

INTERNAL

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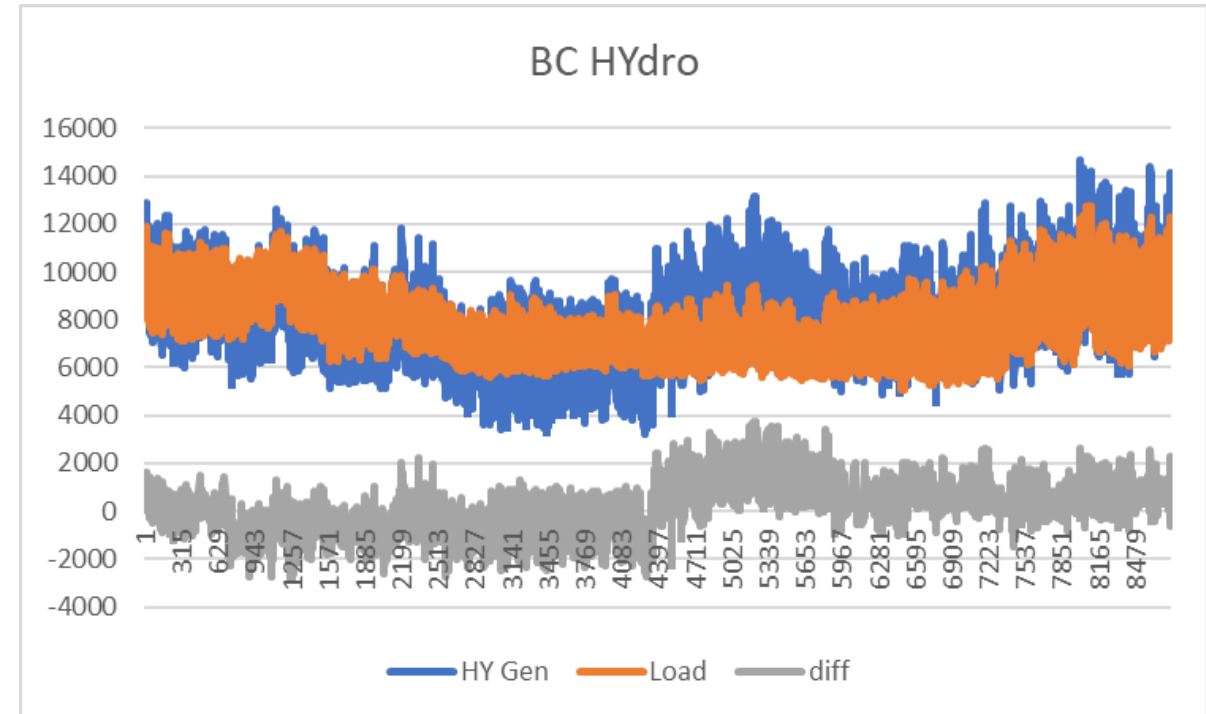
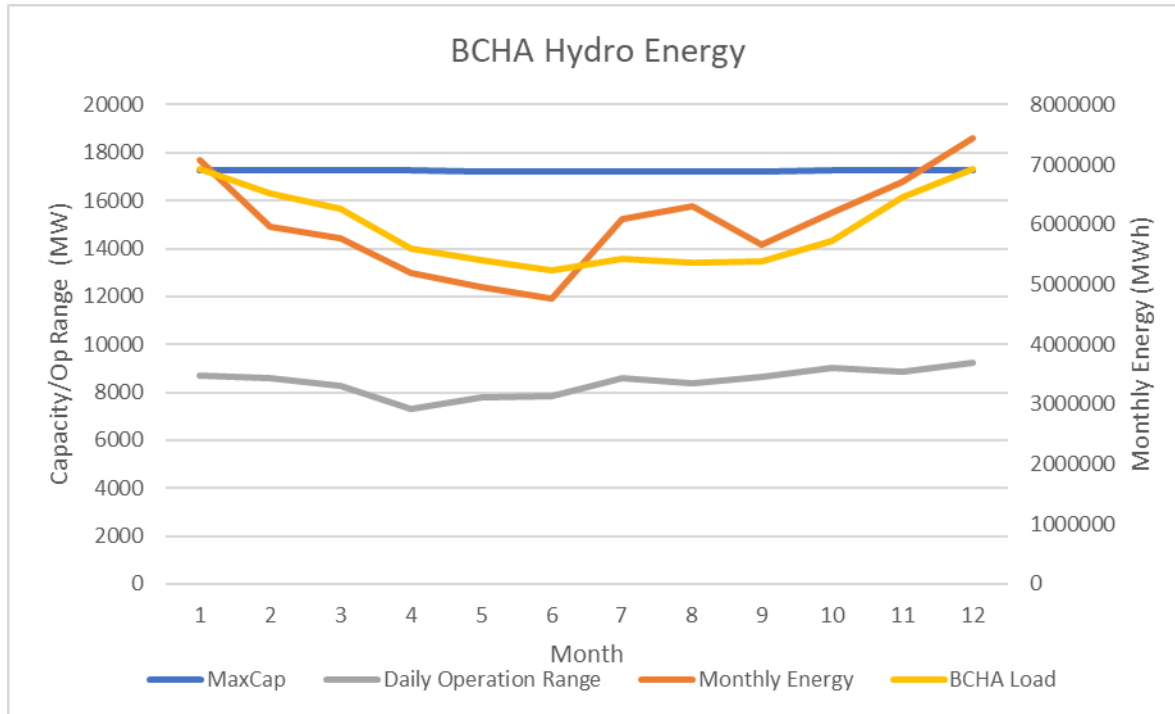
## 2032 ADS Case – Hydro Modeling

## ■ 2032\_ADS\_PCM\_6-30-2022

- The case is solved by GridView version 10.3.29 or later versions
- Version 10.3.31 is used, which fixed hydro curtailment amounts

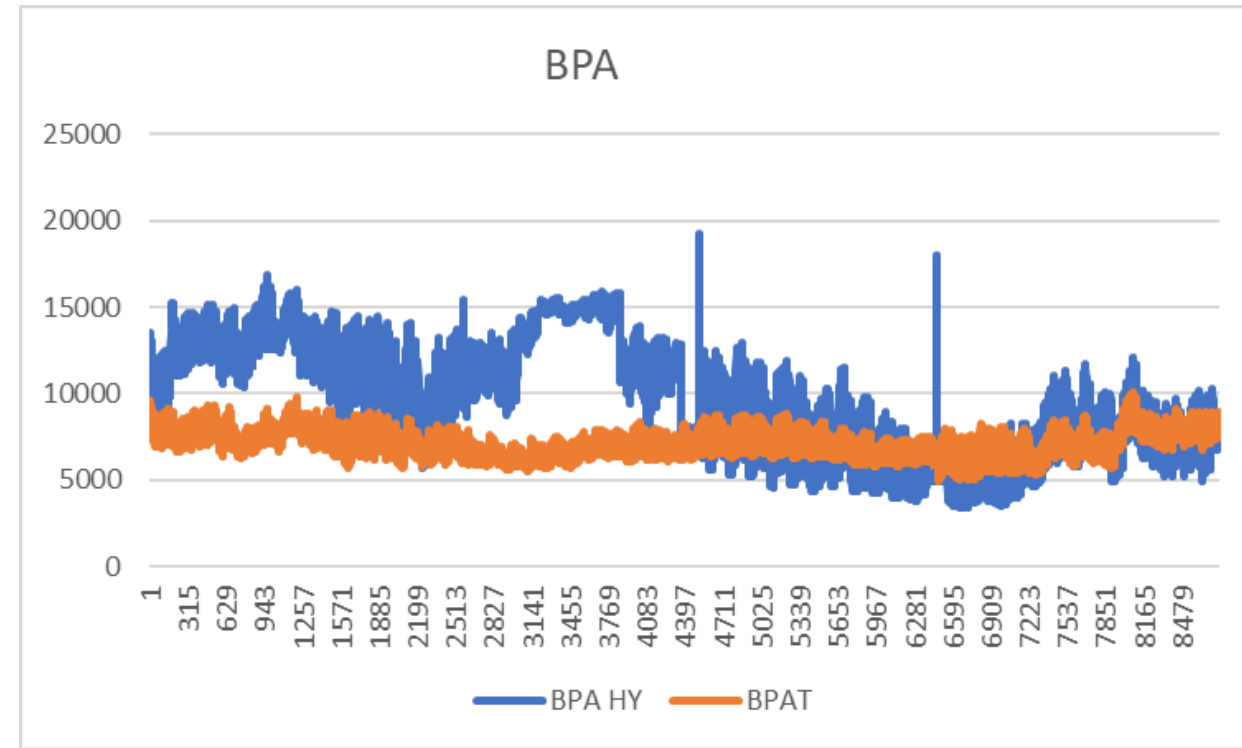
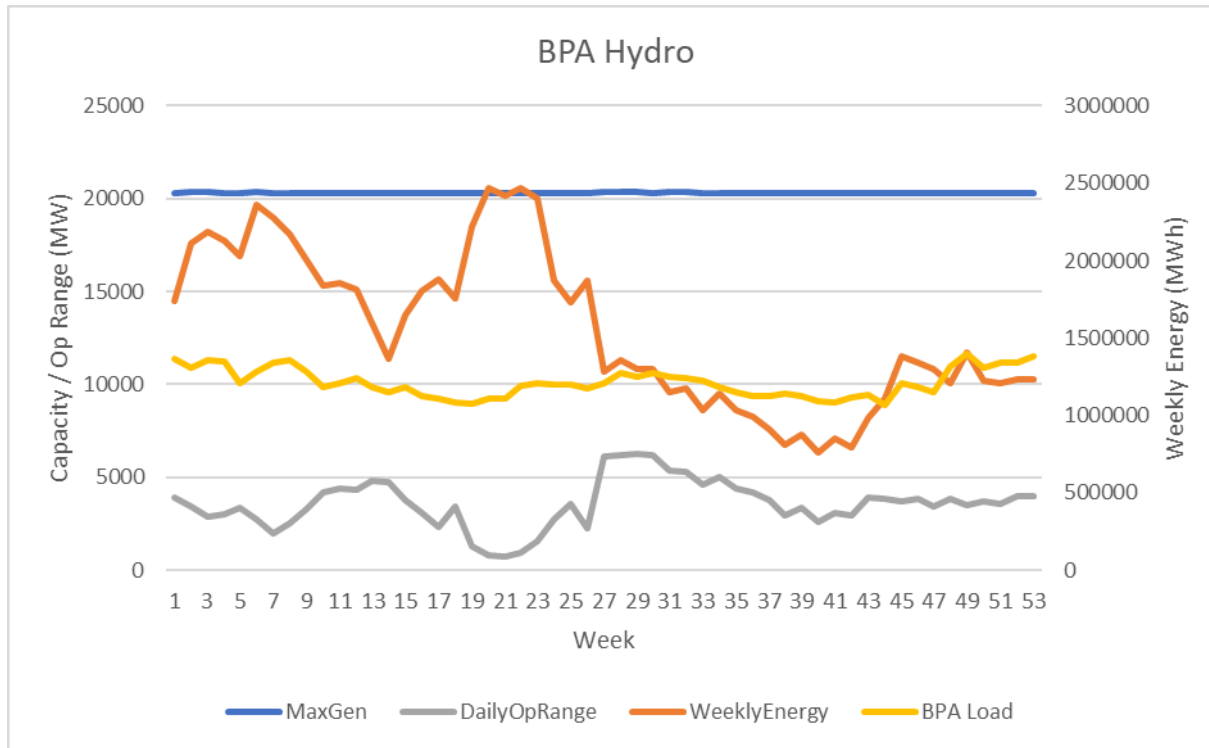
## ■ Case Descriptions

- No Marginal Losses modeled
- BC Hydro is based on Monthly hydro data
- BPA and USA Hydro is based on Weekly hydro data
- Automatically calculation for k and p factors for proportional load following pondage Hydro
- CA, AB, and BC has GHG Emission Allowance Price at \$56.9/ton, \$121.6/ton, \$35.8/ton.
- Wheeling rates are applied to BAA export, AB32 wheeling is applied to CA imports
- Regulation and Load Following reserves are still use 2030 reserve requirements (2009 shapes)



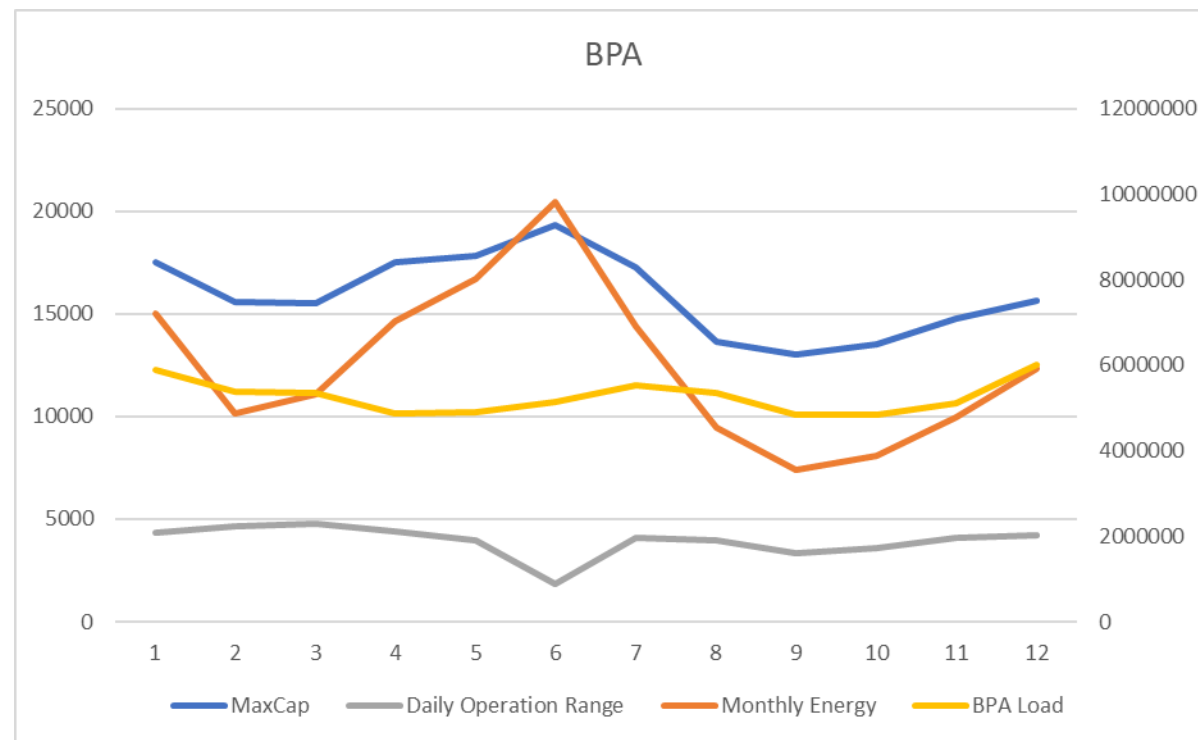
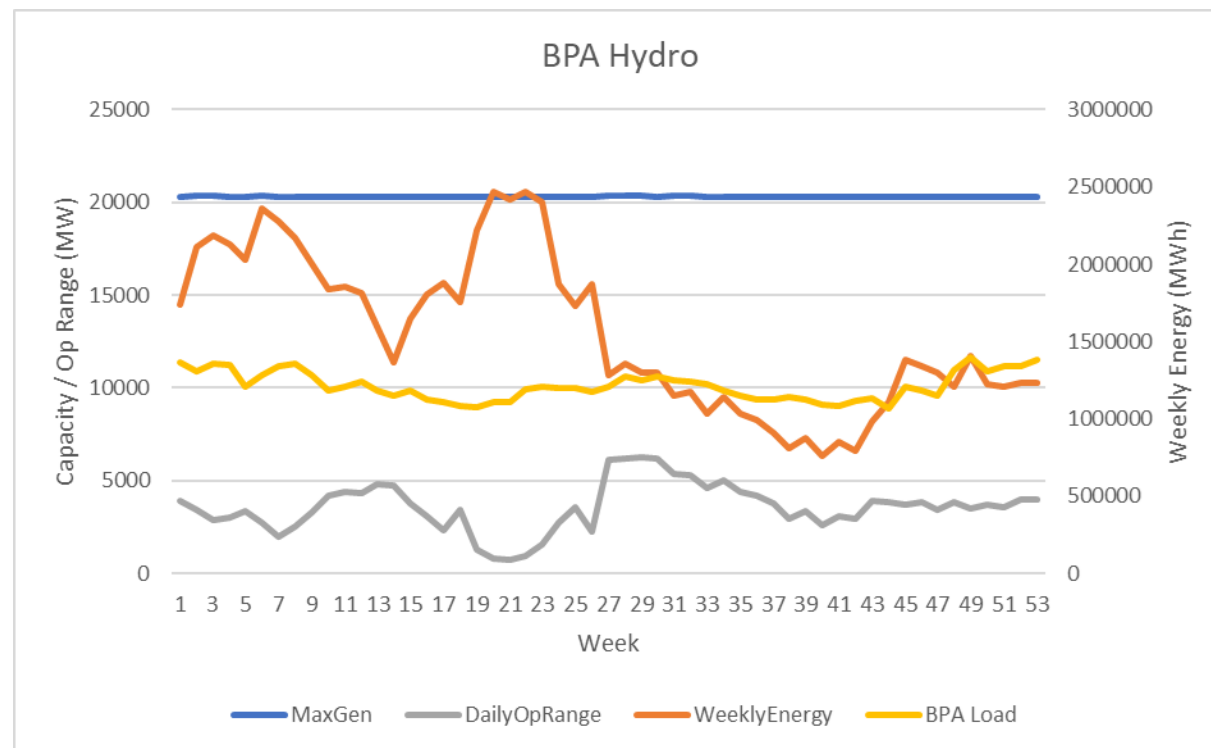
## ■ BC Hydro

- Monthly Hydro Data, monthly operation range, monthly energy, which trace BCHA monthly load
- BC Hydro generation follows hourly BC hydro area load



## ■ BPA Hydro

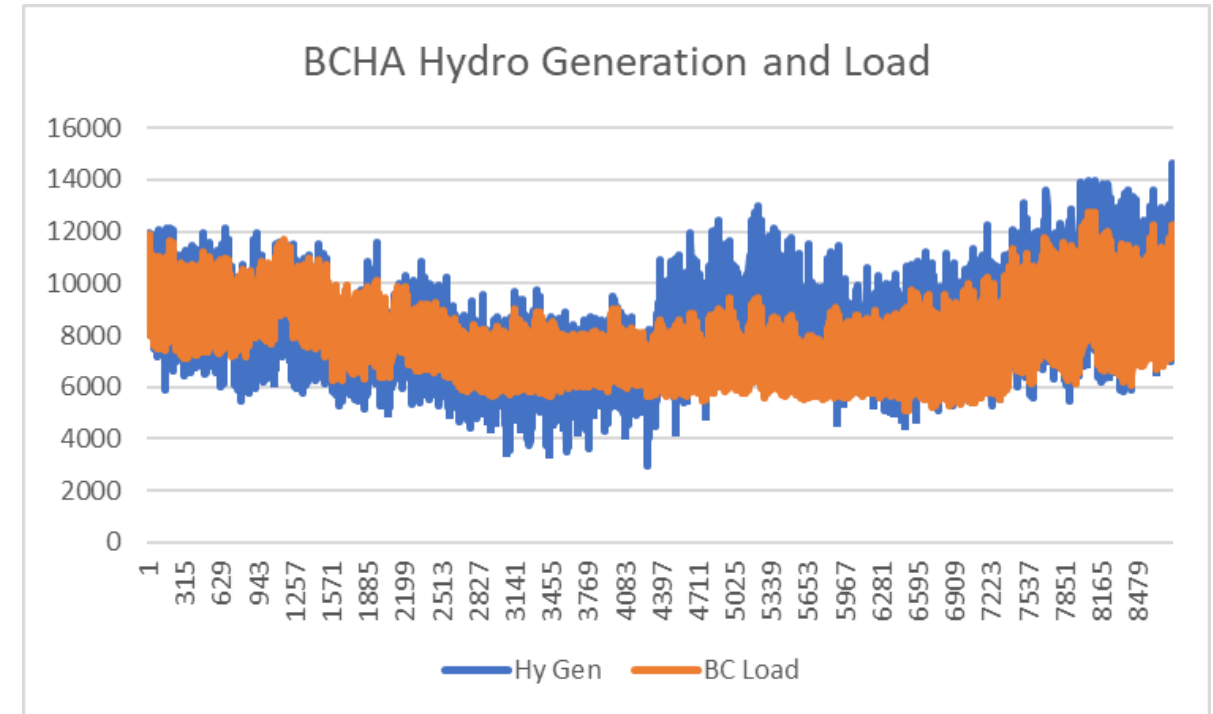
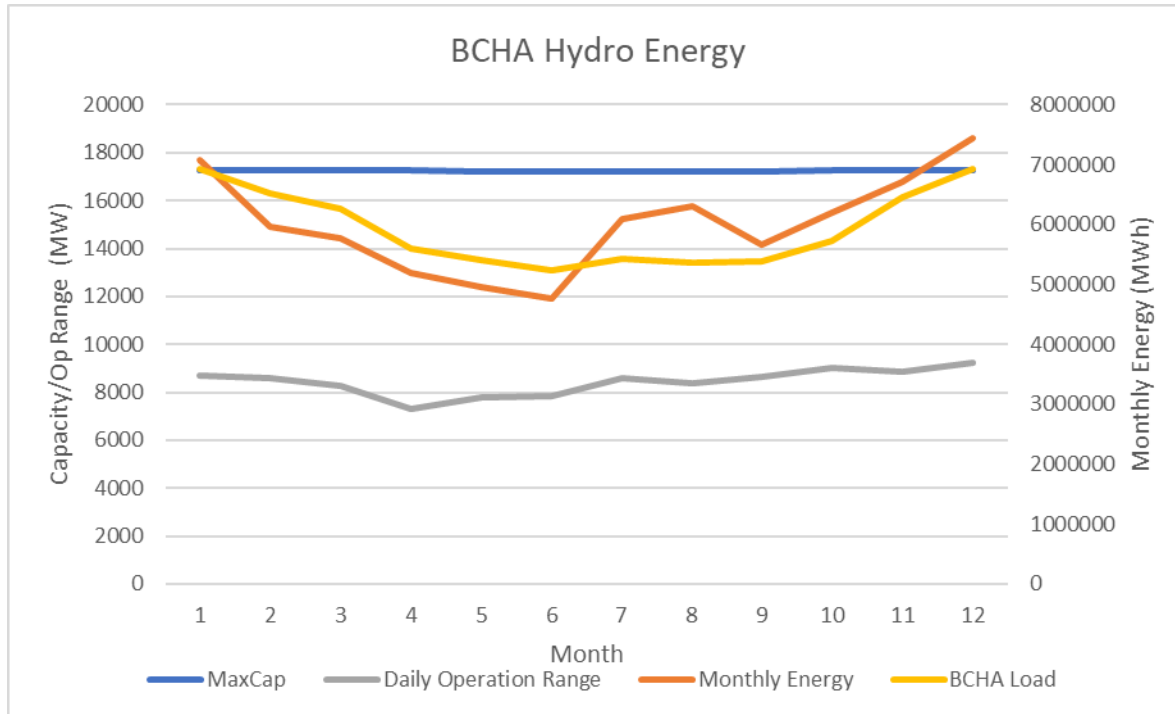
- Weekly Hydro Data, weekly operation range, weekly energy, weekly load
- BPA Hydro generation is significantly over BPA area load in the first half



## ■ BPA Hydro

- How the Weekly Hydro Data developed ?
- The differences of first half hydro energy and second half Hydro energy.

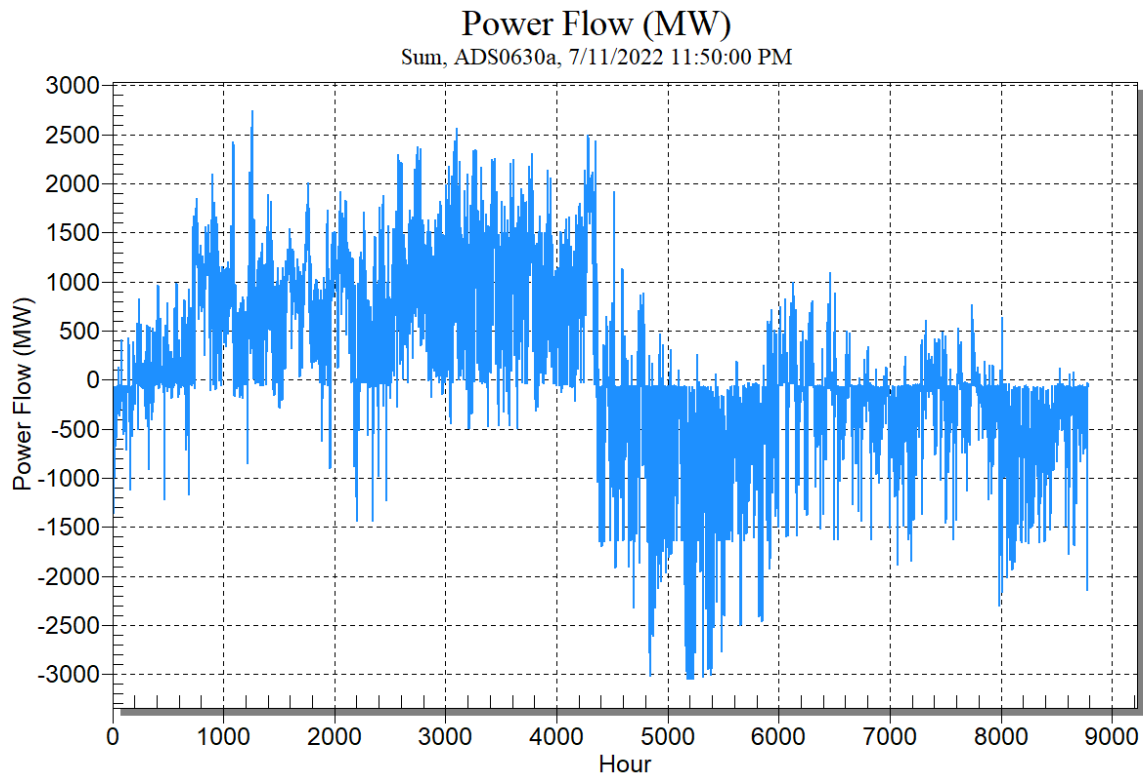
- BCHA Hydro plants
  - Basecase: 235 units with 100% PLF in the case
    - Automatically calculate k factor
  - BCHY30: 235 units with 30% PLF and 70% HTC
    - Automatically calculate k and p factors
  - Monthly energy and operation range are the same to both cases



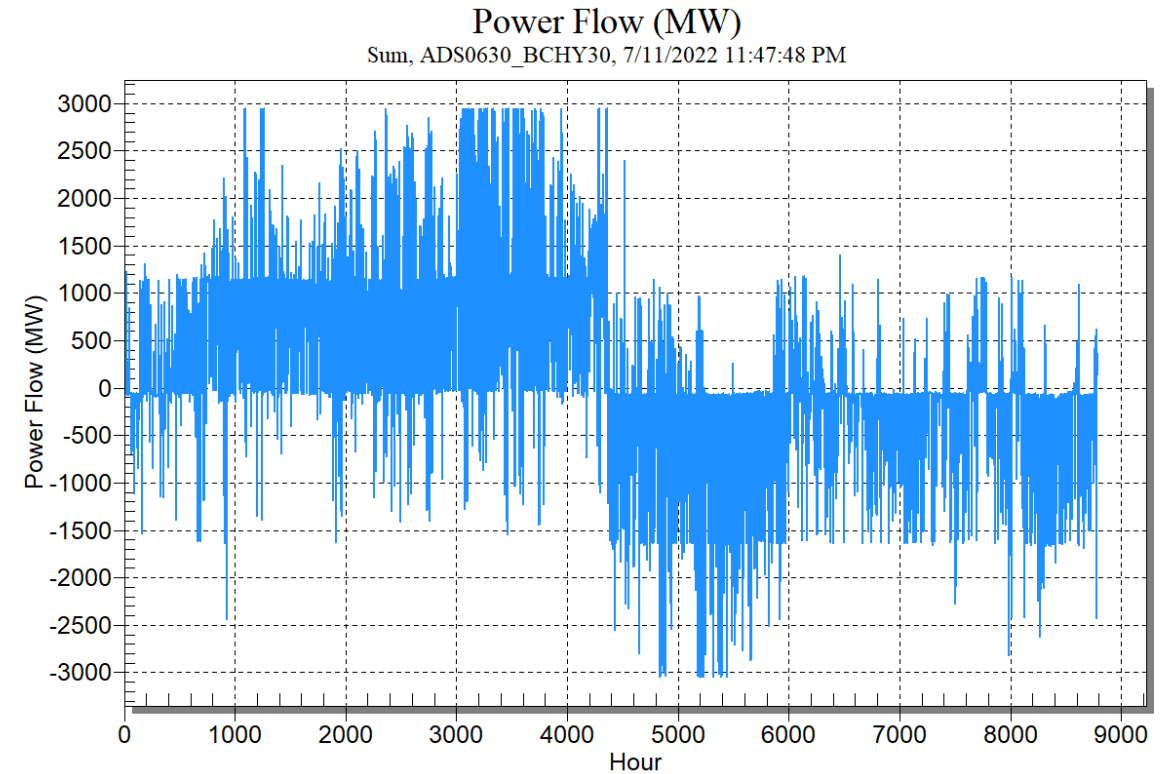
## ■ BC Hydro

- Monthly Hydro Data, monthly operation range, monthly energy, which trace BCHA monthly load
- BC Hydro generation follows hourly BC hydro area load

# Path 3 Northwest to BC



Original Case



BCHA30% PLF + 70% HTC Case



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