Bear River Hydroelectric Project
Federal Energy Regulatory Commission
Project No. 20

Oneida Development
Water Year 2011 Operations Report

Submitted to:

Idaho Department of Environmental Quality

Prepared by:

PACIFICORP ENERGY
A DIVISION OF PACIFICORP

December 12, 2011

1.0 INTRODUCTION

This report fulfills the requirements of paragraph 4 of the 401 Water Quality Certification dated 23 June 2003 and Appendix A of the FERC license for FERC Project No. 20 issued 22 December 2003. The precise requirements are:

> *"At the November meeting of the Bear River Commission, PacifiCorp shall provide IDEQ a report for the preceding water year that describes PacifiCorp's operation of the Oneida Project. The report shall set forth a record showing the times during the preceding water year when PacifiCorp released water for power production, flood control, irrigation delivery, facility maintenance or for other reasons. The annual report shall be delivered to IDEQ each year during the term of the New License."*

2.0 RESERVOIR INFLOW, RELEASES AND ELEVATION

Reservoir releases were made to pass inflow for power generation and for flood control, with no deliveries for irrigation this year (Figure 1). Large changes in reservoir storage (Figure 2) were made in October and the spring. In October the reservoir was low during the maintenance outage to allow recoating and repair of the spillway gates on the concrete dam section. In the spring it was lowered as a buffer to changing inflows during snowmelt inflow. During the drawdowns all operations remained essentially normal and the minimum flow and ramp rate requirements were met.

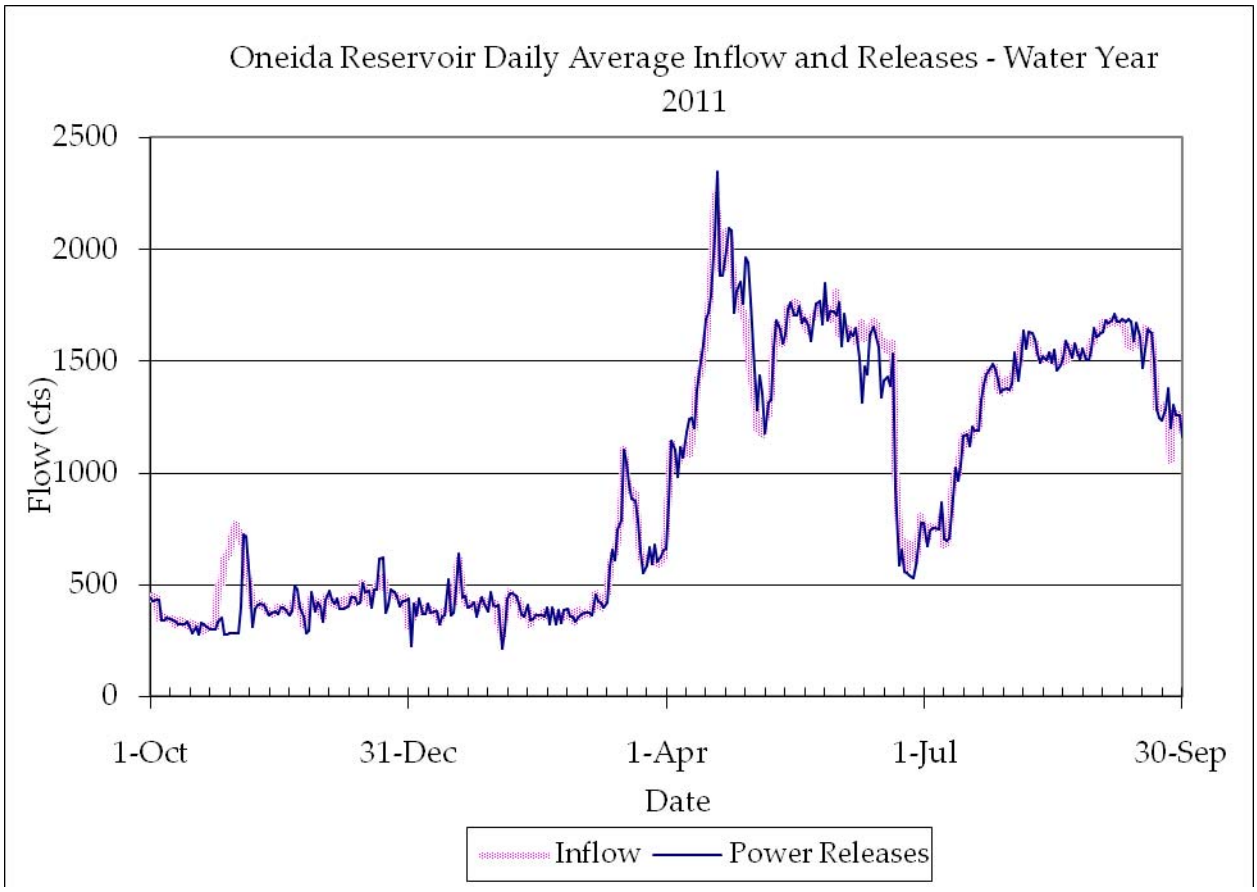

Figure 1. Daily average reservoir inflow and power releases. Flows are in cubic feet per second (CFS).

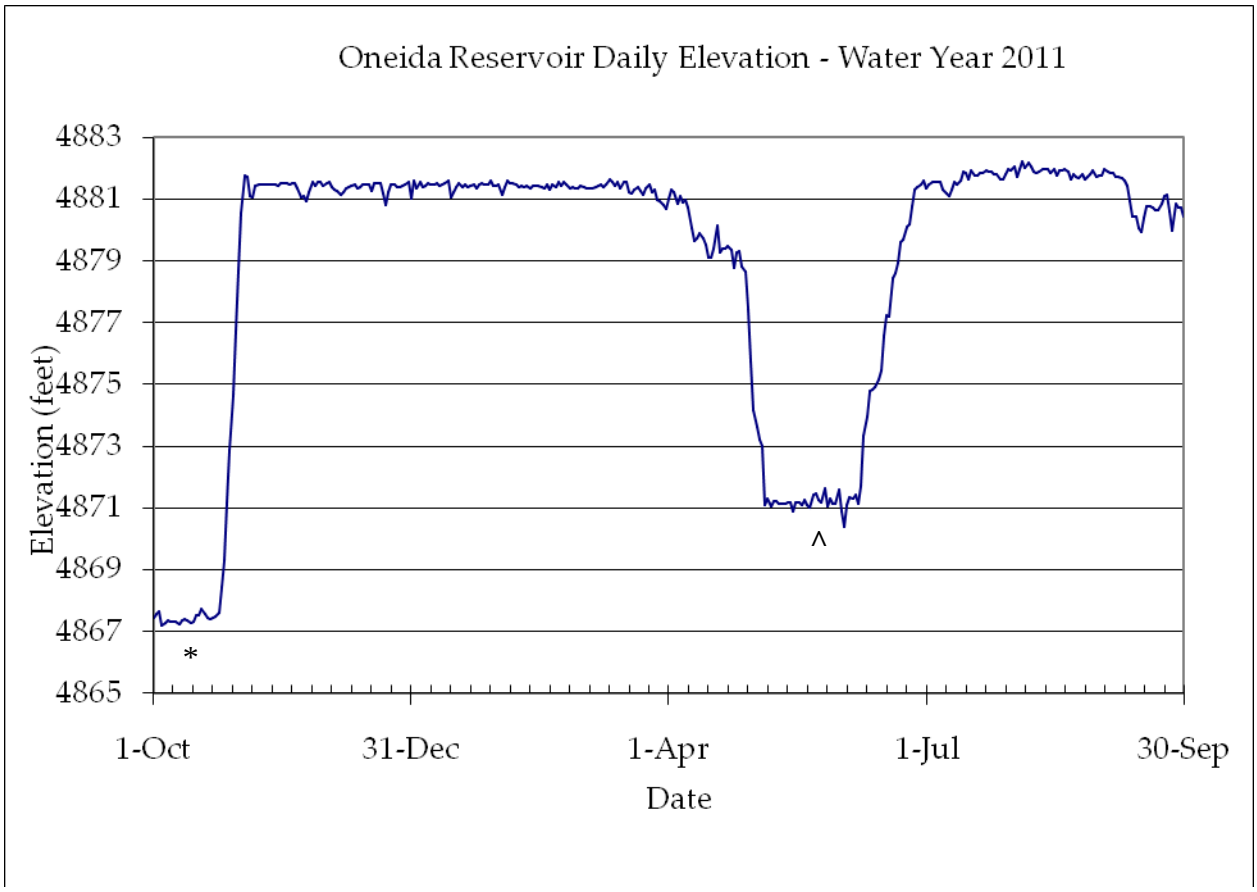

Figure 2. Oneida reservoir elevations. The asterisk (*) denotes the beginning of the period when the reservoir was refilled after the spill gate recoating and repair work. Before refilling, the elevation was held at approximately 4867.5'. The carat (^) denotes a period when the elevations were held lower to provide a buffer against possible high runoff due to elevated snowpack. Elevations are in feet above mean sea level.

3.0 DAILY FLUCTUATIONS

Daily fluctuations are summarized by the plots and tables of statistics of daily stage values that are recorded every 15-mintues. The statistics used are average, maximum, and minimum. This is a concise way of demonstrating the daily fluctuations. Figures 3 and 4 show the average stage for a day as a black square with a line spanning the range from the minimum to the maximum.

Because Oneida was used for electrical grid stabilization in the 1980s, frequent and large flow fluctuations on the order of minutes were common, and this is the baseline against which current operations are measured. This annual report documents the dramatic reduction in flow fluctuations compared with this baseline.

Appendix A provides the record of purpose for reservoir releases on a daily time scale.

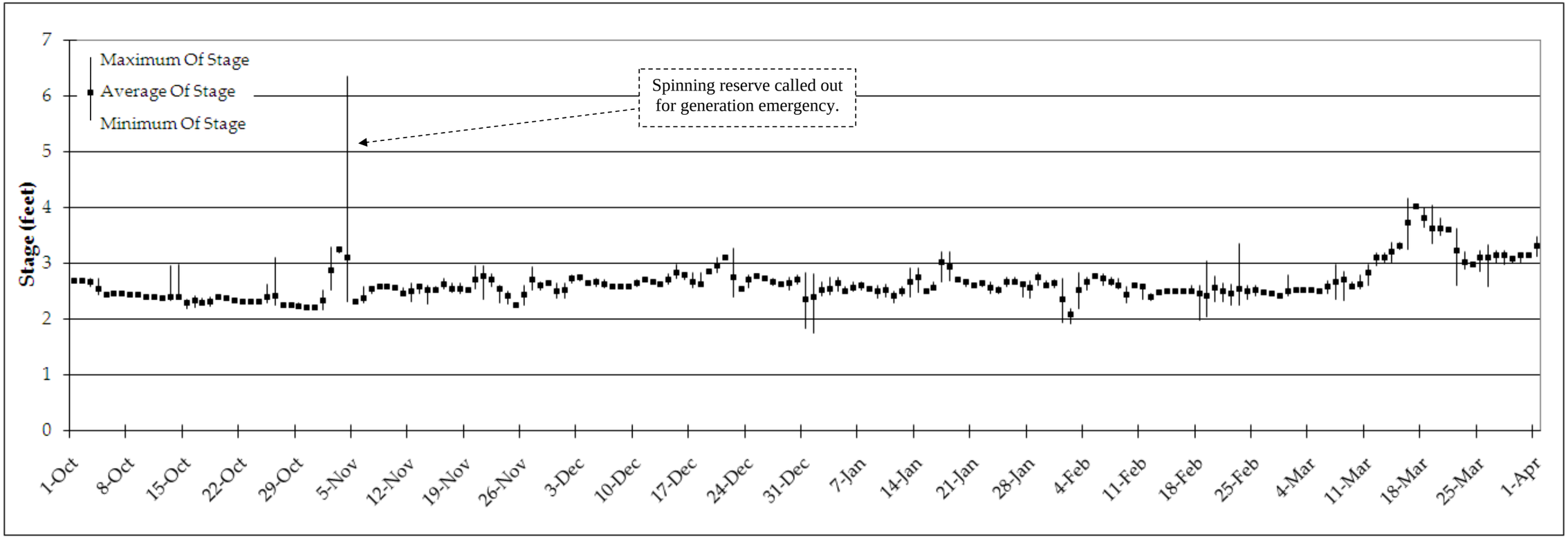

Figure 3. October 2010 through March 2011 daily average, maximum and minimum stage below Oneida. Precise values for each day and explanations are provided in Appendix A. Corresponding flows are shown in Figure 1.

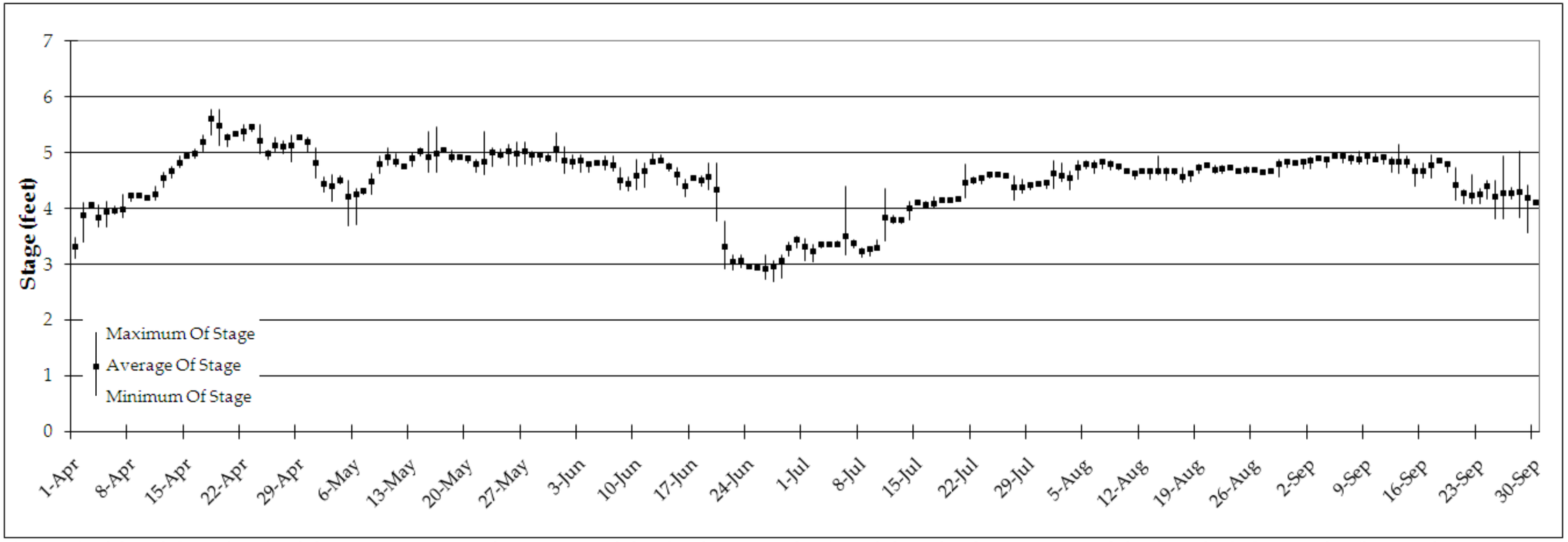

Figure 4. April through September 2011 daily average, maximum and minimum stage below Oneida. Precise values for each day and explanations are provided in Appendix A. Corresponding flows are shown in Figure 1.

4.0 RAMPING RATE ANALYSIS

An analysis of the maximum daily ramping rate is shown in Appendix A. The table summarizes the maximum stage decrease in any 15 minute period in each day. There are no events when the 15-minute down-ramping stage change exceeded 2.0 feet per 15 minutes as specified by the analysis accepted by the Federal Energy Regulatory Commission in the Bear River Operations and Compliance Plan approved April 7, 2005 after review by the Environmental Coordination Committee which includes the Idaho Department of Environmental Quality.

Appendix A. Daily Summary of Gage Height, Primary Purpose for Water Releases and Daily Maximum Down-Ramping Rate

Date	Maximum Of Stage	Minimum Of Stage	Average Of Stage	Maximum 15-minute Down-Ramping Rate	Comment
1-Oct	2.72	2.65	2.68	0.05	Power production
2-Oct	2.72	2.64	2.68	0.01	Power production
3-Oct	2.73	2.59	2.67	0.11	Power production
4-Oct	2.73	2.43	2.55	0.10	Power production
5-Oct	2.44	2.43	2.44	0.01	Power production
6-Oct	2.47	2.43	2.45	0.01	Power production
7-Oct	2.46	2.45	2.46	0.00	Power production
8-Oct	2.45	2.43	2.44	0.01	Power production
9-Oct	2.43	2.42	2.43	0.01	Power production
10-Oct	2.42	2.39	2.40	0.01	Power production
11-Oct	2.39	2.38	2.38	0.00	Power production
12-Oct	2.38	2.37	2.38	0.01	Power production
13-Oct	2.95	2.33	2.40	0.30	Power production - maintenance to check governor and run air out of the lines.
14-Oct	2.98	2.36	2.39	0.41	Power production - maintenance to check governor and run air out of the lines.
15-Oct	2.36	2.18	2.28	0.11	Power production
16-Oct	2.41	2.21	2.34	0.03	Power production
17-Oct	2.37	2.24	2.29	0.08	Power production
18-Oct	2.40	2.24	2.31	0.00	Power production
19-Oct	2.40	2.39	2.39	0.00	Power production
20-Oct	2.39	2.34	2.37	0.03	Power production
21-Oct	2.34	2.32	2.33	0.01	Power production
22-Oct	2.32	2.31	2.31	0.01	Power production
23-Oct	2.31	2.30	2.31	0.01	Power production
24-Oct	2.31	2.30	2.31	0.00	Power production
25-Oct	2.63	2.30	2.39	0.32	Power production
26-Oct	3.11	2.25	2.42	0.51	Power production
27-Oct	2.25	2.24	2.24	0.01	Power production
28-Oct	2.26	2.24	2.25	0.01	Power production
29-Oct	2.28	2.20	2.24	0.04	Power production

Date	Maximum Of Stage	Minimum Of Stage	Average Of Stage	Maximum 15-minute Down-Ramping Rate	Comment
30-Oct	2.21	2.20	2.20	0.00	Power production
31-Oct	2.21	2.20	2.21	0.00	Power production
1-Nov	2.53	2.17	2.34	0.22	Power production
2-Nov	3.28	2.52	2.88	0.10	Power production
3-Nov	3.28	3.19	3.24	0.06	Power production
4-Nov	6.34	2.31	3.11	1.09	Power production - spinning reserve called out.
5-Nov	2.32	2.30	2.31	0.02	Power production
6-Nov	2.58	2.28	2.38	0.02	Power production
7-Nov	2.59	2.46	2.53	0.05	Power production
8-Nov	2.59	2.58	2.59	0.00	Power production
9-Nov	2.58	2.57	2.57	0.01	Power production
10-Nov	2.57	2.55	2.56	0.00	Power production
11-Nov	2.56	2.42	2.46	0.06	Power production
12-Nov	2.65	2.30	2.50	0.22	Power production
13-Nov	2.63	2.45	2.57	0.05	Power production
14-Nov	2.61	2.27	2.52	0.23	Power production
15-Nov	2.58	2.50	2.53	0.04	Power production
16-Nov	2.74	2.53	2.62	0.06	Power production
17-Nov	2.64	2.49	2.55	0.06	Power production
18-Nov	2.64	2.47	2.55	0.09	Power production
19-Nov	2.55	2.48	2.52	0.00	Power production
20-Nov	2.95	2.54	2.72	0.11	Power production
21-Nov	2.95	2.36	2.77	0.27	Power production
22-Nov	2.82	2.59	2.70	0.10	Power production
23-Nov	2.60	2.29	2.53	0.07	Power production
24-Nov	2.50	2.27	2.41	0.19	Power production
25-Nov	2.27	2.25	2.26	0.00	Power production
26-Nov	2.61	2.25	2.44	0.00	Power production
27-Nov	2.94	2.53	2.71	0.36	Power production
28-Nov	2.66	2.53	2.59	0.01	Power production
29-Nov	2.66	2.63	2.65	0.01	Power production
30-Nov	2.64	2.38	2.49	0.08	Power production
1-Dec	2.64	2.37	2.51	0.01	Power production
2-Dec	2.79	2.63	2.73	0.01	Power production
3-Dec	2.79	2.69	2.74	0.04	Power production
4-Dec	2.69	2.63	2.65	0.04	Power production
5-Dec	2.72	2.57	2.66	0.05	Power production

Date	Maximum Of Stage	Minimum Of Stage	Average Of Stage	Maximum 15-minute Down-Ramping Rate	Comment
6-Dec	2.71	2.57	2.63	0.13	Power production
7-Dec	2.58	2.57	2.57	0.01	Power production
8-Dec	2.58	2.57	2.57	0.01	Power production
9-Dec	2.58	2.58	2.58	0.01	Power production
10-Dec	2.71	2.58	2.65	0.00	Power production
11-Dec	2.71	2.70	2.71	0.01	Power production
12-Dec	2.71	2.62	2.67	0.05	Power production
13-Dec	2.66	2.62	2.63	0.03	Power production
14-Dec	2.80	2.62	2.72	0.07	Power production
15-Dec	2.98	2.73	2.82	0.05	Power production
16-Dec	2.84	2.71	2.79	0.01	Power production
17-Dec	2.84	2.57	2.67	0.14	Power production
18-Dec	2.84	2.57	2.63	0.01	Power production
19-Dec	2.85	2.84	2.84	0.00	Power production
20-Dec	3.10	2.84	2.96	0.03	Power production
21-Dec	3.10	3.09	3.10	0.01	Power production
22-Dec	3.27	2.40	2.75	0.75	Power production
23-Dec	2.58	2.52	2.55	0.01	Power production
24-Dec	2.78	2.57	2.70	0.01	Power production
25-Dec	2.78	2.77	2.77	0.01	Power production
26-Dec	2.77	2.70	2.73	0.02	Power production
27-Dec	2.72	2.60	2.66	0.03	Power production
28-Dec	2.65	2.58	2.62	0.01	Power production
29-Dec	2.75	2.52	2.64	0.18	Power production
30-Dec	2.79	2.63	2.71	0.07	Power production
31-Dec	2.83	1.84	2.34	0.52	Power production
1-Jan	2.81	1.74	2.39	0.09	Power production
2-Jan	2.66	2.42	2.53	0.07	Power production
3-Jan	2.75	2.44	2.54	0.02	Power production
4-Jan	2.74	2.50	2.65	0.08	Power production
5-Jan	2.58	2.48	2.51	0.06	Power production
6-Jan	2.66	2.51	2.56	0.01	Power production
7-Jan	2.67	2.51	2.60	0.06	Power production - in Reservoir Deadband compliance for minimum flow. Extremely cold temperatures reduced inflow.
8-Jan	2.55	2.51	2.53	0.02	Power production - in

Date	Maximum Of Stage	Minimum Of Stage	Average Of Stage	Maximum 15-minute Down-Ramping Rate	Comment
					Reservoir Deadband compliance for minimum flow.
9-Jan	2.60	2.37	2.50	0.19	Power production - in Reservoir Deadband compliance for minimum flow.
10-Jan	2.63	2.40	2.53	0.09	Power production - in Reservoir Deadband compliance for minimum flow.
11-Jan	2.51	2.28	2.41	0.05	Power production - in Reservoir Deadband compliance for minimum flow.
12-Jan	2.57	2.43	2.49	0.05	Power production
13-Jan	2.92	2.40	2.66	0.04	Power production
14-Jan	2.92	2.47	2.74	0.19	Power production
15-Jan	2.54	2.47	2.50	0.01	Power production
16-Jan	2.66	2.53	2.57	0.01	Power production
17-Jan	3.21	2.66	3.02	0.18	Power production
18-Jan	3.21	2.69	2.94	0.14	Power production
19-Jan	2.73	2.69	2.71	0.01	Power production
20-Jan	2.71	2.58	2.66	0.04	Power production
21-Jan	2.60	2.58	2.59	0.01	Power production
22-Jan	2.67	2.58	2.63	0.01	Power production
23-Jan	2.66	2.47	2.57	0.06	Power production
24-Jan	2.59	2.45	2.53	0.01	Power production
25-Jan	2.74	2.58	2.67	0.01	Power production
26-Jan	2.74	2.63	2.66	0.05	Power production
27-Jan	2.63	2.39	2.62	0.15	Power production
28-Jan	2.69	2.37	2.56	0.09	Power production
29-Jan	2.84	2.60	2.75	0.08	Power production
30-Jan	2.68	2.57	2.59	0.04	Power production
31-Jan	2.70	2.57	2.63	0.02	Power production
1-Feb	2.72	1.95	2.35	0.14	Power production
2-Feb	2.19	1.91	2.09	0.02	Power production
3-Feb	2.82	2.19	2.51	0.02	Power production

Date	Maximum Of Stage	Minimum Of Stage	Average Of Stage	Maximum 15-minute Down-Ramping Rate	Comment
4-Feb	2.75	2.53	2.67	0.13	Power production
5-Feb	2.81	2.73	2.77	0.01	Power production
6-Feb	2.81	2.60	2.72	0.08	Power production
7-Feb	2.74	2.61	2.67	0.10	Power production
8-Feb	2.72	2.55	2.60	0.06	Power production
9-Feb	2.57	2.29	2.43	0.15	Power production
10-Feb	2.63	2.57	2.59	0.01	Power production
11-Feb	2.63	2.35	2.59	0.26	Power production
12-Feb	2.46	2.33	2.39	0.05	Power production
13-Feb	2.52	2.44	2.47	0.02	Power production
14-Feb	2.51	2.49	2.50	0.01	Power production
15-Feb	2.50	2.49	2.49	0.01	Power production
16-Feb	2.50	2.47	2.49	0.02	Power production
17-Feb	2.60	2.46	2.50	0.01	Power production
18-Feb	2.60	1.98	2.46	0.48	Power production - equipment malfunction temporarily reduced flow overnight. Affected Feb 18 and 19.
19-Feb	3.04	2.04	2.42	0.39	Power production
20-Feb	2.77	2.32	2.55	0.17	Power production
21-Feb	2.63	2.31	2.49	0.05	Power production
22-Feb	2.62	2.24	2.46	0.19	Power production
23-Feb	3.34	2.24	2.53	0.62	Power production
24-Feb	2.60	2.35	2.50	0.09	Power production
25-Feb	2.60	2.42	2.52	0.07	Power production
26-Feb	2.49	2.48	2.49	0.00	Power production
27-Feb	2.49	2.41	2.46	0.05	Power production
28-Feb	2.42	2.41	2.41	0.00	Power production
1-Mar	2.80	2.40	2.49	0.12	Power production
2-Mar	2.53	2.50	2.51	0.00	Power production
3-Mar	2.53	2.52	2.53	0.01	Power production
4-Mar	2.54	2.52	2.53	0.01	Power production
5-Mar	2.53	2.47	2.50	0.03	Power production
6-Mar	2.68	2.47	2.58	0.01	Power production
7-Mar	2.98	2.35	2.67	0.17	Power production
8-Mar	2.85	2.34	2.70	0.07	Power production
9-Mar	2.67	2.53	2.58	0.10	Power production

Date	Maximum Of Stage	Minimum Of Stage	Average Of Stage	Maximum 15-minute Down-Ramping Rate	Comment
10-Mar	2.78	2.53	2.61	0.05	Power production
11-Mar	2.97	2.61	2.84	0.01	Power production
12-Mar	3.18	2.96	3.09	0.05	Power production
13-Mar	3.18	3.03	3.11	0.06	Power production
14-Mar	3.37	3.03	3.21	0.01	Power production
15-Mar	3.36	3.26	3.31	0.04	Power production
16-Mar	4.15	3.26	3.73	0.13	Power production
17-Mar	4.06	3.97	4.01	0.04	Power production
18-Mar	4.00	3.64	3.82	0.15	Power production
19-Mar	4.04	3.35	3.63	0.69	Power production
20-Mar	3.81	3.49	3.62	0.08	Power production
21-Mar	3.62	3.58	3.60	0.01	Power production
22-Mar	3.62	2.61	3.22	0.36	Power production
23-Mar	3.21	2.89	3.03	0.14	Power production
24-Mar	3.02	2.93	2.98	0.01	Power production
25-Mar	3.22	2.85	3.11	0.16	Power production
26-Mar	3.33	2.58	3.09	0.36	Power production
27-Mar	3.23	3.00	3.14	0.01	Power production
28-Mar	3.22	2.98	3.15	0.09	Power production
29-Mar	3.12	2.99	3.08	0.05	Power production
30-Mar	3.19	3.02	3.14	0.05	Power production
31-Mar	3.19	3.11	3.14	0.04	Power production
1-Apr	3.48	3.12	3.31	0.07	Power production
2-Apr	4.11	3.40	3.87	0.01	Power production
3-Apr	4.07	4.05	4.06	0.01	Power production
4-Apr	4.06	3.67	3.83	0.17	Power production
5-Apr	4.12	3.67	3.95	0.04	Power production
6-Apr	4.05	3.90	3.96	0.08	Power production
7-Apr	4.25	3.83	3.98	0.13	Power production
8-Apr	4.26	4.12	4.23	0.07	Power production
9-Apr	4.25	4.22	4.24	0.01	Power production
10-Apr	4.24	4.15	4.20	0.05	Power production
11-Apr	4.39	4.14	4.25	0.01	Power production
12-Apr	4.65	4.38	4.54	0.01	Power production
13-Apr	4.76	4.54	4.68	0.08	Power production
14-Apr	4.95	4.73	4.82	0.13	Power production
15-Apr	4.95	4.93	4.94	0.01	Power production
16-Apr	5.07	4.91	4.99	0.09	Power production

Date	Maximum Of Stage	Minimum Of Stage	Average Of Stage	Maximum 15-minute Down-Ramping Rate	Comment
17-Apr	5.32	5.02	5.20	0.07	Power production
18-Apr	5.77	5.31	5.61	0.05	Power production
19-Apr	5.77	5.13	5.48	0.31	Power production
20-Apr	5.34	5.11	5.27	0.01	Power production
21-Apr	5.34	5.32	5.33	0.01	Power production
22-Apr	5.51	5.21	5.39	0.11	Power production
23-Apr	5.51	5.39	5.47	0.10	Power production
24-Apr	5.51	4.99	5.22	0.26	Power production
25-Apr	5.04	4.87	4.97	0.09	Power production
26-Apr	5.28	5.03	5.12	0.15	Power production
27-Apr	5.21	4.98	5.10	0.09	Power production
28-Apr	5.33	4.84	5.14	0.09	Power production
29-Apr	5.31	5.26	5.28	0.02	Power production
30-Apr	5.28	5.01	5.18	0.12	Power production
1-May	5.08	4.55	4.82	0.29	Power production
2-May	4.56	4.30	4.44	0.21	Power production
3-May	4.61	4.13	4.41	0.15	Power production
4-May	4.59	4.43	4.50	0.13	Power production
5-May	4.51	3.69	4.22	0.30	Power production
6-May	4.36	3.71	4.24	0.13	Power production
7-May	4.35	4.26	4.31	0.05	Power production
8-May	4.64	4.26	4.49	0.01	Power production
9-May	4.93	4.64	4.80	0.06	Power production
10-May	5.10	4.77	4.93	0.21	Power production
11-May	4.99	4.75	4.83	0.14	Power production
12-May	4.77	4.75	4.76	0.01	Power production
13-May	5.00	4.76	4.90	0.05	Power production
14-May	5.08	4.94	5.03	0.06	Power production
15-May	5.38	4.66	4.93	0.21	Power production
16-May	5.47	4.66	4.98	0.15	Power production
17-May	5.08	5.01	5.05	0.03	Power production
18-May	5.05	4.85	4.93	0.09	Power production
19-May	4.95	4.88	4.92	0.01	Power production
20-May	4.95	4.81	4.90	0.11	Power production
21-May	4.89	4.66	4.79	0.12	Power production
22-May	5.38	4.61	4.85	0.26	Power production
23-May	5.08	4.75	5.00	0.11	Power production
24-May	5.07	4.89	4.97	0.08	Power production

Date	Maximum Of Stage	Minimum Of Stage	Average Of Stage	Maximum 15-minute Down-Ramping Rate	Comment
25-May	5.14	4.78	5.03	0.19	Power production
26-May	5.20	4.76	4.98	0.02	Power production
27-May	5.19	4.79	5.02	0.12	Power production
28-May	5.02	4.78	4.96	0.07	Power production
29-May	5.01	4.85	4.95	0.09	Power production
30-May	4.99	4.84	4.90	0.07	Power production
31-May	5.35	4.83	5.06	0.12	Power production
1-Jun	5.12	4.64	4.86	0.26	Power production
2-Jun	4.97	4.72	4.84	0.01	Power production
3-Jun	4.96	4.65	4.87	0.11	Power production
4-Jun	4.84	4.65	4.80	0.06	Power production
5-Jun	4.84	4.82	4.83	0.01	Power production
6-Jun	4.95	4.68	4.82	0.12	Power production
7-Jun	4.93	4.68	4.79	0.10	Power production
8-Jun	4.73	4.33	4.51	0.14	Power production
9-Jun	4.57	4.32	4.45	0.03	Power production
10-Jun	4.88	4.34	4.59	0.24	Power production
11-Jun	4.82	4.39	4.67	0.01	Power production
12-Jun	4.98	4.81	4.84	0.08	Power production
13-Jun	4.96	4.82	4.86	0.08	Power production
14-Jun	4.83	4.67	4.76	0.15	Power production
15-Jun	4.74	4.41	4.60	0.11	Power production
16-Jun	4.52	4.22	4.41	0.14	Power production
17-Jun	4.59	4.50	4.54	0.01	Power production
18-Jun	4.59	4.40	4.51	0.14	Power production
19-Jun	4.82	4.34	4.57	0.13	Power production
20-Jun	4.81	3.77	4.34	0.24	Power production
21-Jun	3.77	2.92	3.32	0.39	Power production
22-Jun	3.17	2.89	3.05	0.10	Power production
23-Jun	3.17	2.95	3.08	0.08	Power production
24-Jun	2.96	2.94	2.95	0.01	Power production
25-Jun	3.01	2.92	2.94	0.02	Power production
26-Jun	3.17	2.73	2.92	0.13	Power production
27-Jun	3.07	2.70	2.95	0.03	Power production
28-Jun	3.17	2.76	3.07	0.22	Power production
29-Jun	3.41	3.15	3.30	0.02	Power production
30-Jun	3.49	3.30	3.44	0.07	Power production
1-Jul	3.45	3.06	3.31	0.12	Power production

Date	Maximum Of Stage	Minimum Of Stage	Average Of Stage	Maximum 15-minute Down-Ramping Rate	Comment
2-Jul	3.37	3.04	3.24	0.11	Power production
3-Jul	3.38	3.31	3.35	0.02	Power production
4-Jul	3.37	3.35	3.36	0.01	Power production
5-Jul	3.43	3.34	3.36	0.04	Power production
6-Jul	4.39	3.18	3.51	0.62	Power production
7-Jul	3.44	3.30	3.38	0.07	Power production
8-Jul	3.30	3.14	3.23	0.13	Power production
9-Jul	3.30	3.14	3.27	0.11	Power production
10-Jul	3.44	3.28	3.30	0.01	Power production
11-Jul	4.36	3.43	3.84	0.22	Power production
12-Jul	3.88	3.74	3.80	0.09	Power production
13-Jul	3.82	3.74	3.79	0.01	Power production
14-Jul	4.12	3.80	4.01	0.03	Power production
15-Jul	4.13	4.10	4.11	0.01	Power production
16-Jul	4.13	4.01	4.07	0.06	Power production
17-Jul	4.20	4.00	4.09	0.02	Power production
18-Jul	4.18	4.12	4.16	0.05	Power production
19-Jul	4.16	4.13	4.14	0.01	Power production
20-Jul	4.20	4.14	4.16	0.01	Power production
21-Jul	4.79	4.19	4.47	0.20	Power production
22-Jul	4.57	4.44	4.51	0.01	Power production
23-Jul	4.57	4.44	4.55	0.08	Power production
24-Jul	4.64	4.55	4.61	0.01	Power production
25-Jul	4.64	4.58	4.61	0.02	Power production
26-Jul	4.60	4.58	4.59	0.01	Power production
27-Jul	4.59	4.16	4.38	0.11	Power production
28-Jul	4.52	4.28	4.37	0.10	Power production
29-Jul	4.47	4.35	4.43	0.01	Power production
30-Jul	4.46	4.44	4.45	0.01	Power production
31-Jul	4.50	4.37	4.45	0.08	Power production
1-Aug	4.86	4.37	4.63	0.03	Power production
2-Aug	4.81	4.49	4.58	0.13	Power production
3-Aug	4.67	4.34	4.56	0.13	Power production
4-Aug	4.86	4.52	4.74	0.08	Power production
5-Aug	4.85	4.72	4.80	0.05	Power production
6-Aug	4.86	4.64	4.77	0.11	Power production
7-Aug	4.86	4.72	4.84	0.12	Power production
8-Aug	4.86	4.69	4.80	0.06	Power production

Date	Maximum Of Stage	Minimum Of Stage	Average Of Stage	Maximum 15-minute Down-Ramping Rate	Comment
9-Aug	4.79	4.69	4.75	0.06	Power production
10-Aug	4.70	4.65	4.67	0.03	Power production
11-Aug	4.68	4.52	4.63	0.11	Power production
12-Aug	4.68	4.65	4.66	0.01	Power production
13-Aug	4.70	4.53	4.66	0.11	Power production
14-Aug	4.94	4.61	4.67	0.12	Power production
15-Aug	4.72	4.51	4.67	0.11	Power production
16-Aug	4.72	4.61	4.67	0.05	Power production
17-Aug	4.74	4.46	4.57	0.13	Power production
18-Aug	4.65	4.48	4.62	0.07	Power production
19-Aug	4.79	4.63	4.73	0.08	Power production
20-Aug	4.78	4.76	4.77	0.01	Power production
21-Aug	4.77	4.62	4.69	0.05	Power production
22-Aug	4.78	4.63	4.71	0.05	Power production
23-Aug	4.76	4.70	4.74	0.05	Power production
24-Aug	4.70	4.64	4.67	0.05	Power production
25-Aug	4.74	4.63	4.69	0.01	Power production
26-Aug	4.74	4.64	4.69	0.06	Power production
27-Aug	4.66	4.63	4.65	0.01	Power production
28-Aug	4.71	4.64	4.67	0.01	Power production
29-Aug	4.87	4.57	4.79	0.08	Power production
30-Aug	4.87	4.74	4.84	0.09	Power production
31-Aug	4.84	4.79	4.81	0.01	Power production
1-Sep	4.87	4.72	4.83	0.10	Power production
2-Sep	4.93	4.71	4.87	0.03	Power production
3-Sep	4.92	4.90	4.91	0.01	Power production
4-Sep	4.92	4.74	4.88	0.10	Power production
5-Sep	4.97	4.90	4.94	0.01	Power production
6-Sep	4.96	4.81	4.93	0.13	Power production
7-Sep	4.95	4.80	4.91	0.12	Power production
8-Sep	5.03	4.80	4.89	0.13	Power production
9-Sep	5.01	4.79	4.94	0.07	Power production
10-Sep	4.97	4.83	4.88	0.12	Power production
11-Sep	4.97	4.80	4.92	0.12	Power production
12-Sep	4.92	4.65	4.84	0.13	Power production
13-Sep	5.16	4.64	4.83	0.10	Power production - spill gate testing.
14-Sep	4.94	4.73	4.84	0.13	Power production

Date	Maximum Of Stage	Minimum Of Stage	Average Of Stage	Maximum 15-minute Down-Ramping Rate	Comment
15-Sep	4.80	4.41	4.68	0.12	Power production
16-Sep	4.82	4.54	4.67	0.09	Power production
17-Sep	4.97	4.55	4.77	0.07	Power production
18-Sep	4.90	4.83	4.86	0.03	Power production
19-Sep	4.84	4.66	4.80	0.12	Power production
20-Sep	4.74	4.16	4.43	0.14	Power production
21-Sep	4.33	4.09	4.27	0.10	Power production
22-Sep	4.60	4.08	4.24	0.18	Power production
23-Sep	4.37	4.08	4.26	0.13	Power production
24-Sep	4.51	4.17	4.39	0.15	Power production
25-Sep	4.50	3.81	4.21	0.29	Power production
26-Sep	4.94	3.81	4.28	0.44	Power production - maintenance on all units, adjustments to shift generation from one unit to another.
27-Sep	4.38	4.18	4.28	0.16	Power production - maintenance on all units, adjustments to shift generation from one unit to another.
28-Sep	5.03	3.84	4.30	1.17	Power production - maintenance on all units, adjustments to shift generation from one unit to another.
29-Sep	4.42	3.56	4.19	0.49	Power production - maintenance on all units, adjustments to shift generation from one unit to another.
30-Sep	4.15	4.08	4.11	0.01	Power production