

From: Bernstein, Barbara [mailto:Barbara.Bernstein@puc.nh.gov]

06 10 2014

Sent: Monday, June 23, 2014 9:11 AM

To: Stephen Hickey

Subject: questions...

Steve,

Staff has reviewed MPM's most recent REC eligibility application submissions, and we have identified additional questions requiring clarification. Please respond by e-mail and we will have the e-mail response posted to the docket for each relevant application.

- MPM proposes an extrapolation methodology for determining the historical generation baseline of the Monadnock Dam over the statutory period of January 1, 1986 through December 31, 2005. Please clarify whether the 300 kW generation unit was in operation in any year(s) during the period from 1986-2013 and, if it was, during which time periods and with what estimated effect on the total generation of the MPM hydroelectric generators in such periods.

The 300 kW at Monadnock station was installed in 1979. The contribution of that unit to overall generation was not any different during the statutory period than during the period 2005-2013 which was presented. Data is unavailable for total project generation for the years 1986-2013, but specific to generation at Monadnock Station, data is only available for the years 2005-2013.

All of the available data is in the attached spreadsheet.

- There is an apparent discrepancy in the description of independent monitor Bill Short's meter reading and GIS reporting of the excess generation delivered into the PSNH system between the Class I application and the Class IV applications. Please clarify whether Mr. Short or PSNH would report this excess electric production to GIS.

PSNH would still report the net generation output of the three respective dams. There should be no change in the way that PSNH reads and reports the net generation meter from all of the dams.

Mr. Short intends to read the generation meters for each dam site as well as read the PSNH generation meter for the Monadnock dams. (The PSNH meter output can actually be accessed through the NEPOOL GIS). The difference between the sum of the generation meters for each dam and the PSNH meter will be power consumed behind the meter. Mr. Short would then calculate the percent of power consumed behind the meter attributed to each site by dividing gross generation at a particular dam site by the gross generation of all of the dam sites and then multiplying that number by the net generation number for all of the dams. These latter numbers Mr. Short would upload to each dam site's NON-account.

- How would the Class I generation be separated from the Class IV generation for each of the Monadnock Dam's GIS accounts?

The separation of Class I generation from Class IV generation would be a task performed by APX, operator of the NEPOOL GIS, and not by Mr. Short. In other

New England states , these PUCs give instruction to APX on how to split the production. Generally, these are fixed percentages of monthly production.

- How would the metered generation output of the three hydroelectric facilities be allocated and reported to each of the respective GIS accounts?

Mr. Short intends to read the generation meters for each dam site as well as read the PSNH generation meter for the Monadnock dams. (The PSNH meter output can actually be accessed through the NEPOOL GIS). The difference between the sum of the generation meters for each dam and the PSNH meter will be power consumed behind the meter. Mr. Short would then calculate the percent of power consumed behind the meter attributed to each site by dividing gross generation at a particular dam site by the gross generation of all of the dam sites and then multiplying that number by the net generation number for all of the dams. These latter numbers Mr. Short would upload to each dam site's NON-account.

An example may be helpful in this case:

Assume per dam generation is 200 MWh at Dam 1, 300 MWh at Dam 2 and 500 MWh at Dam 3 and PSNH meter generation of 400 MWh. Total generation is 1,000 MWh. Behind the meter generation is 600 MWh. Behind-the-Meter (BTM) Production for Dam 1 would be 120 MWh, for Dam 2 would be 180 MWh and for Dam 3 would be 300 MWh. Mr. Short would upload these latter quantities into the NON-accounts for the respective dams in the NEPOOL GIS.

- Please create and submit a table listing each of the three MPM hydroelectric facilities and its respective GIS facility codes and related nameplate capacities.

Spreadsheet attached

I look forward to hearing from you.

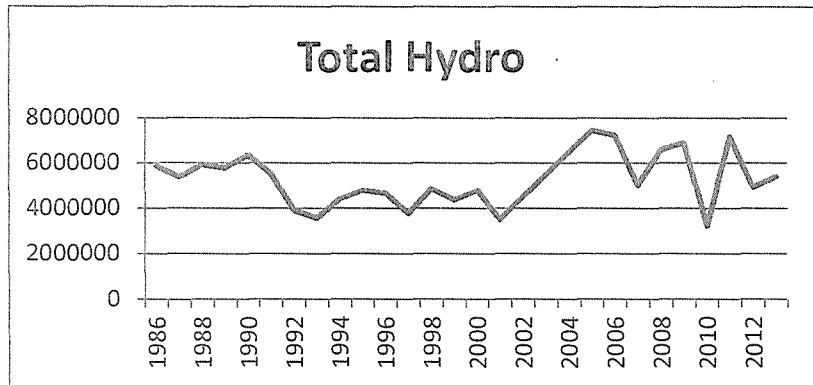
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Monadnock Station Power Generation

Year	Total Hydro	Monadnock Station	% Monadnock Station	Estimated Monadnock Station
1986	5851800			696364
1987	5369200			638935
1988	5917000			704123
1989	5770000			686630
1990	6346400			755222
1991	5529700			658034
1992	3904052			464582
1993	3565900			424342
1994	4399400			523529
1995	4787900			569760
1996	4653800			553802
1997	3766300			448190
1998	4859092			578232
1999	4366800			519649
2000	4781700			569022
2001	3494300			415822
2002	4520012			537881
2003	5466300			650490
2004	6490500			772370
2005	7425700	662700	8.9%	
2006	7224900	932000	12.9%	
2007	5008100	724600	14.5%	
2008	6566300	691300	10.5%	
2009	6892900	918000	13.3%	
2010	3202300	532400	16.6%	Mill Wheel down for 3-4 months
2011	7168900	821200	11.5%	
2012	4922100	574400	11.7%	
2013	5391500	984100	18.3%	



Base average
650490

11.9%

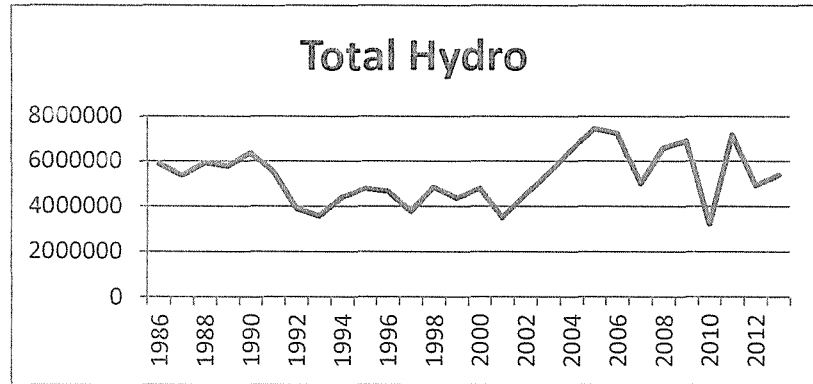
MONADNOCK PAPER MILLS HYDROELECTRIC FACILITIES

Station Name	Plant-Unit Name	Unit ID	Nameplate Capacity (MW)
Monadnock Power Station Dam	UNDER 1MW - Monadnock Power Station Dam	NON39968	0.425
Paper Mill Dam	UNDER 1MW - Paper Mill Dam	NON39969	0.750
Pierce Dam	UNDER 1MW - Pierce Dam	NON39971	0.770
Monadnock Paper Mills	UNDER 5MW - Monadnock Paper Mills	MSS915	1.945

Revised

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Base average
591484

11.9%

Power Flow From Project

