



bcuc
British Columbia
Utilities Commission

Marija Tresoglavic
Acting Commission Secretary

Commission.Secretary@bcuc.com
bcuc.com

Suite 410, 900 Howe Street
Vancouver, BC Canada V6Z 2N3
P: 604.660.4700
TF: 1.800.663.1385
F: 604.660.1102

July 3, 2020

Sent via email/eFile

PNGNE CPCN AUTOMATED METERING
READING EXHIBIT A-7

Gordon Doyle
Vice President, Regulatory Affairs, Legal & Gas Supply
Pacific Northern Gas Ltd.
750 – 888 Dunsmuir Street
Vancouver, BC V6C 3K4
gdoyle@png.ca

Re: Pacific Northern Gas (N.E.) Ltd. – Application for a Certificate of Public Convenience and Necessity to Implement Automated Meter Reading Infrastructure – Project No. 1599049 – Information Request No. 2

Dear Mr. Doyle:

Further to your March 25, 2020 filing of the above-noted application, enclosed please find British Columbia Utilities Commission Information Request No. 2. In accordance with the Regulatory Timetable established by Order G-169-20, please file your responses on or before Tuesday, July 21, 2020.

Sincerely,

Original Signed By:

Marija Tresoglavic
Acting Commission Secretary

/mp

Enclosure

cc: votto@png.ca



Pacific Northern Gas (N.E.) Ltd.
Application for a Certificate of Public Convenience and Necessity to Implement Automated Meter
Reading Infrastructure

INFORMATION REQUEST NO. 2 TO PACIFIC NORTHERN GAS (N.E.) LTD.

**22.0 Reference: PROJECT ALTERNATIVES CONSIDERED
Exhibit B-3, BCUC IR 6.2,6.3;
Advanced Metering Infrastructure**

In response to British Columbia Utilities Commission (BCUC) Information Request (IR) 6.2, Pacific Northern Gas (N.E.) Ltd. (PNG(NE)) explains:

In order for PNG(NE) to take advantage of existing network infrastructure from another utility, they would have to be on the same vendor's system, the locations would have to be suitable for PNG(NE), and PNG(NE) would be subject to terms and conditions and costs of JUAs to utilize that utility's collection infrastructure or shared towers. In general, except in certain unique circumstances, the sharing of existing network collection infrastructure is not practical.

Further, in response to BCUC IR 6.3, PNG(NE) states it "has not made any effort in regard to pursuing fixed-network infrastructure for its AMR Project due to the challenges outlined in response to Question 6.2."

- 22.1 Please describe in detail any existing or planned fixed-network infrastructure in the Project area.
- 22.2 Please discuss whether any other company's fixed-network system in the Project area would be suitable for PNG(NE).
 - 22.2.1 If not, why not?
- 22.3 Please discuss whether PNG(NE) can be on the "same vendor's system" on another company's fixed network infrastructure.
 - 22.3.1 If not, why not?
- 22.4 Please discuss any assessment undertaken to determine whether the location of any existing or planned network infrastructure would be suitable for PNG(NE).
 - 22.4.1 If no assessment has been conducted, please discuss what resources would be required and how long it would take for PNG(NE) to complete such an assessment.
- 22.5 Please discuss the anticipated resources and time required for PNG(NE) to negotiate the terms for an agreement to utilize another company's fixed-network infrastructure, if found to be suitable.
- 22.6 Please discuss the estimated time and resources required for PNG(NE) to develop an Advanced Metering Infrastructure (AMI) cost estimate assuming utilization of another company's fixed-network infrastructure for the following:

- i. System functionality limited to the automation of the meter reading function; and
- ii. A complete, fully functioning AMI system.

**23.0 Reference: PROJECT ALTERNATIVES CONSIDERED
Exhibit B-3, BCUC IR 4.2;
Automated Meter Reading**

In response to BCUC IR 4.2, PNG(NE) states:

Depending upon the technology vendor and the specifications of the ERT, some ERTs used in AMR implementations can be read via both mobile and fixed network receivers. PNG(NE) had given consideration to Itron's 500G ERT which would enable the ability to move from a mobile to fixed network system at some point in the future.

However, PNG(NE)'s proposal to proceed with AMR is as a cost-effective and efficient replacement to the current manual meter reading process. Installation of the 500G ERT would come at a higher capital cost of approximately \$85,000 with no certain financial benefit. On this basis, PNG(NE) is proceeding with the Vendor A Itron 100G ERT, and though it does not have the noted capability, this capability was never a consideration in PNG(NE)'s business case.

- 23.1 Please further explain the meter data transmission capability of the Itron 500G Encoder Receiver Transmitter (ERT) alternative, including whether the 500G ERT could allow for two-way communication via fixed-network infrastructure, if warranted.
- 23.2 Please discuss whether the Itron 500G ERT would provide the ability to record other physical data or the ability to remotely shut off the gas supply, if PNG(NE) wished to utilize that ability in the future.
 - 23.2.1 If yes, please explain any additional equipment required and associated cost.
- 23.3 Please provide a cost breakdown on the additional \$85,000 in capital required for the Itron 500G ERT alternative.
- 23.4 Did PNG(NE) solicit proposals from other vendors for ERTs with similar functions to the Itron 500G ERT?
 - 23.4.1.1 If so, please provide the Vendor name, product, and cost.
 - 23.4.1.2 If not, why not?

**24.0 Reference: PROJECT DESCRIPTION
Exhibit B-3, BCUC IR 14.2;
Field Installation of ERTs**

In response to BCUC IR 14.2, PNG(NE) explains it has not made provision in the Automated Meter Reading (AMR) project cost estimate for any additional resources required to support installation of ERTs in unfavorable weather conditions. However, PNG(NE) notes "the cost estimate includes a 15% contingency to accommodate uncertain or unknown items of this nature."

- 24.1 Please estimate the additional resources (equipment and staff) required to support ERT installation in unfavorable weather conditions.
- 24.2 Please provide a capital cost estimate for the AMR Project assuming all ERT installations would be completed in unfavorable weather conditions.

**25.0 Reference: PROJECT DESCRIPTION
Exhibit B-3, BCUC IR 15.1, 15.7;
Radio-off Option for Customers**

In response to BCUC IR 15.1, in the second scenario in which a customer could opt-out of AMR (i.e. after the deployment and an ERT is already install at the customer premise), PNG(NE) estimates that the cost of setting up the customer is \$63.33 based on an assumed average travel time to the customer of 20 minutes.

In response to BCUC IR 15.7, PNG(NE) states that the customer located the furthest distance away is 380 kilometers from PNG(NE)'s regional office, and the assumed travel time to this customer is 285 minutes.

25.1 Please provide the rationale for assuming an average travel time of 20 minutes to customer premise in scenario two. What is the distribution of travel time to customer premises?

**26.0 Reference: PROJECT COST ESTIMATES
Exhibit B-3, BCUC IR 17.1, 17.2;
Annual Vehicle Operating Cost Savings**

In response to BCUC IR 17.1, PNG(NE) states:

The average fuel and maintenance costs are based on 2017 average costs of \$6,000 and \$4,000, respectively, escalated to 2020 at 2% annual inflation. The vehicle capital cost is was [sic] based on a 2017 average cost of \$55,000 escalated to 2020 by 2% annually for inflation.

26.1 Please explain why PNG(NE) used the 2017 average cost as the basis for fuel, maintenance and vehicle capital costs to determine annual vehicle operating cost savings.

26.2 Please provide a table showing PNG(NE)'s historical annual average cost of fuel, maintenance and vehicle capital costs for the past five years.

In response to BCUC IR 17.2, PNG(NE) states it has included 40 percent of the vehicle fuel and maintenance associated with a meter reader Full-Time Equivalent (FTE) position in the expected future cost of vehicle fuel and maintenance after deployment.

26.3 Please provide the rationale for using 40 percent of existing vehicle fuel and maintenance associated with a meter reader FTE as the expected future cost as opposed to some other percentage.

26.4 Please provide the sensitivity of the net present value (NPV) of customer benefits for Vendor A to a +/- 10 percent change in the expected future cost of vehicle fuel and maintenance.

**27.0 Reference: PROJECT COST ESTIMATES
Exhibit B-3, BCUC IR 2.3, 2.4.1, 17.2;
Cost of Service**

In response to BCUC IR 2.3, PNG(NE) states:

Currently PNG(NE) has approximately 1,700 off-cycle manual reads annually. These off-cycle reads primarily pertain to move in/move out, special requests and meter re-reads. Moving to a monthly read cycle will provide accurate daily consumption information and thereby is expected to eliminate the need for off-cycle reads for these items.
[Emphasis Added]

PNG(NE) further states, in response to BCUC IR 2.4.1, “On a day to day basis at least one meter reader would be tasked with the off-cycle reads with any overload being assigned to CSTs [Customer Service Technicians].”

In response to BCUC IR 17.2, PNG(NE) confirms the financial analysis provided in Appendices B and C, respectively, do not include any incremental annual labour cost associated with employing an existing non-meter reader FTE to assume meter reading responsibility.

- 27.1 Please elaborate on the reasons why moving to a monthly read cycle is expected to eliminate the need for off-cycle reads with respect to move in/move out and special requests. Is it PNG(NE)'s expectation that the information obtained at monthly meter reads is sufficient to meet the requirements of move in/move out reads and special requests? Please explain.
- 27.2 Please provide a breakdown of the approximately 1,700 annual off-cycle manual reads into move in/move out, special requests and meter re-reads.
- 27.3 Please elaborate on why it is not necessary to include any incremental annual labour cost associated with employing an existing non-meter reader FTE to assume meter reading responsibility considering existing off-cycle meter read volumes.