



Load Summary Capacity Comparison BC Hydro Modeling

July 20 2022

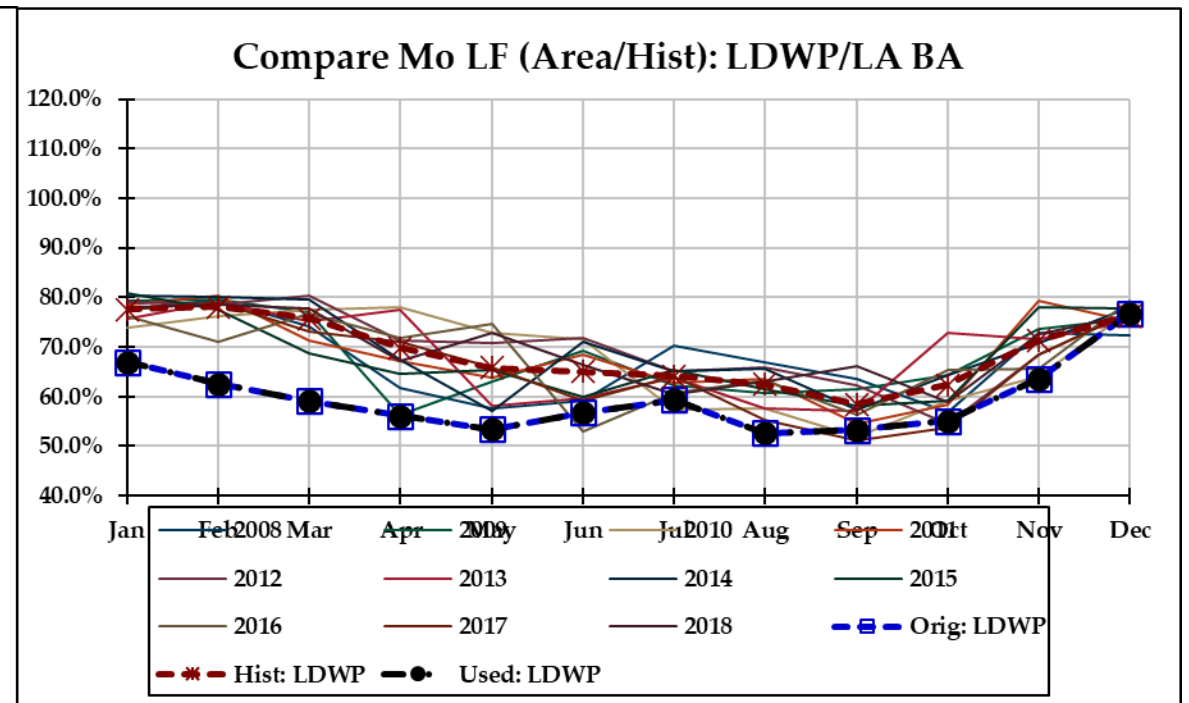
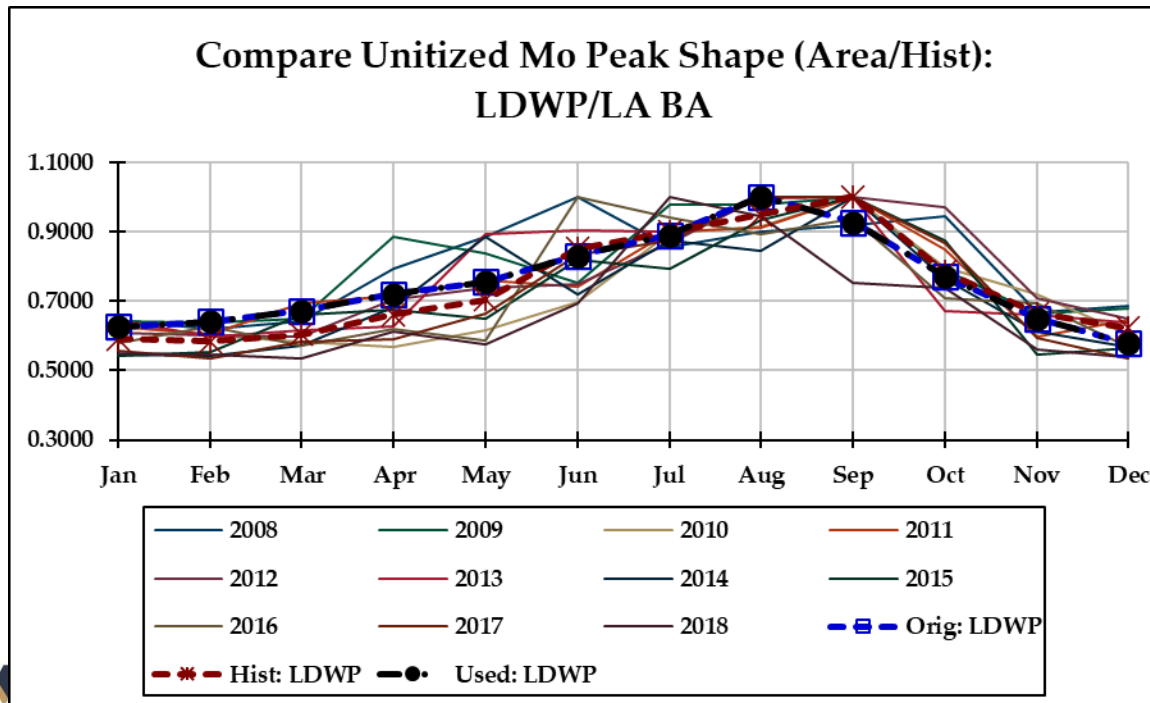
Tyler Butikofer
Staff Engineer

Load Summary

- LDWP submitted new forecast
 - Energy seems reasonable
 - Peak higher than CEC forecast
 - Still needs some looking into. Load Factor is low beginning of the year.
- IPCO – Experienced high load growth for recent years yearly load growth from 2021 – 2032 averages 2%.
 - Aligns with recent growth in Idaho
- All other areas were confirmed to be ok with some modifications

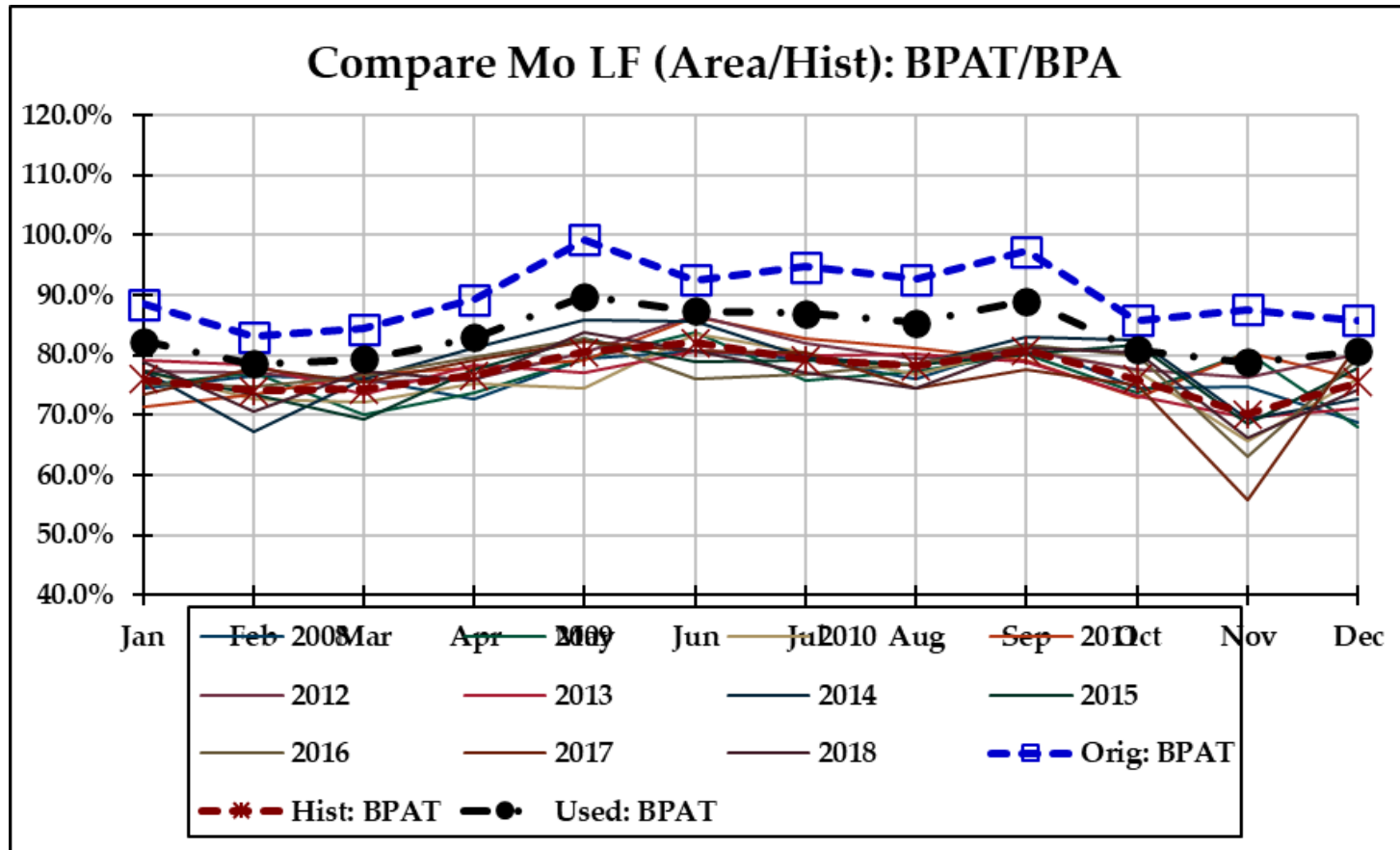
LDWP

- Peak Occurring in August in L&R forecast
- Load factor lower than historic
- May need to use CEC forecast



BPAT

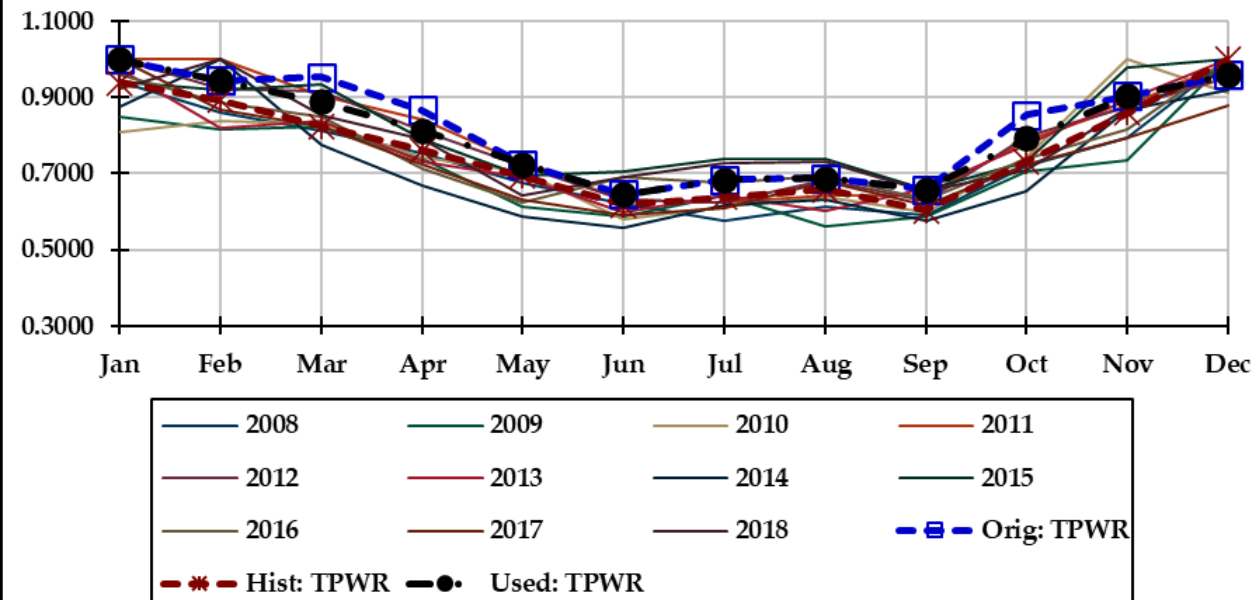
- Load Factor used average historic and L&R



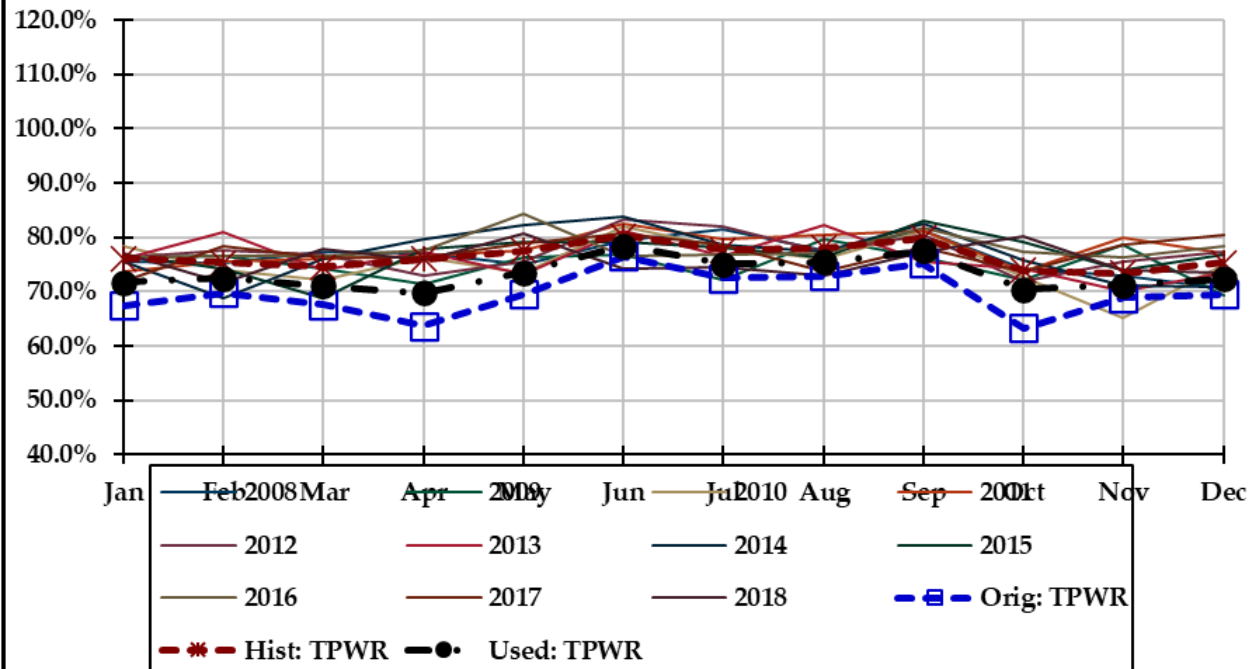
TPWR

- Peak average of historic and L&R for Mar, Apr, Oct
- Load Factor used 50% L&R, 50% Hist; 2/3 historic for Oct

Compare Unitized Mo Peak Shape (Area/Hist):
TPWR/TPWR



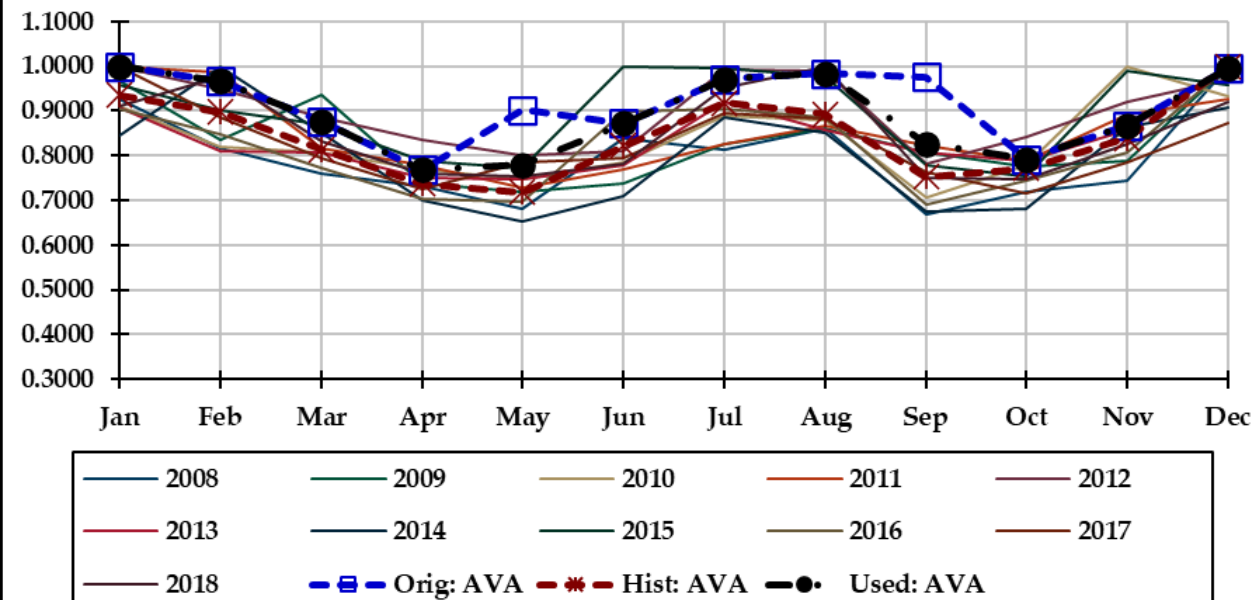
Compare Mo LF (Area/Hist): TPWR/TPWR



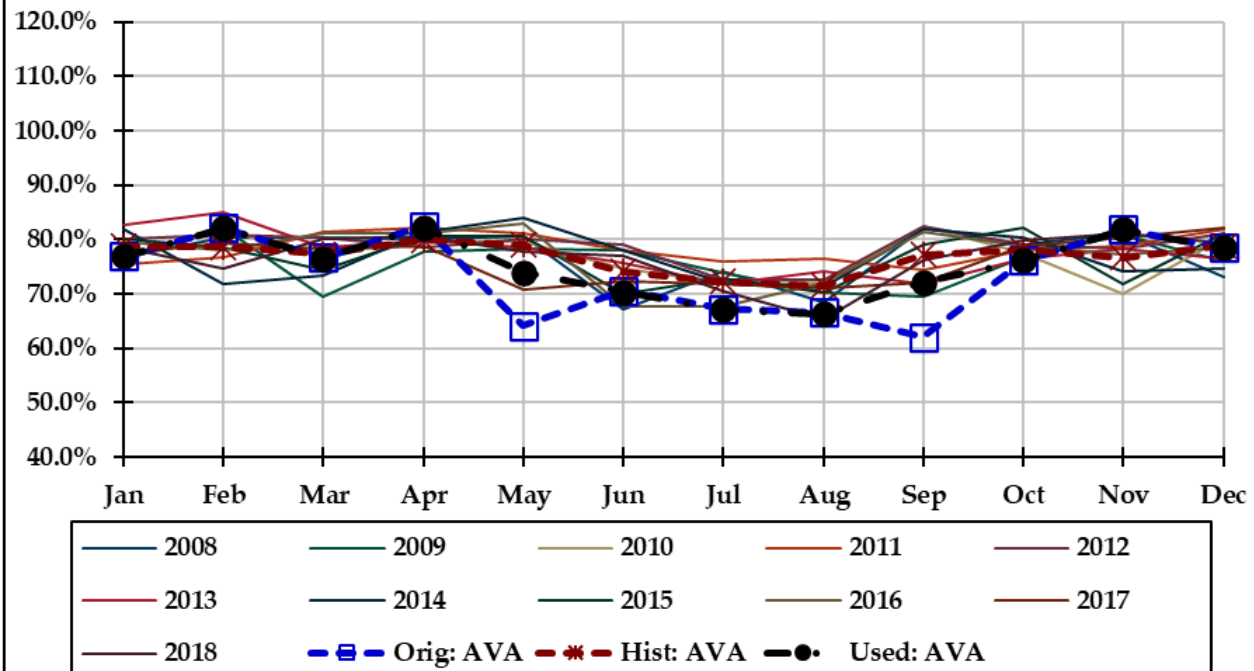
AVA

- Peak used 2/3 Historic, 1/3 L&R for May and Sept
- Load Factor used 2/3 Historic, 1/3 L&R for May and Sept

Compare Unitized Mo Peak Shape (Area/Hist):
AVA/AVA



Compare Mo LF (Area/Hist): AVA/AVA



BTM-Solar Capacities

- Used the 2020 EIA-861 Capacity for the following areas:
 - AVA
 - BPAT
 - CHPD
 - DOPD
 - GCPD
 - IPCO
 - VEA
 - NWMT
 - PGE
 - SRP
 - TEPC
 - TPWR
 - WALC
 - WAUW

Approval Item

- *It is moved to use the 2032 hourly load profiles developed using the Loads and Resources monthly peak and energy and historic 2018 shape.*
 - *With the exceptions that LDWP may be modified with the recent findings*

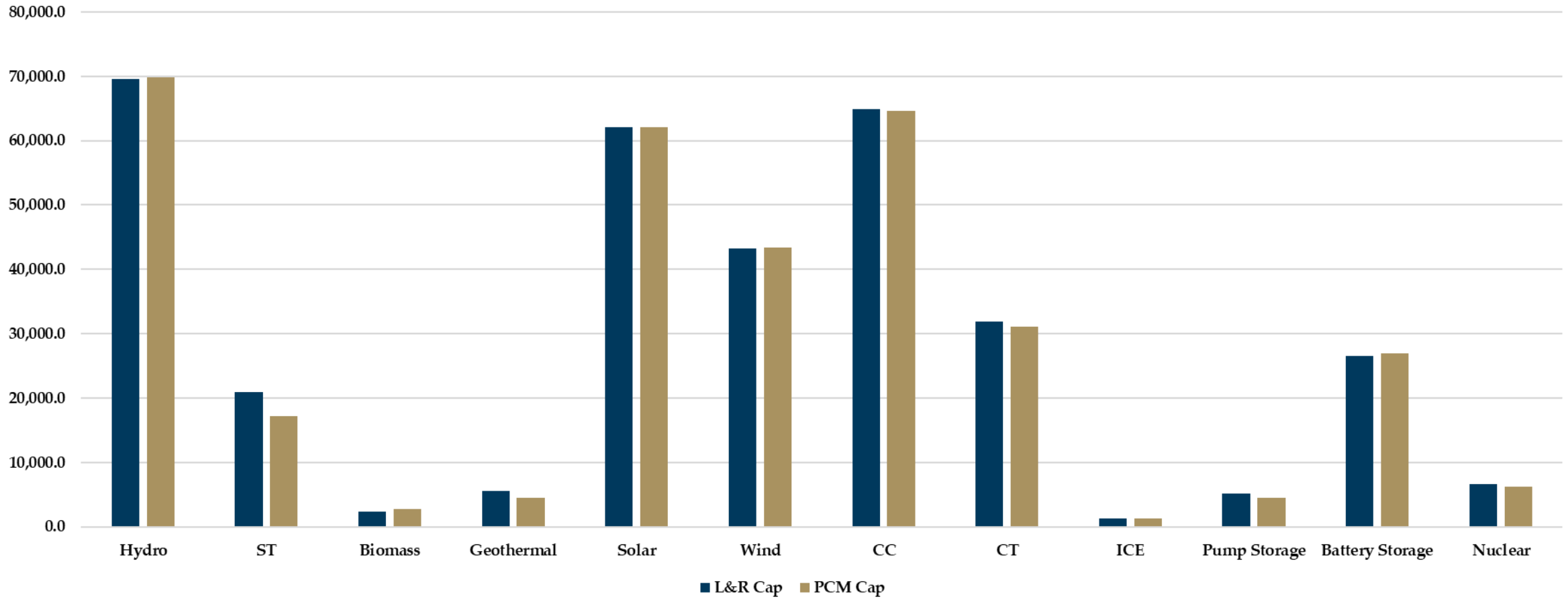
Capacity Check

Capacity Difference

- General CC and CT capacities do not match between L&R and PCM
 - Using nameplate in L&R which doesn't represent reality
- Wind and Solar Capacities need to be adjusted. There are some errors in the PCM
- AESO – ST gas conversions some were changed to CT or CC
- NWMT – L&R only reporting owned capacity of Colstrip 3 4; PCM models full capacity
- PACE – Jim Bridger 1 2 need to be converted to gas
- PSCO – Wind capacities need adjusted in PCM

WECC Capacity by Type

==WECC== Capcity (MW)

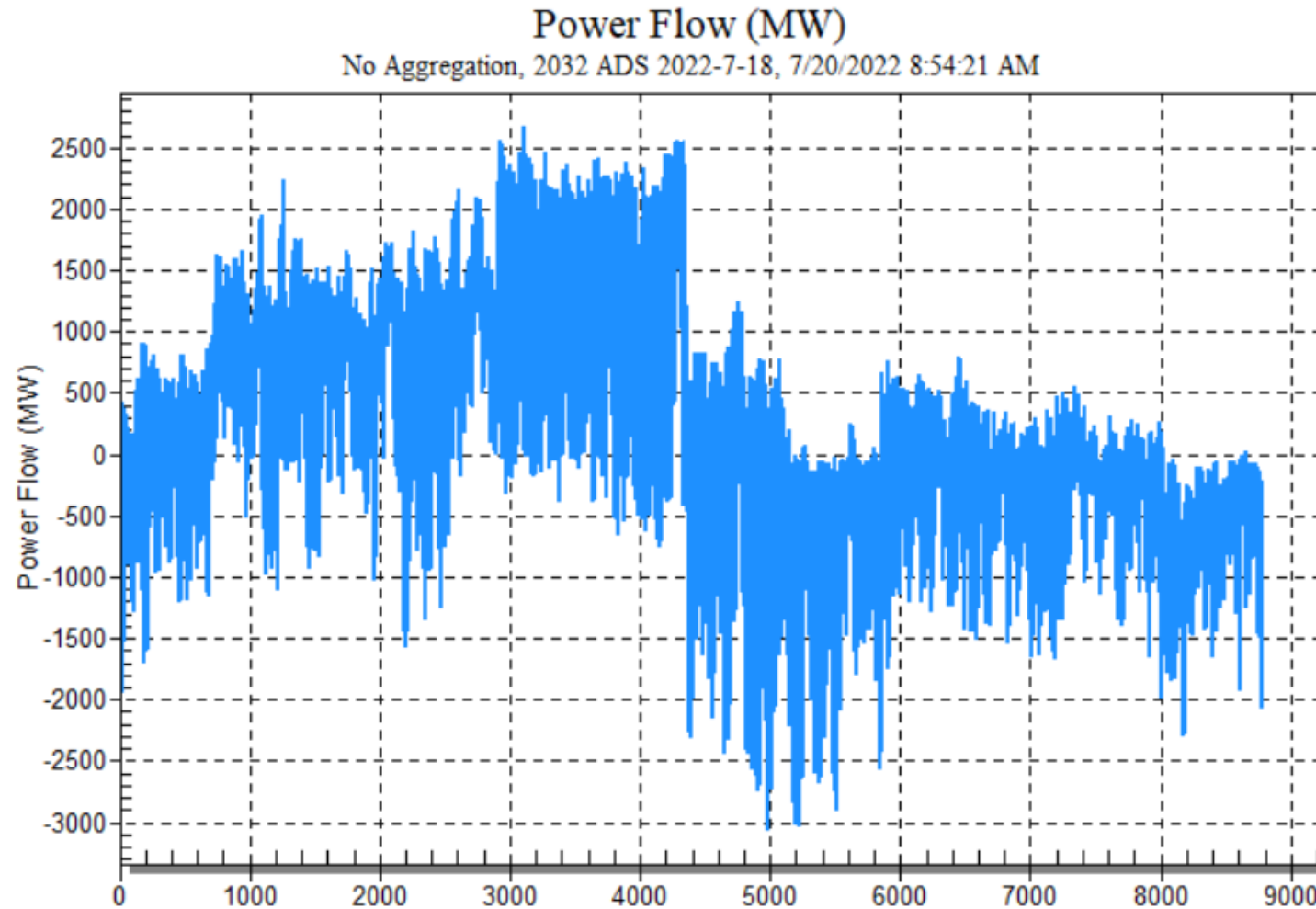


BC Hydro Modeling

BC Hydro Modeling

- Use 75% PLF Allocation for major projects
 - Gordon Shrum, Mica, Revelstoke
- Use 100% PLF Allocation for all other projects
- Can't change energy, don't have better data will have to live with what we have.
 - This means that we will always have the flows on path 3 from the simulation

Path 3 Flows



Approval Item

- *It is moved to model BC Hydro with:*
 - *75% PLF Allocation for major projects: Gordon Shrum, Mica, Revelstoke*
 - *100% PLF Allocation for all other projects*

Contact:

Tyler Butikofer

tbutikofer@wecc.org