Q. **Reference: 2024 Resource Adequacy Plan**

Please refer to Hydro's "2024 Resource Adequacy Plan: Technical Conference #4: Expansion Plan, Insights, and Next Steps," dated October 29, 2024, at slide 33. For each "model run"[1] and "sensitivity" identified below, and with all units of measurement clearly indicated, please provide for all assets available to PLEXOS (including existing Hydro assets and potential expansion assets) and in Excel format, for the entire study period:

a) Total installed capacity, by year

b) Selected resources' MW, by year

c) Annual generation (GWh, by year)

d) Annual fuel burn (Btu, by year)

e) Capacity factor (by year)

f) Availability factor (by year)

g) Average duration (hours)

h) Fixed costs (by year)

i) Variable costs (by year)

j) Forced outage hours (by year)

k) Planned outage hours (by year)

l) Maintenance outage hours (by year)

m) Hourly operating reserve contributions (by reserve product, e.g., 30-minute and 10-minute reserves, regulating reserves, etc.)

[1] To clarify, Scenario S4AEF(ADV) was not a model run, rather it is Scenario S4AEF with the On-Avalon CT advanced from 2034 to 2031.

Model Runs and Sensitivities

Core PLEXOS Runs

Scenario	Model Run
1	1AEF
4	Unrestricted
4	4AC
4	4AD
4	4AE
4	4AEC
4	4AEF
4	4AEF(ADV)
4	4AEI
4	4AH
4	4AB40H
4	4AB80H
4	4AEGH
3	3AEF
5	5AEF
7	7AEF
8	8EF

LIL Shortfall Runs

BESS vs. CT (section 6.2.1.1.5, App C)	B	Two 47.2 MW CTs, one 47.2 MW BESS
BESS vs. CT (section 6.2.1.1.5, App C)	D	No CTs, three 47.2 MW BESS
Min Portfolio (4AEF)	2	Slow decarb, Min Investment Portfolio
Min Portfolio, advance COD to 2031	3	Same as (2), but advance CODs to 2031

A. **a)** Total installed capacity, by year – Please refer to the attached spreadsheet labelled "Max Capacity" and note that installed capacity is not an input to Plexos.

b) Selected resources' MW, by year – Please refer to the attached spreadsheet labelled "Max Capacity."

c) Annual generation (GWh, by year) – Please refer to the attached spreadsheet labelled "Annual Generation."

d) Annual fuel burn (Btu, by year) – Please refer to the attached spreadsheet "Annual Fuel Burn."

e) Capacity factor (by year) – Please refer to the attached spreadsheet labelled "Annual Capacity Factor."

f) Availability factor (by year) – Plexos is not configured to report Availability Factor; however, the inputs and a calculated Availability Factor can be seen in the attached spreadsheet labelled "Outage Inputs."

g) Average duration (hours) – Plexos is not configured to report Average Duration.

h) Fixed costs (by year) – Please refer to the attached spreadsheet labelled "Fixed Costs."

i) Variable costs (by year) – Please refer to the attached spreadsheet labelled "Variable Costs."[2]

j) Forced outage hours (by year) – Plexos is not configured to report Forced Outage Hours; however, the inputs can be seen in the attached spreadsheet labelled "Outage Inputs."

k) Planned outage hours (by year) – Plexos is not configured to report Planned Outage Hours; however, the inputs can be seen in the attached spreadsheet labelled "Outage Inputs."

l) Maintenance outage hours (by year) – Maintenance outage hours are included in planned outage hours.

m) Hourly operating reserve contributions (by reserve product, e.g., 30-minute and 10-minute reserves, regulating reserves, etc.) – Plexos is not configured to report reserve contributions.

The model used to produce the shortfall analysis is not configured to output data other than Unserved Energy by Hour. The output files for the shortfall runs can be seen in the attached spreadsheet labelled "Shortfall Results."

[2] Variable Costs represents variable operations and maintenance only and does not include fuel costs