FIVE NATIONS ENERGY INC.

Undertakings from Oral Hearing (July 6 and 7, 2017)

UNDERTAKING NO. J1.1

Reference(s):

To provide a forecast of capital expenditures for 2018 to 2020.

RESPONSE:

This undertaking was struck on the second day of the hearing (Transcript Volume 2, page 90, lines 13-14).

UNDERTAKING NO. J1.2

Reference(s):

To prepare an economic evaluation and calculate a capital contribution, if applicable, for the Attawapiskat and Kashechewan feeder projects.

RESPONSE:

An economic evaluation was completed for each feeder project using Hydro One's spreadsheet, and it was determined that no capital contribution was required. The summary for each contribution calculation is included on the following pages.

Date:	26-Jul-17
Project #	APC Feeder 3

SUMMARY OF CONTRIBUTION CALCULATIONS
Transformation Pool - Estimated cost

Facility Name:	APC Feeder 3 Station Modifications
Description:	Station Assets Capital Contribution Analysis
Customer:	Attawapiskat Power Corporation

			In-Service Date	<------- Project year ended - annualized from In-Service Date ------->																						
		Month	Sep-1	Sep-1	Sep-1	Sep-1	Sep-1	Sep-1	Sep-1	Sep-1	Sep-1	Sep-1	Sep-1	Sep-1	Sep-1	Sep-1	Sep-1	Sep-1	Sep-1	Sep-1	Sep-1	Sep-1	Sep-1	Sep-1	Sep-1	Sep-1	Sep-1
		Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
								1st true-up					2nd true-up					3rd true-up									
			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Revenue & Expense Forecast																												
Load Forecast (MW)				0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6
Load adjustments (MW)				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6
Tariff Applied ($/kW/Month)				2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02
Incremental Revenue - $k				8.2	8.4	8.6	8.9	9.1	9.3	9.6	9.8	10.1	10.4	10.7	11.0	11.2	11.6	11.9	12.2	12.5	12.9	13.2	13.6	13.9	14.3	14.7	15.1	15.5
Removal Costs - $k			0.0																									
On-going OM&A Costs - $k			0.0	(1.5)	(1.5)	(1.5)	(1.5)	(1.6)	(1.6)	(1.6)	(1.6)	(1.6)	(1.6)	(1.7)	(1.7)	(1.7)	(1.7)	(1.7)	(1.7)	(1.8)	(1.8)	(1.8)	(1.8)	(1.8)	(1.8)	(1.9)	(1.9)	(1.9)
Municipal Tax - $k				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net Revenue/(Costs) before taxes - $k			0.0	6.7	6.9	7.1	7.3	7.5	7.8	8.0	8.2	8.5	8.7	9.0	9.3	9.6	9.8	10.1	10.4	10.8	11.1	11.4	11.7	12.1	12.4	12.8	13.2	13.6
Income Taxes - $k			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Operating Cash Flow (after taxes) - $k			0.0	6.7	6.9	7.1	7.3	7.5	7.8	8.0	8.2	8.5	8.7	9.0	9.3	9.6	9.8	10.1	10.4	10.8	11.1	11.4	11.7	12.1	12.4	12.8	13.2	13.6
		Cumulative PV @ 7.07%																										
PV Operating Cash Flow (after taxes) - $k	**(A)**	**105.5**	**0.0**	**6.4**	**6.2**	**6.0**	**5.8**	**5.5**	**5.3**	**5.1**	**4.9**	**4.7**	**4.6**	**4.4**	**4.2**	**4.1**	**3.9**	**3.8**	**3.6**	**3.5**	**3.3**	**3.2**	**3.1**	**3.0**	**2.9**	**2.8**	**2.6**	**2.5**
Capital Expenditures - $k																												
Capital cost before overheads & AFUDC - $k			(72.7)																									
- Overheads - $k			0.0																									
- AFUDC - $k			0.0																									
Total upfront capital expenditures - $k			(72.7)																									
On-going capital expenditures - $k				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV On-going capital expenditures - $k			0.0																									
Total capital expenditures - $k			**(72.7)**																									
PV CCA Residual Tax Shield - $k			**0.0**																									
PV Working Capital - $k			**(0.0)**																									
PV Capital (after taxes) - $k	**(B)**	**(72.8)**	**(72.8)**																									
Cumulative PV Cash Flow (after taxes) - $k	**(A) + (B)**	**32.7**	**(72.8)**	**(66.3)**	**(60.1)**	**(54.2)**	**(48.4)**	**(42.9)**	**(37.5)**	**(32.4)**	**(27.5)**	**(22.7)**	**(18.2)**	**(13.8)**	**(9.5)**	**(5.5)**	**(1.6)**	**2.2**	**5.8**	**9.3**	**12.6**	**15.9**	**19.0**	**21.9**	**24.8**	**27.6**	**30.2**	**32.7**

Discounted Cash Flow Summary

Economic Study Horizon - Years	**25**
Discount Rate - %	**7.07%**

		$k
PV Incremental Revenue		125.1
PV OM&A Costs		(19.6)
PV Municipal Tax		0.0
PV Income Taxes		0.0
PV CCA Tax Shield		0.0
PV Capital - Upfront	(72.7)	
Add: PV Capital Contribution	**0.0**	(72.7)
PV Capital - On-going		0.0
PV Working Capital		(0.0)
PV Surplus / (Shortfall)		**32.7**
Profitability Index*		**1.5**

Notes:
*PV of total cash flow, excluding net capital expenditure & on-going capital & proceeds on disposal / PV of net capital expenditure & on-going capital & proceeds on disposal

Other Assumptions		**Notes:**
In-Service Date	01-Sep-14	
Municipal Tax	0.00%	Transmission system average
Federal Income Tax	0.00%	2015 federal corporate income tax
Ontario Corporation Income Tax	0.00%	2015 provincial corporate income tax
Working cash net lag days	9.96	As Per Lead Lag study by Navigant for FNEI for 2016 Transmission Rate
CCA Rate for Class N/A Assets	2%	100% Class N/A assets

Calculation Time Stamp: 26-Jul-17, 12:07 PM

Date:	26-Jul-17
Project #	KPC Feeder 2

SUMMARY OF CONTRIBUTION CALCULATIONS
Transformation Pool - Estimated cost

Facility Name: KPC Feeder 2 Station Modifications
Description: Station Assets Capital Contribution Analysis
Customer: Kashechewan Power Corporation

			In-Service Date	<------- Project year ended - annualized from In-Service Date ------->																							
		Month	Oct-1	Oct-1	Oct-1	Oct-1	Oct-1	Oct-1	Oct-1	Oct-1	Oct-1	Oct-1	Oct-1	Oct-1	Oct-1	Oct-1	Oct-1	Oct-1	Oct-1	Oct-1	Oct-1	Oct-1	Oct-1	Oct-1	Oct-1	Oct-1	Oct-1	Oct-1
		Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
								1st true-up					2nd true-up					3rd true-up									
			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Revenue & Expense Forecast																												
Load Forecast (MW)				0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6
Load adjustments (MW)				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6
Tariff Applied ($/kW/Month)				2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02
Incremental Revenue - $k				7.9	8.1	8.3	8.5	8.8	9.0	9.2	9.5	9.7	10.0	10.3	10.6	10.8	11.1	11.4	11.7	12.1	12.4	12.7	13.1	13.4	13.8	14.1	14.5	14.9
Removal Costs - $k			0.0																									
On-going OM&A Costs - $k			0.0	(1.5)	(1.5)	(1.5)	(1.5)	(1.6)	(1.6)	(1.6)	(1.6)	(1.6)	(1.6)	(1.7)	(1.7)	(1.7)	(1.7)	(1.7)	(1.7)	(1.8)	(1.8)	(1.8)	(1.8)	(1.8)	(1.8)	(1.9)	(1.9)	(1.9)
Municipal Tax - $k				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net Revenue/(Costs) before taxes - $k			0.0	6.4	6.6	6.8	7.0	7.2	7.4	7.6	7.9	8.1	8.4	8.6	8.9	9.1	9.4	9.7	10.0	10.3	10.6	10.9	11.2	11.6	11.9	12.3	12.6	13.0
Income Taxes - $k			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Operating Cash Flow (after taxes) - $k			0.0	6.4	6.6	6.8	7.0	7.2	7.4	7.6	7.9	8.1	8.4	8.6	8.9	9.1	9.4	9.7	10.0	10.3	10.6	10.9	11.2	11.6	11.9	12.3	12.6	13.0
		Cumulative PV @ 7.07%																										
PV Operating Cash Flow (after taxes) - $k	**(A)**	**100.9**	**0.0**	**6.2**	**5.9**	**5.7**	**5.5**	**5.3**	**5.1**	**4.9**	**4.7**	**4.5**	**4.4**	**4.2**	**4.0**	**3.9**	**3.7**	**3.6**	**3.5**	**3.3**	**3.2**	**3.1**	**3.0**	**2.9**	**2.7**	**2.6**	**2.5**	**2.4**
Capital Expenditures - $k																												
Capital cost before overheads & AFUDC - $k			(80.6)																									
- Overheads - $k			0.0																									
- AFUDC - $k			0.0																									
Total upfront capital expenditures - $k			(80.6)																									
On-going capital expenditures - $k				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV On-going capital expenditures - $k			0.0																									
Total capital expenditures - $k			**(80.6)**																									
PV CCA Residual Tax Shield - $k			**0.0**																									
PV Working Capital - $k			**(0.0)**																									
PV Capital (after taxes) - $k	**(B)**	**(80.7)**	**(80.7)**																									
Cumulative PV Cash Flow (after taxes) - $k	**(A) + (B)**	**20.3**	**(80.7)**	**(74.5)**	**(68.6)**	**(62.9)**	**(57.4)**	**(52.1)**	**(47.0)**	**(42.1)**	**(37.4)**	**(32.8)**	**(28.5)**	**(24.3)**	**(20.2)**	**(16.3)**	**(12.6)**	**(9.0)**	**(5.5)**	**(2.2)**	**1.0**	**4.1**	**7.1**	**9.9**	**12.7**	**15.3**	**17.8**	**20.3**

Discounted Cash Flow Summary

Economic Study Horizon - Years	**25**
Discount Rate - %	**7.07%**

		$k
PV Incremental Revenue		120.6
PV OM&A Costs		(19.6)
PV Municipal Tax		0.0
PV Income Taxes		0.0
PV CCA Tax Shield		0.0
PV Capital - Upfront	(80.6)	
Add: PV **Capital Contribution**	**0.0**	(80.6)
PV Capital - On-going		0.0
PV Working Capital		(0.0)
PV Surplus / (Shortfall)		**20.3**
Profitability Index*		**1.3**

Notes:
*PV of total cash flow, excluding net capital expenditure & on-going capital & proceeds on disposal / PV of net capital expenditure & on-going capital & proceeds on disposal

Other Assumptions		**Notes:**
In-Service Date	01-Oct-13	
Municipal Tax	0.00%	Transmission system average
Federal Income Tax	0.00%	2015 federal corporate income tax
Ontario Corporation Income Tax	0.00%	2015 provincial corporate income tax
Working cash net lag days	9.96	As Per Lead Lag study by Navigant for FNEI for 2016 Transmission Rate
CCA Rate for Class N/A Assets	2%	100% Class N/A assets

Calculation Time Stamp: 26-Jul-17, 12:07 PM

UNDERTAKING NO. J1.3

Reference(s):

To provide the Hydro One report that includes the true-up prior to the sale of the 80 kilometres of transmission line to FNEI.

RESPONSE:

In responding to this undertaking, FNEI was unable to locate a Hydro One report that specifically addressed the value of the 80 kilometres of the transmission line, based on Hydro One accounting, at the time that FNEI reacquired this asset in 2015.[1] Shortly after the conclusion of the oral hearing, FNEI contacted Hydro One to request this information and was provided with the calculation of net book value set out in the table below.

Asset Description	HONI Acquisition Value	HONI Accumulated Depreciation	HONI Book Value	Amortization Adjustment	Reacquisition Net Book Value
Overhead conductors and devices	$16,800.00	($7,559.77)	$9,821.63	($1,168.37)	$8,653.26
Overhead conductors and devices	$16,800.00	($7,559.79)	$9,821.61	($1,168.37)	$8,653.24
TX – Towers, fixtures and poles	$50,400.00	($22,910.26)	$29,233.95	($3,477.65)	$25,756.30
Overhead conductors and devices	$1,159,199.96	($521,624.06)	$677,692.62	($80,617.81)	$597,074.81
Overhead conductors and devices	$1,159,199.96	($521,625.03)	$677,691.65	($80,617.70)	$597,073.95
TX – Towers, fixtures and poles	$3,477,599.87	($1,580,808.20)	$2,017,141.83	($239,957.70)	$1,777,184.13
Overhead conductors and devices	$520,000.00	($74,287.50)	$445,712.50	($53,021.63)	$392,690.87
Overhead conductors and devices	$520,000.00	($74,312.98)	$445,687.02	($53,018.60)	$392,668.42
TX – Towers, fixtures and poles	$1,560,000.00	($315,486.86)	$1,244,513.14	($148,046.36)	$1,096,466.78
Totals:	**$8,479,999.79**	**($3,126,174.45)**	**$5,557,315.95**	**($661,094.19)**	**$4,896,221.76**

The book value of the 80 kilometres of transmission line at the time of FNEI's reacquisition was $5,557,315.95, based on the 40 year amortization that Hydro One was using for its own purposes (the "**HONI BV**"). The HONI BV needed to be adjusted to reflect the 30 year amortization period that Hydro One and FNEI had agreed upon, at the time of the Hydro One acquisition, as the appropriate rate for the purposes of determining the net book value at which the transmission line would be reacquired by FNEI (the "**Reacquisition NBV**"). The amortization adjustment resulted in a reduction of $661,094.19 to the HONI BV, which yielded a Reacquisition NBV of $4,896,221.76.

[1] FNEI did receive "true-up" reports from Hydro One related to the amounts of RRRP funds owing to the three communities, but FNEI understands from the transcript that the Board's purpose in asking for this undertaking was to definitively establish the appropriate transfer price of the 80 km (for rate-setting purposes).

FNEI reacquired the 80 kilometres of transmission line on October 15, 2015 for $5,532,730.58, which was based on a purchase price of $4,896,221.75 plus $636,508.83 in harmonized sales tax, which corresponds with the Reacquisition NBV calculated above.

UNDERTAKING NO. J1.4

Reference(s):

(a) To make best efforts to determine a calculation of the Hydro One depreciation rate for the 80 kilometre transmission line.

(b) To advise the depreciation rates FNEI was using for the components of the 80 kilometre transmission line.

RESPONSE:

(a) Please see FNEI's response to Undertaking No. J1.3.

(b) FNEI tracks the depreciation of the 80 kilometre transmission line in two separate components. One component is the poles and fixtures, which have a useful life of 40 years, while the other component is the overhead conductors and devices, which have a useful life of 60 years. Depreciation for both components is on a straight-line basis.

UNDERTAKING NO. J1.5

Reference(s):

To provide a description of equipment that could have been maintained without an outage before the bus isolation project, and what FNEI anticipates will be able to be maintained without outages after the bus isolation project is performed.

RESPONSE:

Each of the following subsections include:

- a table listing the equipment at each transformer station for which maintenance, prior to the bus isolation project, required a shutdown of the transformer station (and, in some cases, downstream service); and
- a second table listing the equipment necessitating a shutdown of the transformer station after the completion of the bus isolation project.

Both scenarios include the predicated maintenance time for each servicing (the "**Maintenance Outage**" reported in minutes), as well as the anticipated Maintenance Outage an annual basis (the "**Average Annual Outage**" reported in minutes). In each case, maintenance is expected on a frequency greater than one year, so the Average Annual Outage is less than the Maintenance Outage.

Fort Albany Transformer Station

Fort Albany transformer station equipment requiring a station outage for maintenance before the bus isolation project is set out in the following table.

Equipment	Maintenance Outage	Average Annual Outage
3364CVT-M3K	240	60
3364M3K-G	120	30
3364-M3K	180	45
B2CVT	240	60
3364T1A-B2	360	90
3364T1-B2	360	90
3364R1-B2	360	90
3364R2-B2	360	90
Enclosure 1 BUS	720	360
Enclosure 2 BUS	720	360
	Total:	**1275**

Fort Albany transformer station equipment requiring a station outage for maintenance after the bus isolation project is set out in the following table.

Equipment	Maintenance Outage	Average Annual Outage
3364CVT-M3K	240	60
3364M3K-G	120	30
3364B2-M3K	180	45
3364B2A-M3K	180	45
	Total:	**180**

It is expected that the bus isolation project will reduce the Average Annual Outage at the Fort Albany transformer station from 1275 minutes per year to 180 minutes per year, which is within the system reliability envelope of 360 minutes per year.

Kashechewan Transformer Station

Kashechewan transformer station equipment requiring a station outage for maintenance before the bus isolation project is set out in the following table. An asterisk (*) has been used to denote equipment that would not only necessitate the shutdown of the Kashechewan transformer station, but also would cause a loss of service to the Attawapiskat transformer station and the DeBeers Mine.

Equipment	Maintenance Outage	Average Annual Outage
L9B3-B3*	240	60
L3B3-B3*	120	30
B3A-CVT*	180	45
3365T2A-B3*	360	90
B3A-B3*	360	90
B3-CVT*	180	45
3365T2-B3*	360	90
L5B3-B3*	240	60
3365-K5A*	240	60
3365K5A-G*	120	30
3365CVT-K5A*	180	45
L5B3*	1440	120
Enclosure 1 BUS	720	360
Enclosure 2 BUS	720	360
F1	240	60
	Total:	**1545**

Kashechewan transformer station equipment requiring a station outage for maintenance after the bus isolation project is set out in the following table.

Equipment	Maintenance Outage	Average Annual Outage
L9B3-B3*	240	60
L3B3-B3*	120	30
B3A-CVT*	180	45
T2A-B3A*	240	60
B3A-B3*	60	15
B3A-K5A*	60	15
	Total:	**225**

It is expected that the bus isolation project will reduce the Average Annual Outage at the Kashechewan transformer station from 1545 minutes per year to 225 minutes per year, which is within the system reliability envelope of 360 minutes per year. Furthermore, it is expected that the bus isolation will reduce the loss of service to the Attawapiskat transformer station and the DeBeers Mine, otherwise resulting from the maintenance at the Kashechewan transformer station, from 765 minutes per year to 225 minutes per year.

Attawapiskat Transformer Station

Attawapiskat transformer station equipment requiring a station outage for maintenance before the bus isolation project is set out in the following table. An asterisk (*) has been used to denote equipment that would not only necessitate the shutdown of the Attawapiskat transformer station, but also would cause a loss of service to the DeBeers Mine.

Equipment	Maintenance Outage	Average Annual Outage
3366CVT-K5A*	180	45
3366K5A-G*	120	30
3366-K5A*	240	60
B4-CVT*	180	45
3366T3-B4*	360	90
3366T3A-B4*	360	90
3366R1-B4*	360	90
L7B4-B4*	240	60
L7B4*	1440	120
L7B4-7*	240	60
3366A7V-G*	120	30
3366CVT-A7V*	180	45
Enclosure 1 BUS	720	360
Enclosure 2 BUS	720	360
F1	240	60
F2	240	60
F3	240	60
	Total:	**1665**

Attawapiskat transformer station equipment requiring a station outage for maintenance after the bus isolation project is set out in the following table.

Equipment	Maintenance Outage	Average Annual Outage
3366CVT-K5A*	180	45
3366K5A-G*	120	30
K5A-B4A*	240	60
3366A7V-G*	120	30
3366CVT-A7V*	180	45
K5A-A7V*	60	15
	Total:	**225**

It is expected that the bus isolation project will reduce the Average Annual Outage at the Attawapiskat transformer station from 1665 minutes per year to 225 minutes per year, which is within the system reliability envelope of 360 minutes per year. Furthermore, it is expected that the bus isolation will reduce the loss of service to the DeBeers Mine, otherwise resulting from the maintenance at the Attawapiskat transformer station, from 765 minutes per year to 225 minutes per year.

UNDERTAKING NO. J1.6

Reference(s):

To provide a breakdown of the cost of the bus isolation project.

RESPONSE:

A breakdown of the costs incurred by FNEI in relation to the bus isolation project, on an annual basis up to December 31, 2016, is provided in the table below.

	2014	**2015**	**2016**	**Totals**
Labour and Accommodations	$81,708.65	$316,684.22	$1,130,921.32	$1,529,314.19
Engineering	$104,894.63	$152,604.27	$79,135.50	$336,634.40
Freight and Travel	$27,281.39	$80,858.80	$170,085.82	$278,226.01
Materials	$129,993.23	$194,241.81	$168,987.14	$493,222.18
Equipment	$0	$272,475.00	$64,653.19	$337,128.19
Totals	**$345,891.90**	**$1,018,879.10**	**$1,615,798.97**	**$2,974,524.97**

UNDERTAKING NO. J1.7

Reference(s):

To provide an explanation for each of the measures that FNEI does not propose to include in its own performance scorecard.

RESPONSE:

The measures of the Hydro One scorecard, filed in EB-2016-0160 (reproduced in FNEI's Application at Exhibit 4, Tab 1, Schedule 1, Appendix 1), that FNEI does not believe are applicable or appropriate measures for the measurement of FNEI's performance, as well as the reasoning for FNEI's position, are set out below:

Performance Outcomes	Performance Categories	Reason Measure Not Applicable to FNEI
Customer Focus	Service Quality	FNEI has not proposed any specific measures with respect to the category of "Service Quality", but is open to discussion regarding measures that would be appropriate. Hydro One's proposed measures of (i) satisfaction with outage planning procedures, and (ii) customer delivery point performance standard outliers as a % of delivery points is not appropriate given that FNEI only has four customers; three of which are the members of FNEI, while the fourth (DeBeers Mine) is expected to scale down production.
	Customer Satisfaction	A survey of customer satisfaction would not provide real value in the case of FNEI, because FNEI has only four transmission customers (three of which are members of FNEI). FNEI is in constant communication with all of four customers. A more reliable gauge of service quality would be the system performance metrics, which FNEI proposes to retain as part of this scorecard.
Operational Effectiveness	Asset Management	FNEI does not have an asset management plan, and given its small size (and intimate knowledge of its system), a conventional plan may not be warranted. Reporting on FNEI's capital spend as a percent of its budget may be inappropriate, given that the small size of FNEI results in capital expenditures being highly variable. Delaying a single project by a few months, for example, can result in drastic "underspending" vs. budget in Year X, and drastic "overspending" vs. budget. So a simple, rational

		decision can make FNEI's capital spending inaccurately appear erratic.
	Cost Control	FNEI's Gross Fixed Asset Value is artificially low. As explained at a few points in the oral hearing, the federal government's initial contribution to the FNEI Project ($33 million) was flowed directly from the federal government to FNEI. As such, it was treated as similar to a customer contribution. Had the funds been distributed to the three communities (Fort Albany, Attawapiskat and Kashechewan) or their respective LDCs, and then to FNEI, FNEI's initial rate base would have been $33 million greater. This initial funding approach has benefited Ontario ratepayers. The result of this anomaly in intial funding, though, would skew the performance metrics in this category – making FNEI appear far less efficient than it is.
Public Policy Responsiveness	Connection of Renewable Generation	Renewable generation is non-existent in FNEI's operating area and there are no indications that this will change. It is not expected that FNEI will be required to complete any connection impact assessments.
	Market Regulatory Compliance	FNEI's system is entirely a radial line. It is not part of the bulk electrical system.

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UNDERTAKING NO. J1.8

Reference(s):

To provide the charge determinant forecast on the basis of a four-year historical average (2013-2016) and a three-year historical average (2014-2016).

RESPONSE:

The charge determinant, based on both a three year (2014-2016) and four year (2013-2016) average, is set out in the table below.

	Annual Peak Demand						
	2013	**2014**	**2015**	**2016**	**4 yr Avg**	**3 yr Avg**	**Current**
Network	231.729	233.343	228.768	229.127	**230.742**	**230.413**	187.12
Line Connection	253.684	256.72	232.679	257.167	**250.063**	**248.855**	213.46
Transformation	73.843	72.666	72.548	73.911	**73.242**	**73.042**	76.19

UNDERTAKING NO. J1.9

Reference(s):

To provide a breakdown of actual 2016 OM&A spending with a variance analysis to the proposed amounts; and to provide a summary of the reasons for any material variances in any account ($50,000+).

RESPONSE:

The proposed and actual OM&A expenditures for 2016 are set out in the table below. Accounts in which there have been material variances (equal to or greater than $50,000) are indicated by the text being in **bold.**

Account	Description	Proposed	Actual	Variance
4810	Load Dispatching	$397,000	$349,660	$47,340
4815	Station Building & Fixtures	$59,900	$55,082	$4,818
4820	Transformer Station Equip Oper Labour	$724,920	$724,920	$0
4850	Rents	$86,000	$117,775	($31,775)
4916	Maint – Transformer Station Equip	$325,680	$293,780	$31,900
4930	**Maint – Towers, Poles and Structures**	**$545,000**	**$597,378**	**($52,378)**
5410	Community Relations – Sundry	$34,000	$60,198	($26,198)
5415	Energy Conservation	$30,000	$68,910	($38,910)
5420	Community Safety Program	$9,000	$0	$9,000
5605	**Executive Salaries and Expenses**	**$604,250**	**$439,806**	**$164,444**
5610	Management Salaries and Expenses	$318,693	$355,484	($36,791)
5615	General Admin Salaries and Expenses	$115,741	$123,810	($8,069)
5620	Office Supplies and Expenses	$24,800	$26,322	($1,522)
5630	**Outside Services Employed**	**$209,000**	**$125,241**	**$83,759**
5635	Property Insurance	$252,000	$263,037	($11,037)
5640	Injuries and Damages	$166,000	$161,895	$4,105
5655	**Regulatory Expenses**	**$324,000**	**$385,365**	**($61,365)**
5665	Miscellaneous General Expenses	$30,000	$3,132	$26,868
5675	Maintenance of General Plant	$80,000	$92,211	($12,211)
	Totals:	**$4,335,984**	**$4,244,006**	**$91,978**

The material variances between proposed and actual OM&A expenditures for 2016 resulted from the following:

a) **4930 – Maintenance – Towers, Poles and Structures.** Additional costs were incurred as part of the 2016 right-of-way clearing program.

b) **5605 – Executive Salaries and Expenses.** Actual costs were less than expected due to (i) the compensation for the new CEO being set at less than the amount originally estimated, and (ii) the activities of the board of directors being less than in prior years.

c) **5630 – Outside Services Employed.** Actual costs were less than expected due to lower levels of consulting services and related travel, as compared to prior years.

d) **5655 – Regulatory Expenses.** Additional costs were incurred in relation to the cost of service rate application, which was prepared and submitted in 2016.

UNDERTAKING NO. J1.10

Reference(s):

To provide a breakdown of staffing cost changes between 2015 actual and 2016 actual, and 2015 actual and 2016 proposed, that shows the amount of the overall staffing cost increase related to the change in the number of FTEs and the amount related to increases in salaries, wages and benefits.

RESPONSE:

As compared to the actual 2015 staffing costs of FNEI, the 2016:

(i) proposed staffing costs represented an increase of:

a. $196,489 due to FTEs; and

b. $12,186 due to salary increases; and

(ii) actual staffing costs represented an increase of:

a. $27,055 due to FTEs; and

b. $87,623 due to salary increases.

UNDERTAKING NO. J2.1

Reference(s):

To provide the depreciation rates for the capital projects.

RESPONSE:

This undertaking was given in relation to the depreciation rates used specifically for the FNEI office building in Timmins (Transcript Volume 2, pages 19-20). The components and the associated useful life, each of which is depreciated on a straight-line basis, are set out in the table below.

Asset ID	Class Code	Asset Description	Depr. Begin Date	Rev Useful Life (Years)
1908-004	1908	FNEI Office Building – Site Improvements	1-Sep-13	20
1908-004-1	1908	FNEI Office Building – Site Improvements	30-Nov-13	20
1908-005	1908	FNEI Office Building – Concrete Foundations and Slabs	1-Sep-13	40
1908-005-01	1908	FNEI Office Building – Concrete Foundations and Slabs	30-Nov-13	40
1908-006	1908	FNEI Office Building – Building Frame and Envelope	1-Sep-13	40
1908-006-01	1908	FNEI Office Building – Building Frame and Envelope	30-Nov-13	40
1908-007	1908	FNEI Office Building – Doors & Windows	1-Sep-13	20
1908-007-01	1908	FNEI Office Building – Doors & Windows	30-Nov-13	20
1908-008	1908	FNEI Office Building – Mechanical & Geothermal	1-Sep-13	25
1908-008-01	1908	FNEI Office Building – Mechanical & Geothermal	30-Nov-13	25
1908-009	1908	FNEI Office Building – Electrical & Lighting	1-Sep-13	25
1908-009-01	1908	FNEI Office Building – Electrical & Lighting	30-Nov-13	25
1908-010	1908	FNEI Office Building – Finishes & Specialties	1-Sep-13	20
1908-010-01	1908	FNEI Office Building – Finishes & Specialties	30-Nov-13	20
1908-012	1908	FNEI Office Building – Electrical & Mechanical	30-Jun-14	25
1908-14	1908	FNEI Office Building – Building Frame & Envelope	31-Dec-14	40
1908-15	1908	FNEI Office Building – Building Frame & Envelope	18-Feb-15	40
1908-16	1908	FNEI Office Building – Misc.	30-Jun-15	40
1908-17	1908	FNEI Office Building – Misc.	30-Sep-15	40
1908-18	1908	FNEI Office Building – Misc.	31-Dec-15	40
1908-22	1908	FNEI Office Building – Misc.	31- Dec-16	40

UNDERTAKING NO. J2.2

Reference(s):

To provide an update to Table 7-7-1-A showing the actual long-term debt held at the end of 2016.

RESPONSE:

Table 7-7-1-A, revised to reflect the actual long-term debt held by FNEI at the end of 2016, is set out below.

(000's)	Institution	Loan Limit	Rate	Balance at 12/31/2016	Maturity Date	Interest-Only Payments	Type
Term Loan #1	Manulife; Pacific & Western	$11,000.0	5.49%	$7,507.0	2/29/2028	$423.0	Non-revolving; monthly principal and interest payments
Acquisition Loan	Manulife	$5,800.0	4.76%	$5,591.4	10/15/2035	$268.9	Non-revolving; monthly principal and interest payments
Term Loan #2	BMO	$1,675.0	4.61%	$1,498.0	11/30/2020	$70.6	Non-revolving; monthly principal and interest payments (amortized over 20 years, initial seven year term)
					Total:	**$762.4**	

UNDERTAKING NO. J2.3

Reference(s):

To provide a draft accounting order for the proposed forgone revenue deferral account.

RESPONSE:

Deferral Account to Record

Revenue Deficiencies Incurred from January 1, 2016

This account records the differences between the revenue earned by FNEI under its interim order (EB-2015-0368 Decision and Interim Order of December 29, 2015) and the revenues that would have been received under the approved 2016 and 2017 Uniform Transmission Rates. The account will capture forgone revenue from January 1, 2016 to the date when FNEI's revenue requirement is reflected in the Uniform Transmission Rates. The accounting entries are to be as follows:

USofA #	**Account Description**
Dr: 1574	Other Regulatory Assets – Sub account "Forgone Revenue Deferral Account"
Cr: 4105	Transmission Charges Revenue

To record the differences between revenue earned by FNEI under its current interim revenue requirement and the revenues that would have been received under the approved 2016 and 2017 Uniform Transmission Rates.

USofA #	**Account Description**
Dr: 1574	Other Regulatory Assets – Sub account "Forgone Revenue Deferral Account"
Cr: 4405	Interest and Dividend Income

To record interest improvement on the principal balance of the "Forgone Revenue Deferral Account".

UNDERTAKING NO. J2.4

Reference(s):

To provide a draft accounting order for the Z-Factor deferral account.

RESPONSE:

Deferral Account to Record

Z-Factor Expenses Incurred

This account records the expenditures incurred by FNEI in relation to Z-Factor events that may occur, as well as any subsequent receipt of funds pursuant to an approved Z-Factor application and the disbursement of such funds for the purposes of refunding the FNEI Insurance Reserve Account.

USofA #	**Account Description**
Dr: 1110	Other Accounts Receivable Z-Factor Sub-Account
Cr: 1005	Cash-Insurance Reserve Sub-Account
Dr: 1005	Cash-Insurance Reserve Sub-Account
Cr: 1110	Other Accounts Receivable Z-Factor Sub-Account

To record the expenses incurred in relation to Z-Factor events, the subsequent receipt of funds from an approved Z-Factor application, and the disbursement of such funds for refunding the Insurance Reserve Account.