



**ORDER NUMBER**  
**G-132-16**

IN THE MATTER OF  
the *Utilities Commission Act*, RSBC 1996, Chapter 473

and

Pacific Northern Gas (N.E.) Ltd.  
2016-2017 Revenue Requirements Application  
for the PNG (N.E.) Service Area

**BEFORE:**

K. A. Keilty, Panel Chair/Commissioner  
H. G. Harowitz, Commissioner  
R. D. Revel, Commissioner

on August 10, 2016

**ORDER**

**WHEREAS:**

- A. On August 23, 2013, the British Columbia Utilities Commission (Commission) issued Order G-131-13 concurrently with its decision on the Pacific Northern Gas (N.E.) Ltd. [PNG (N.E.)] 2013 Revenue Requirements Application (RRA) and directed PNG (N.E.) to, among other things, file its 2014 RRA for a period of two years. By Order G-168-13 dated October 10, 2013, the Commission varied Order G-131-13 to instead require PNG (N.E.) to file its RRA for a period of two years commencing in test years 2016 and 2017;
- B. On November 30, 2015, PNG (N.E.) filed its 2016-2017 RRA with the Commission for the Fort St. John/Dawson Creek (FSJ/DC) and Tumbler Ridge (TR) divisions pursuant to sections 58 to 61 of the *Utilities Commission Act* (UCA) seeking, among other things, approval to increase 2016 delivery rates (Applications);
- C. By Order G-208-15 dated December 18, 2015, the Commission approved the delivery rates and the Rate Stabilization Adjustment Mechanism riders set forth in the Applications on an interim and refundable basis, effective January 1, 2016. The Commission also established a preliminary regulatory timetable, including a procedural conference on January 29, 2016;
- D. The British Columbia Old Age Pensioners' Organization *et al.* (BCOAPO) and the International Brotherhood of Electrical Workers, Local 213 (IBEW 213) registered as interveners;
- E. On January 26, 2016, the Commission issued Exhibit A-5 with a list prepared by Commission staff of specific items and/or supplemental information to be included in PNG (N.E.)'s updated applications;
- F. The Procedural Conference was held on January 29, 2016. PNG (N.E.) and BCOAPO made appearances. As an alternative to the proposal in the Applications, PNG (N.E.) proposed that it seek permanent 2016 and 2017 rates in its updated applications. PNG (N.E.) also indicated that it would provide all of the items and supplemental information found in Exhibit A-5 in the updated applications;

- G. By Order G-14-16 dated February 4, 2016, the Commission established a written public hearing process, which directed PNG (N.E.) to file its updated applications on February 29, 2016, and included two rounds of Commission and intervener information requests, and final and reply arguments;
- H. On February 29, 2016, PNG (N.E.) filed its updated applications for the FSJ/DC and TR divisions (Amended Applications); and
- I. The Commission considered the Applications, Amended Applications, evidence and submissions of the parties.

**NOW THEREFORE** pursuant to sections 59 to 61 of the *Utilities Commission Act*, for the reasons for decision attached as Appendix A to this order, the British Columbia Utilities Commission orders as follows:

1. Pacific Northern Gas (N.E.) Ltd. [PNG (N.E.)]'s request for recovery of the 2016 revenue requirements and resultant delivery rate changes presented in the Amended Applications for the Fort St. John/Dawson Creek (FSJ/DC) and Tumbler Ridge (TR) divisions are approved on a permanent basis, effective January 1, 2016, subject to the adjustments identified by PNG (N.E.) in information requests and in argument as well as to the adjustments outlined in these directives.
2. The Rate Stabilization Adjustment Mechanism riders set forth in the Amended Applications are approved on a permanent basis, effective January 1, 2016.
3. PNG (N.E.)'s request for recovery of the 2017 revenue requirements and resultant delivery rate changes presented in the Amended Applications for the FSJ/DC and TR divisions are approved on a permanent basis, effective January 1, 2017, subject to the adjustments identified by PNG (N.E.) in information requests and in argument as well as to the adjustments outlined in these directives.
4. The following changes and additions to PNG (N.E.)'s regulatory accounts are approved:
  - a. The creation of a new regulatory account in both the FSJ/DC and TR divisions to capture variances in forecast to actual pension and non-pension post-retirement benefits expenses bearing interest at PNG (N.E.)'s weighted average cost of debt rates and amortized over a three-year period;
  - b. The establishment of a new regulatory account in both the FSJ/DC and TR divisions bearing interest at PNG (N.E.)'s weighted average cost of debt to record the net impact on PNG (N.E.)'s 2016 and 2017 rates arising from the Commission's decision on the FortisBC Energy Inc. 2016 Application for Common Equity Component and Return on Equity;
  - c. Inclusion of the variances between the forecast margin used to set rates and the actual margin recovery from the small industrial customer Air Liquide in PNG (N.E.)-FSJ/DC's Industrial Customer Deliveries deferral account; and
  - d. Amortization of the costs of the Sweet Gas Supply Option Study included in PNG (N.E.)-TR's Studies deferral account over a three-year period commencing on January 1, 2016.
5. PNG (N.E.)-FSJ/DC is approved to continue use of the unaccounted for gas (UAF) volume deferral account on the basis that the UAF volume forecasts for each of Test Year 2016 and Test Year 2017 are set based on using 1.0 percent of deliveries UAF loss factor. PNG (N.E.)-FSJ/DC must file an application with the Commission to obtain approval to record UAF losses above 1.5 percent in this deferral account.

6. PNG (N.E.)-TR is approved to continue use of the UAF volume deferral account on the basis that the UAF volume forecasts for each of Test Year 2016 and Test Year 2017 are set at zero with PNG (N.E.)-TR recording the variance between zero percent and a loss of up to 1.0 percent without requiring further Commission approval. PNG (N.E.)-TR must file an application with the Commission to obtain approval to record UAF losses above 1.0 percent in this deferral account.
7. The Commission does not accept PNG (N.E.)'s proposed method for developing Residential and Small Commercial customer load forecasts for the purpose of calculating the annual revenue deficiency/(sufficiency) and the resulting delivery rate changes in its revenue requirement applications (RRAs). PNG (N.E.) is therefore directed to re-calculate these load forecasts using its existing load forecasting method, and to use those forecasts to calculate the 2016 and 2017 revenue deficiencies and resultant delivery rate changes for the FSJ/DC and TR divisions. PNG (N.E.) must file the revised load forecasts and rate calculations in a compliance filing as part of its final regulatory schedules which are due to the Commission by no later than 30 days from the date of this order.
8. PNG (N.E.) is directed in future RRAs to file a copy of its Annual Pipeline Risk Mitigation Report or equivalent, together with any additional explanations or documentation required to support each significant category of forecast pipeline operating, maintenance and capital expenditure in each test period.
9. PNG (N.E.) is directed to re-calculate the 2016 and 2017 revenue deficiencies and delivery rate changes for the FSJ/DC and TR divisions and file in a compliance filing the revised regulatory schedules with the Commission reflecting the changes outlined in this order and further described in the attached reasons for decision by no later than 30 days from the date of this order.
10. PNG (N.E.) is directed to collect from/refund to customers the difference between the 2016 interim rates and the 2016 permanent rates for the FSJ/DC and TR divisions over the balance of 2016. PNG (N.E.) must inform all customers of permanent rates by way of a written notice to be included with their next customer invoice.
11. PNG (N.E.) is directed to file its next RRA for the FSJ/DC and TR divisions for a period of two years encompassing a test period of 2018 and 2019.

**DATED** at the City of Vancouver, in the Province of British Columbia, this 10<sup>th</sup> day of August 2016.

BY ORDER

*Original signed by:*

K. A. Keilty  
Commissioner

Attachment



British Columbia  
Utilities Commission

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**IN THE MATTER OF**

**Pacific Northern Gas (N.E.) Ltd.  
2016-2017 Revenue Requirements Application  
for the PNG (N.E.) Service Area**

**REASONS FOR  
DECISION**

**August 10, 2016**

**Before:**

**K. A. Keilty, Commissioner/Panel Chair  
H. G. Harowitz, Commissioner  
R. D. Revel, Commissioner**

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## **1.0 INTRODUCTION**

### **1.1 Background**

Pacific Northern Gas (N.E.) Ltd. [PNG (N.E.)] filed its applications with the British Columbia Utilities Commission (BCUC or the Commission) for the Fort St. John / Dawson Creek (FSJ/DC) and Tumbler Ridge (TR) divisions on November 30, 2015, pursuant to sections 58 to 61 of the *Utilities Commission Act* (UCA) seeking, among other things, approval to increase 2016 delivery rates (Applications). By Order G-208-15 dated December 18, 2015, the Commission approved the delivery rates and the Rate Stabilization Adjustment Mechanism (RSAM) riders set forth in the Applications on an interim and refundable basis, effective January 1, 2016.

On February 29, 2016, PNG (N.E.) filed amended applications with the Commission seeking approval, among other things, of permanent 2016 and 2017 delivery rate increases (Amended Applications). In the Amended Application for FSJ/DC, PNG (N.E.) forecasts a revenue deficiency of approximately \$0.970 million for the 2016 test year (Test Year 2016), and a revenue deficiency of approximately \$1.268 million for the 2017 test year (Test Year 2017).<sup>1</sup> In the Amended Application for TR, PNG (N.E.) forecasts a revenue deficiency of approximately \$140,000 for Test Year 2016, and a revenue deficiency of approximately \$169,000 for Test Year 2017.<sup>2</sup>

The requirement for PNG (N.E.) to file a two-year revenue requirements application (RRA) arose from the PNG (N.E.) 2013 RRA Decision and accompanying Order G-131-13, in which the Commission directed PNG (N.E.) to file its 2014 RRAs for a two-year period. The Commission stated that it “is of the view that filing future RRAs covering a time span of two years is both administratively efficient and prudent from a cost perspective.”<sup>3</sup> By Order G-168-13 dated October 10, 2013, the Commission varied Order G-131-13 to instead require PNG to commence filing two-year RRAs for Test Years 2016 and 2017.

Subsequent to PNG (N.E.) filing its Amended Application for FSJ/DC, PNG (N.E.) became aware that one of its small industrial transportation customers, Terra Energy Corp. (Terra), ceased operations. In a letter dated May 4, 2016, PNG (N.E.) notified the Commission that as part of its final regulatory schedules for Test Years 2016 and 2017, it will be updating the annual demand and margin forecasts to reflect the removal of 100,879 gigajoules (GJ) and associated margin of \$118,018 for Test Year 2016 and the removal of 113,400 GJ and associated margin of \$160,289 for Test Year 2017.<sup>4</sup>

### **1.2 Regulatory process**

As described above, by Order G-208-15 dated December 18, 2015, the Commission approved the delivery rates and RSAM rider set forth in the Applications on an interim and refundable basis, effective January 1, 2016. The Commission also established a preliminary regulatory timetable which included a procedural conference to be held on January 29, 2016.

The British Columbia Old Age Pensioners’ Organization *et al.* (BCOAPO) and the International Brotherhood of Electrical Workers, Local 213 (IBEW 213) registered as interveners.

On January 26, 2016, the Commission issued Exhibit A-5 with a list prepared by Commission staff of specific items and/or supplemental information that PNG (N.E.) should include in the Amended Applications.

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<sup>1</sup> Exhibit B-3, Amended Application, p. 3.

<sup>2</sup> Exhibit B-4, Amended Application, p. 6.

<sup>3</sup> PNG (N.E.) 2013 RRA Decision, p. 6.

<sup>4</sup> Exhibit B-3-1.

PNG (N.E.) and BCOAPO made appearances at the January 9, 2016 Procedural Conference. While PNG (N.E.) originally stated in the Applications that it would seek approval of permanent 2016 rates and interim 2017 rates when filing the Amended Applications, PNG (N.E.) proposed as an alternative at the Procedural Conference to seek permanent delivery rates for both 2016 and 2017 in the Amended Applications. PNG (N.E.) also indicated that it would provide all of the items and supplemental information stated in Exhibit A-5 in the Amended Applications.

By Order G-14-16 dated February 4, 2016, the Commission established a written hearing process and amended the regulatory timetable to direct PNG (N.E.) to file the Amended Applications on February 29, 2016, followed by two rounds of Commission and intervener information requests (IRs) and written final and reply arguments.

### **1.3 Approvals sought and issues arising**

#### **1.3.1 Approvals sought**

In the Amended Applications and subsequently updated in its final argument, PNG (N.E.) requests approval of the following:

FSJ/DC division<sup>5</sup>

1. Approval, effective January 1, 2016, on a permanent basis pursuant to sections 58 to 61 of the UCA, for the recovery of the applied for revenue requirements and the resultant delivery rate changes presented in Exhibit B-3 under Tab Schedules, Tab 6, page 9 in the table entitled “Summary of Proposed Gas Delivery Charge Rate Changes Effective January 1, 2016” as set forth under the heading “Rate Changes for Revenue Deficiency (\$/GJ),” subject to adjustments and undertakings as proposed through the information response process.
2. Approval, effective January 1, 2017, on a permanent basis pursuant to sections 58 to 61 of the UCA, for the recovery of the applied for revenue requirements and the resultant delivery rate changes presented in Exhibit B-3 under Tab Schedules, Tab 6, page 30 in the table entitled “Summary of Proposed Gas Delivery Charge Rate Changes Effective January 1, 2017” as set forth under the heading “Rate Changes for Revenue Deficiency (\$/GJ),” subject to adjustments and undertakings as proposed through the information response process.
3. Approval of the changes and additions to PNG (N.E.)’s deferral accounts and amortization expenses for 2016 and 2017, pursuant to sections 58 to 61 of the UCA, as detailed in Section 2.10, Amortization, of Exhibit B-3, and as shown in the Continuity of Deferred Charges tables set forth in this same exhibit under Tab Schedules, Tab 2, pages 10 through 12, and as detailed in response to certain information requests, including:
  - i. Approval to create a new regulatory account to capture variances in forecast to actual pension and non-pension post-retirement benefits expenses bearing interest at PNG (N.E.)’s weighted average cost of debt (WACD) rate and amortized over a three-year period;
  - ii. Approval to establish a regulatory account bearing interest at PNG (N.E.)’s WACD to record the net impact on PNG (N.E.)-FSJ/DC’s rates arising from the Commission’s decision on the FortisBC Energy Inc. 2016 Application for Common Equity Component and Return on Equity; and

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<sup>5</sup> Exhibit B-3, p. 8; PNG (N.E.) Final Argument, pp. 3–5, 19–20.

- iii. Approval to include variances between the forecast margin used to set rates and the actual margin recovery from the small industrial customer Air Liquide in the Industrial Customer Deliveries deferral account (ICDDA).
4. Approval to continue the unaccounted for gas (UAF) volume deferral account on the basis, pursuant to sections 58 to 61 of the UCA, that the UAF volume forecasts for Test Year 2016 and Test Year 2017 are set based on using a 1.0 percent of deliveries UAF loss factor for 2016 and 2017. PNG (N.E.) FSJ/DC would be required to file an application with the Commission to obtain approval to record UAF losses above 1.5 percent in this deferral account.

TR division<sup>6</sup>

1. Approval, effective January 1, 2016, on a permanent basis pursuant to sections 58 to 61 of the UCA, for the recovery of the applied for revenue requirements and the resultant delivery rate changes presented in Exhibit B-4 under Tab Schedules, Tab 6, page 3 in the table entitled “Summary of Proposed Gas Delivery Charge Rate Changes Effective January 1, 2016” as set forth under the heading “Rate Changes for Revenue Deficiency (\$/GJ),” subject to adjustments and undertakings as proposed through the information response process.
2. Approval, effective January 1, 2017, on a permanent basis pursuant to sections 58 to 61 of the UCA, for the recovery of the applied for revenue requirements and the resultant delivery rate changes presented in Exhibit B-4 under Tab Schedules, Tab 6, page 14 in the table entitled “Summary of Proposed Gas Delivery Charge Rate Changes Effective January 1, 2017” as set forth under the heading “Rate Changes for Revenue Deficiency (\$/GJ),” subject to adjustments and undertakings as proposed through the information response process.
3. Approval of the changes and additions to PNG (N.E.)’s deferral accounts and amortization expenses for 2016 and 2017, pursuant to sections 58 to 61 of the UCA, as detailed in Section 2.10, Amortization, of Exhibit B-4, and as shown in the Continuity of Deferred Charges tables set forth in this same exhibit under Tab Schedules, Tab 2, pages 10 through 12, and as detailed in response to certain information requests, including:
  - i. Approval to create a new regulatory account to capture variances in forecast to actual pension and non-pension post-retirement benefits expenses bearing interest at PNG (N.E.)’s WACD rate and amortized over a three-year period;
  - ii. Approval to establish a regulatory account bearing interest at PNG (N.E.)’s WACD to record the net impact on PNG (N.E.)-TR’s rates arising from the Commission’s decision on the FortisBC Energy Inc. 2016 Application for Common Equity Component and Return on Equity; and
  - iii. Approval for the amortization of the costs of the Sweet Gas Supply Options Study included in the Studies deferral account over a three-year period commencing 2016.
4. Approval to continue the UAF volume deferral account on the basis, pursuant to sections 58 to 61 of the UCA, that the UAF volume forecasts for Test Year 2016 and Test Year 2017 are set at zero with PNG (N.E.) TR recording the variance between zero percent and a loss of up to 1.0 percent without having to seek further Commission approval. PNG (N.E.) TR would be required to file an application with the Commission to obtain approval to record UAF losses above 1.0 percent in this deferral account.

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<sup>6</sup> Exhibit B-4, p. 7; PNG (N.E.) Final Argument, pp. 5–6, 19–20.



### 1.3.2 Issues arising

A number of issues were identified through Commission and intervener IRs and in some cases further explored in parties' Final and Reply Arguments. These issues are listed below and are each addressed in sections 2 through 5 of these Reasons for Decision.

- PNG (N.E.)'s proposed load forecasting method for residential and small commercial customers;
- Rate shock;
- Cost of service items, including:
  - Operating labour increase
  - Documentation supporting pipeline operating, maintenance and capital expenditures;
- Other matters, including:
  - Low income customer programs and affordability issues; and
  - PNG (N.E.)'s debt collection practices.

#### **Commission determination**

**With the exception of the issues identified and outlined above, the Panel finds the requested approvals to be just and reasonable and accordingly approves them.** The Panel also notes that other than the items identified in Section 1.3.2, no issues were raised by the parties with the remainder of PNG (N.E.)'s requested approvals.

In the remainder of these Reasons for Decision, the Panel provides discussions and determinations where applicable on the identified issues.

## **2.0 PROPOSED VS. EXISTING METHOD FOR RESIDENTIAL AND SMALL COMMERCIAL LOAD FORECASTS**

In the Amended Applications and the amended application filed in the Pacific Northern Gas Ltd. (PNG-West) 2016-2017 RRA proceeding, PNG-West and PNG (N.E.) propose a new method for forecasting load for Residential and Small Commercial customers. This section addresses whether the proposed method should be approved by the Panel for the purpose of calculating PNG-West and PNG (N.E.)'s annual revenue deficiencies / (sufficiencies) and the resultant delivery rate changes. The Panel notes that due to the identical nature of the proposed load forecasting method put forth in the PNG-West and PNG (N.E.) RRAs, the evidence, discussion and determinations made in this section pertain to both applications.

PNG (N.E.) states that the Commission, in the Reasons for Decision appended to Order G-140-14 approving the PNG-West 2014 Resource Plan, encouraged PNG-West to harmonize its methods for forecasting design day demand in a consistent manner across all of its regulatory filings, including the PNG (N.E.) divisions' regulatory filings.<sup>7</sup> PNG-West submits that in order to generate a meaningful forecast of annual demand, changes made to a peak day demand forecasting method must then also be reflected in an annual demand forecasting method. PNG-West has therefore responded to the Commission's suggestion by taking steps to harmonize both the annual and design day demand forecasting methods.<sup>8</sup>

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<sup>7</sup> Exhibit B-9, BCUC IR 41.2.

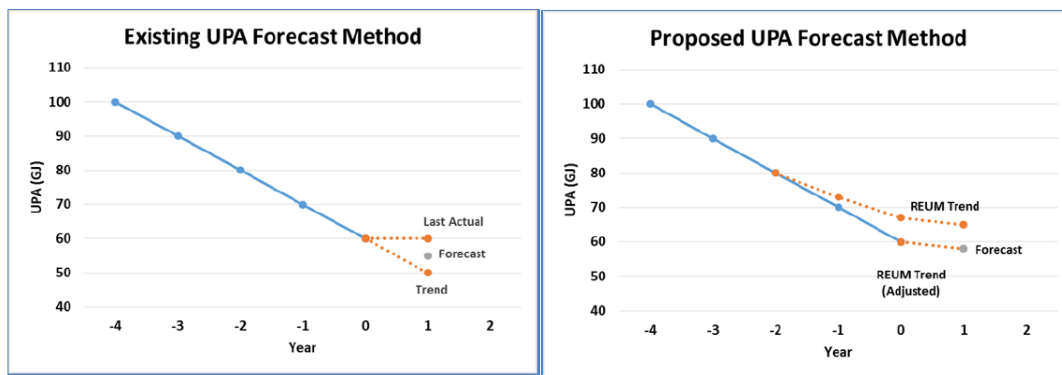
<sup>8</sup> PNG-West 2016-2017 RRA proceeding, Exhibit B-6, BCUC IR 47.1.

Under both the existing and proposed forecasting methods, aggregate demand forecasts for Residential and Small Commercial customer classes are developed by multiplying the forecast of Use Per Accounts (UPAs) times the forecast for the total number of accounts.

The existing UPA forecasting method is based on the average of: (i) the most recent weather normalized actual UPA; and (ii) the UPA determined by extrapolation into the forecast year, of the most recent five years of weather-normalized actual UPA.<sup>9</sup> PNG (N.E.)’s proposed UPA forecasting method multiplies the 2015 actual UPA by the percentage year over year forecast change in UPA trend from the residential end-use model (REUM) used in the PNG-West 2014 Resource Plan. The consolidated Resource Plan for PNG-West and PNG (N.E.) is filed every five years, with the next plan to be filed no later than April, 2019.<sup>10</sup>

In response to BCOAPO IR 6.1, PNG-West provided the following graphs to illustrate the mechanism of the existing and the proposed UPA forecast method:<sup>11</sup>

**Figure 1 – Existing versus proposed UPA Forecast Method**



PNG-West anticipates that the cost and effort of generating forecasts using the proposed method is similar to those of the existing method.<sup>12</sup>

With regard to customer count forecasts, PNG-West submits that “the existing method is based on expert opinion supported by observations by field staff on residential and commercial construction activity in PNG’s service areas.”<sup>13</sup> Under the proposed method, the Residential and Small Commercial customer count forecasts are determined from the 2015 actual customers multiplied by the percentage year-over-year change in customers forecast in the 2014 Resource Plan.<sup>14</sup> In other words, the customer count forecast is based on the trend presented in the resource plan, where the trend in the customer forecast is revised along with the resource plan. PNG-West considers that a long term trend provides a forward looking forecast that reflects demographic trends forecast by both provincial and federal agencies as well as by private institutions. In addition, PNG-West and PNG (N.E.) have reviewed the performance of their long term customer forecasts as presented in the 2014 and 2015 Resource Plans, respectively, and have updated their forecasts using a weighted

<sup>9</sup> Ibid., Exhibit B-5, BCOAPO IR 6.1.

<sup>10</sup> Order G-140-14 Reasons for Decision, p. 17.

<sup>11</sup> PNG-West 2016-2017 RRA proceeding, Exhibit B-5, BCOAPO IR 6.1.

<sup>12</sup> Ibid., Exhibit B-6, BCUC IR 47.8.

<sup>13</sup> Ibid., BCUC IR 47.3.

<sup>14</sup> PNG (N.E.) Final Argument, p. 7.

average of the Reference and All Electric scenarios in order to reflect better, recent changes in growth.<sup>15</sup> PNG (N.E.) presents these scenarios in Appendix B to the Amended Applications.

PNG (N.E.) presented an analysis using Mean Percent Error (MPE) and Mean Absolute Percent Error (MAPE) on the accuracy of the existing forecast method and the proposed forecast method by comparing the forecasts generated under the two methods against the actual results over the 2009 to 2015 period.<sup>16</sup> PNG (N.E.) submits that the proposed method, as compared to the existing method, results in a more accurate forecast when compared against historical actual demand.<sup>17</sup> PNG-West submits that it considers that a forward looking forecast, such as the proposed method based on the REUM, can better reflect the anticipated changes to the mix of residential housing stock, the increased energy efficiency of new construction, and changes in the mix of standard and high efficiency furnaces and domestic hot water heaters in the residential stock. In addition, a forward looking forecast is not as susceptible to the year-over-year variability in the UPA over the historical period; the variability which is most often due to techniques used to estimate calendar-year consumption based on metered deliveries, to adjust to normal weather conditions, and to account for intra-year customer additions and removals.<sup>18</sup>

#### Intervener final argument

BCOAPO submits the following:

- Changes in use due to changes in the housing mix, average energy efficiency, upgrades in furnaces and hot water heating are all factors which contribute to changes in UPA and are inputs into, and reflected by, the actual normalized UPA which is used under the existing method.
- Direct use of historical actuals is preferable to the use of a long-run planning/resource document for forecasting near-term actual usage, and long-term projections are not suitable for forecasting demand and setting rates in a short-term test year.
- The MPE and MAPE evidence provided by PNG to claim that the proposed method is superior should be afforded zero weight by the Commission since the REUM being relied upon did not exist during the period 2010-2012.<sup>19</sup>

BCOAPO also notes that, while the new method does not appear to provide any theoretical or practical benefits for ratepayers, it does have very negative impacts on rates.<sup>20</sup>

#### PNG (N.E.) reply argument

PNG (N.E.) disagrees with BCOAPO's assessment that the extrapolation of the trend of historical actual UPA is preferable to the use of a long-run forecasting method applied to generate a test year forecast, and submits that while a historical trend reflects socio-economic and technical factors that collectively acted to influence UPA, this same trend also reflects variations due to the adjustment to normal weather patterns, assumptions on the timing of customer additions and removals in order to estimate the average number of customers, and an

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<sup>15</sup> PNG-West 2016-2017 RRA proceeding, Exhibit B-6, BCUC IR 47.4.

<sup>16</sup> Exhibit B-1-1, Appendix B, p. 6; PNG-West 2016-2017 RRA proceeding, Exhibit B-5, BCOAPO IR 6.2.

<sup>17</sup> PNG (N.E.) Final Argument, p. 8.

<sup>18</sup> PNG-West 2016-2017 RRA proceeding, Exhibit B-6, BCUC IR 47.1.

<sup>19</sup> BCOAPO Final Argument, pp. 4-5.

<sup>20</sup> *Ibid.*, p. 5.

adjustment for the year-end unbilled consumption; all of which introduce a degree of uncertainty and variability in the historical UPA to be used for trending purposes. PNG (N.E.) further submits that a forecast of the test year UPA based on a trend that reflects PNG (N.E.)'s best forecast of socioeconomic and technical factors is not susceptible to the variability introduced by an extrapolation of historical UPA.<sup>21</sup>

With regard to the credibility of PNG (N.E.)'s MAPE analysis that compares the accuracy of the proposed and the existing forecast methods, PNG (N.E.) concedes that, since the REUM was not created until 2013, PNG (N.E.) has had to apply it retrospectively to the period 2010 to 2012 in order to generate statistics measuring its performance against actual results over a meaningful time period. PNG (N.E.) further states that it intends to continue to evaluate and evolve its forecasting techniques in order to achieve improved accuracies, as determined by a comparison with actual values.<sup>22</sup>

### Commission determination

**The Panel does not accept PNG (N.E.)'s proposed method for developing Residential and Small Commercial customer load forecasts for the purpose of calculating the annual revenue deficiency / (sufficiency) and the resulting delivery rate changes in RRAs. PNG (N.E.) is therefore directed to re-calculate these load forecasts using its existing load forecasting method, and to use those forecasts to calculate the 2016 and 2017 revenue deficiencies and resultant delivery rate changes. PNG (N.E.) must file the revised load forecasts and rate calculations in a compliance filing as part of its final regulatory schedules which are due to the Commission by no later than 30 days from the date of these reasons for decision.**

The Panel's conclusion that the existing method is superior for purposes of establishing rates is based upon a number of related considerations. First, the Panel agrees with BCOAPO that PNG (N.E.)'s MPE and MAPE analysis is problematic given that the REUM which PNG (N.E.) relies upon did not exist during the period of 2010 to 2012. The Panel further notes that PNG (N.E.) concedes in its reply argument that because the REUM was not created until 2013, PNG (N.E.) had to apply it retrospectively to the period of 2010 to 2012. The Panel therefore considers this analysis to be insufficient and is not convinced of the improved predictive accuracy assertions that are based on the MPE and MAPE analysis. Second, from a general design perspective, the Panel is not convinced that methods/models that are useful in predicting longer term trends have application in predicting shorter-term results: rather, we consider the most recent actual performance data (i.e. the basis for the existing method) to be superior for short term purposes. Third, in considering future RRAs, the Panel is concerned that the proposed method runs the risk of relying on outdated and less reliable inputs from the REUM if/as a particular RRA does not coincide with a recent update to the Long Term Resource Plan.

Furthermore, while this Panel agrees that there is value in having consistency in the load forecasts presented in different applications/analyses presented to the Commission, we do not see this as equivalent to arguing for use of the same tools in all instances. Rather, the pursuit of consistency means that the forecasts presented from one application to the next must be logically reconcilable.

The Panel also notes that, while agreeing in many instances with BCOAPO's analysis of the relative technical merits of the two forecast methods, the Panel does not consider BCOAPO's arguments regarding the relative rate impacts of one method versus the other as being relevant to our decision to continue using the existing method.

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<sup>21</sup> PNG (N.E.) Reply Argument, pp. 2–3.

<sup>22</sup> *Ibid.*, p. 4.

### 3.0 RATE SHOCK

PNG (N.E.)'s proposed delivery rate increases in Test Year 2016 and Test Year 2017 for residential customers are as follows:<sup>23</sup>

- Test Year 2016:
  - Fort St. John – 8.5 percent
  - Dawson Creek – 9.0 percent
  - Tumbler Ridge – 14.1 percent
  
- Test Year 2017:
  - Fort St. John – 10.3 percent
  - Dawson Creek – 10.9 percent
  - Tumbler Ridge – 15.0 percent

In response to BCOAPO IR 4.1, PNG (N.E.) states that it does not believe that the increases in delivery rates constitute rate shock and points out that the rate increases in FSJ/DC represent an increase of approximately \$3.00 per month for a typical residential customer for Test Year 2017 and less than this amount for Test Year 2016.<sup>24</sup> In the case of the Tumbler Ridge division, the largest of the rate increases, which occurs in Test Year 2017, is approximately \$6.00 per month for a typical residential customer.<sup>25</sup>

#### Intervener final argument

BCOAPO submits while it “agrees that a typical residential customer may be able to handle a \$6 per month increase, such an increase is very onerous for ratepayers of modest or low income.”<sup>26</sup>

BCOAPO further submits that “were the utility to generally agree or be bound by a BCUC determination that a delivery rate increase exceeding 10% constituted rate shock, there would be some imperative to look for all ways possible to mitigate such a proposed rate increase – by smoothing, deferring, amortizing, budget optimizing, etc., - prior to filing a rate application.”<sup>27</sup>

#### PNG (N.E.) reply argument

PNG (N.E.) responds that there are two instances where the Commission determined a 10 percent threshold for rate shock – determinations on rate increases for the British Columbia Hydro and Power Authority (BC Hydro) and more recently in the BCUC Thermal Energy Systems Regulatory Framework Guidelines (TES Guidelines). PNG (N.E.) argues, however, that in both of these cases, rate impacts are measured based on the bill impact to

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<sup>23</sup> Exhibit B-3, Tables 2 and 3, p. 5; Exhibit B-4, Table 2, p. 5.

<sup>24</sup> Exhibit B-7, BCOAPO IR 4.1.

<sup>25</sup> Exhibit B-8, BCOAPO IR 2.1.

<sup>26</sup> BCOAPO Final Argument, p. 6.

<sup>27</sup> Ibid., p. 7.

customers, not on the delivery rate charge alone. With regards to the bill impact to residential customers in all PNG (N.E.) divisions, none of the proposed rate increases exceed ten percent.<sup>28</sup>

PNG (N.E.) also submits that it has “completed an exhaustive analysis of the expenses and expenditures related to providing secure, reliable, and safe natural gas service for customers” and that it believes that “expected volatility in rates should be mitigated when options exist to reduce the volatility.” PNG (N.E.) provides the example that “a significant rate change in one year should be mitigated or smoothed when possible if there is a reasonable expectation of an offsetting rate change in the following year” but argues that “no such opportunity is foreseen in this case.”<sup>29</sup>

### **Panel discussion**

The Panel does not accept BCOAPO’s argument that the Amended Applications constitute rate shock and therefore does not support any modification or adjustment to the Amended Applications in relation to this issue.

To begin with, the Panel is not convinced that ratepayers will be subjected to rate shock if the applied-for rates are approved. First, we are persuaded by PNG (N.E.)’s argument that questions of rate shock should look beyond the change to the delivery rate alone and should consider the bill impact to customers. Based on the information provided by PNG (N.E.) in the Amended Applications, the Test Year 2016 and Test Year 2017 bill impacts for FSJ/DC residential customers are 6.1 percent and 6.6 percent, respectively, and the bill impacts for TR residential customers are 7.9 percent and 6.6 percent, respectively.<sup>30</sup> Second, we note that the ten percent “test” even if it is exceeded, is only a guideline and does not in and of itself compel intervention/adjustments to the rate application. Finally, we also take note of the fact that the Amended Applications follow on from two years of unchanged rates.

Furthermore, the Panel agrees with PNG (N.E.)’s characterization of the types of situations where rate smoothing is appropriate: i.e. to mitigate rate volatility when there is reasonable expectation of offsetting the rate change in the following period(s). In the Panel’s view, even if the applied-for rate changes were to be considered as rate shock, no evidence has been presented to suggest that the underlying pressures on rates are either transitory in nature or mitigatable.

## **4.0 COST OF SERVICE ISSUES**

### **4.1 Operating labour increase – FSJ/DC division**

PNG (N.E.) forecasts an increase in operating labour of \$174,000 or 8.6 percent in Test Year 2017 compared to Test Year 2016 for the FSJ/DC division.<sup>31</sup> One of the main drivers of this increase is the addition of a full time equivalent (FTE) to perform warehousing activities.<sup>32</sup>

PNG (N.E.) explained that it follows the internal controls under the 2013 Committee of Sponsoring Organizations of the Treadway Commission Framework (2013 COSO Framework), which requires a separation of duties

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<sup>28</sup> PNG (N.E.) Reply Argument, pp. 5–6.

<sup>29</sup> Ibid., p. 6.

<sup>30</sup> Exhibit B-3, Tab 6, pp. 6, 7, 27-28; Exhibit B-4, pp. 6, 13.

<sup>31</sup> Exhibit B-3, Tab 1, p. 2.

<sup>32</sup> Ibid., p. 33; Exhibit B-5, BCUC IR 6.4.

between shipping and receiving of goods and the roles of the buyer, including procurement and issuing of purchase orders. PNG (N.E.) also stated that with the addition of the warehousing FTE, it expects to realize improved procurement through economies of scale on purchasing goods as well as through the monitoring and efficient use of shipping in remote areas by ensuring trucks are full whenever possible.<sup>33</sup>

PNG (N.E.) stated that it is “unable to quantify the benefits to ratepayers of this initiative” at this time but submitted that “the implementation of rigorous internal procurement processes has also improved internal control over this business cycle.”<sup>34</sup>

#### Intervener final argument

BCOAPO “accepts that there may be a ‘best practices’ argument that can support the proposed new position and, as such, does not oppose the inclusion of this new FTE in the revenue requirement in this proceeding.” However, BCOAPO argues that “the need for any further new positions should be substantiated by a standard cost-benefit analysis in the pre-filed evidence that demonstrates that the benefits exceed the costs.”<sup>35</sup>

#### PNG (N.E.) reply argument

PNG (N.E.) responds that it is “respectful of the BCOAPO’s suggestion that any further new positions be substantiated by a cost-benefit analysis” but submits that “this may not always be practical given the difficulty in quantifying potential benefits to be realized”.<sup>36</sup>

#### **Panel discussion**

The Panel accepts the increase to operating labour resulting from the hiring of a new warehousing position in the FSJ/DC division. The Panel considers PNG (N.E.)’s rationale for hiring the new warehousing position to be reasonable given the need for PNG (N.E.) to maintain adequate segregation of duties between shipping and receiving, and procurement and issuing of purchase orders.

The Panel encourages PNG (N.E.), where practicable, to provide cost-benefit analyses in future RRAs when adding new labour positions. Even in situations where a cost-benefit analysis is not possible, the Panel expects PNG (N.E.) to provide a detailed explanation in its RRA narratives of any new positions added to its labour force. These explanations should include, at minimum, the timing of hiring the new employee, the employee’s title and a position description, the dollar impact on the revenue requirement forecasts, and the rationale for why the additional position is required. The Panel notes that the Amended Application, while containing some of this information, lacked the level of detail the Panel expects to be provided in future RRAs.

#### **4.2 Documentation supporting pipeline operating, and capital expenditures**

In the Amended Applications and the amended application filed by PNG-West in its 2016-2017 RRA proceeding, PNG-West and PNG (N.E.) forecast a number of operating, maintenance and capital expenditures related to activities to assist in ensuring the long-term, safe and reliable operations of their pipelines. This section examines the sufficiency of the risk assessment documentation supporting these expenditures. The Panel notes

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<sup>33</sup> Exhibit B-5, BCUC IR 9.1.

<sup>34</sup> Exhibit B-7, BCOAPO IR 3.3.

<sup>35</sup> BCOAPO Final Argument, p. 7.

<sup>36</sup> PNG (N.E.) Reply Argument, p. 7.

that due to the similarity of issues identified in both RRA proceedings and certain pieces of relevant evidence being filed in each of the proceedings, the discussion and determinations made in this section pertain to both applications.

PNG-West stated that a 2014 BC Oil and Gas Commission (OGC) audit found PNG-West's existing risk evaluation and project prioritization system not up to industry best practices and not easily verifiable by a third party.<sup>37</sup> As an outcome of this OGC audit, PNG-West has a new forecast cost of \$51,000 in Test Year 2016 to improve its high pressure risk assessment methodology.<sup>38</sup>

PNG (N.E.) stated that commencing in 2016 it will be using an outside facilitator for its annual risk review meeting and "significantly improving the documentation of the discussions and action items as required by its regulatory authorities." PNG (N.E.) also provided the minutes of the most recent Annual Integrity Management and Risk Review Meeting held on May 27, 2015.<sup>39</sup>

### **Commission determination**

**In future RRAs, PNG (N.E.) is directed to file a copy of its Annual Pipeline Risk Mitigation Report or equivalent, together with any additional explanations or documentation required to support each significant category of forecast pipeline operating, maintenance and capital expenditure in the test period.** In the Panel's view, the pipeline risk assessment and project prioritization process is an important tool for use in assessing the necessity, efficiency, reasonableness and benefits associated with planned pipeline operating, maintenance and capital expenditures. The Panel notes that in some instances, information on new and/or larger expenditures related to ensuring the long-term, safe and reliable operations of PNG (N.E.)'s pipelines were not fully addressed in the Amended Applications and instead only came to light through IR responses. The Panel considers it important that PNG (N.E.) provide a more detailed explanation and justification in the next RRAs and leverage the improved risk evaluation process commencing in 2016 to enhance the information filed in future RRAs, as this will allow for a more efficient review process and will help to clarify and explain changes in costs.

## **5.0 OTHER MATTERS**

BCOAPO raises a number of additional concerns in its submissions, each of which is dealt with in this section.

### **5.1 Low-income customer programs and affordability issues**

BCOAPO requests that PNG (N.E.) include a discussion of steps it plans to take regarding affordability issues in PNG (N.E.)'s next rate design application.<sup>40</sup>

PNG (N.E.) opposes this request in its reply argument and states that this would result in increased costs and resources which would further increase the cost of service for PNG (N.E.) customers. PNG (N.E.) also argues that it does not believe that the UCA permits discrimination in rates in favour of low income residential ratepayers.<sup>41</sup>

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<sup>37</sup> PNG-West 2016-2017 RRA proceeding, Exhibit B-6, BCUC IR 48.1.2.

<sup>38</sup> Ibid., BCUC IR 48.10.1.

<sup>39</sup> Exhibit B-9, BCUC IR 44.5.

<sup>40</sup> BCOAPO Final Argument, p. 7.

<sup>41</sup> PNG (N.E.) Reply Argument, p. 9.



## **Panel discussion**

The Panel considers this issue to be out of scope in a revenue requirements application, and hence does not make any request of PNG (N.E.) in this regard.

### **5.2 Debt collection policies**

BCOAPO presents a case in its final argument that PNG (N.E.)'s current debt collection practices are at a minimum not appropriate and perhaps not legal, and therefore asks that the Commission order PNG (N.E.) to stop the collection practices that BCOAPO finds objectionable.<sup>42</sup>

PNG (N.E.) opposes this request in its reply argument, stating that BCOAPO is "essentially challenging the content of PNG(NE)'s Commission-approved tariff."<sup>43</sup>

PNG (N.E.) states that BCOAPO's request is not appropriate in the context of this RRA due to the fact that the RRA is not dealing with tariff issues. PNG (N.E.) states that its tariff was most recently approved in Order G-127-11 and that BCOAPO's request constitutes a reconsideration of that order without an accompanying application filed by BCOAPO with the Commission.<sup>44</sup>

## **Panel discussion**

The Panel agrees with PNG (N.E.) that this request is out of scope of this revenue requirements hearing, and therefore refrains from issuing any directive to PNG (N.E.) in this regard.

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<sup>42</sup> BCOAPO Final Argument, pp. 7-10.

<sup>43</sup> PNG (N.E.) Reply Argument, p. 9.

<sup>44</sup> *Ibid.*, p. 10.