Reference: Energy Supply Risk Assessment Update, November 30, 2016, page 28, 2 line 10 to page 29, line 1. Please provide the data submitted to Hydro by Newfoundland Power associated with the October 7, 2016 load forecast. Please 3 4 include any data reconciling the forecast to prior forecasts. 5 6 7 A. Please see PUB-NLH-626, Attachment 1 – Newfoundland Power Load Forecast, 8 which provides the data submitted to Hydro by Newfoundland Power associated 9 with the Newfoundland Power October 7, 2016 load forecast. 10 The data provided to Hydro includes the standardized information requested by 11 12 Hydro for preparing its load forecasts but does not include forecast input data or 13 information that would be necessary for reconciling the load forecast to prior 14 forecasts. Please note that Newfoundland Power subscribes to the Conference 15 Board of Canada for the provincial economic forecasts which are a key data input in 16 its load forecast models and which would provide necessary data for reconciling the 17 forecast to prior forecasts. Hydro does not subscribe to this particular service provided by the Conference Board of Canada and is therefore unable to include any 18 provincial economic forecast data for reconciling Newfoundland Power's October 7, 19 20 2016 load forecast to prior forecasts.

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## NEWFOUNDLAND POWER INC. ENERGY & DEMAND FORECAST 2016 - 2021

	PRODUCED PURCHASED & WHEELED	TOTAL WHEELED	TOTAL PRODUCED & PURCHASED			TOTAL CURTAILED	NP PRC	DUCED	TOTAL PURCHASED	
YEAR	(1) Energy (GWh)	(2) Energy (GWh)	Energy (GWh)	(3) Native Peak (MW)	(4) Load Factor	(5) At Native Peak (MW)	(6) Energy (GWh)	(7) At Native Peak (MW)	Energy (GWh)	(8) At Native Peak (MW)
2016	6,396.1	105.8	6,290.3	1,395.1	51.33%	11.0	427.4	70.0	5,862.9	1,314.1
2017	6,367.9	105.2	6,262.7	1,392.8	51.33%	11.0	438.0	70.0	5,824.7	1,311.8
2018	6,365.6	105.3	6,260.3	1,392.3	51.33%	11.0	435.8	70.0	5,824.5	1,311.3
2019	6,367.9	100.1	6,267.8	1,393.9	51.33%	11.0	434.2	70.0	5,833.6	1,312.9
2020	6,367.0	95.4	6,271.6	1,391.0	51.33%	11.0	428.1	70.0	5,843.5	1,310.0
2021	6,294.6	95.3	6,199.3	1,378.7	51.33%	11.0	440.4	70.0	5,758.9	1,297.7

#### NOTES:

- 1. Produced, Purchased and Wheeled is based on the System Energy Forecast dated October 7, 2016.
- 2. Wheeled Forecast dated April 2016.
- 3. Native Peak refers to the maximum purchased and produced demand during the winter season at the end of the current year. Newfoundland Power Native Peak is calculated by applying the Load Factor to Produced & Purchased energy.
- 4. Load Factor is based on an average of 15 year historical (normalized) load factors.
- 5. The Total Curtailed Demand represents the amount available through the Curtailable Service Option and various Company facilities.
- 6. Average water year for the forecast period is 438.4 GWh adjusted for forecast plant availability and efficiency improvements.
- 7. Newfoundland Power production of 70.0 MW is based the 10 year average of production from hydro plants at time of native peak. Production from hydro plants at time of native peak typically vary between 60 and 90 MW. When requested by Newfoundland and Labrador Hydro, production from hydro plants will be maximized.
- 8. Refers to the maximum purchased at time of native peak.

### NEWFOUNDLAND POWER INC. ENERGY & DEMAND MONTHLY BREAKDOWN 2016 - 2021

	2016		2017		2018		2019		2020		2021	
MONTH	Purchased Energy (1) GWh	NP Native Peak (2) MW										
JAN.	718.5	1,381.2	716.8	1,395.1	715.6	1,392.8	716.2	1,392.3	711.7	1,393.93	703.9	1,391.0
FEB.	677.6	1,339.6	649.0	1,331.8	644.8	1.323.8	645.7	1,325.9	665.8	1.318.23	639.6	1,314.4
MAR.	653.7	1,236.3	652.8	1,234.8	650.6	1,231.2	652.8	1,235.3	647.9	1,226.78	639.9	1,212.5
APR.	512.9	1,066.0	511.1	1,062.6	510.4	1,061.6	511.5	1,063.9	506.7	1,054.97	502.7	1,047.4
MAY	422.7	889.4	421.0	890.1	421.2	890.3	420.9	890.4	421.4	887.98	416.7	881.9
JUNE	348.8	756.4	346.9	756.4	347.0	755.3	349.3	760.4	350.6	759.73	344.1	751.0
JULY	312.6	608.8	311.9	609.8	314.2	613.1	316.7	617.3	316.4	613.88	311.4	608.4
AUG.	304.1	574.9	304.4	576.3	303.6	573.9	304.7	575.7	308.2	576.70	301.5	571.3
SEPT.	316.2	635.9	315.0	636.0	316.3	637.2	318.9	640.6	319.0	637.18	314.9	636.0
OCT.	415.9	863.7	414.6	864.6	416.3	866.8	420.3	870.2	415.3	866.82	415.0	865.4
NOV.	518.2	1,089.0	517.0	1,090.5	518.1	1,092.9	516.6	1,090.3	516.6	1,090.65	510.5	1,078.3
DEC.	661.7	1,300.8	664.2	1,305.4	666.4	1,309.5	660.0	1,310.2	663.9	1,305.23	658.7	1,296.0
TOTAL	5,862.9		5,824.7		5,824.5		5,833.6		5,843.5		5,758.9	

#### NOTES:

- 1. Monthly Purchased Energy is based on the produced and purchased breakdown analysis less Newfoundland Power's monthly production. Purchased Energy for 2016 is based on nine months weather normalized actual and three months forecast data.
- 2. The Monthly peaks for January of 2017 to 2021 are set equal to the forecast *winter seasonal peak* which can occur in either month during the December through March period. The monthly peak shown for January 2016 is Newfoundland Power's actual weather adjusted native peak for the 2015/2016 Winter season. The Monthly peaks for February to December of each year were derived by applying average historic monthly load factors to the monthly purchased energy. Average monthly load factors are based on 15 year historical weather normalized Produced and Purchased and actual monthly Newfoundland Power Native Peaks.

PUB-NLH-626, Attachment 1
Page 3 of 4, Isl Int System Power Outages (Phase Two)
CDM Impacts
(GWh)

	Domestic	General Service	Total
2016	9.7	4.4	14.1
2017	26.5	10.6	37.1
2018	39.8	17.4	57.2
2019	45.9	25.0	70.9
2020	33.9	33.6	67.5
2021	37.2	42.2	79.4

# **Normal Hydro Production**

	2016	2017	2018	2019	2020	2021
Jan	41.700	41.700	41.900	42.000	42.100	42.100
Feb	36.500	36.500	36.600	36.800	36.900	36.900
Mar	42.300	42.300	42.500	42.600	42.700	42.700
Apr	49.300	49.300	49.400	49.600	49.700	49.700
May	46.700	48.800	48.700	49.100	47.300	48.800
Jun	33.200	35.000	34.400	34.700	33.000	35.100
Jul	24.600	25.800	25.300	25.200	23.600	25.500
Aug	20.300	20.800	20.200	20.200	17.200	20.900
Sep	21.700	23.100	22.500	21.600	19.700	23.200
Oct	31.000	32.800	32.200	30.000	33.300	32.900
Nov	36.800	38.800	38.900	39.100	39.200	39.100
Dec	43.000	43.100	43.200	43.300	43.400	43.500
Total	427.100	438.000	435.800	434.200	428.100	440.400

## **Actual Thermal Production**

	2016	2017	2018	2019	2020	2021
Jan	0.021	0.0	0.0	0.0	0.0	0.0
Feb	0.035	0.0	0.0	0.0	0.0	0.0
Mar	0.024	0.0	0.0	0.0	0.0	0.0
Apr	0.004	0.0	0.0	0.0	0.0	0.0
May	0.011	0.0	0.0	0.0	0.0	0.0
Jun	0.002	0.0	0.0	0.0	0.0	0.0
Jul	0.008	0.0	0.0	0.0	0.0	0.0
Aug	0.043	0.0	0.0	0.0	0.0	0.0
Sep	0.108	0.0	0.0	0.0	0.0	0.0
Oct	0.000	0.0	0.0	0.0	0.0	0.0
Nov	0.000	0.0	0.0	0.0	0.0	0.0
Dec	0.000	0.0	0.0	0.0	0.0	0.0
Total	0.256	0.0	0.0	0.0	0.0	0.0