



PCDS Meeting

July 24, 2024

Jon Jensen and Anuj Patil

WECC

2034 ADS Updates

- DG-BTM and DR only assigned to BTM = True
- Dev status to align with L&R
- Removed Pth BPA COI
- Opened up PARs to +/- winter rating A
- Updated SunZia representation
- Relocated gens that were submitted in the L&R without a bus number—Kevin, Yi, WECC
- Added/Retired Gens from Yi

SunZia

- Represented as the 2 DC terminals connected to Bus 15080
PINAL_C
- Two gens on each terminal (Firm and Non-firm)
 - Non-firm is anything above the contracted amount to PV of 2,131 MW in case anyone wants to play around with the dispatch cost of non-firm generation
 - Losses accounted for in the shapes
 - Removed the islanded duplicate representation of the SunZia with the individual wind units

COI

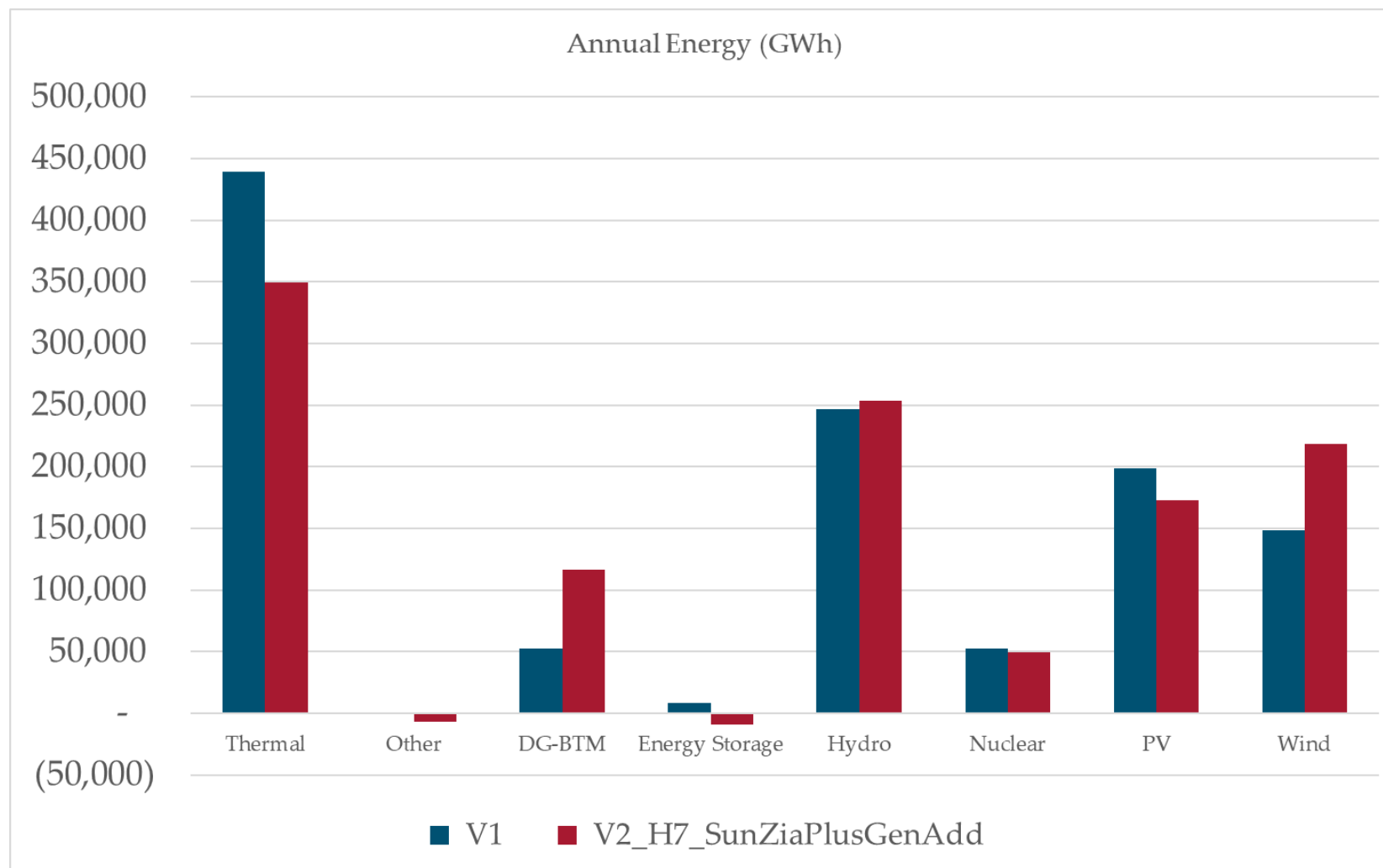
- Path 66 COI deadband fix. Jin found the issue:
 - The COI line is limited because of Pth BPA COI. The Pth BPA COI has the same definition.
 - I deleted Pth BPA COI.
 - One major issue is PAR setting MW upper limit and lower limit are reset by power flow with narrow bandwidth. We need to allow PAR to open the operation rang to its +/- Rate A.
 - Reset the PAR Max/Min MW to +/- Winter rating A
 - This works, implemented and now COI hits limits

PDCI

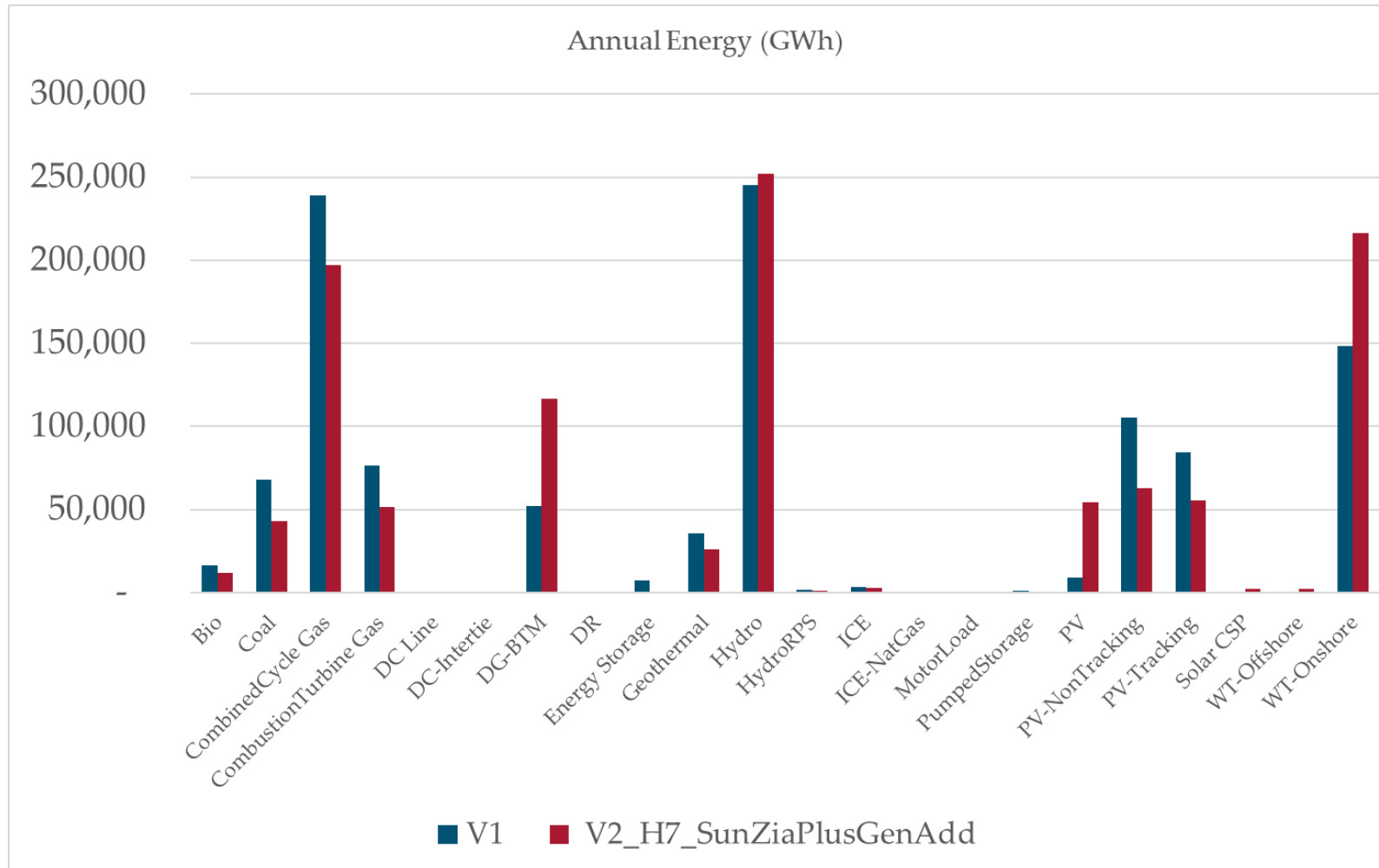
- Path 65 PDCI Deadband. Jin found the issue:
 - Working as modeled
 - For PDCI P65 limit at 2727 MW is because it is limited by the line we monitor
 - Line 26099-26094 at 1600 MVA, with 95% MW rating at 1520 MW
 - Also, we have bi-pole balance at 10 MW. The total injection to PDCI is 3050 MW at the southern end. With transmission losses, the flow is 2727 MW at receiving end

Annual Energy

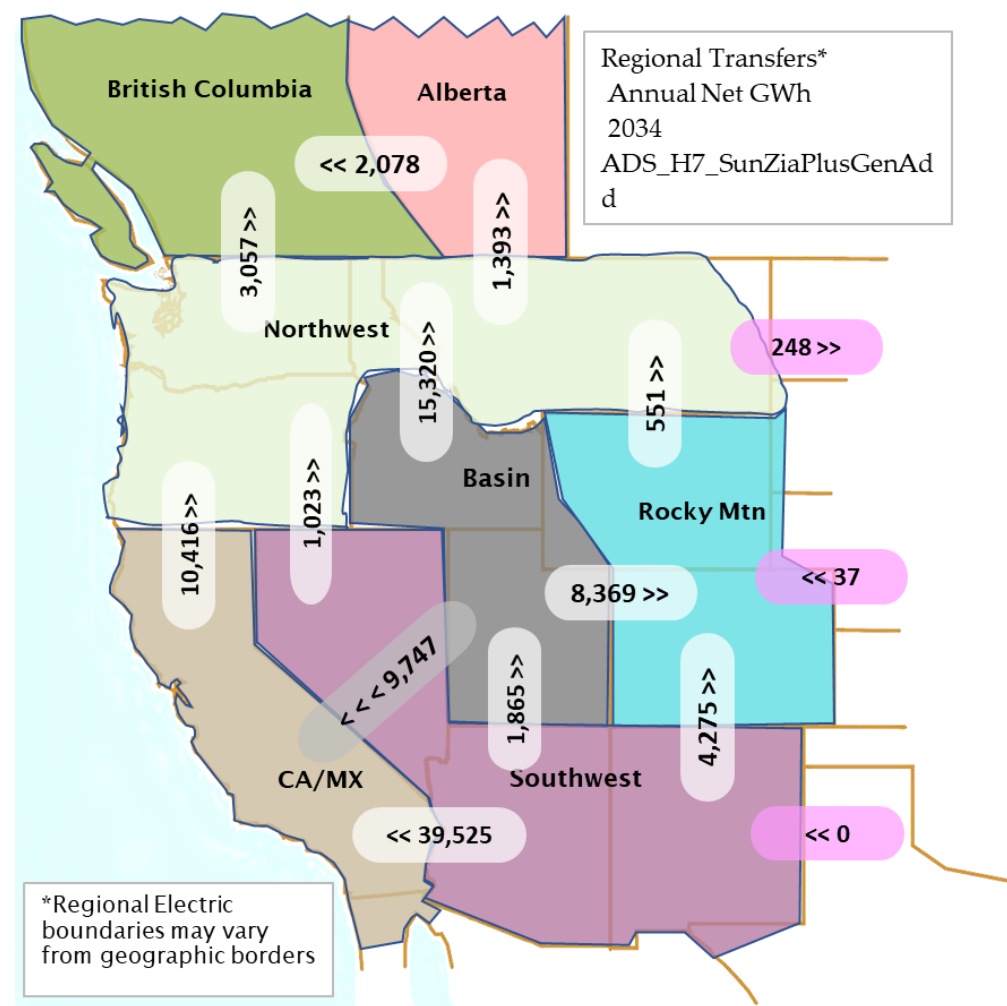
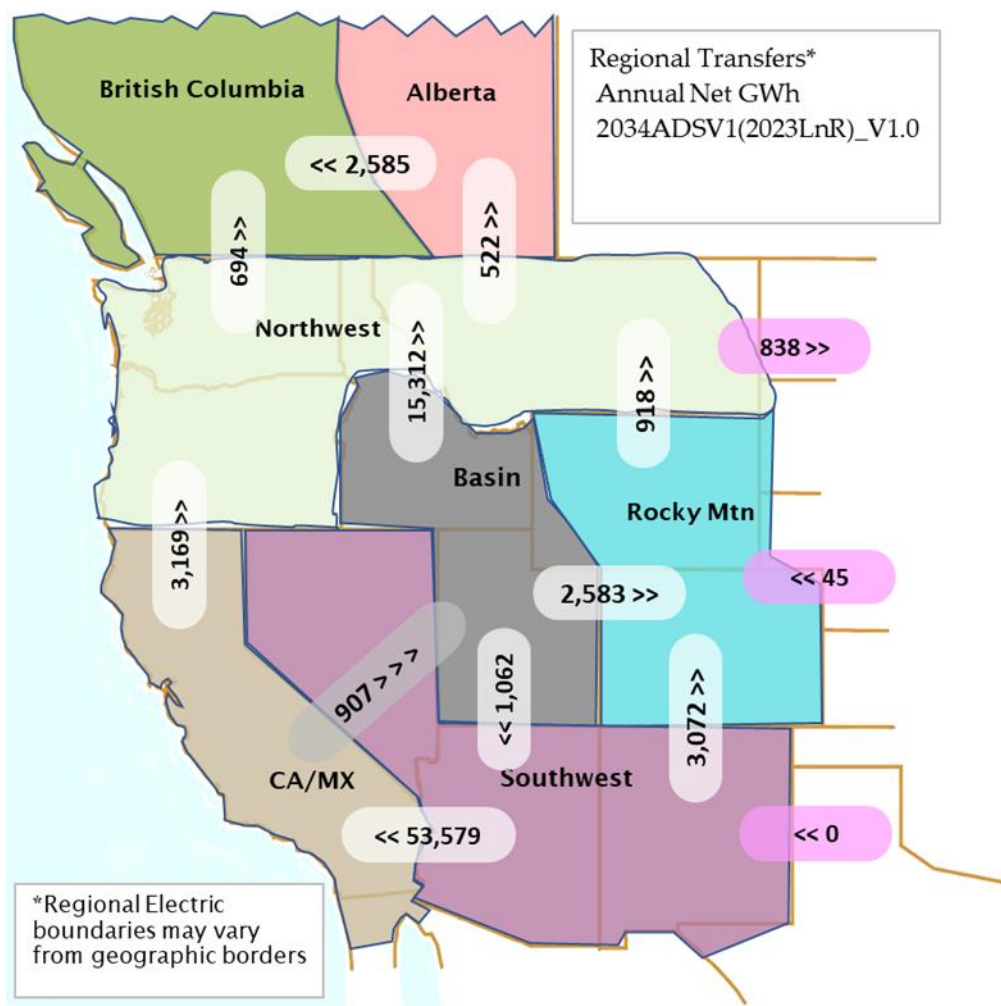
0MWh Unserved load



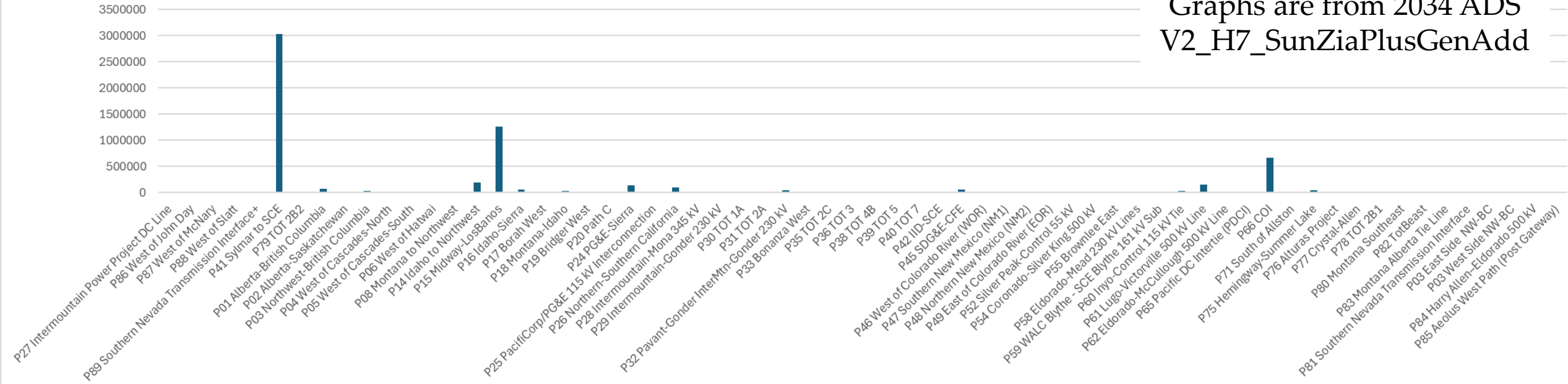
Annual Energy



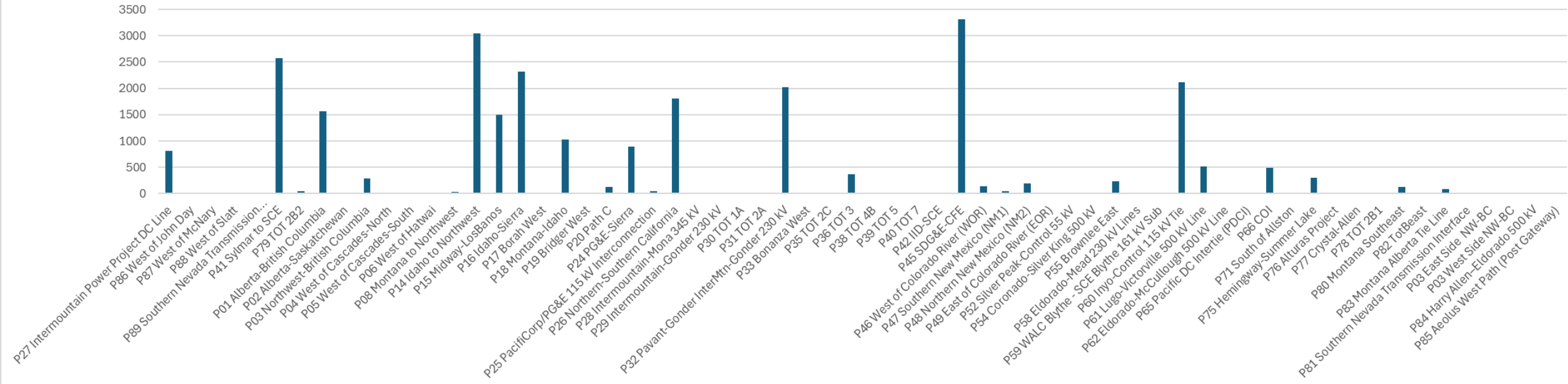
Annual Net Interchange



Congestion Cost (k\$)



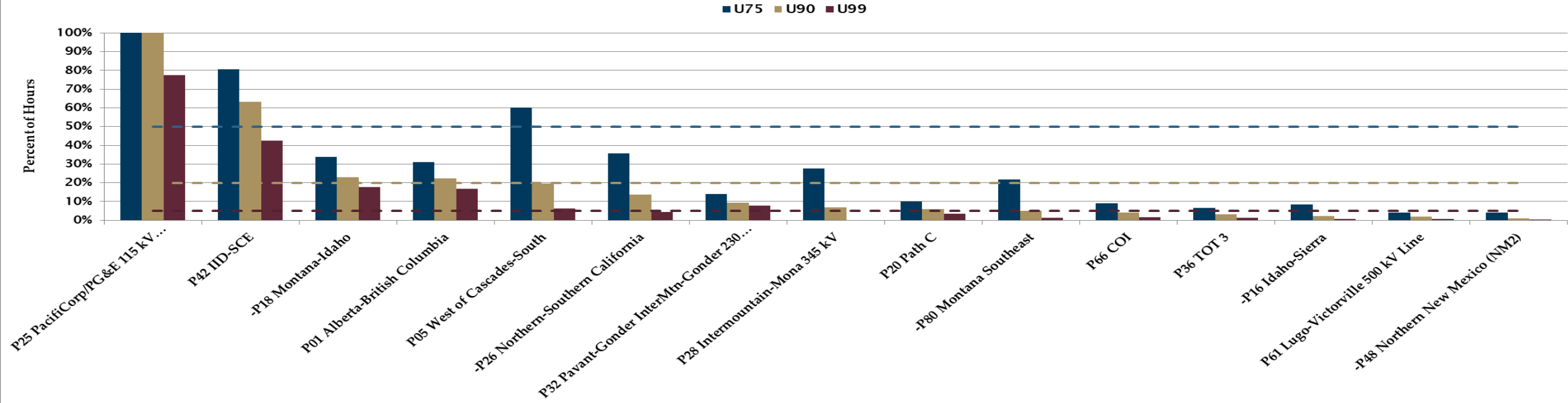
Congestion Hours (Hrs)



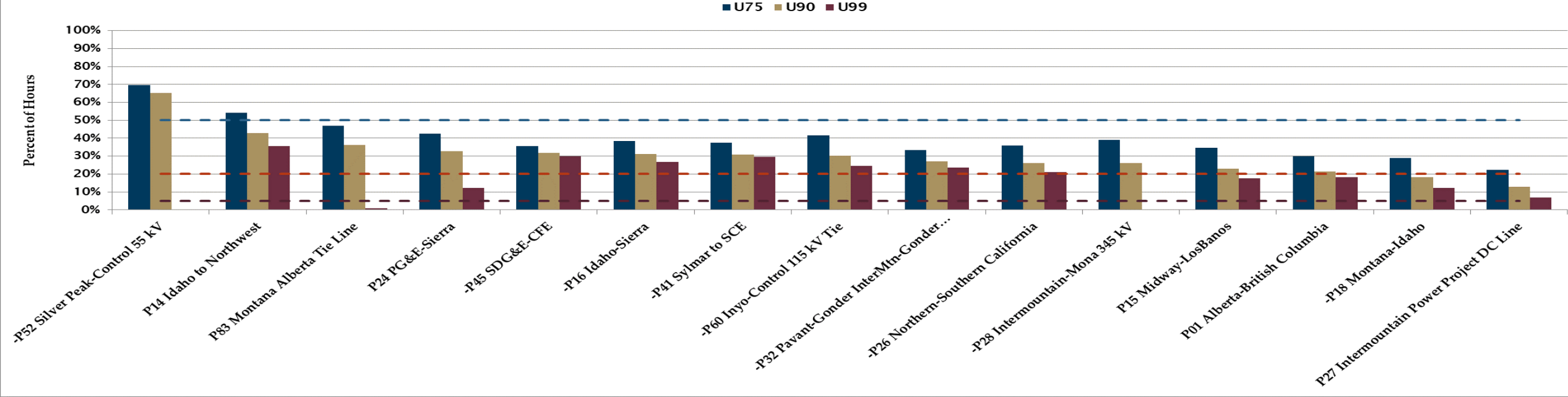
Congestion

- Congestion costs and hours by branch and interface on PCDS team site in the “2034 ADS PCM V2” folder
 - “Congestion” folder

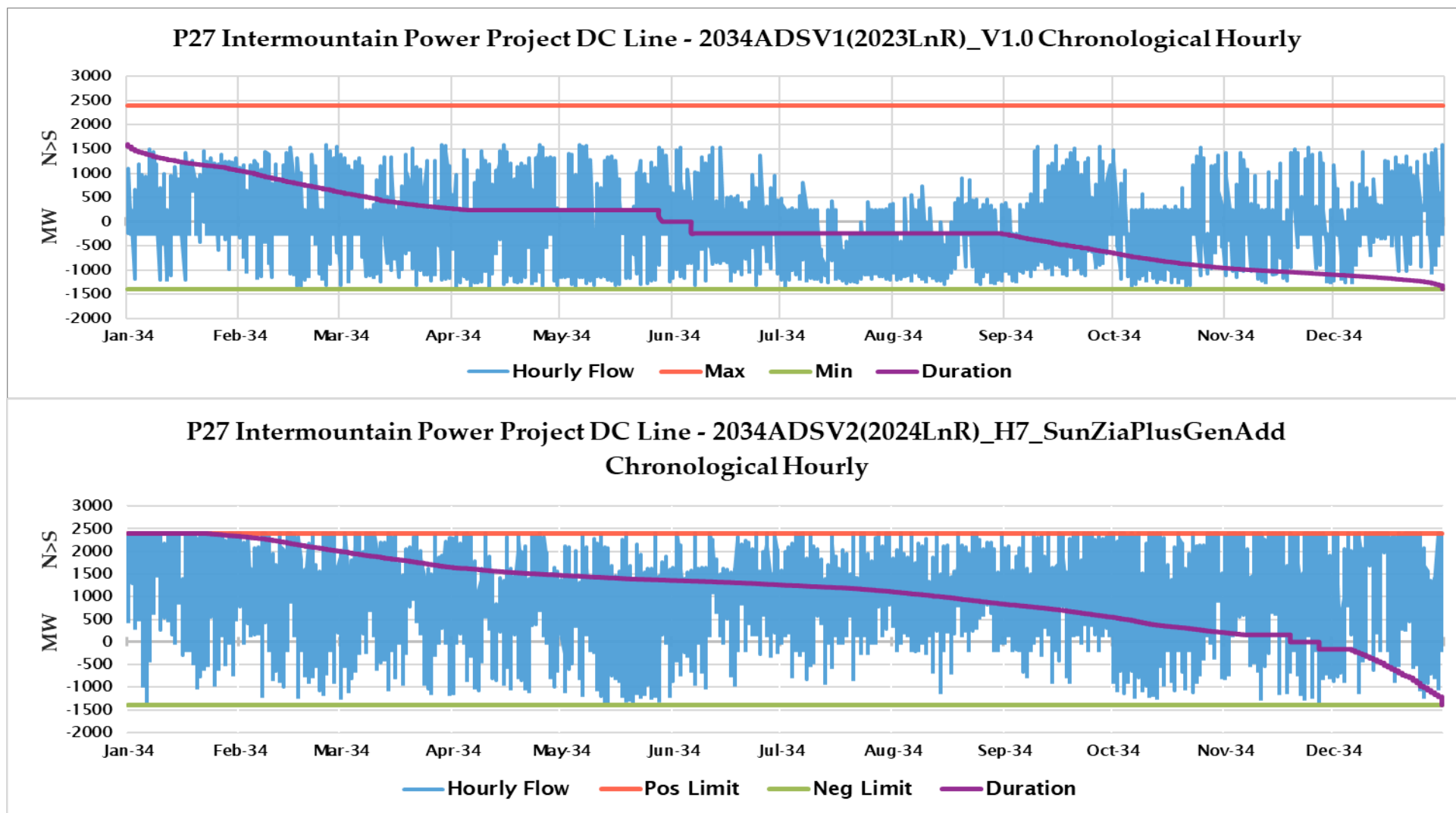
Most Heavily Utilized Paths - 2034ADSV1(2023LnR)_V1.0



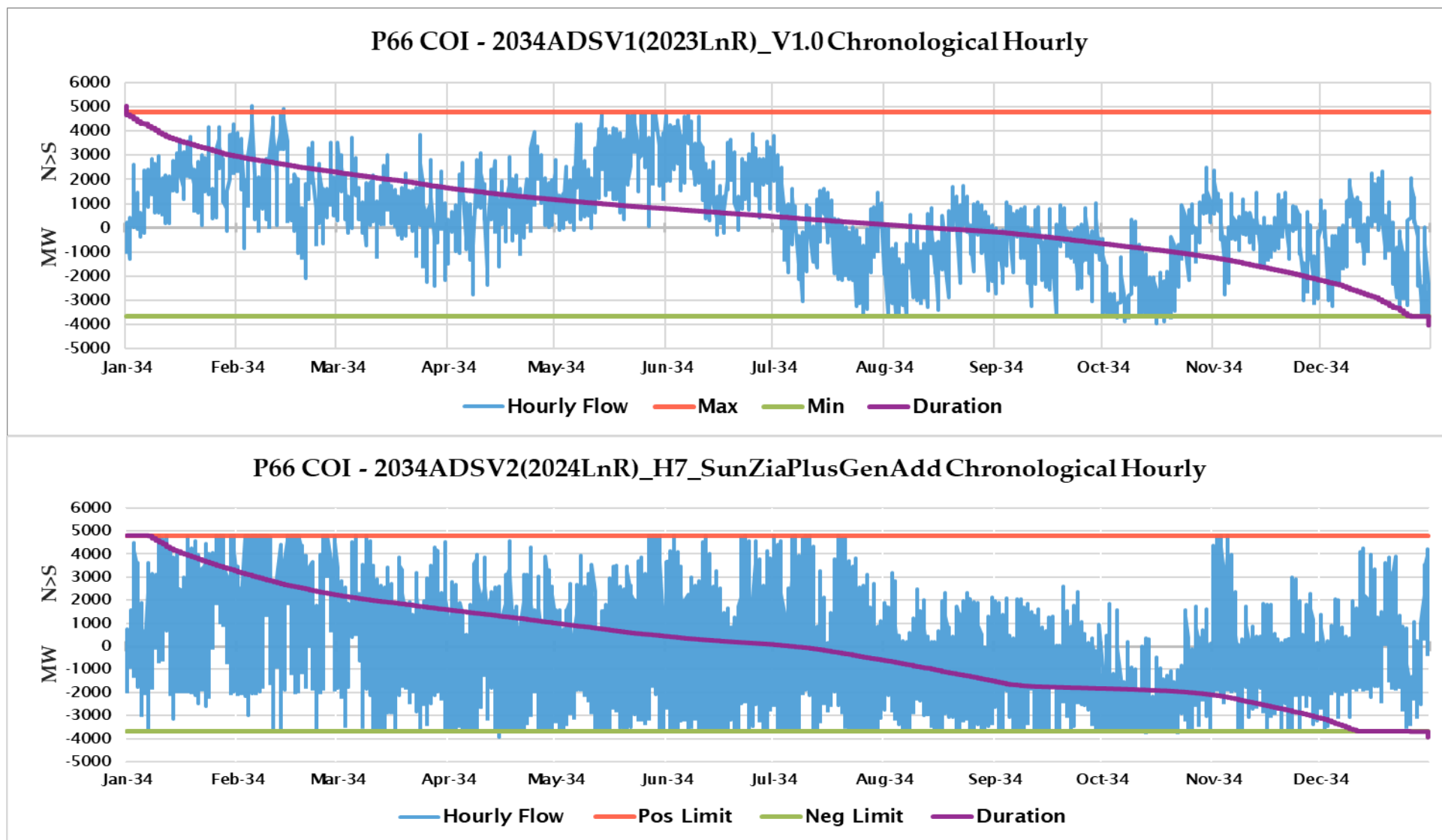
Most Heavily Utilized Paths - 2034ADSV2(2024LnR)_H7_SunZiaPlusGenAdd



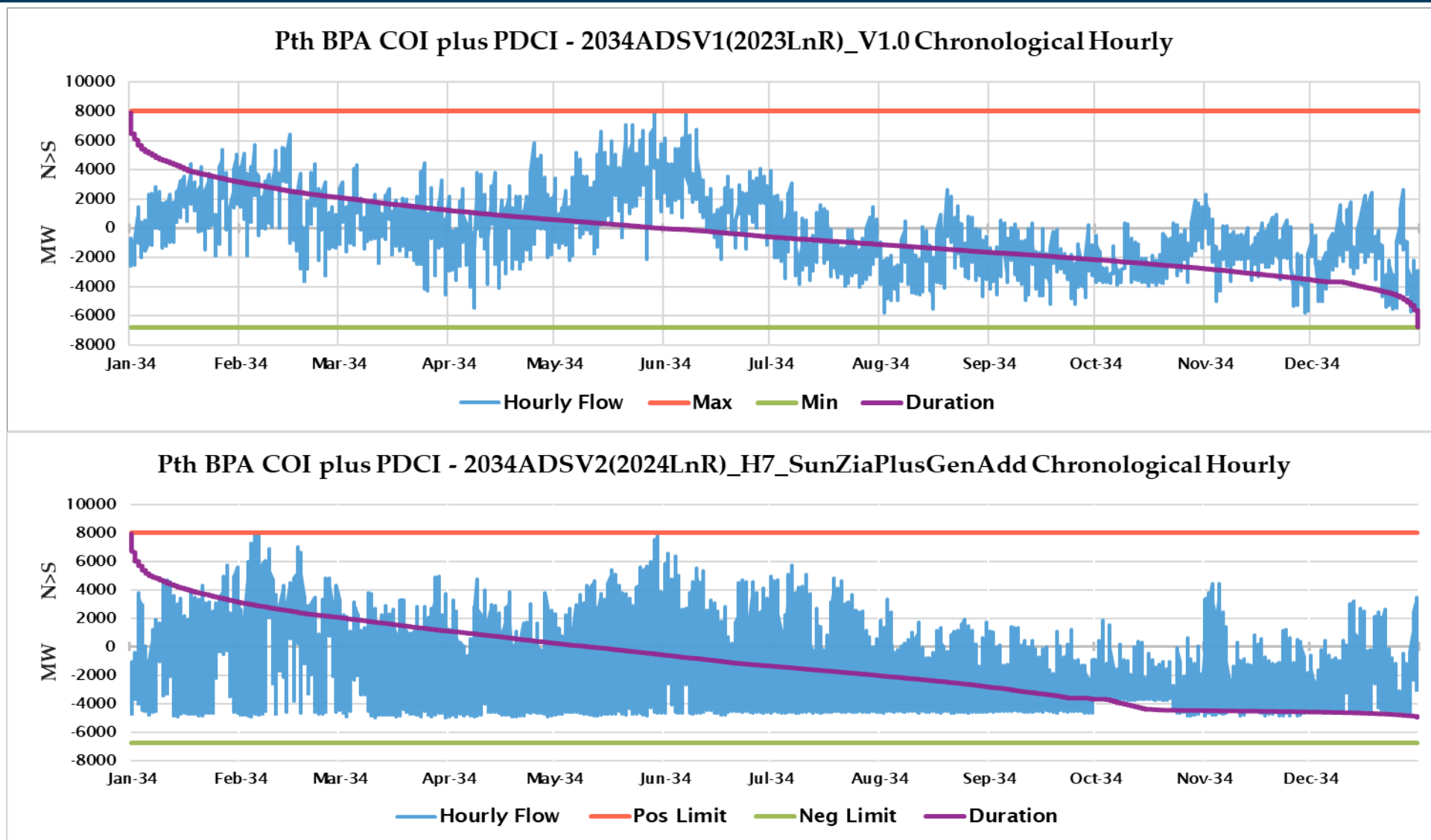
Path 27



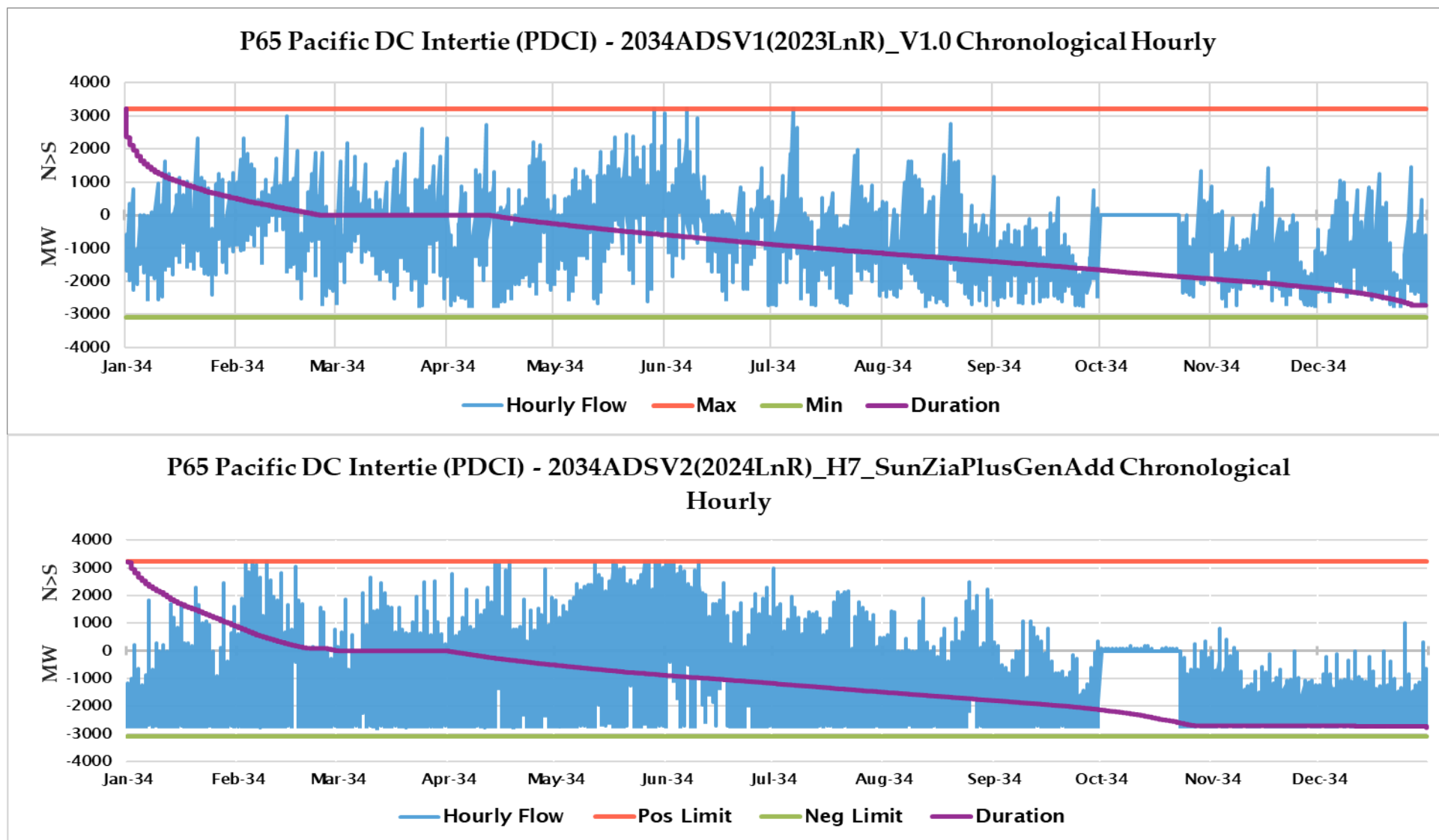
Path 66



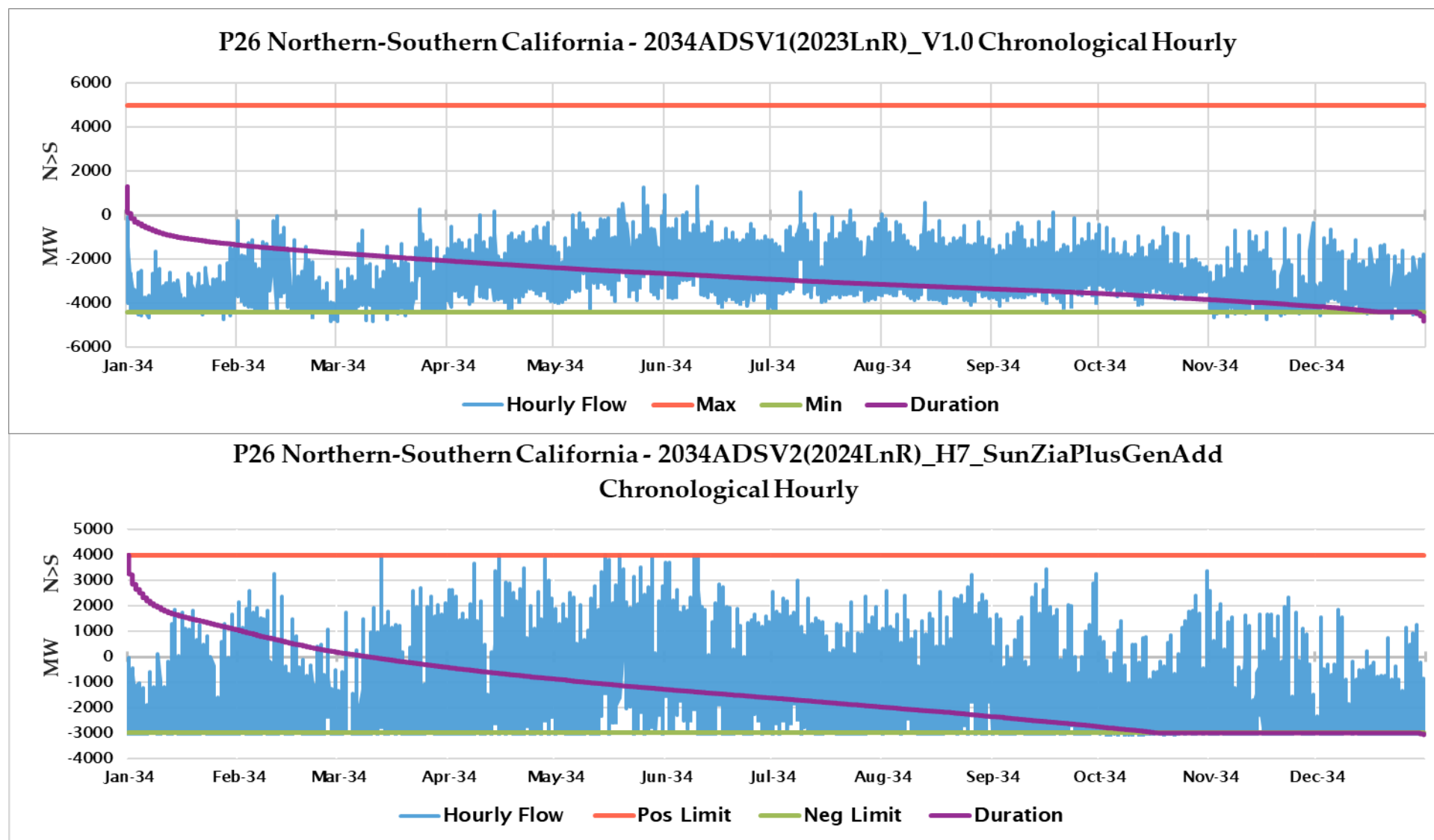
COI+PDCI



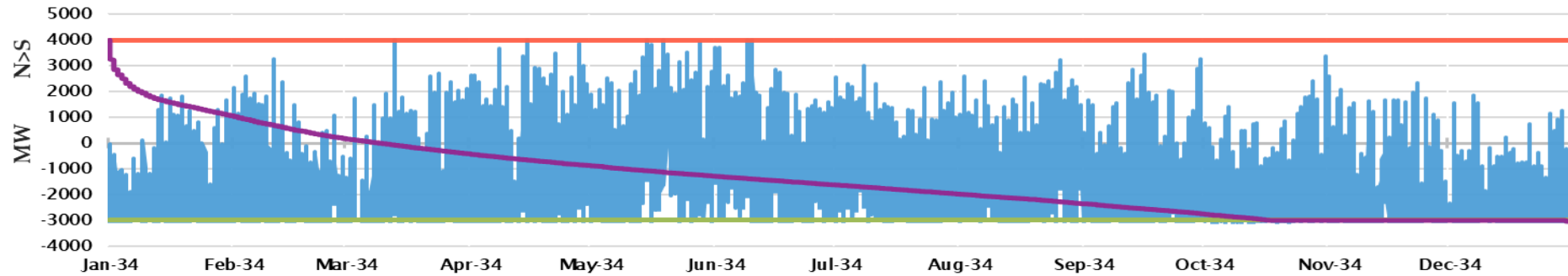
Path 65



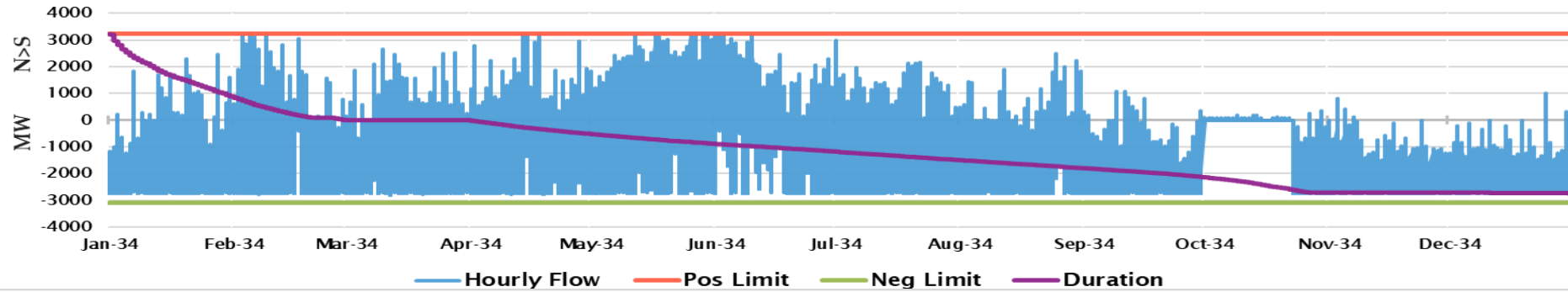
Path 26



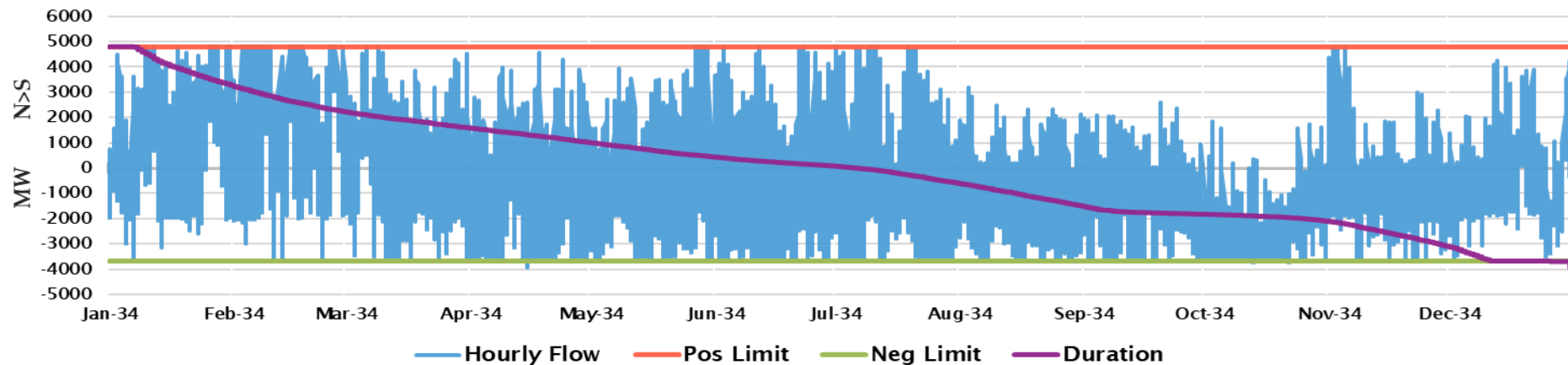
P26 Northern-Southern California - 2034ADSV2(2024LnR)_H7_SunZiaPlusGenAdd
Chronological Hourly



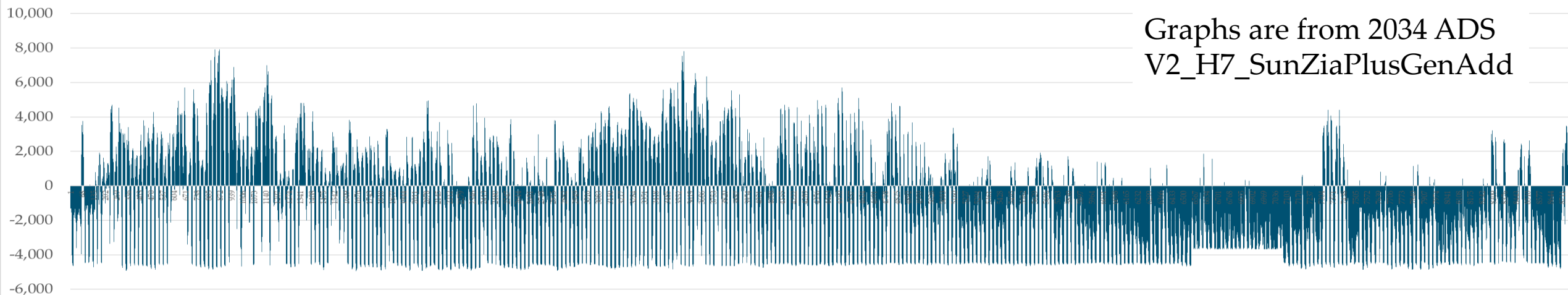
P65 Pacific DC Intertie (PDCI) - 2034ADSV2(2024LnR)_H7_SunZiaPlusGenAdd Chronological
Hourly



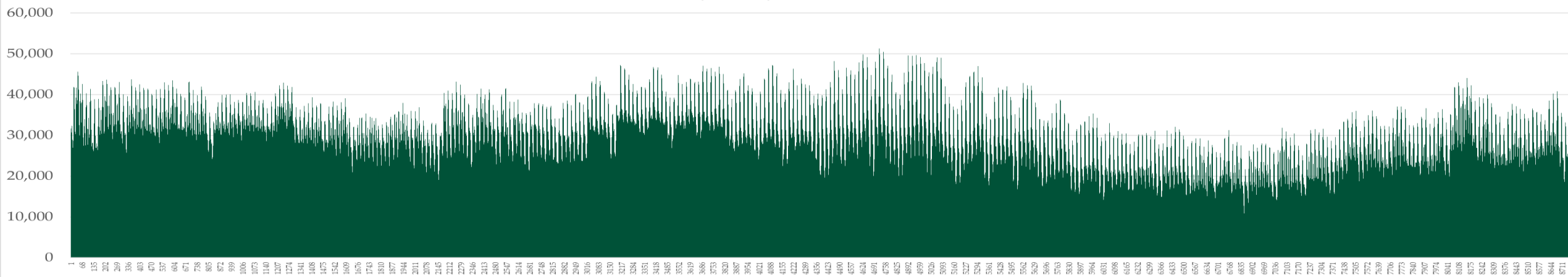
P66 COI - 2034ADSV2(2024LnR)_H7_SunZiaPlusGenAdd Chronological Hourly



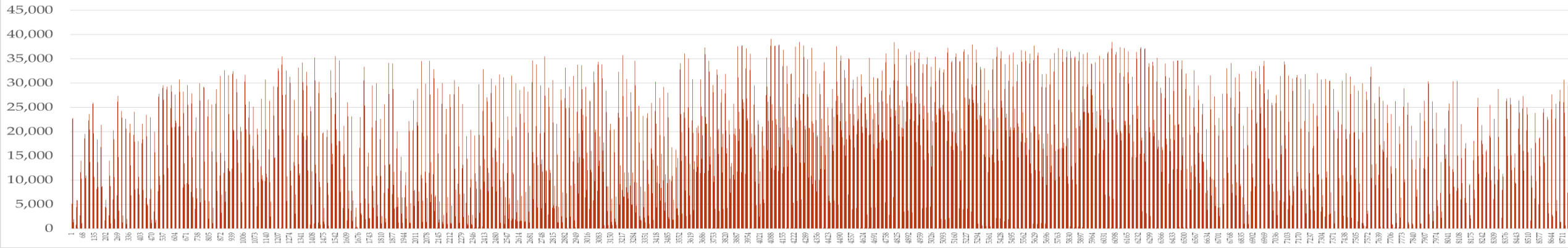
COI+PDCI-Hourly Flow (N->S Positive x-axis)



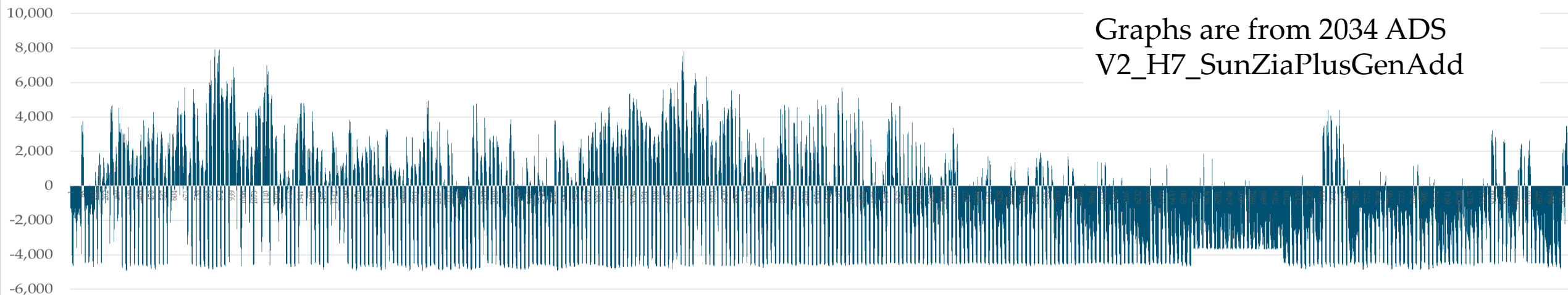
Hydro-Hourly Generation (MWh)



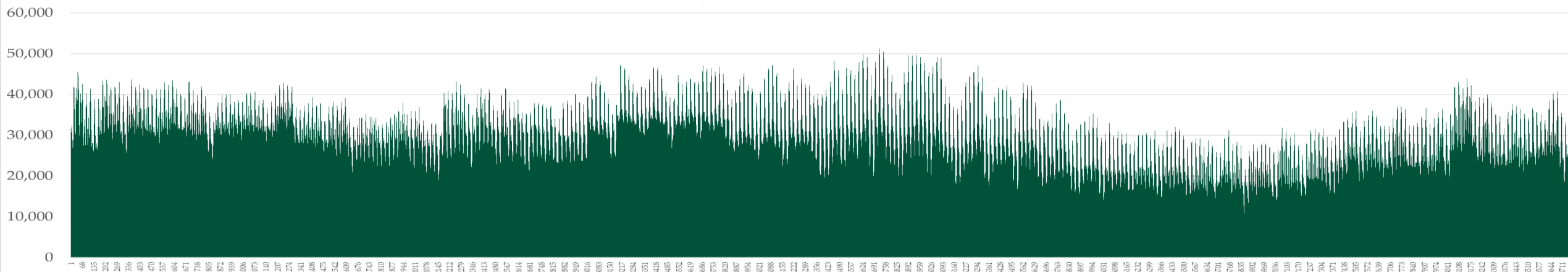
CA Solar-Hourly Generation (MWh)



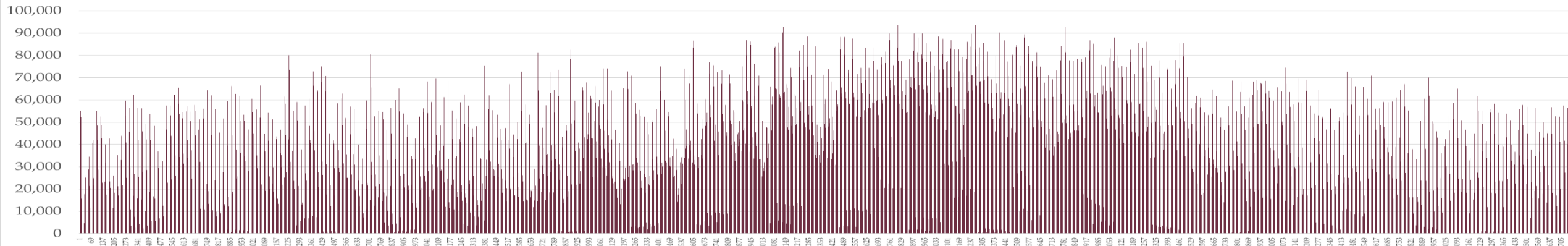
COI+PDCI-Hourly Flow (N->S Positive x-axis)



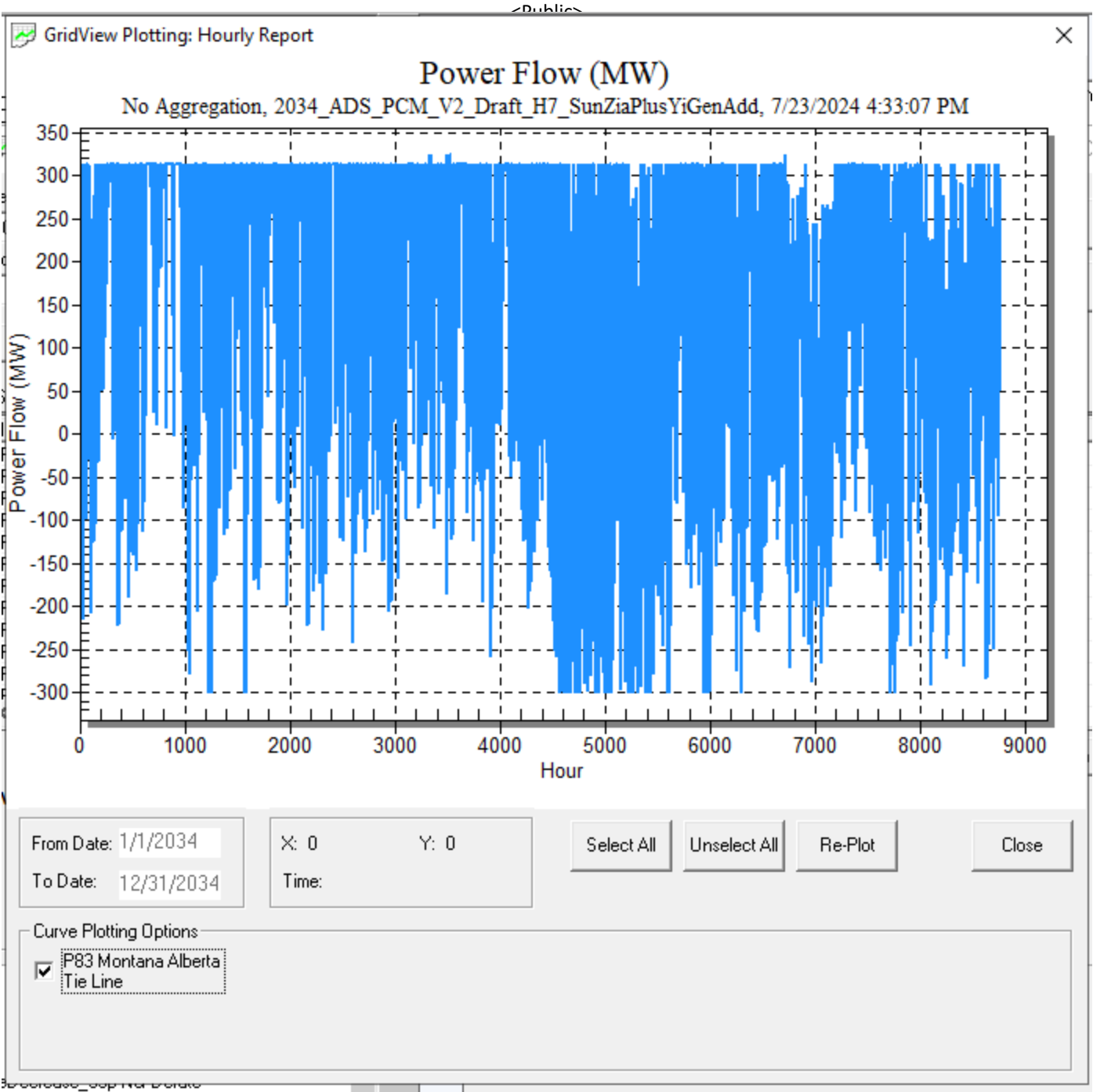
Hydro-Hourly Generation (MWh)



Solar-Hourly Generation (MWh)



Graph is from 2034 ADS
V2_H7_SunZiaPlusGen
Add



Change Cases

Provide the changes cases for TransWest Express and SWIP North

Approval Item

- Approve the 2034 ADS PCM V2 as presented
 - The Change cases for TransWest Express (with high wheeling into PAC) and SWIP North will be provided when complete
 - Check for duplicate path definitions before posting

