulations are mandatory, and TGC faces potential penalties and a diminishment of gas flow rate or shut-down of its entire transmission system should it fail to comply. In addition, TGC’s plan appears to adequately address the requirements of the Act, and the projected costs appear reasonable (given the limited information currently available particularly concerning remediation costs). While the commission is concerned about the inclusion of an additional 10% in costs for “contingencies,” that concern is mitigated by the recommendation of the Consumer Advocate to defer any determination of project costs in rate base until TGC’s next rate case proceeding. Accordingly, the commission concludes that the
Proposed Project is reasonable, and should be approved. The commission, however, agrees with the Consumer Advocate that a determination of the project costs to be included in rate base should be made in the rate proceeding following the Proposed Project's completion.

In addition, the commission finds reasonable the Consumer Advocate's recommendations that TGC should be required to provide certain information and documents to the commission and the Consumer Advocate and will require submission of the following: (1) a description of the remediation work and a revised cost estimate once the scope of the remediation work is determined; (2) a copy of TGC's initial PIM Plan; and (3) a copy of TGC's semi-annual performance measure reports.

III.

Orders

THE COMMISSION ORDERS:

1. TGC's request to expend an estimated $1,170,346 to implement the first phase of a federally mandated, multi-year, pipeline IMP applicable to TGC's SNG transmission system, is approved; provided that no part of the Proposed Project may be included in TGC's rate base, unless and until the Proposed Project is used and useful for public utility purposes, as determined in the rate proceeding following the Proposed Project's completion date.
2. TGC shall provide a description of the remediation work and a revised cost estimate to the commission and the Consumer Advocate once the scope of the remediation work is determined.

3. TGC shall file copies of its initial PIM Plan and the semi-annual performance reports required by 49 CFR § 192.945 with the commission and the Consumer Advocate.

4. TGC shall submit a report within sixty (60) days of the completion of the Proposed Project, with an explanation of any deviation of ten (10) percent or more in the Proposed Project’s cost from that estimated in the Application. Failure to submit the report will constitute cause to limit the cost of the Proposed Project, for ratemaking purposes, to that estimated in the Application.

5. TGC shall conform to the commission’s orders set forth in paragraphs 2, 3 and 4, above. Failure to adhere to the commission’s orders shall constitute cause for the commission to void this Decision and Order, and may result in further regulatory action as authorized by law.
DONE at Honolulu, Hawaii  

Public Utilities Commission  
Of The State of Hawaii

By
Carlito P. Caliboso, Chairman

By
John E. Cole, Commissioner

Approved as to form:

Benedyne Stone
Commission Counsel

06-0402.ac
CERTIFICATE OF SERVICE

I hereby certify that I have this date served a copy of the foregoing Decision and Order No. 23174 upon the following parties, by causing a copy hereof to be mailed, postage prepaid, and properly addressed to each such party.

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DATED: DEC 29 2006