



Verlon G. Otto
Director, Regulatory Affairs

Pacific Northern Gas (N.E.) Ltd.
750 – 888 Dunsmuir Street
Vancouver, BC V6C 3K4
Tel: (604) 691-5680
Fax: (604) 697-6210
Email: votto@png.ca

Via E-file

April 29, 2020

B.C. Utilities Commission
Suite 410, 900 Howe Street
Vancouver, BC V6Z 2N3

File No.: 4.2.7(2020)

Attention: Patrick Wruck
Commission Secretary and Manager, Regulatory Services

Dear Mr. Wruck:

**Re: Pacific Northern Gas (N.E.) Ltd.
Fort St. John/Dawson Creek and Tumbler Ridge Divisions
2020-2021 Revenue Requirements Application
Response to BCOAPO Information Request No. 1**

Accompanying, please find the response of Pacific Northern Gas (N.E.) Ltd. to the referenced information request.

Please direct any questions regarding the application to my attention.

Yours truly,

A handwritten signature in black ink that reads "Verlon Otto".

Verlon G. Otto

Enclosure

REQUESTOR NAME:

BCOAPO et al.

INFORMATION REQUEST ROUND NO:

#1

TO:

**Pacific Northern Gas Ltd. (N.E.) - 2020-2021
Revenue Requirements Application**

DATE:

April 15, 2020

APPLICATION NAME:

2020-21 Revenue Requirements Application

1.0 Reference: General – Impact of Covid-19 Pandemic on FSJ/DC and TR

- 1.1 Statistics Canada has just announced (April 15) that in March, Canada's GDP declined by 9% - the sharpest drop since 1961. Furthermore, Canadians are being advised by government and health authorities to expect that current lockdown/physical distancing restrictions will remain in effect for months. Given the exceptional nature of the current environment, can PNG confirm that its Amended Application contains reasonable and reliable forecasts for the 2020-21 test period? If yes, please explain fully how the severe new circumstances are reflected in the application; if no, please explain fully why an application that does not capture or reflect the historic impacts of the pandemic is appropriate or relevant for the 2020-21 RRA.

Response:

PNG(NE) believes that, for the reasons described in the response to Question 1.2, the Amended Application contains the most reasonable and reliable forecasts for the 2020-2021 test period given the information currently available.

- 1.2 Assuming that the pandemic's impacts – which include layoffs and reduced incomes for households, decreased business activity and business revenues, decreased industrial activity, stay-at-home strictures, etc., – remain applicable for at least three months (into July 2020) and that full economic recovery is delayed into 2021, please provide PNG's views or estimates of the impacts on 2020 throughputs by class (residential, commercial, institutional, industrial, transportation, NGV, etc.), utility revenues, operating costs, bad debt, utility working capital, and rates as compared to the forecasts in the Amended Application.

Response:

PNG(NE) submits that it is premature to predict the outcomes from COVID-19 on PNG(NE). However, PNG(NE) provides the following commentary on the key areas of its operations.

Operating Activities

- (i) Utility Costs: At this stage, PNG(NE) has continued with most of its work as planned, in a manner that promotes physical distancing and good hygiene practices. One exception is the temporary suspension of meter recalls due to the in-premise re-light aspect and direct contact with customers. PNG(NE) expects that this may result in an increase in contractor costs near the end of the year to ensure PNG(NE) fulfills Measurement Canada requirements. PNG(NE) reiterates that it has submitted an application to the BCUC for the creation of a COVID-19 deferral account that will enable it to capture any unplanned expenses due to the COVID- 19 pandemic. These costs may include, but are not limited to, additional resources to manage customer service, incremental information technology and personal protection equipment costs, and additional financing costs.
- (ii) Forecast Capital Expenditures: PNG(NE) has not revised its forecasted capital expenditures at this time and will be monitoring this closely in the coming weeks. The planned system betterment work is a high priority for PNG(NE) to ensure the continued provision of safe and reliable service. For the most part, the system integrity work can be executed in a manner that promotes physical distancing and good hygiene. PNG(NE) has also implemented numerous health and safety procedures and activated its Emergency Operations Centre to ensure the work can continue given that PNG(NE) staff are providing an essential service to customers.
- (iii) Utility Maintenance Activities: There is no change to utility maintenance activities forecast at this time, however PNG(NE) is monitoring the situation closely.
- (iv) Engagement with Third Parties such as Consultants and Contractors: At this time, PNG(NE) has significantly decreased in-person meetings, which impacts its engagement efforts with stakeholders and Indigenous Nations for some projects. In terms of working with PNG(NE)'s vendors and consultants, business has been carrying on as usual as much

of the work is in the planning, engineering, permitting stage, which can be done remotely in most cases. If the situation persists into the construction season, there could be some impact to the engagement efforts in projects. PNG(NE) notes that it is too early to predict whether contractors will have sufficient resources and be ready to work on PNG(NE) infrastructure projects when required.

- (v) In-house Labour Costs, Including Administrative Costs: There is no change to the in-house labour forecast at this time, however PNG(NE) is monitoring the situation closely. PNG(NE) expects some reduction in its travel expenses, based on the physical distancing and remote working arrangements in place. However, it is too early to revise the forecast, as other labour and administrative costs may increase due to COVID-19.
- (vi) Working Capital: PNG(NE) anticipates a potential impact on its working capital requirements. In order to help customers who have been financially impacted by COVID-19, PNG(NE) has expanded the flexibility in its bill payment arrangements to include up to a three-month deferral of energy bill payments to qualifying residential and small commercial customers. Under these programs, PNG(NE) expects to see much higher outstanding accounts receivable from customers as well as a much higher than previously anticipated bad debts. Therefore, PNG(NE) may be required to increase its borrowings to finance its expenses and capital requirements in order to continue to serve customers, including the write-off of bad debts. PNG(NE) does note that it has sufficient borrowing capacity to be able to fund its forecast working capital needs, but will likely incur higher financing charges.

On April 17, 2020, the BCUC approved PNG(NE)'s request, on an interim basis, for the creation of a COVID-19 deferral account to capture unrecovered revenues and unplanned costs arising from the COVID-19 pandemic. As such, PNG(NE) is not modifying the 2020 forecasts in the instant application as cost impacts from COVID-19 will be addressed via the COVID-19 deferral account.

Customer Demand and Throughput

PNG(NE) is closely monitoring how the measures being taken with respect to COVID-19 will impact customer load. With the warmer spring weather, PNG(NE)'s forecast takes into consideration lower demand given that many customers primarily use natural gas for space and hot water heating. Depending on the situation of each type of customer, as well as the customer class category, PNG(NE) expects the following impacts:

- (i) Residential: With the warmer spring weather, PNG(NE)'s forecast takes into consideration lower demand given that residential customers primarily use natural gas for space and hot water heating. As such, subject to changes in weather being warmer or colder than normal, PNG(NE) expects minimal impacts to residential consumption over

the next few months. PNG(NE) also notes that any variation in residential use per account would be captured in the Rate Stabilization Adjustment Mechanism (RSAM) deferral account.

- (ii) Institutional/Commercial: PNG(NE) is closely monitoring how the measures being taken with respect to COVID-19 will impact institutional and other commercial gas demand from schools, hospitals, and other businesses. With the warmer spring weather, PNG(NE)'s forecast takes into consideration lower demand given that the noted institutional customers and many other commercial businesses primarily use natural gas for space and hot water heating. Depending on the situation of each type of customer, as well as the customer class category, PNG(NE) expects the following impacts:
 - a) Small Commercial – variations in small commercial customer load would be captured in the Rate Stabilization Adjustment Mechanism (RSAM) deferral account; however any permanent closures of businesses in this category would impact PNG(NE)'s margin.
 - b) Large Commercial – variations in demand in large commercial customer load as well as any permanent closures of institutions in this category would directly impact PNG(NE)'s actual margin.
- (iii) Industrial: PNG(NE) has reached out to its large industrial customers to better understand the impacts of COVID-19 on their forecast natural gas consumption. To date, these customers have indicated that even in a scenario whereby COVID-19 related restrictions are prolonged for an additional three to six months, they do not anticipate any substantial impact to their demand. PNG(NE) will continue to monitor the situation with its larger customers. PNG(NE) also notes that several of its larger customers have a minimum take or pay contractual obligations in place and the ICDDA is in place to capture load variances from some industrial customers.

- 1.3 In the event that the Covid-19 pandemic continues for at least the next three months and that full economic recovery is delayed into 2021, does PNG believe there will be any material impact in 2020 on (i) utility costs, (ii) forecasted capital expenditures, (iii) utility maintenance activities, (iv) engagements with third-parties such as consultants and contractors, and (v) in-house labour costs, including administrative costs? Please discuss fully.

Response:

Please see the response to Question 1.2.

- 1.4 To the extent that the Covid-19 pandemic may materially change throughputs for different customer classes, does PNG agree that proposed rates for each customer class should reflect these impacts? If not, please explain.

Response:

All else held equal, PNG(NE) believes that if there are material, quantifiable changes to the expected throughputs for the different customer classes the rates for those classes should reflect these expected changes. However, as described in the response to Question 1.2, PNG(NE) does not have any evidence that there will be material changes to throughputs that would warrant an adjustment to rates at this time. Further, any variances that arise from residential and small commercial loads would be captured in the RSAM and the variances of some industrial customer loads would be captured in the ICDDA.

- 1.5 In PNG's view, do the prevailing historic circumstances warrant any significant revisions to the instant application in terms of the two-year term of the plan, forecast throughputs, forecast costs, or proposed rates?

Response:

For the reasons described in response to Question 1.2, PNG(NE) does not believe that there is a need to make any significant revisions at this time to the Amended Application with respect to forecast costs or throughputs related to residential and small commercial customers.

- 1.6 Does PNG believe that the recent 0.5% cut in the Bank of Canada's overnight rate to 0.25% will materially impact PNG's short-term borrowing costs?

Response:

PNG(NE) has addressed this matter in its response to BCUC IR 46.1, and has reproduced the response below:

Despite the rate reductions in underlying government debt instruments, the underlying rates for corporate instruments have not moved significantly. Financial institutions have significantly increased credit spread requirements and standby charges for debt that have more than offset the reductions in prime rates. PNG(NE) is exposed to these impacts for both any new financing that may be required for RECAP, and also at the renewal of the 18-month operating facility which will next be required in May 2021. PNG(NE) relies on the short term and long term interest deferral accounts to capture the differences in the actual and forecast debt rates rather than forecasting corporate credit spreads and changes in other bank charges.

As noted on page 83 of the FSJ/DC Amended Application and page 68 of the TR Amended Application, the forecast of the underlying prime rate for operating line borrowings in both Test Year 2020 and Test Year 2021 was based on the forecast decrease in the average 90-day treasury bill rate for 2020 relative to the forecast 90-day treasury bill rate from Decision 2019 which is then added to the forecast 2019 Decision prime rate. PNG(NE) based the forecast 90-day treasury bill rate for 2020 from BMO's published forecast dated November 22, 2019. With the changing economic conditions, BMO has published a forecast dated March 27, 2020 which shows that the forecast 90-day treasury bill rate for 2020 has declined from 1.6625% to 0.4875%. BMO's publication also includes a forecast for 2021 which is 0.20%. BMO's March 27, 2020 publication is reproduced on the pages that follow this response.

Use of the updated forecast would reduce Fort St John's, Dawson Creek's and Tumbler Ridge's forecast 2020 and 2021 short term and long term debt interest rates as follows:

Fort St. John

- In Test Year 2020, Fort St. John's forecast average short-term interest rate would decline by 117 basis points to 2.44% and Fort St John's forecast average long-term interest rate would decline by 37 basis points to 3.79%.
- In Test Year 2021, Fort St. John's forecast average short-term interest rate would decline by 147 basis points to 2.50% and Fort St John's forecast average long-term interest rate would decline by 49 basis points to 3.63%.

The resulting impact on the 2020 and 2021 cost of service from the updated 90 day treasury bill rate on Fort St. John's 2020 and 2021 short term debt costs would result in a decrease in costs of \$23,000 and \$40,000, respectively.

The resulting impact on the 2020 and 2021 cost of service from the updated 90 day treasury bill rate on Fort St. John's 2020 and 2021 long term debt costs would result in a decrease in costs of \$98,000 and \$134,000, respectively.

These impacts for Fort St. John are illustrated in the table that follows.

\$000's		
Item	Test Year 2021	Test Year 2020
Short-term Debt		
Debt Balance	2,706	1,959
Interest Rate - Amended Application	3.96%	3.61%
Interest rate - Using Updated 90-Day Treasury Bill Forecast	2.50%	2.44%
Difference in Average Short-Term Interest rate	-1.47%	-1.17%
Impact on Short-Term Interest Costs	(40)	(23)
Long-term Debt		
Debt Balance	27,377	26,460
Interest Rate - Amended Application	4.12%	4.16%
Interest rate - Using Updated 90-Day Treasury Bill Forecast	3.63%	3.79%
Difference in Average Long-Term Interest rate	-0.49%	-0.37%
Impact on Short-Term Interest Costs	(134)	(98)

Dawson Creek

- In Test Year 2020, Dawson Creek's forecast average short-term interest rate would decline by 117 basis points to 2.68% and Dawson Creek's forecast average long-term interest rate would decline by 26 basis points to 3.97%.
- In Test Year 2021, Dawson Creek's forecast average short-term interest rate would decline by 147 basis points to 2.68% and Dawson Creek's forecast average long-term interest rate would decline by 42 basis points to 3.73%.

The resulting impact on the 2020 and 2021 cost of service from the updated 90 day treasury bill rate on Dawson Creek's 2020 and 2021 short term debt costs would result in a decrease in costs of \$22,000 and \$31,000, respectively.

The resulting impact on the 2020 and 2021 cost of service from the updated 90 day treasury bill rate on Dawson Creek's 2020 and 2021 long term debt costs would result in a decrease in costs of \$42,000 and \$73,000, respectively.

These impacts for Dawson Creek are illustrated in the table that follows.

\$000's		
Item	Test Year 2021	Test Year 2020
Short-term Debt		
Debt Balance	2,106	1,898
Interest Rate - Amended Application	4.15%	3.86%
Interest rate - Using Updated 90-Day Treasury Bill Forecast	2.68%	2.68%
Difference in Average Short-Term Interest rate	-1.47%	-1.17%
Impact on Short-Term Interest Costs	(31)	(22)
Long-term Debt		
Debt Balance	17,510	16,010
Interest Rate - Amended Application	4.15%	4.24%
Interest rate - Using Updated 90-Day Treasury Bill Forecast	3.73%	3.97%
Difference in Average Long-Term Interest rate	-0.42%	-0.26%
Impact on Short-Term Interest Costs	(73)	(42)

Tumbler Ridge

- In Test Year 2020, Tumbler Ridge's forecast average short-term interest rate would decline by 118 basis points to 2.95% and Tumbler Ridge's forecast average long-term interest rate would decline by 61 basis points to 3.38%.
- In Test Year 2021, Tumbler Ridge's forecast average short-term interest rate would decline by 147 basis points to 2.91% and Tumbler Ridge's forecast average long-term interest rate would decline by 82 basis points to 3.17%.

The resulting impact on the 2020 and 2021 cost of service from the updated 90 day treasury bill rate on Tumbler Ridge's 2020 and 2021 short term debt costs would result in a decrease in costs of \$4,000 and \$5,000, respectively.

The resulting impact on the 2020 and 2021 cost of service from the updated 90 day treasury bill rate on Tumbler Ridge's 2020 and 2021 long term debt costs would result in a decrease in costs of \$16,000 and \$23,000, respectively.

These impacts for Tumbler Ridge are illustrated in the table that follows.

Item	\$000's	
	Test Year 2021	Test Year 2020
Short-term Debt		
Debt Balance	370	330
Interest Rate - Amended Application	4.38%	4.12%
Interest rate - Using Updated 90-Day Treasury Bill Forecast	2.91%	2.95%
Difference in Average Short-Term Interest rate	-1.47%	-1.18%
Impact on Short-Term Interest Costs	(5)	(4)
Long-term Debt		
Debt Balance	2,763	2,655
Interest Rate - Amended Application	3.99%	3.99%
Interest rate - Using Updated 90-Day Treasury Bill Forecast	3.17%	3.38%
Difference in Average Long-Term Interest rate	-0.82%	-0.61%
Impact on Short-Term Interest Costs	(23)	(16)

PNG(NE) presently has both short term and long term interest rate deferral accounts in place to capture variances in short term and long term financing rates. Given the current uncertainty in the capital markets, and the inability to be able to forecast what terms for the renewal of the operating facility may be provided in May 2021, PNG(NE) proposes to rely on these deferral accounts to capture any differences in financing rates for Test Years 2020 and 2021.

Canadian Economic Outlook | Our key forecasts for the Canadian economy

March 27, 2020

Canadian Economic Outlook for Mar. 27, 2020

A Publication of BMO Capital Markets Economic Research - Douglas Porter, CFA, Chief Economist, BMO Financial Group

	2019				2020				2021				2018				
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020	2021	
Production	<i>q/q % chng : a.r.</i>																
Real GDP (chain-weighted)	1.0	3.4	1.1	0.3	-6.5	-25.0	30.0	4.1	2.2	2.1	1.9	1.8	2.0	1.6	-3.0	3.5	
Final Sales	-1.0	5.0	3.0	-0.1	-6.6	-23.4	29.2	3.3	2.2	2.1	1.9	1.8	2.3	1.5	-2.6	3.4	
Final Domestic Demand	3.1	0.1	3.1	0.7	-5.0	-23.1	28.4	3.1	2.2	2.0	1.8	1.7	2.1	1.2	-2.3	3.3	
Consumer Spending	2.4	0.4	2.0	2.0	-8.8	-32.4	42.2	3.4	2.2	1.9	1.7	1.4	2.2	1.6	-4.2	3.8	
Durables	4.8	-2.6	1.4	-0.2	-7.0	-40.0	40.0	5.0	2.0	1.8	1.4	1.5	1.7	0.6	-6.6	3.0	
Nondurables	1.2	-0.2	1.8	1.1	-3.0	-10.0	10.0	1.5	1.5	1.7	1.5	1.5	1.8	1.0	-1.0	2.0	
Services	2.4	1.0	2.3	3.4	-12.0	-40.0	58.5	4.0	2.2	2.1	1.8	1.4	2.5	2.1	-5.5	4.5	
Government Spending	2.8	0.7	2.1	0.5	1.5	4.5	6.8	1.6	2.4	2.2	2.1	2.0	3.4	1.6	2.6	2.8	
Business Investment	18.3	-7.7	5.6	-6.3	-5.0	-40.0	25.0	5.0	2.5	2.5	2.0	2.0	1.4	0.0	-8.3	1.9	
Non-residential Construction	4.4	4.3	11.2	-1.7	-5.0	-40.0	25.0	5.0	2.5	2.5	2.0	2.0	-0.6	0.9	-6.2	1.9	
Machinery and Equipment	42.7	-23.2	-2.6	-13.5	-5.0	-40.0	25.0	5.0	2.5	2.5	2.0	2.0	4.7	-1.4	-11.7	1.9	
Residential Construction	-3.1	6.4	13.0	1.1	0.0	-30.0	20.0	5.5	1.0	1.5	1.7	2.0	-1.6	-0.6	-1.9	1.9	
Exports	-4.0	10.6	-0.6	-5.1	-7.9	-7.7	8.3	6.0	2.1	2.3	2.4	2.3	3.1	1.2	-2.6	3.0	
Imports	8.3	-4.1	-0.2	-2.5	-2.9	-7.7	8.2	5.3	2.1	2.0	2.0	1.9	2.6	0.3	-1.7	2.7	
Inventory Change	2012S bns : a.r.	24.1	17.0	7.1	10.5	10.6	2.2	6.5	10.7	10.7	10.8	10.8	13.0	14.7	7.5	10.8	
Contrib. to GDP Growth	ppts : a.r.	1.9	-1.4	-1.8	0.6	0.1	-1.6	0.8	0.8	0.0	0.0	0.0	-0.3	0.1	-0.5	0.1	
Net Exports	2012S bns : a.r.	-12.7	11.1	10.3	5.7	-3.0	-2.9	-2.8	-1.7	-1.7	-1.2	-0.6	0.0	-2.4	3.6	-2.6	-0.9
Contrib. to GDP Growth	pppts : a.r.	-4.1	4.8	-0.1	-0.8	-1.5	0.2	-0.3	0.0	-0.1	0.0	0.1	0.1	0.3	-0.2	0.0	
Nominal GDP	\$ bns : a.r.	2,260	2,305	2,312	2,338	2,299	2,107	2,259	2,296	2,321	2,345	2,370	2,393	2,224	2,304	2,240	2,357
Growth	q/q % chng : a.r.	5.7	8.2	1.3	4.5	-6.4	-29.5	32.1	6.6	4.4	4.3	4.3	3.9	3.9	3.6	-2.8	5.2
Real GDP	y/y % chng	1.5	2.0	1.6	1.5	-0.5	-8.2	-2.2	-1.3	0.9	9.0	2.5	2.0				
Inflation	<i>q/q % chng : a.r.</i>												1.8	1.9	0.3	1.6	
GDP Price Index	4.5	4.5	0.4	4.1	0.1	-5.9	1.6	2.5	2.2	2.2	2.4	2.0	1.8	1.9	0.3	1.6	
CPI All Items	1.7	3.3	1.6	1.7	1.3	-3.2	3.4	2.1	2.1	2.0	2.0	2.1	2.3	1.9	1.0	1.9	
Ex. Food and Energy	1.9	2.7	2.1	1.1	1.6	2.1	2.7	1.6	2.1	1.9	2.0	2.1	1.9	2.1	1.9	2.0	
Food Prices	3.9	2.7	4.0	2.9	1.3	1.3	1.8	2.1	2.1	1.8	2.1	2.1	1.8	3.4	2.1	1.9	
Energy Prices	-6.1	15.8	-7.8	5.0	-5.7	-56.9	16.7	7.4	3.5	2.8	2.4	2.0	7.5	-2.9	-12.9	-0.5	
Services	1.9	3.8	3.8	-1.3	1.7	2.2	2.2	1.5	1.9	2.4	2.3	1.5	2.5	2.5	1.6	2.0	
CPI All Items	y/y % chng	1.6	2.1	1.9	2.1	2.0	0.3	0.8	0.9	1.1	2.4	2.0	2.0				
CPPIB	y/y % chng	1.6	1.9	1.9	1.8	1.8	1.6	1.5	1.5	1.4	1.7	1.7	2.1	1.4	1.8	1.6	1.7
New Core CPIs	y/y % chng : avg.	1.9	2.0	2.0	2.1	2.1	1.6	1.5	1.4	1.7	1.8	2.1	1.9	2.0	1.6	1.7	
Financial	<i>% : quarterly avg.</i>												1.44	1.75	0.50	0.25	
Overnight Rate	1.75	1.75	1.75	1.75	1.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1.44	1.75	0.50	0.25	
3-Month T-Bill	1.65	1.67	1.64	1.66	1.30	0.25	0.20	0.20	0.20	0.20	0.20	0.20	1.37	1.65	0.50	0.20	
90-Day BAs	2.14	2.00	1.96	1.99	1.85	1.00	0.75	0.60	0.55	0.55	0.55	0.55	1.89	2.02	1.05	0.55	
10-Year Bond Yield	1.86	1.62	1.36	1.52	1.20	0.65	0.70	0.80	0.90	1.05	1.20	1.35	2.28	1.59	0.85	1.15	
10-Year BBB Corporate Spread	pppts	2.20	2.01	1.94	1.93	2.00	3.30	2.70	2.40	2.30	2.30	2.30	1.85	2.02	2.60	2.30	
90 Day Canada/U.S. Spread	bps	-79	-68	-38	5	17	8	3	3	3	3	3	-60	-45	7	3	
10 Year Canada/U.S. Spread	bps	-80	-72	-43	-28	-18	-5	-5	-4	-4	-4	-3	-63	-56	-8	-3	
Foreign Trade	<i>\$ bns : a.r.</i>												1.44	1.75	0.50	0.25	
Current Account Balance	-69.4	-33.7	-43.5	-35.0	-54.3	-74.5	-72.1	-67.3	-67.6	-66.0	-63.6	-62.6	-55.5	-45.4	-67.0	-65.0	
Share of GDP	-3.1	-1.5	-1.9	-1.5	-2.4	-3.5	-3.2	-2.9	-2.9	-2.8	-2.7	-2.6	-2.5	-2.0	-3.0	-2.8	
Merchandise Balance	-36.1	-7.6	-16.6	-12.6	-31.9	-53.2	-51.3	-47.6	-46.9	-45.5	-43.2	-42.2	-22.1	-18.2	-46.0	-44.4	
Non-Merchandise Balance	-33.2	-26.1	-26.9	-22.4	-22.4	-21.2	-20.7	-19.7	-20.7	-20.5	-20.5	-20.4	-33.4	-27.2	-21.0	-20.5	
US\$	US\$/C\$: qtr. avg.	75.2	74.8	75.7	75.8	74.3	68.4	69.8	71.0	71.9	72.5	73.2	73.8	77.2	75.4	70.9	72.8
	CS/US\$: qtr. avg.	1,329	1,338	1,321	1,320	1,346	1,462	1,433	1,408	1,392	1,379	1,367	1,354	1,296	1,327	1,412	1,373
Yen	Y/C\$: qtr. avg.	82.9	82.2	81.3	82.4	80.8	69.0	72.2	75.4	77.8	80.0	82.2	84.4	85.2	82.2	74.4	81.1
Euro	CS/E : qtr. avg.	1.51	1.50	1.47	1.46	1.48	1.57	1.56	1.54	1.53	1.52	1.51	1.53	1.49	1.54	1.52	
Corp. Profits Before Tax	y/y % chng	-13.9	-9.0	-17.9	2.4	1.7	-28.8	-18.6	-1.5	5.1	39.7	32.9	11.8	4.0	-10.2	-12.2	20.8
Corp. Profits After Tax	y/y % chng	-1.1	1.8	-5.6	0.0	1.1	-26.0	-19.7	-1.5	5.1	39.7	32.9	11.8	6.6	-1.3	-11.8	20.8
Personal Income	y/y % chng	4.1	5.2	4.9	4.6	2.3	-5.1	-0.8	-0.4	1.8	8.9	4.7	4.1	4.3	4.7	-1.0	4.8
Real Disposable Income	y/y % chng	2.0	2.7	3.1	2.8	0.4	-5.3	-1.2	-0.9	1.2	7.0	2.6	2.1	2.0	2.6	-1.7	3.2
Savings Rate	% : quarterly avg.	2.1	3.0	2.8	3.0	3.3	6.7	3.8	4.0	4.0	4.1	4.4	4.6	1.8	2.7	4.4	4.3
Other Indicators	<i>quarterly avg. (000s and mils are a.r.)</i>																
Unemployment Rate	percent	5.8	5.6	5.6	5.7	6.4	9.3	8.4	8.0	7.6	7.2	6.8	6.5	5.8	5.7	8.0	7.0
Housing Starts	000s	187	224	223	202	208	160	190	203	217	222	227	232	214	209	190	225
Existing Home Sales	y/y % chng	-4.2	5.5	9.7	15.1	15.9	-20.6	-7.6	-6.1	-4.4	31.1	5.2	2.0	-10.8	6.5	-5.0	7.0
MLS Home Price Index	y/y % chng	-0.5	-0.3	1.2	3.3	5.3	4.5	3.1	2.0	1.2	1.2	2.8	3.5	2.7	0.7	4.0	2.0
Motor Vehicle Sales	mils	2.00	1.93	1.98	1.93	1.93	1.65	1.80	1.81	1.85	1.89	1.91	1.95	2.04	1.96	1.80	1.90
Employment Growth	q/q % chng : a.r.	3.0	2.6	1.1	0.5	-2.2	-12.4	5.2	2.7	2.5	2.4	2.4	2.2	1.3	2.1	-1.8	1.9
Industrial Production	q/q % chng : a.r.	-3.8	4.4	-5.1	-2.4	1.4	-9.1	1.1	2.1	2.5	2.4	1.9	1.6	3.1	-1.1	-2.0	1.3
Federal Budget Balance	% of FY GDP													-0.6	-1.2	-1.2	-1.0

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- 1.7 With the huge drop in incomes and aggregate demand for products, the global slowdown, almost historic low oil prices, please provide PNG's views as to the appropriateness, for 2021 over 2020, of the 2% inflation "adder" that PNG has used to inflate forecasts year-to-year; put another way, does PNG expect annual inflation on labour, materials, inputs, etc., to remain at 2% per year for 2020 and 2021? If so, please explain fully; if not, does PNG suggest any revision to the almost omnipresent 2% adder?

Response:

PNG(NE) has no reason to believe that an inflation "adder" of 2% is not appropriate. In the current environment there is a high degree of uncertainty which makes it difficult to accurately determine the impact of the costs for labour and materials for 2021. For labour costs, PNG(NE) has provided its best estimate given current market conditions. For other costs, PNG(NE) notes that while some costs may reduce in the future, increased demand for other materials may cause those costs to rise, and further that monetary policy in Canada could have inflationary pressure on many costs. Therefore, PNG(NE) believes that the continued use of the 2% inflationary factor is appropriate.

- 1.8 Does PNG believe that there should be any revision in its forecasts of debt costs over 2020-2021?

Response:

Please see the response to Question 1.6.

- 1.9 Does PNG believe that its approved RoE for 2018-19 remains appropriate for 2020-2021 in the sense that it provides PNG the opportunity for a reasonable risk-adjusted return as compared to overall Canadian and North American market equity returns?

Response:

PNG(NE) has not engaged an expert to review its RoE and capital structure to determine if it provides the Company with the opportunity to earn a fair and reasonable return in the current context of Canadian and North American market equity returns. Equity markets are highly volatile, with a large number of the factors that go into the determination of the appropriate RoE and capital structure changing rapidly and often.

PNG(NE) does, however, believe it is appropriate to use the RoE and capital structure approved for 2018 and 2019 for Test Years 2020 and 2021. It is PNG(NE)'s opinion that attempting to determine an appropriate change to any utility's RoE and capital structure during current market conditions would not be an appropriate use of resources given the rapid rates of change in the equity markets.

2.0 Reference: Exhibit B-2, Amended Application, FSJ/DC p. 29 and TR page 28, and Exhibit A-3, BCUC IR 6.0 Preamble and BCUC IR 6.2

The referenced preamble states:

It is anticipated that PNG will see a general increase in operating costs due to increased activities relating to ensuring compliance with PNG's Integrity Management Plans and related codes, standards and regulations (i.e. CSA Z662-19, Oil & Gas Activities Act, BC OGC/Technical Safety BC).

While PNG has had a robust integrity programs for several years, PNG has aging pipeline infrastructure and is at a point where several pipeline integrity activities cannot be prudently deferred, particularly in the face of more stringent codes, standards and regulations and related industry expectations.

- 2.1 Please explain what is meant integrity issues being “prudently deferred” by “robust integrity programs,” i.e., what is the distinction between prudent and imprudent deferral of integrity issues?

Response:

PNG(NE) notes that the preamble references pipeline integrity activities, not integrity issues, when discussing the notion of prudent deferral. There are significant and appreciable differences in these two distinct terms of reference.

Throughout the PNG-West and PNG(NE) Amended Applications and associated responses to information request included the response to Question 2.2 below, PNG submits that its integrity programs (encompassing all divisions of PNG-West and PNG(NE)) are subject to continuous improvement. These programs are robust in present form, and when exercised as intended, they meet the requirements of CSA Z662-19 Section 3, Section 10, and Annex N on safety and loss management, operation and maintenance, and integrity management, respectively, and the associated regulatory expectations of the BC Oil and Gas Commission.

Historically, PNG-West and PNG(NE) have strived to strike a responsible balance between spending on integrity programs and being conscious of the related rate impacts. In some cases, as it pertains to certain integrity activities, PNG(NE) elected to minimally comply and defer improvement initiatives in favor of minimizing rate increases. PNG submits that these decisions were made showing care for the future (acting prudently) based on a risk assessment that ensures maintaining PNG(NE)'s responsibilities and obligations for safe and reliable operation while considering the overall impact on ratepayers.

PNG-West and PNG(NE) recognize that pipeline operations are now in an environment with heightened regulatory requirements and stakeholder expectations with respect to integrity management. Furthermore, PNG-West and PNG(NE)'s overall understanding of and appreciation for integrity management-based requirements and decision making continues to

mature and broaden and with this comes changes to operational practice and associated expense to ensure compliance and continued responsible operational improvement as it pertains to pipeline safety and reliability.

- 2.2 With respect to BCUC IR 6.2, please provide a list of all new regulations, standards, codes, and the like which have come into effect since the 2018-19 RRA.

Response:

PNG(NE) notes that there have not been “new” regulations, standards, codes, and “the like” that have come into effect since the 2018-2019 RRA, but rather that technical regulator and stakeholder expectations, and industry response to these expectations by way of compliance and integrity and risk management focused continuous improvement has shifted. There have been recent integrity management associated changes to CSA Z662, with a new edition release in 2019. This standard is the fundamental standard governing natural gas pipeline design, construction, maintenance, and integrity management and guides operational expectations of both the BC Oil and Gas Commission (BCOGC) and Technical Safety BC (TSBC). Furthermore, there have been changes in the US by the Pipeline and Hazardous Materials Administration (PHMSA) that are shaping changes with Canadian and provincial technical regulators. There is also an increasing focus on the meaningful application of standards such as CSA Z663 for land use planning and the management of third party activities, CSA Z260 on pipeline safety metrics, CSA Z246 on oil and gas facility security and loss management, CSA Z247 for damage prevention, and API 579 fitness for service.

These noted changes have resulted in direct and appreciable focus and mandated requirements by the BCOGC pertaining to pipeline segment by segment and facility risk management and the implementation of a new assessment and audit program directed at pipeline and facility assets 50 years of age or older, thereby encompassing many of PNG(NE) (NE)’s transmission and distribution system assets. This has resulted in, but is not limited to, increasing focus, efforts and expenses by PNG(NE) in medium and high consequence areas, geohazard identification, monitoring and management, small diameter and hard to inspect pipelines, verification of maximum operating pressure acceptability for in-service pipelines, and class location changes.

Advances in technology in all aspects of pipeline system access, inspection, and integrity management have also contributed to both the increase in expectations as well as operators’ abilities to respond. These improvements in technology have paved the way for the applicable codes and standards to become more prescriptive in terms of acceptable means for things such as depth of cover surveys, in-line inspections, and leak detection.

Given all of this, PNG(NE)’s overall understanding and appreciation for integrity management-based requirements continues to mature and broaden and with this comes changes to operational practice and associated expense to ensure compliance and continued responsible operation as it pertains to pipeline safety and reliability.

3.0 Reference: Exhibit B-2, Amended Application, FSJ/DC pages 34 and 67, TR Pages 33 and 62, and Exhibit A-3, BCUC IR 8.2, Elimination of Meter Reading

- 3.1 Can PNG NE confirm that the increases sought for AMR going forward are net of the savings by having fewer FTEs (offset by severance)?

Response:

PNG(NE) submits that incremental costs for the AMR project going forward are less than the anticipated savings of having fewer FTEs. Therefore, there will be a net decrease in the cost of service going forward.

PNG(NE) also notes that it filed its application for a certificate of public convenience and necessity (CPCN) for the AMR project with the BCUC on March 25, 2020. As stated in the CPCN application, PNG(NE) anticipates average annual cost reductions of \$280,000 during the 20-year evaluation period presented in the application, which equates to savings of \$0.08 per GJ or approximately \$8.00 per year for the average residential customer.

- 3.2 Can PNGNE confirm that utility costs and rates will be lower with AMR than they would be had personnel been retained for meter reading?

Response:

Confirmed. Please see the response to Question 3.1.

- 3.3 Please provide the savings that ratepayers will enjoy for 2021 and beyond as a result of replacing meter reading FTEs with AMR.

Response:

Please see the response to Question 3.1.

- 3.4 Can ~~FET~~ PNG(NE) confirm that the severance costs are one-time costs and that the reduction in FTEs for meter reading is fully reflected in the 2021 forecasts?

Response:

PNG(NE) confirms that the severance costs are one-time costs reflected in the financial schedules for Test Year 2020 and that the reduction in FTEs for meter reading is fully reflected in the 2021 forecast cost of service.

4.0 Reference: Exhibit B-2, Amended Application, FSJ/DC p. 43 and TR page 41, and Exhibit A-3, BCUC IR 15.2, Deferral Account for Shared Corporate Services Costs

- 4.1 Does PNG NE agree that if the BCUC approved specific amounts for corporate cost recovery from FSJ, DC, and TR, then the requested deferral account would not be required?

Response:

PNG and PNG(NE) are seeking BCUC approval of the full amount of the Shared Corporate Service costs from TriSummit Utilities Inc. (TSU, formerly ACI). However, for the purposes of Test Year 2020 and 2021 rates, PNG and PNG(NE) are seeking to recover an amount equal to the Shared Corporate Service costs approved under Decision 2019 plus inflationary increases for each year. For the difference between the full amount of the Shared Corporate Service costs and the amount to be recorded in Test Year 2020 and 2021 rates, PNG and PNG(NE) are seeking BCUC approval to record this difference in a deferral account to be recovered in future test periods.

In response to this question, PNG(NE) has interpreted it as follows:

- i) If the BCUC approves the recovery of the full amount of the Shared Corporate Services costs in the manner proposed by PNG(NE), which entails a partial recovery in the cost of service for Test Year 2020 and 2021, then PNG(NE) assumes that the BCUC has also approved the creation of the deferral account to be amortized in future periods.
- ii) If the BCUC approves the recovery of the full amount of the Shared Corporate Services costs from TSU in the cost of service for Test Year 2020 and 2021, then PNG(NE) agrees that the requested deferral account would not be required.
- iii) If the BCUC approves only a partial recovery of the Shared Corporate Services costs from TSU and disallows the remaining amount, PNG(NE) assumes that the BCUC would also be disallowing the creation of the deferral account.
- iv) If the BCUC approves only a partial recovery of the Shared Corporate Services costs from TSU at an amount higher than the Decision 2019 amount plus inflationary increases (amount A) and approves PNG(NE)'s proposal to include the amount equivalent to the Decision 2019 amount plus inflationary increases in the cost of service for Test Year 2020 and 2021 (amount B), then PNG(NE) assumes that the BCUC would also approve the creation of the deferral account to record the difference (amount C) between the BCUC-approved Shared Corporate Services costs from TSU (amount A) and the Decision 2019 amount plus inflationary increases to be included in

the cost of service for Test Year 2020 and 2021 (amount B), where amount C is equivalent to amount A minus amount B.

5.0 Reference: Exhibit B-2, Amended Application p.22 and Exhibit A3, BCUC IR 31.2 Meter Recalls

- 5.1 Have changes in criteria resulted in an increase in meter recalls by Measurement Canada? If so, please provide details.

Response:

In 2010, Measurement Canada enacted Specification S-S-06 Sampling Plans for the Inspection of Isolated Lots of Meters in Service that forms the requirements for meter sampling in Canada. This enhanced plan has had a direct effect on the meter sampling and recall plan for PNG(NE) and all Canadian Gas Association (CGA) companies as it has resulted in an increase in meter sample group sizes. In addition, tighter accuracy tolerances have further defined the allowable variance threshold that would allow meters to pass or fail acceptance testing.

- 5.2 Please provide, for each of the last ten years up to 2019 and for FSJ/DC and TR, the number of meters in service, the number of meters recalled, and the actual and forecast/approved costs associated with the recalls.

Response:

Please see the tables that follow.

Installed Meters

Row Labels	Count of Meter # Column Labels											
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
Fort St John	10906	11124	11275	11523	11739	11966	12397	12780	12851	12934	13027	
Dawson Creek	6309	6536	6672	6792	6934	7050	7186	7264	7300	7372	7393	
Tumbler Ridge	1120	1146	1157	1182	1228	1237	1269	1272	1269	1267	1263	
Grand Total	18335	18806	19104	19497	19901	20253	20852	21316	21420	21573	21683	

Recalled Meters

Row Labels	Count of Cust Code Column Labels											
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
Dawson Creek	67	57	94	470	238	349	946	1074	258	292	1133	
FORT ST JOHN	56	169	83	637	112	618	1070	1757	672	633	1716	
Tumbler Ridge	22	36	19	270	223	41	169	20	89	20	54	
Grand Total	145	262	196	1377	573	1008	2185	2851	1019	945	2903	

Actual vs Approved Meter Services Costs

Account 673 - Meter Services (\$000's)	2009		2010		2011		2012		2013		2014		2015		2016		2017		2018		2019	
	Actual	NSP	Actual	NSP	Actual	NSP	Actual	Decision	Actual	Decision	Actual	NSP	Actual	Budget	Actual	Decision	Actual	Decision	Actual	Decision	Actual	Decision
FSJ/DC	\$293	\$235	\$282	\$257	\$364	\$278	\$402	\$303	\$315	\$278	\$314	\$286	\$439	\$318	\$470	\$320	\$376	\$328	\$363	\$335	\$469	\$342
TR	12	22	13	18	31	21	30	34	19	35	10	35	15	25	15	26	12	26	10	27	9	27
	\$305	\$257	\$295	\$275	\$395	\$299	\$432	\$337	\$334	\$313	\$324	\$321	\$454	\$343	\$485	\$346	\$388	\$354	\$373	\$362	\$478	\$369

PNG(NE) notes that the table immediately above provides costs for BCUC Account 673 – Meter Services for each of 2009 through 2019. This account includes other meter service costs as well as meter recall and replacement costs. As illustrated in the table, meter service costs have continued to increase in 2019 due to a significantly higher number of meter recalls.

- 5.3 Given a fairly mature utility, is it reasonable to expect that meter recall costs would be somewhat stable on a year-to-year basis?

Response:

The meter recalls required as defined by Measurement Canada will vary from year to year as it depends on the specific meter groups and sizes that are subject sampling or recall. The meter groups are determined based on the sample results done previously for that group, therefore, the results are unknown until the testing and variance results have been completed in the previous year.

6.0 Reference: Exhibit B-2 TR Amended Application, p.85 and Exhibit A-4, BCUC IR 3.0 Preamble

The referenced extract states the following:

The actual costs for 2019 included in this account are \$74,000 or 52.7% lower than those approved under Decision 2019. This is primarily due to lower labour costs incurred during the year as a result of a decline in customer activity due to the downturn in the economy, particularly impacting housing developments in the Tumbler Ridge area.

- 6.1 Does PNG NE expect an increase in customer activity in the TR area in 2020 over 2019? If so, please explain; if not, please indicate how the severe downturn in economic activity globally has been reflected in the TR application.

Response:

Within the TR Division, PNG(NE) is forecasting little or no organic growth during the test years, however, PNG(NE) is projecting an increase in the CNRL load in 2020, as compared to 2019, of approximately 70 TJ or 10 percent.