

## Questions and Answers

### Electricity Rates in NL – Updated November 2015

#### November 2015

**Following the capital cost update for the Muskrat Falls Project in September 2015, Nalcor was requested to provide information on updated electricity rate forecast.**

We have updated the Projected Island Residential Customer Bill Information and the Projected Electricity Rates and Average Monthly Island Residential Customer Bills based on our latest estimates, including the revised capital costs update for the Muskrat Falls Project that was released in September 2015. These estimates include all generation, transmission, and distribution costs, including capital, operating, fuel, interest and financing costs, plus an estimate of Newfoundland Power costs.

Please note that the estimated residential electricity rates and customer bills for the island interconnected system for the years 2018, 2020, 2025 and 2030 provided below have been developed for planning purposes and are not fully developed rates. Final electricity rates will be set by the Board of Commissioners of Public Utilities through a future general rate hearing.

The following table outlines changes to rates and bills since DG3 and reflect these changes in three categories: (i) Lower Churchill Project (LCP) capital costs; (ii) non-LCP system changes and; (iii) tax changes since DG3.

## Projected Island Residential Electricity Rates and Customer Bill Information

Domestic Rate (¢ per kWh)				
	2018	2020	2025	2030
DG3 Rates	15.9	16.1	16.2	16.6
Domestic impact of LCP cost change (2014 vs DG3)	(2.5)	1.1	1.0	1.1
Domestic impact of LCP cost change (2015 vs 2014)	(0.1)	0.4	0.4	0.4
Restated Domestic Rates (LCP changes only)	13.2	17.6	17.6	18.1
Impact of Other Non-LCP System changes	1.9	0.3	0.7	1.1
Sub-total	15.1	17.9	18.3	19.2
Tax changes since DG3 *	1.6	1.9	1.8	1.9
Current forecast rates	16.7	19.8	20.1	21.1

Average Monthly Island Interconnected Customer Bills (nominal \$; 1517 kWh per month)				
	2018	2020	2025	2030
DG3 Bill	241	244	246	252
Domestic impact of LCP cost change (2014 vs DG3)	(38)	16	15	17
Domestic impact of LCP cost change (2015 vs 2014)	(2)	7	6	6
Restated Domestic Bill (LCP changes only)	200	267	267	275
Impact of Other Non-LCP System changes	29	5	10	17
Sub-total	229	272	277	292
Tax changes since DG3 *	25	29	28	28
Current forecast bills	253	300	305	320

\*The Tax changes since DG3 include the elimination of the 8% Provincial Rebate effective July 1, 2015 and the proposed increase in HST from 13% to 15% effective January 1, 2016.

**July 2014**

**Q1. I understand that Nalcor is estimating that the new cost estimates will result in a \$8 higher monthly power bill for the "average" customer. I would like to see the analysis that derived the \$8 figure from the new cost estimates. Is that possible?**

A1. Forecast electricity bills include all costs of generation, transmission, distribution, capital, operating, maintenance and sustaining capital, including fuel, interest and financing costs, plus Newfoundland Power costs. All of these items are included in the rates. Prior to interconnection Newfoundland and Labrador Hydro (Hydro) anticipates significant capital expenditures to address load growth including a new gas turbine in 2014 and a new transmission line from Bay d'Espoir to Western Avalon in 2017. Like most electric utilities in North America, Hydro has a aging infrastructure that requires continued investment to ensure reliable and safe supply of power and energy to its customers.

Below is the projected bill calculation for 2018:

<b>Projected Customer Bill 2018</b>	<b>Current</b>	<b>DG3</b>
Customer Rate (¢ per kWh)	15.6	15.1
HST Net of 8% Provincial Rebate	5.0%	5.0%
Customer Rate including HST (¢ per kWh)	16.4	15.9
Average Consumption kWh	1,517	1,517
<b>Total Customer Bill including HST</b>	<b>249</b>	<b>241</b>

**Q2. Since posing this question there have been some other public statements from Nalcor that have sown confusion among the public. A good example is Ed Martin's letter to the Telegram that was not careful to explain he is using nominal price estimates.**

I think it would be a big help if - in addition to answering the question above - Nalcor released an update of estimated electricity rates in a form directly comparable to this chart:  
[http://www.powerinourhands.ca/pdf/Electricity\\_Rates.pdf](http://www.powerinourhands.ca/pdf/Electricity_Rates.pdf)

A2. As requested, we've updated the Electricity Rates and Average Monthly Island Residential information based on the revised capital cost update for the Muskrat Falls Project that was released in June 2014.

In our reply to your previous question on July 24, 2014, we noted that forecast electricity bills include all costs of generation, transmission, distribution, capital, operating, maintenance and sustaining capital, including fuel, interest and financing costs, plus Newfoundland Power costs. All of these items are included in the projected rates. Prior to interconnection Newfoundland and Labrador Hydro anticipates significant capital expenditures to address load growth including a new gas turbine in 2014 and a new transmission line from Bay d'Espoir to Western Avalon in 2017.

The rate projection information below is from 2018 (year Muskrat Falls Project will be included in island electricity rates) to 2030. The information that was prepared in October 2012 at Decision Gate 3 used 2017 as a starting reference point for Muskrat Falls. The information at Decision Gate 3 also included rate projections for the Isolated Island option. Since the Muskrat Falls Project (Interconnected Island) was sanctioned in December 2012 there is no longer an Isolated Island option for 2018 and beyond as the system will be interconnected with power from Muskrat Falls.

At the time of the release of the capital cost update for the Muskrat Falls Project at the end of June 2014, Nalcor stated that the change in the electricity rates are expected to be in the range of about 7% to the average homeowner on the island using electric heat. This is for the 10-year period from 2014 to 2023. It is anticipated that when Muskrat Falls is fully operational and our province is powered almost exclusively by renewable energy sources, rates will stabilize for customers, increasing on average around one to two per cent per year.

Attached is the updated chart as requested.

**DECISION GATE 3 ELECTRICITY RATES AND AVERAGE MONTHLY ISLAND RESIDENTIAL  
CONSUMER BILLS FROM 2018-2030**  
Interconnected Island (Muskrat Falls) June 2014 versus DG3

<b>June 2014</b>	<b>2018</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
Interconnected Electricity Rate*	16.4	17.3	17.7	18.4
Interconnected Consumer Bill**	\$249	\$262	\$268	\$279
<b>DG3</b>				
Interconnected Electricity Rate*	15.9	16.1	16.2	16.6
Interconnected Consumer Bill**	\$241	\$244	\$246	\$252

\*Rates are in cents per kWh and include: taxes, basic monthly service charge and discount and assumes an average consumption of 1517kWh/month

\*\* Bills assume an average consumption of 1517 kWh/month

Notes: The increases between 2014 and 2017 are not related to Muskrat Falls but are a result of projected oil price increases and increasing demand. The above bill projections are for Interconnected Island Customers and do not represent electricity rates or bills for Labrador Interconnected Customers, Labrador and Island Isolated Customers and L'Anse Au Loup Customers.

**Q3. Am I to understand that both the June 2014 projection and the DG3 projection are "real" rates that take into account inflation? Or does the June 2014 projection use nominal prices?**

A3. All the rate information and customer bills are all in nominal terms (dollars of the day).

**Q4. In 2018, electricity rates for households on the island are projected to be 16.4 cents per kilowatt hour (kWh), which is about \$249 for an average monthly bill, approximately half a cent higher than the rate estimated at sanction of the Muskrat Falls project (15.9 cents/kWh). Looking out to 2020, electricity rates will be around 17.3 cents/kWh or about \$262 for an average monthly bill....Is Martin using nominal prices or real prices that correct for inflation?**

A4. The rate information is in nominal (dollars of the day).

**Q5. Within his July 12 column to the Telegram Ed Martin indicated that rates would increase 1-2% annually following the commissioning of Muskrat Falls. Can this be confirmed? Are these increases in real terms?**

A5. Nalcor confirms that the 1- 2% annually reflects the compound annual growth rate of the nominal rates.

**Q6. Please confirm if the rates provided at DG3 in the online rate calculator were nominal, or real? If they were real rates can Nalcor confirm the reference year, and the assumed inflation rate?**

A6. These are nominal dollars (represented in dollars of the day).

#### **April 2014**

**Q1. What will be the cost of Muskrat Falls power to retail customers on the Island?**

A1. Rate projections were presented in 2012, and are available on the powerinourhands.ca website at: [www.powerinourhands.ca/pdf/Electricity\\_Rates.pdf](http://www.powerinourhands.ca/pdf/Electricity_Rates.pdf). With Muskrat Falls, electricity rates will be stable over time and will be lower than if we continued to be an isolated system relying on burning oil to generate electricity. Final rates will be determined upon the completion of the project.

#### **November 2013**

**Q1. What is the residential user paying per kilowatt hour, now, as of 1 November, and long term projections post Muskrat?**

A1. Here is a link to information on the current electricity rates in NL and across Canada: <http://www.hydrogra.ca/rates-among-lowest.html>. For example, I'm going to assume you live on the island and therefore your all in electricity rate today (this is the cents/kilowatt hour, your basic monthly charge, and taxes included) is 12.4 c/kwh today.

In the fall of last year, we published what we anticipated electricity rates to be in 2017/2020/2025/2030 under two options 1) Muskrat Falls or Interconnected Island and 2) Holyrood or Isolated Island. The Isolated Island is higher in 2017 and continues to grow out to 2030 and beyond. Here is the link to that chart:

[http://powerinourhands.ca/pdf/Electricity\\_Rates.pdf](http://powerinourhands.ca/pdf/Electricity_Rates.pdf)

Based on our analysis completed at the end of last year prior to the sanction decision of the Muskrat Falls Project, electricity rates between 2011 and 2016 for the average ratepayer on the island were projected to increase by about 16% or approximately \$30 per month over this period. These increases have nothing to do with the development of Muskrat Falls. These increases are a result of projected oil price increases and increasing demand.

With power from Muskrat Falls in 2017, electricity rates will stabilize, increasing just over 1% per year between 2016 and 2030 for residential customers. By comparison, if we continue relying on oil to generate electricity, average bills for homeowners are projected to increasing just over 2% per year. From 2016 to 2030 without Muskrat Falls, electricity rates for the average ratepayer would increase by 38% or approximately \$82 per month. Over the same period, with Muskrat Falls, electricity rates for the average ratepayer will increase by 18% or approximately \$38 per month.