

August 18, 2006

MEMORANDUM

TO: July 24 Temperature Event Review Group

FROM: Wally Gibson

SUBJECT: IPP Generation Levels During July 24 Temperature Event

INTRODUCTION

One part of the question why the Northwest appeared to be suffering from tight power supplies on July 24, while our overall assessments showed the region extremely surplus, focused on uncontracted Northwest IPP generation. We include it in our surplus calculations. What was it doing on July 24?

DISCUSSION

I reviewed Bonneville transmission schedule data for July 24 (available on their web site). The following table shows the hourly schedules for the peak load hours for most of the major IPP generators without full firm power sales contract coverage to Northwest utilities. The schedules are only on the Bonneville transmission system. This is significant because Bonneville only owns 59 percent of COI, so the data do not include any IPP generation that might have been indirectly remarketed on the PGE, PAC or other owners' shares of COI by their marketing arms. The information in the table includes all schedules, both to Northwest sinks and to California or other extra-regional sinks. I have also extracted the subset of schedules that sink in clearly identifiable California entities from the same data. This information is summarized on the bottom line of the table.

This shows that these generators were operating at or close to full output levels (one Chehalis unit was on forced outage), which makes sense given the high power prices experienced in the Northwest and in the California ISO. It also suggests that much of the generation was scheduled to Northwest entities. The data do not show whether any of the schedules to Northwest entities were in turn scheduled on to serve California loads though it is highly probable.

NW IPP Generator	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00
Chehalis total	225	225	225	225	225	225	225	225	225
Centralia total	1405	1424	1428	1414	1422	1425	1411	1079	1164
Fredrickson total	264	259	265	265	265	265	265	265	265
Goldendale total	235	235	235	235	235	235	235	235	235
Hermiston total	532	532	532	532	531	531	533	531	532
Klamath Falls total	88	88	88	88	88	88	88	88	88
Klamath Generator total	455	455	455	455	455	455	455	455	455
IPP Generation total	3204	3218	3228	3214	3221	3224	3212	2878	2964
Total to California	1542	1757	1761	1747	1755	1758	1744	1454	1566

For background, the next table shows the schedules from all entities (not just the IPPs) sinking in California and Northern Nevada (i.e., directly connected to COI or PDCI).

NW to Cal/No. Nev. on BPA Tx	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00
To ISO	3532	3961	3816	3952	4096	4019	4162	3923	4234
To LA	363	479	509	536	560	535	416	383	373
To SMUD	322	573	449	408	408	408	409	323	323
To SPP	285	300	300	300	300	300	300	300	300
To TID	73	73	88	73	63	53	53	53	0
To Redding	35	35	35	35	35	35	35	35	35
To NCPA	40	54	54	40	40	40	40	40	40
To Modesto	157	150	150	163	163	162	162	160	163
To Burbank	18	18	18	18	18	18	18	18	18
Total to California/Nevada	4825	5643	5419	5525	5683	5570	5595	5235	5486

Finally, the last table shows the intertie ownership shares and shows that Bonneville’s share of the interties was full or close to full. The table shows OTCs most common for the relevant peak hours (there was some variation from hour to hour). COI ownership shares are from the Path Rating catalog (with “Other” increased by 0.001 to add to 1.000).

	Share	COI	PDCI	Total
BPA	0.588	2693	1	5683
PAC	0.083	380	0	380
PGE	0.177	811	0	811
Other	0.152	696	0	696
OTC		4580	2990	7570

The Intertie (combined COI plus PDCI) was heavily loaded during these hours, as shown by the first graph below. This loading was limited by loadings on upstream internal BPA paths (one of them, North of John Day, is also shown below).



