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January 13, 2021

Debra Howland, Executive Director
New Hampshire Public Utilities Commission
21 South Fruit Street
Concord, NH 03301

Dear Ms. Howland,

I am writing on the behalf of North Conway Memorial Hospital, 3073 White Mountain Highway, North Conway NH. The North Conway Memorial Hospital boiler system using Renewable Fuel Oil (RFO) was approved for eligibility to produce NH Class I Thermal RECs on November 15, 2019. It is a 3.924 MW equivalent facility, its NEPOOL GIS code is NON58396. I serve as the Independent Monitor for this facility, and I am requesting one-time approval to use an alternative method of measuring thermal energy during the period from July 31, 2020 @ 4:49 PM until August 14, 2020 @ 5:47 PM due to the failure of the data logger during that time period.

The current alternative method of measuring the thermal energy generated by this facility was approved by the Commission in Docket # REC 19-103/RREC 18-0492. This method utilizes sensors and meters to measure the volume and temperature of the boiler feedwater, the pressure of the steam, and the amount of RFO in the storage tank. Those sensors and meters transmit their measurements to a data logger. The data is retrieved approximately every 14 days, and hence that is the interval for which data was lost, 14 days and 58 minutes in this case. Normally, the retrieved data is used to calculate useful thermal energy output using the approved calculation, and quarterly I upload the monthly results to NEPOOL GIS for the creation of Class I Thermal RECs. It was found that the data logger had failed during the time period from July 31, 2020 @ 4:49 PM until August 14, 2020 @ 5:47 PM, I am therefore unable to determine REC production using the approved method for that time period.

Fortunately, independent of the data logger, RFO level in the holding tank is measured daily and thus RFO consumption can be computed on a daily basis, taking account of deliveries which are also recorded. I am requesting to use an alternative method to calculate and report the Class I Thermal RECs production during the time period that the data logger had failed based on these daily RFO consumption data. I further request temporary waiver of any of the Puc 2500 rules that are deemed necessary to waive in order to accommodate this request.

The alternate method is as follows. I have plotted the daily RFO use from 1 January 2020 to 14 October 2020, please see attached. From this attached plot it can be seen that, during the

summer, when there is little or no space heating, the daily consumption falls in a well-defined band from 15 June to 14 September. The granular nature of the data stems from the fact that RFO level in the storage tank is only measured to the nearest inch, which is roughly equivalent to 50 gallons. For averages over multiple days this will have a limited impact. The proposed alternate method correlates the daily average RFO use during that stable summer period to the daily RFO use during the 14 days when the data logger was not recording. This correlation is then used by applying the same relation to the useful Class I Thermal RECs calculated for the periods of 15 June to 31 July and 15 Aug to 14 September to find the amount that reasonably can be assumed for the 14 days for which no data was logged. Below are the values I have determined using this method:

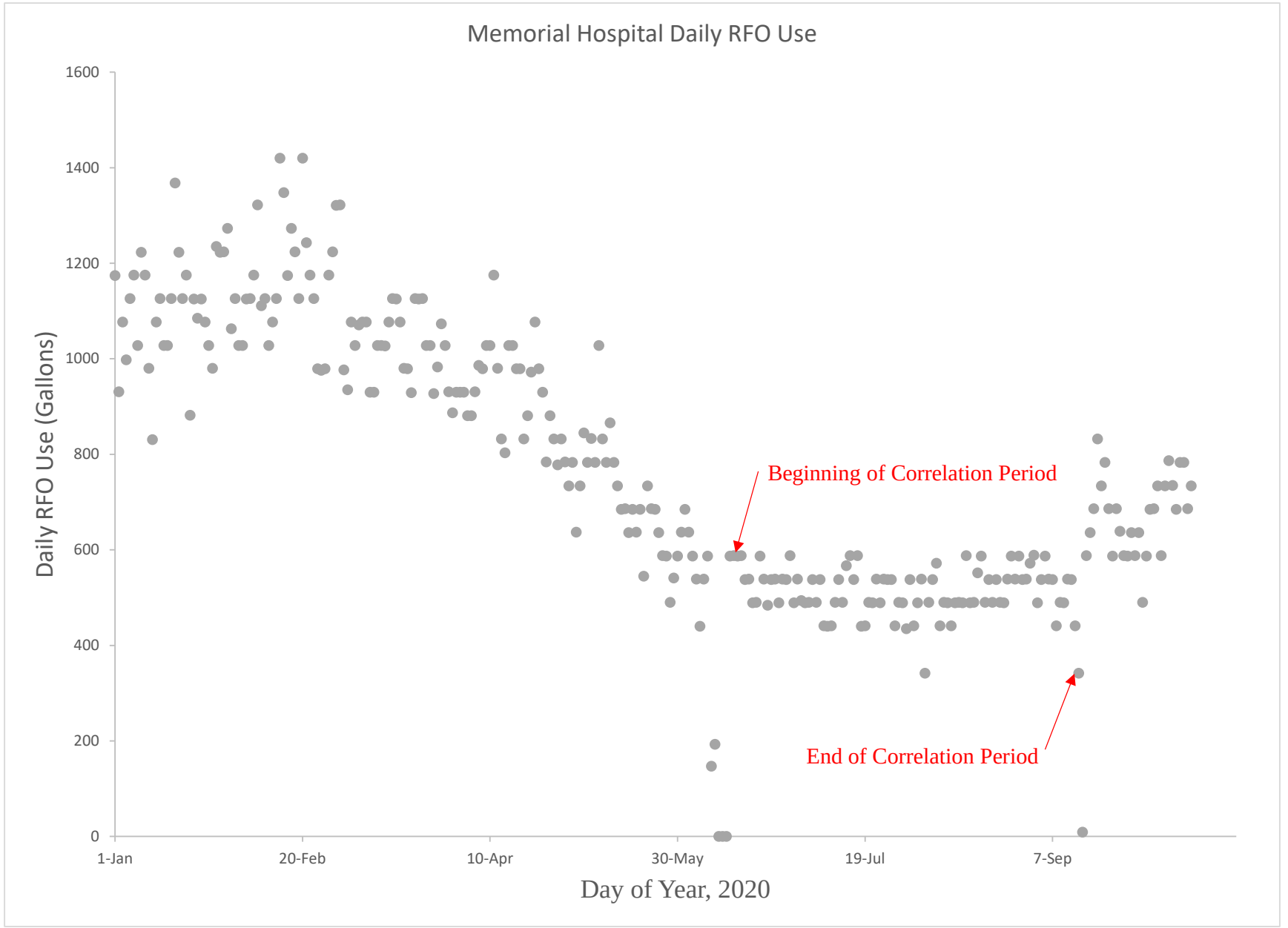
Daily Average RFO Consumption, 15 Jun to 14 Sep = 512 gallons
Daily Average RFO Consumption, 1 Aug to 14 Aug = 481 gallons
(Daily Avg. RFO, 1 Aug to 14 Aug)/(Daily Avg. RFO, 15 Jun to 14 Sep) = 481/512 = 94%
Discounted Avg. Daily Thermal RECs, 15 Jun. to 31 Jul. & 15 Aug. to 14 Sep. = 9.08MWh
Correlated Avg. Daily Discounted Thermal RECs, 1 Aug to 14 Aug = 8.54MWh
Total Correlated Discounted Thermal RECs, 1 Aug to 14 Aug = 119.49MWh

The August 2020 Class I Thermal RECs of the Memorial Hospital for the period of 15 August 2020 to 31 August 2020 have been uploaded to NEPOOL GIS as 164.97 MWh, thus if this waiver is granted that amount would be increased to 284.46 MWh for the entire month of August 2020.

Thank you for your consideration of this request.

Respectfully,

Gary Phetteplace, PhD, PE


Memorial Hospital Daily RFO Use
Daily RFO Use (Gallons)
1600
1400
1200
1000
800
600
400
200
0
1-Jan
20-Feb
10-Apr
30-May
19-Jul
7-Sep
Day of Year, 2020
Beginning of Correlation Period
End of Correlation Period