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IDAHO PUBLIC UTILITIES COMMISSION

DONOVAN E. WALKER
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November 5, 2021

VIA ELECTRONIC MAIL

Jan Noriyuki, Secretary
Idaho Public Utilities Commission
11331 West Chinden Blvd., Building 8
Suite 201-A
Boise, Idaho 83714

Re: Case No. IPC-E-21-35
Idaho Power Company's Application to Update the Gas Forecast in the
Incremental Cost Integrated Resource Plan Avoided Cost Model

Dear Ms. Noriyuki:

Attached for electronic filing please find the Supplement to Idaho Power Company's Annual Compliance Filing in the above entitled matter. If you have any questions about the attached documents, please do not hesitate to contact me.

Very truly yours,

Donovan E. Walker

DEW:cld
Enclosures

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Attorney for Idaho Power Company

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IDAHO POWER COMPANY'S ANNUAL COMPLIANCE FILING TO UPDATE THE LOAD AND GAS FORECASTS IN THE INCREMENTAL COST INTEGRATED RESOURCE PLAN AVOIDED COST MODEL.)	CASE NO. IPC-E-21-35
)	SUPPLEMENT TO IDAHO POWER COMPANY'S ANNUAL COMPLIANCE FILING

Idaho Power Company ("Idaho Power") hereby respectfully submits to the Idaho Public Utilities Commission ("Commission") this supplement to its earlier filing in this case. This supplemental filing is in compliance with Order No. 34913 and updates the Peak Hours and Premium Peak Hours used to calculate capacity payments for battery storage resources in the Incremental Cost Integrated Resource Plan ("ICIRP") avoided cost model.

I. INTRODUCTION

Idaho Power filed its annual update to the load forecast and natural gas forecast components of the ICIRP, in compliance with Order Nos. 32697 and 32802, on October 15, 2021. That filing should have included the first update to the Peak and Premium Peak hours used to calculate capacity payments for battery storage resources. As that would have been the first update, Idaho Power inadvertently did not include it. Idaho Power respectfully submits the update to the Peak Hours and Premium Peak hours with this supplemental filing.

II. PEAK HOURS AND PREMIUM PEAK HOURS UPDATE

Idaho Power has refreshed its analysis of peak forecasted hours for 2022, using the same data as the load forecast submitted in the October 15, 2021, update. Idaho Power has also refreshed its analysis of load from 2021, net of solar generation, and the analysis of Western Energy Imbalance Market prices from 2021. Updated charts including this data are included in Attachment A. Idaho Power also evaluated Loss of Load Probability (“LOLP”) data from the 2019 IRP. The 2019 IRP LOLP evaluation was performed in AURORA to analyze the likelihood of unique loss-of-load events in the year 2025. AURORA performed 100 iterations of the analysis for 2025. In all those iterations, four unique loss-of-load events occurred, all in July in the late afternoon/evening hours.

Based on the refreshed data, the Peak Hours for 2022 for July are 2:00 pm through the 10:00 pm hour. For August, the Peak Hours are 4:00 pm through the 8:00 pm hour. Compared to the 2021 Peak Hours this is a shift one hour later for each month. The updated Premium Peak Hours for July are 5:00 pm through the 8:00 pm hour, a shift one hour earlier compared to the 2021 Premium Peak Hours. The updated Premium Peak

hours for August are 5:00 pm through the 8:00 pm hour, a shift of one hour later compared to the 2021 Premium Peak Hours.

As a result, Idaho Power is updating the Peak and Premium Peak Hour definitions for battery storage capacity payments as follows:


Peak Hours: Hours that occur in July starting at ~~2:00~~4:00 PM and ending at ~~10:59~~5:59:59 PM, and hours that occur in August starting at ~~4:00~~3:00 PM and ending at ~~8:59~~7:59:59. Peak Hours are subject to change annually and when a new IRP is acknowledged.

Premium Peak Hours: Hours that occur in July, starting at ~~5:00~~6:00 PM and ending at ~~8:59~~5:59:59 PM, and hours in that occur in August, starting at ~~5:00~~4:00 PM and ending at ~~8:59~~7:59:59 PM. Premium Peak Hours are subject to change annually and when a new IRP is acknowledged.

II. CONCLUSION

Idaho Power hereby respectfully submits this updated Peak Hours and Premium Peak Hours in compliance with the Commission's directives in Order No. 34913 and asks the Commission to accept the same for filing.

Respectfully submitted this 5th day November 2021.



DONOVAN E. WALKER
Attorney for Idaho Power Company

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 5th day of November 2021, I served a true and correct copy of the within and foregoing Supplement to Idaho Power Company's Annual Compliance Filing upon the following named parties by the method indicated below, and addressed to the following:

Riley Newton
Deputy Attorney General
Idaho Public Utilities Commission
P.O. Box 83720
Boise, ID 83720-0074

Hand Delivered
 U.S. Mail
 Overnight Mail
 FAX
 Email – riley.newton@puc.idaho.gov



Christy Davenport, Legal Assistant

ATTACHMENT A

2022 Forecast Average Load

2022 Load Forecast: Average Load													
HE (MPT)	January	February	March	April	May	June	July	August	September	October	November	December	
midnight	1	1750	1628	1488	1497	1643	2140	2447	2246	1740	1390	1546	1861
1	2	1686	1566	1435	1443	1524	1976	2231	2101	1643	1287	1485	1809
2	3	1663	1541	1414	1416	1451	1869	2090	2005	1584	1232	1459	1784
3	4	1660	1543	1410	1410	1416	1797	1994	1946	1557	1212	1455	1778
4	5	1672	1557	1422	1415	1401	1751	1924	1907	1544	1212	1469	1785
5	6	1716	1602	1454	1440	1418	1729	1886	1894	1555	1244	1513	1816
6	7	1813	1709	1540	1508	1497	1749	1900	1940	1626	1339	1618	1883
7	8	1974	1885	1686	1630	1635	1817	1960	2032	1771	1528	1788	1990
8	9	2107	2017	1801	1711	1759	1951	2091	2120	1881	1703	1920	2082
9	10	2141	2027	1812	1726	1831	2074	2249	2215	1925	1767	1943	2120
10	11	2123	1998	1789	1721	1873	2168	2380	2298	1958	1785	1923	2119
11	12	2089	1955	1750	1707	1894	2252	2498	2374	1979	1777	1880	2103
noon	13	2036	1900	1708	1686	1904	2324	2611	2447	1993	1753	1831	2063
1	14	1979	1842	1662	1660	1904	2391	2726	2518	1998	1731	1781	2024
2	15	1935	1800	1628	1637	1905	2460	2850	2601	2020	1721	1741	1992
3	16	1902	1763	1599	1622	1910	2529	2969	2690	2044	1720	1712	1971
4	17	1896	1746	1579	1609	1913	2580	3075	2773	2066	1728	1703	1970
5	18	1938	1788	1580	1612	1935	2617	3150	2839	2103	1747	1745	2015
6	19	2047	1830	1599	1619	1958	2644	3199	2883	2129	1769	1856	2117
7	20	2124	1935	1630	1627	1969	2656	3218	2895	2131	1791	1909	2142
8	21	2094	1954	1667	1633	1968	2635	3181	2847	2112	1841	1888	2117
9	22	2053	1921	1703	1668	1958	2572	3068	2755	2113	1805	1848	2090
10	23	1970	1847	1663	1667	1956	2488	2924	2659	2025	1700	1771	2036
11	24	1846	1730	1575	1586	1828	2356	2730	2470	1877	1544	1658	1950

2021 Actual Load, Net of Solar Generation

2021 Load-Net-Solar Generation													
Hour Beginning	Hour Ending (MPT)	January	February	March	April	May	June	July	August	September	October	November	December
midnight	1	1650	1655	1601	1577	1821	2861	2983	2326	1921			
1	2	1629	1635	1542	1518	1729	2717	2642	2207	1829			
2	3	1640	1639	1549	1484	1670	2627	2519	2099	1759			
3	4	1657	1656	1586	1461	1636	2530	2403	2002	1731			
4	5	1714	1713	1643	1498	1638	2470	2321	1948	1697			
5	6	1814	1833	1747	1603	1698	2454	2314	1956	1752			
6	7	2007	2011	1918	1778	1825	2503	2354	2007	1842			
7	8	2129	2151	2028	1862	1884	2536	2418	2058	1923			
8	9	2145	2054	1838	1827	1944	2570	2498	2153	1984			
9	10	2055	1999	1803	1822	1947	2608	2640	2211	2034			
10	11	2031	1980	1736	1816	1961	2754	2753	2271	2048			
11	12	1992	1943	1662	1745	1954	2955	2929	2376	2046			
noon	13	1941	1895	1584	1728	1903	3113	3092	2549	2112			
1	14	1931	1869	1517	1710	1927	3235	3245	2703	2153			
2	15	1930	1844	1487	1711	2006	3347	3333	2847	2240			
3	16	1945	1836	1453	1804	2076	3420	3401	2943	2372			
4	17	1948	1881	1543	1863	2149	3447	3436	3013	2553			
5	18	2014	1936	1606	1889	2201	3466	3501	3101	2629			
6	19	2031	2015	1730	1971	2260	3516	3494	3101	2717			
7	20	2020	1994	1813	2062	2356	3540	3503	3074	2695			
8	21	1979	1955	1786	2049	2410	3563	3474	3027	2611			
9	22	1893	1878	1731	2017	2351	3473	3371	2926	2443			
10	23	1794	1778	1623	1907	2189	3308	3206	2713	2232			
11	24	1700	1695	1542	1770	1992	3063	2970	2488	2040			

2021 Average of Western Energy Imbalance Market Locational Marginal Prices

Red circle represents hours in 2021 when ELAP prices were highest, within the yellow-highlighted highest-forecasted-load block (from 2022 load forecast).

		Average of ELAP Prices											
Hour Beg	HE (MPT)	January	February	March	April	May	June	July	August	September	October	November	December
midnight	1	\$ 25.26	\$ 47.26	\$ 28.08	\$ 26.12	\$ 27.29	\$ 34.64	\$ 42.47	\$ 43.14	\$ 46.99			
	2	\$ 23.66	\$ 39.91	\$ 26.62	\$ 25.82	\$ 25.30	\$ 31.13	\$ 40.60	\$ 40.54	\$ 45.30			
	3	\$ 22.44	\$ 34.65	\$ 23.84	\$ 24.12	\$ 23.10	\$ 27.09	\$ 35.03	\$ 35.99	\$ 42.81			
	4	\$ 22.66	\$ 35.07	\$ 24.19	\$ 23.46	\$ 21.77	\$ 25.33	\$ 31.38	\$ 33.66	\$ 40.29			
	5	\$ 22.98	\$ 35.56	\$ 24.39	\$ 24.89	\$ 21.42	\$ 24.56	\$ 29.20	\$ 32.63	\$ 41.08			
	6	\$ 23.80	\$ 42.14	\$ 27.58	\$ 26.39	\$ 23.15	\$ 24.77	\$ 31.21	\$ 33.47	\$ 42.91			
	7	\$ 24.60	\$ 51.30	\$ 28.98	\$ 26.86	\$ 24.93	\$ 26.66	\$ 33.68	\$ 34.36	\$ 45.36			
	8	\$ 28.53	\$ 73.41	\$ 34.83	\$ 29.86	\$ 21.64	\$ 25.37	\$ 28.81	\$ 34.66	\$ 49.33			
	9	\$ 31.33	\$ 53.09	\$ 31.03	\$ 26.81	\$ 15.91	\$ 22.23	\$ 27.80	\$ 31.77	\$ 43.38			
	10	\$ 25.45	\$ 33.89	\$ 25.09	\$ 23.26	\$ 16.45	\$ 23.84	\$ 28.92	\$ 29.85	\$ 48.78			
	11	\$ 23.14	\$ 27.53	\$ 22.92	\$ 21.90	\$ 17.08	\$ 26.29	\$ 31.50	\$ 31.02	\$ 40.13			
	noon	12	\$ 20.20	\$ 22.82	\$ 19.96	\$ 22.22	\$ 16.70	\$ 27.96	\$ 35.60	\$ 34.89	\$ 41.76		
13		\$ 19.10	\$ 20.62	\$ 17.59	\$ 22.00	\$ 16.48	\$ 35.55	\$ 40.41	\$ 40.81	\$ 43.87			
14		\$ 17.86	\$ 18.39	\$ 15.73	\$ 21.14	\$ 18.68	\$ 37.45	\$ 46.27	\$ 43.53	\$ 50.62			
15		\$ 17.15	\$ 15.17	\$ 15.36	\$ 20.26	\$ 21.46	\$ 41.83	\$ 48.88	\$ 50.76	\$ 54.59			
16		\$ 20.08	\$ 15.59	\$ 15.20	\$ 20.90	\$ 22.26	\$ 42.95	\$ 58.70	\$ 53.83	\$ 63.39			
17		\$ 25.94	\$ 25.30	\$ 19.07	\$ 21.53	\$ 24.06	\$ 44.33	\$ 60.52	\$ 54.21	\$ 61.75			
18		\$ 31.82	\$ 56.66	\$ 21.01	\$ 23.00	\$ 24.09	\$ 45.99	\$ 74.48	\$ 55.12	\$ 64.48			
19		\$ 30.76	\$ 86.09	\$ 36.03	\$ 29.52	\$ 26.95	\$ 48.27	\$ 71.89	\$ 63.06	\$ 85.31			
20		\$ 31.98	\$ 100.87	\$ 38.10	\$ 37.70	\$ 38.09	\$ 56.91	\$ 91.67	\$ 78.77	\$ 122.75			
21		\$ 31.06	\$ 88.53	\$ 40.32	\$ 41.00	\$ 44.35	\$ 55.47	\$ 109.19	\$ 75.44	\$ 89.44			
22		\$ 31.84	\$ 76.59	\$ 35.86	\$ 38.45	\$ 43.24	\$ 53.47	\$ 58.81	\$ 58.71	\$ 63.99			
23		\$ 29.36	\$ 75.28	\$ 36.51	\$ 40.43	\$ 36.05	\$ 44.54	\$ 60.68	\$ 54.16	\$ 59.20			
24	\$ 27.32	\$ 60.09	\$ 31.68	\$ 36.59	\$ 32.02	\$ 43.55	\$ 52.22	\$ 48.49	\$ 56.10				