TOPIC:

REFERENCE: **In the public presentation on 11-Feb, the slide listing capacities had in very large print "Eliminates 4 Rental Diesel Engines Each Winter."**

PREAMBLE:

QUESTION:

a) When the Project comes online, does YEC actually expect to have four fewer rentals than are currently installed, or was this just implied to sell the Project?

b) How many rental diesels does YEC expect to have each season from 2022-2035? On pages 18 and 19, scenarios involving 16, 24 and 35 rental diesels are mentioned, along with the text "the requirement for diesel rentals is forecast to increase significantly..." Please provide this forecast (rental diesel requirement by year) for 2022-2035.

ANSWER:

(a) and (b)

Please see response to YUB-YEC-1-13(c) for available forecasts of diesel rental requirements with and without the Project, focusing on winter 2024/25 and 2030/31. This information indicates that the EPA prior to in-service of Moon Lake Pumped Storage will reduce diesel rentals by 5 units (assuming each unit capacity = 1.8 MW).

REVISED RESPONSE

On March 16, 2022 Mr. Yee filed Notice of Motion regarding YEC's response to b) part of this IR. Mr. Yee specifically notes that YEC did not provide the number of diesel rentals for each season for 2022-2035 as requested in the question.

In his Motion, Mr. Yee modified his question and included a table requesting YEC to fill the missing information that covers 2017/18 through 2041/42 years. The modified question

also requests YEC to specify the number of rentals before and after the Atlin EPA, Moon Lake pump storage as well as other additional resources.

Table 4-1 of the Application, as revised in response to NY-YEC-1-6 a) and b), provides forecast non-industrial peak, dependable capacity and capacity shortfall under N-1 for the period from 2021/22 through 2030/31 and Figure 4-1 of the Application illustrates similar information that extends to 2041/42 years. The information from Table 4-1 and Figure 4-1 is used to populate the table below to provide information as requested by Mr. Lee in his Motion for further information, however, the table excludes the years 2017/18 through 2020/21 as the table and figure in the Application did not include those years as they are not relevant and not useful to this review process; in addition, information for these years was not included in the original information request.

The number of spares will depend on total number of rental units, the number of locations, and potentially other considerations relating to requirements and costs. Therefore, excluding 2021/22, the table does not include spares.

	Number of Diesel Rentals excluding spares			
	Before Committed and Planned Supply Options	After Diesel Replacements, Whitehorse #2 Uprate, BESS and DSM	After Atlin	After Moon Lake [Phase I and Phase II]
	A	B	C [incl. B]	D [incl. C]
2021/22	17	15	15	15
2022/23	19	16	16	16
2023/24	23	8	8	8
2024/25	25	10	6	6
2025/26	27	12	7	7
2026/27	29	14	9	9
2027/28	31	16	11	11
2028/29	34	18	14	0
2029/30	36	21	16	0
2030/31	39	24	19	0
2031/32	40	25	20	0
2032/33	42	26	22	0
2033/34	42	26	22	0
2034/35	42	27	23	0
2035/36	43	28	24	0
2036/37	44	29	24	0
2037/38	44	29	24	0
2038/39	45	29	25	0
2039/40	45	29	25	0
2040/41	45	30	25	0
2041/42	46	30	26	1

Notes:

1. Assumes diesel rental unit of 1.8 MW (this may change in future).
2. Based on Table 4-1 of the Application, as revised in response to NY-YEC-1-6 a) and b), which provides forecast non-industrial peak, dependable capacity and capacity shortfall under N-1 for the period from 2021/22 through 2030/31 and Figure 4-1 of the Application which illustrates similar information that extends to 2041/42 years. Moon Lake pumped storage is a proposed future project that requires material grant funding to complete feasibility studies, as well as to proceed with actual development – its timing, if it proceeds, is likely to be delayed beyond time forecast in the 10-Year Renewable Electricity Plan.