

**David Vardy**

**From:** karenoneill@nalcorenergy.com  
**Sent:** March 19, 2018 9:54 AM  
**To:** David Vardy  
**Subject:** RE: Questions - reply to Jan 28 question  
**Attachments:** Muskrat Falls Project Sources & Uses Overview Aug 2017\_final.pdf

Hi Dave

Please find attached an updated version of your chart below that supplements the MF Project Sources & Uses Overview relating to the June 2017 update which I previously provided.

Regards  
 Karen

<b>Muskrat Falls Project</b>						
<b>Based on June 2017 Update</b>						
<b>(\$ Billions)</b>						
	<u>LIL</u>	<u>MF/LTA</u>	<u>Total</u>			
Total Cost	5.1	7.6	12.7			
Debt	3.5	4.5	7.9			
Equity	1.7	3.2	4.8			
Emera Equity	0.8	0.0	0.8			
Nalcor/NL Equity	0.8	3.2	4.0			
<i>Note: Equity figures above include \$0.4B of AFUDC on LIL equity contributed by Nalcor/NL and Emera.</i>						



**Karen O'Neill**  
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You owe it to yourself, and your family, to make it home safely every day. What have you done today so that nobody gets hurt?

**From:** "David Vardy" <david.vardy@ [REDACTED]>  
**To:** <karenoneill@nalcorenergy.com>  
**Cc:** "David Vardy" <david.vardy@ [REDACTED]>  
**Date:** 03/04/2018 08:42 PM  
**Subject:** RE: Questions - reply to Jan 28 question

Karen

Using the information from page 14 of the oversight report I prepared the following table. Can you confirm it is correct? If no please provide the correct information, allocating the \$2.6 million in financing costs among the three project components?

Many thanks

Dave

ALLOCATION OF COSTS BETWEEN DEBT AND EQUITY			
	LIL	MF + LTA	Total
Total cost	\$4,959 (39%)	\$7,758 (61%)	\$12,717 (100%)
Debt prorated	3,353 (68%)	4,547 (59%)	7,900
Equity	1,606 (32%)	3,211 (41%)	4,817
Emera Equity	800	0	800
NL Equity	806	3,211	4,817

**From:** David Vardy [<mailto:david.vardy>]  
**Sent:** February-03-18 9:46 AM  
**To:** 'karenoneill@nalcenergy.com'  
**Cc:** David Vardy  
**Subject:** RE: Questions - reply to Jan 28 question

Karen

Many thanks for your quick reply.

The following is from the page 14 you cited in the oversight report:

“In June 2017 the estimated cost of \$2.6 billion included:

- \$1.48 billion in IDC and related closing costs on the \$5.0 billion FLG1 + \$2.9 billion FLG2 debt;
- \$0.44 billion in AFUDC on equity investments in LITL;
- \$0.34 billion for FLG1 + FLG2 financing reserves (debt service and liquidity reserves);
- \$0.08 billion in hedge settlement costs associated with the FLG1 and FLG2 financings;
- \$0.06 billion in Transition to Operations (TTO) costs; and
- \$0.20 billion interim use operating costs prior to full project commissioning.”

Can you give me the allocations of the \$2.6 billion in financing costs between MF + LTA and LIL, regardless of whether they are AFUDC, IDC or other financing as well as a similar allocation of the \$1.48 billion in IDC, the \$0.34 billion in financing reserves, the \$0.06 billion in TTO and the \$0.20 billion interim use operating costs? Are these allocations simply based on a pro rata share of direct costs, namely 63% (MF+LTA) and 37% (LIL) or is it based on a more complex formula?

Can you also explain why “AFUDC does not accrue” on MF/LTA as per the following statement on page 13 of the same report? I follow the statement up to “NLH” but the last four words remain a mystery.

“The MF/LTA cost recovery is based on an increasing price and increasing volume of electricity, and is therefore lower in the early years and higher in the later years. Within that cost recovery an 8.4% Internal Rate of Return (IRR) on equity invested is generated over the term of the power purchase agreement with NLH, but AFUDC does not accrue.”

Thanks

Dave

**From:** karenoneill@nalcenergy.com [mailto:karenoneill@nalcenergy.com]  
**Sent:** February-02-18 4:35 PM  
**To:** David Vardy  
**Subject:** Re: Questions - reply to Jan 28 question

Hi Dave,

Here is the information in response to your question from Jan 28:

AFUDC only applies to LIL - it does not apply to MF or LTA.

You can also refer to pages 13-15 in the following document:

[https://www.gov.nl.ca/mfoversight/pdf/quarterly\\_report\\_sept\\_2017.pdf](https://www.gov.nl.ca/mfoversight/pdf/quarterly_report_sept_2017.pdf)

I'm following up on your Nov'17 request.

Thanks  
Karen

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**From:** "David Vardy" <[david.vardy@nl.ca](mailto:david.vardy@nl.ca)>  
**To:** "Karen O'Neill" <[KONeill@nlh.nl.ca](mailto:KONeill@nlh.nl.ca)>, "Karen O'Neill" <[koneill@nalcenergy.com](mailto:koneill@nalcenergy.com)>  
**Cc:** "David Vardy" <[david.vardy@nl.ca](mailto:david.vardy@nl.ca)>  
**Date:** 01/28/2018 03:12 PM  
**Subject:** Questions

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Karen

I have another question on the June 23, 2017 update, in addition to the outstanding question below from November 29, 2017. Please provide me with the allocation of AFUDC of \$2.6 B in slide 10 among LIL, MF and LTA.

I have assumed, perhaps incorrectly, that they are prorated among the three project components in proportion to their share of direct costs. If not prorated then what are the appropriate values for each component including AFUDC?

The project sources document attached shows Emera equity at \$800 million.

LIL is 37% of direct project cost. If I apply the same percentage to total cost including AFUDC of \$12.7 billion the LIL cost is \$4.7 billion of which 25%, or \$1,175 million, is equity. In this calculation I have simply prorated AFUDC among the three project components. When I take Emera's \$800 million, as shown in Nalcor's sources document attached, as a % of \$1,175 million I get 68% and not 59%. What accounts for this difference?

Many thanks  
Dave

-----Original Message-----

From: David Vardy [<mailto:david.vardy>]

Sent: November-29-17 8:52 AM

To: Karen O'Neill

Subject: Cost of MF purchased power

Karen

I have a question about page 19 in the attached document. See row 3 in the table which shows MF purchased power cost as 11.66 cents per kWh in 2021. Yet from the pie charts on page 15 we are told that the cost is 17.42 cents. The 17.42 cents is based on average unit cost for 4.6 TWH of energy. If less than the full supply is used then the cost per kWh will rise. Can you provide an explanation as to how the 11.66 cents per kWh is calculated? Is it a weighted average of Island hydro and Muskrat Falls power?

Many thanks

Dave

[attachment "Muskrat-Falls-Project-Update-Presentation-June-23\_Final.pdf" deleted by Karen O'Neill/NLHydro] [attachment "Muskrat Falls Project Sources Uses Overview Aug 2017\_final.pdf" deleted by Karen O'Neill/NLHydro] [attachment "image001.jpg" deleted by Karen O'Neill/NLHydro]