PCDS Meeting

August 14, 2024

Jon Jensen and Anuj Patil WECC



WECC

2034 ADS Updates

- Loads comparison between 2034 PCM and 2034 HS1 Power Flow
- Path 26 and 66 violating limits
- MATL review



Loads comparison between PCM and PF

- Comparison of loads for the different areas between the 2034 Heavy Summer case (Power Flow case) and areas from the 2034 ADS (based on the 2024 LnR data).
- ADS peak load was observed at 17:00 on 7/25. ADS Load being considered from this instance for the comparison.
- There are instances of a PF area representing multiple ADS areas (e.g., Northwest, PG&E). The ADS Loads for each corresponding area was added in such cases for the comparison with the PF area.



Loads comparison between PCM and PF

Power Flow Area no.	Power Flow Area Name	Power Flow Load (MW)	Corresponding ADS Areas	ADS Load (MW)	Difference (%)
10	New Mexico	3225.2	PNM	2859	11.35433
11	El Paso	2307.1	EPE	2551	-10.5717
14	Arizona	12233.8	AZPS	10871.30432	11.13714
15	SRP	10326.3	SRP	11568	-12.0246
16	TEP	4224.6	TEPC	4186	0.913696
18	Nevada	7811.7	NEVP	7401	5.257498
19	WAPA-L.C.	1443	WALC	1533	-6.23701
20	MexicoCFE	4961.5	CFE	5070	-2.18684
21	Imperial CA	1421.6	IID	1162	18.26111
22	San Diego	4358.6	CISD	4223	3.111091
24	So Calif	34193.5	CISC, VEA	25164.6692	26.40511
26	LADWP	7651.1	LDWP	7041	7.974017



Loads comparison between PCM and PF

Power Flow Area no.	Power Flow Area Name	Power Flow Load (MW)	Corresponding ADS Areas	ADS Load (MW)	Difference (%)
30	PGandE	32516	BANC, CIPB, CIPV, TIDC	34413.54375	-5.83572
40	Northwest	32489.9	AVA, BPAT, CHPD, DOPD, GCPD, PACW, PGE, PSEI, SCL, TPWR	32342	0.455218
50	BC Hydro	9990	BCHA	8795	11.96196
54	Alberta	11545.4	AESO	11950	-3.50443
60	Idaho	5107.8	IPFE, IPMV, IPTV	5384	-5.40742
62	Montana	2519.3	NWMT	2137	15.17485
63	WAPA UGP	210	WAUW	128	39.04762
64	Sierra	3961.7	SPPC	2341	40.90921
65	PACE	11947.4	PAID, PAUT, PAWY	10057	15.82269
70	PSColorado	11618.8	PSCO	7649	34.16704
73	WAPA R.M.	6002	WACM	5675	5.448184



Loads comparison between PCM and PF

40000 35000 30000 25000 20000 15000 10000 5000 PACE SCHORADO NAPARIN. ur SPE PCandti Northwest Sierra THP Nevada NAPAL.C. Interior CA San Diego So Calif LADAR BCHYdro Alberta Idatro Montaria VARAUCR New Meilo Atilona ELPaso ■ Load (PCM) ■ Load (PF)

2034 Loads Comparison between PCM and PF by Area (MW)



Loads comparison between PCM and PF

Difference in Load between PF and PCM (%)





Loads comparison between PCM and PF

Difference in Load between PF and PCM (MW)



Path 26



Path 26

• On the max limit side, for the hours which are exceeding the limit or very close to it, the flow does not exceed 4000.04 MW.

•	Hour 🔻	Hour 🔻	Flow (MW) 🖵	-	•	Min Limit 👻	Max Limit 💌
P26 Northern-Southern California	1716	1716	3999.992		3/13/2034 10:59	-3000	4000
P26 Northern-Southern California	2506	2506	4000.003		4/15/2034 8:59	-3000	4000
P26 Northern-Southern California	2510	2510	4000.004		4/15/2034 12:59	-3000	4000
P26 Northern-Southern California	2511	2511	3999.992		4/15/2034 13:59	-3000	4000
P26 Northern-Southern California	3234	3234	3999.997		5/15/2034 16:59	-3000	4000
P26 Northern-Southern California	3322	3322	4000.003		5/19/2034 8:59	-3000	4000
P26 Northern-Southern California	3835	3835	4000.001		6/9/2034 17:59	-3000	4000
P26 Northern-Southern California	3859	3859	3999.999		6/10/2034 17:59	-3000	4000



Path 26

- On the min limit side, there are 735 hours where the flow is between -3000 MW and -3000.013.
- There are 47 hours during which the flow dips below -3001 MW. All of these are occurring during October.

	Hour 🔻	Flow (MW)	•	Min Limit 💌	Max Limit 💌
P26 Northern-Southern California	6758	-3066.745	10/9/2034 12:59	-3000	4000
P26 Northern-Southern California	6757	-3045.838	10/9/2034 11:59	-3000	4000
P26 Northern-Southern California	6997	-3041.922	10/19/2034 11:59	-3000	4000
P26 Northern-Southern California	6565	-3033.442	10/1/2034 11:59	-3000	4000
P26 Northern-Southern California	6660	-3033.442	10/5/2034 10:59	-3000	4000
P26 Northern-Southern California	6615	-3033.44	10/3/2034 13:59	-3000	4000
P26 Northern-Southern California	6685	-3033.44	10/6/2034 11:59	-3000	4000
P26 Northern-Southern California	6904	-3033.44	10/15/2034 14:59	-3000	4000
P26 Northern-Southern California	7071	-3033.44	10/22/2034 13:59	-3000	4000
P26 Northern-Southern California	6996	-3033.439	10/19/2034 10:59	-3000	4000



Path 66



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Path 66

• On the max limit side, for the hours which are exceeding the limit or very close to it, the flow does not exceed 4800.12 MW.

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*	Hour 🔻	Flow (MW)	-	v	Min Limit 💌	Max Limit 💌
P66 COI	949	4800.012		2/9/2034 11:59	-3675	4800
P66 COI	3908	4800.012		6/12/2034 18:59	-3675	4800
P66 COI	7411	4800.012		11/5/2034 17:59	-3675	4800
P66 COI	950	4800.011		2/9/2034 12:59	-3675	4800
P66 COI	1091	4800.01		2/15/2034 9:59	-3675	4800
P66 COI	1342	4800.009		2/25/2034 20:59	-3675	4800
P66 COI	3574	4800.009		5/29/2034 20:59	-3675	4800



Path 66

- On the min limit side, there are 119 hours where the flow is between -3675 MW and 3675.037.
- 130 hours during which the flow dips below -3679 MW.
 Most of these are occurring during October except for a couple of hours in April where the flow was observed to be -3939 and -3771.

-	Hour 💌	Flow (MW)	•	Min Limit 💌	Max Limit 💌
P66 COI	2511	-3939.507	4/15/2034 13:59	-3675	4800
P66 COI	2510	-3771.303	4/15/2034 12:59	-3675	4800
P66 COI	6879	-3713.94	10/14/2034 13:59	-3675	4800
P66 COI	6854	-3713.934	10/13/2034 12:59	-3675	4800
P66 COI	6758	-3713.929	10/9/2034 12:59	-3675	4800
P66 COI	6878	-3713.928	10/14/2034 12:59	-3675	4800
P66 COI	6757	-3701.746	10/9/2034 11:59	-3675	4800
P66 COI	6997	-3699.44	10/19/2034 11:59	-3675	4800
P66 COI	6616	-3694.536	10/3/2034 14:59	-3675	4800
P66 COI	6637	-3694.53	10/4/2034 11:59	-3675	4800
P66 COI	6663	-3694.527	10/5/2034 13:59	-3675	4800



MATL Review



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