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Attorney for the Commission Staff

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION OF)	
IDAHO POWER COMPANY FOR APPROVAL)	CASE NO. IPC-E-17-12
OF THE CAPACITY DEFICIENCY TO BE)	
UTILIZED FOR AVOIDED COST)	COMMENTS OF THE
CALCULATIONS.)	COMMISSION STAFF
)	
)	

COMES NOW the Staff of the Idaho Public Utilities Commission, by and through its attorney of record, Camille Christen, Deputy Attorney General, and in response to the Notice of Notice of Application and Modified Procedure issued in Order No. 33838 on August 16, 2017, in Case No. IPC-E-17-12, submits the following comments.

BACKGROUND

On July 26, 2017, Idaho Power Company applied to the Commission for an Order approving the capacity deficiency period to be used for the Company's avoided cost calculations under the Public Utility Regulatory Policies Act (PURPA).

Under PURPA, electric utilities must purchase electric energy from qualifying facilities (QFs) at rates approved by the applicable state agency—in Idaho, this Commission. 16 U.S.C. § 824a-3; *Idaho Power Co. v. Idaho PUC*, 155 Idaho 780, 780, 316 P.3d 1278, 1287 (2013). The purchase or “avoided cost” rate shall not exceed the “‘incremental cost’ to the purchasing utility of power which, but for the purchase of power from the QF, such utility would either generate

itself or purchase from another source.” Order No. 32697 at 7, citing *Rosebud Enterprises v. Idaho PUC*, 128 Idaho 624, 917 P.2d 781 (1996); 18 C.F.R. § 292.101(b)(6) (defining “avoided cost”).

The Commission has established two methods of calculating avoided cost, depending on the size of the QF project: (1) the surrogate avoided resource (SAR) methodology, and (2) the integrated resource plan (IRP) methodology. See Order No. 32697 at 7-8. The Commission uses the SAR methodology to establish what are commonly referred to as “published” avoided cost rates. *Id.* Published rates are available for wind and solar QFs¹ with a design capacity of up to 100 kilowatts (kW), and for QFs of other resource types with a design capacity of up to 10 average megawatts (aMW). For QFs with a design capacity above the published rate eligibility caps, avoided cost rates are “individually negotiated by the QF and the utility using the [IRP methodology].” *Id.* at 2; Order No. 32176.

In calculating avoided cost, the Commission found it “reasonable, appropriate and in the public interest to compensate QFs separately based on a calculation of not only the energy they produce, but the capacity that they can provide to the purchasing utility.” Order No. 32697 at 16. As to the capacity calculation for the SAR methodology, the Commission found it appropriate “to identify each utility’s capacity deficiency based on load and resource balances found in each utility’s IRP.” *Id.* With respect to the IRP methodology, the Commission similarly stated

[i]n calculating a QF’s ability to contribute to a utility’s need for capacity, we find it reasonable for the utilities to only begin payments for capacity at such time that the utility becomes capacity deficient. If a utility is capacity surplus, then capacity is not being avoided by the purchase of QF power. By including a capacity payment only when the utility becomes capacity deficient, the utilities are paying rates that are a more accurate reflection of a true avoided cost for the QF power.

Id. at 21.

The Commission directed that “when a utility submits its [IRP] to the Commission, a case shall be initiated to determine the capacity deficiency to be utilized in the SAR Methodology [used for calculating published avoided cost rates].” *Id.* at 23. The Commission also stated “utilities must update fuel price forecasts and load forecasts annually—between IRP filings. . . . We find it reasonable that all other variables and assumptions utilized within the IRP Methodology remain fixed between IRP filings (every two years).” *Id.* at 22.

¹ See Order No. 33785 (regarding battery storage facilities).

In 2015, the Commission confirmed July 2024 as Idaho Power's capacity deficiency period for the incremental cost IRP methodology and approved the updated SAR model based on that deficiency period and updated SAR-based rates. Order No. 33377.

Idaho Power states that its 2017 IRP, which it filed with the Commission on June 30, 2017 (Case No. IPC-E-17-11), identifies a first peak-hour deficit in July 2026. Application at 2. Idaho Power describes that peak-hour load deficits are determined using 90th percentile water and 95th percentile peak-load conditions. *Id.* at 2-3.

The Company indicates that under the IRP's preferred portfolio, a first capacity deficiency of approximately 34 MW occurs in July 2026, and a first energy deficit of 143 MW occurs in July 2029. *Id.* at 3.

The Company requests that the first capacity deficit date of July 2026 be used for avoided cost calculations for both the SAR and IRP methodologies. *Id.*

STAFF ANALYSIS

SAR Method Deficiency Date

Staff recommends that the Commission authorize July 2026 as the first capacity deficiency date for valuing contracts that use the SAR methodology. This change will push back the deficit date two years from the currently authorized deficit date of July 2024. The 2017 IRP indicates that a first capacity deficiency of approximately 34 megawatts will occur in July 2026 under the preferred portfolio.

Staff compared the 2015 Peak-Hour Load and Resource Balance, used to determine the currently authorized July 2024 first capacity deficiency date, and the 2017 Peak-Hour Load and Resource Balance to identify reasons causing the two-year shift. By comparing average loads and average amounts of capacity from supply resources between 2024 and 2026, Staff was able to determine that the over-riding cause for the two-year shift was a 103% increase in market purchase availability. The increase comes from two sources: (1) an additional 130 MW of import transmission capacity into the south side of its system by closing Valmy Unit 1 in 2019; and (2) an additional 80 MW of incremental transmission capacity through the Company's Idaho/Montana transmission pathway. The Company identified these increases through a re-evaluation of Idaho Power's transmission system conducted as part of a case assessing the early closure of the Valmy Plant (Case No. IPC-E-16-24) and through the 2017 IRP (Case No. IPC-E-17-11).

Other contributing factors assumed in the 2015 IRP as compared to the 2017 IRP include (1) a decrease in peak-hour load forecast of about 125 MW (average of years 2024, 2025, and 2026) due to a reduction in the annual growth rate assumption from 1.5% to 1.4%; (2) an increase in the amount of existing energy efficiency of about 40 MW (average of years 2024, 2025, and 2026); and (3) a slight increase in hydro generation and firm purchase power agreements of about 8 MW. Staff believes the changes in IRP assumptions causing a two-year shift in the first capacity deficiency date are reasonable. Staff updated the SAR model based on the new deficiency year and calculated new avoided cost rates included as an attachment to these comments.

IRP Method Deficiency Date

Staff also recommends that the Commission authorize and lock in the same July 2026 deficiency date as requested in the Company's Application for use in the IRP method for valuing capacity payments. For reasons stated above, Staff finds the first capacity deficiency date reasonable for purposes of negotiating capacity-related avoided costs in IRP-based PURPA contracts.

Although the Commission approved the use of the same first capacity deficiency date based on the most recent submitted IRP to be used in both the SAR and IRP methods (*See* Case No. GNR-E-11-03; Order Nos. 32697, 32802), Staff notes that the application of the deficiency date in determining the value of capacity payments is different between the SAR and IRP methods. For SAR-based contracts, once the deficiency date is authorized, all new contracts signed within the two-year period are effectively valued (through published rates) using the same deficiency date. However, for IRP-based contracts, the deficiency date is allowed to float around the authorized deficiency date depending on the capacity contribution of projects within the PURPA queue until a new deficiency date is authorized. This methodology has been approved by the Commission in several IRP-based PURPA contracts since Case No. GNR-E-11-03.²

With the exception of fuel price forecasts and load forecasts needing to be updated annually, Staff maintains that "all other variables and assumptions utilized within the IRP methodology remain fixed between IRP filings (every two years)." *Id.* at 22. The table below shows how frequently variables are updated in the IRP methodology.

² *See, e.g.,* Grand View Solar (IPC-E-14-19), Boise City Solar (IPC-E-14-20), Mountain Home Solar (IPC-E-14-26), Pocatello Solar 1 (IPC-E-14-27), and others.

Variables in IRP Methodology	Update Frequency
First capacity deficiency date	Every two years with IRP publication
Fuel price forecasts and load forecasts	Annually
All other variables and assumptions	Every two years with IRP publication
PURPA Projects in the queue	As changes occur

In order to efficiently process routine cases, Staff recommends combining the annual fuel price and load forecast filings with the biennial capacity deficiency date filings for both SAR and IRP pricing methodologies when they occur in the same year. There is significant overlap in the information Staff has to examine for the two cases. This would reduce administrative burden for Staff, the utilities and other interested parties.

Currently, all three Idaho electric utilities file separate cases to establish a new capacity deficiency date and to update their fuel and load forecasts. In Order No. 32697, the Commission stated, “when a utility submits its Integrated Resource Plan to the Commission, a case shall be initiated to determine the capacity deficiency to be utilized in the SAR Methodology.” Order No. 32697 at 23. Staff notes that PacifiCorp files its IRP on about April 1, Idaho Power on about July 1, and Avista on about September 1. However, the Commission did not establish distinct deadlines for each utility to update its capacity deficiency date and consequently, the utilities file their deficiency date cases with various amounts of delay from the time they file their IRP.

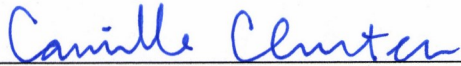
The Commission ordered fuel and load forecasts to be updated every year on October 15. This was established through a collaborative recommendation from all three utilities. *See* Order No. 32802 at 3. With Commission approval, Staff will work with the utilities to establish a date for combined filings. Once agreement is reached, the parties will submit the proposed filing date to the Commission for approval.

STAFF RECOMMENDATION

Staff has updated the SAR model and the avoided cost rates and recommends that the Commission approve the new rates to reflect the first deficiency date of July 2026. Staff also recommends the same first deficiency date to be used as a starting point in the IRP methodology.

Staff also recommends that the Commission direct Staff to work with the utilities to establish a single filing date for the updates to fuel price and load forecasts and capacity deficiency dates.

Respectfully submitted this 6th day of September 2017.


Camille Christen
Deputy Attorney General

Technical Staff: Yao Yin
Stacey Donohue

i:umisc/comments/ipce17.12ccsdycomments

IDAHO POWER COMPANY AVOIDED COST RATES FOR WIND PROJECTS XXXX, 2017 \$/MWh New Contracts and Replacement Contracts without Full Capacity Payments								
Eligibility for these rates is limited to projects 100 kW or smaller.								
LEVELIZED							NON-LEVELIZED	
CONTRACT LENGTH (YEARS)	ON-LINE YEAR						CONTRACT YEAR	NON-LEVELIZED RATES
	2017	2018	2019	2020	2021	2022		
1	28.61	31.48	34.42	35.95	36.78	36.36	2017	28.61
2	29.99	32.89	35.15	36.35	36.57	36.71	2018	31.48
3	31.35	33.83	35.65	36.35	36.74	37.34	2019	34.42
4	32.37	34.48	35.81	36.52	37.18	38.39	2020	35.95
5	33.12	34.80	36.03	36.90	38.01	40.02	2021	36.78
6	33.56	35.11	36.40	37.60	39.37	41.28	2022	36.36
7	33.95	35.52	37.03	38.75	40.48	42.32	2023	37.10
8	34.40	36.13	38.05	39.74	41.42	43.23	2024	38.76
9	35.01	37.07	38.95	40.61	42.27	43.99	2025	42.05
10	35.90	37.91	39.75	41.39	42.98	44.64	2026	47.99
11	36.70	38.67	40.48	42.07	43.61	45.23	2027	49.35
12	37.42	39.36	41.12	42.66	44.18	45.77	2028	50.58
13	38.09	39.98	41.69	43.21	44.70	46.27	2029	52.04
14	38.69	40.53	42.22	43.71	45.19	46.76	2030	52.76
15	39.23	41.04	42.70	44.18	45.67	47.22	2031	53.50
16	39.73	41.51	43.15	44.64	46.12	47.68	2032	54.64
17	40.19	41.96	43.59	45.08	46.56	48.11	2033	55.49
18	40.62	42.38	44.01	45.50	46.98	48.53	2034	56.72
19	41.04	42.79	44.42	45.90	47.38	48.94	2035	58.16
20	41.44	43.19	44.81	46.29	47.78	49.32	2036	59.63
							2037	61.27
							2038	62.44
							2039	63.98
							2040	65.87
							2041	67.01
							2042	69.03

Note: These rates will be further adjusted with the applicable integration charge.

Note: The rates shown in this table have been computed using the U.S. Energy Information Administration (EIA)'s Annual Energy Outlook 2017, released January 2017. See Annual Energy Outlook 2017, Table 3.8 Energy Prices by Sector-Mountain at https://www.eia.gov/outlooks/aeo/tables_ref.cfm

IDAHO POWER COMPANY Page 1

IDAHO POWER COMPANY AVOIDED COST RATES FOR SOLAR PROJECTS XXXX, 2017 \$/MWh New Contracts and Replacement Contracts without Full Capacity Payments								
Eligibility for these rates is limited to projects 100 kW or smaller.								
LEVELIZED							NON-LEVELIZED	
CONTRACT LENGTH (YEARS)	ON-LINE YEAR						CONTRACT YEAR	NON-LEVELIZED RATES
	2017	2018	2019	2020	2021	2022		
1	28.61	31.48	34.42	35.95	36.78	36.36	2017	28.61
2	29.99	32.89	35.15	36.35	36.57	36.71	2018	31.48
3	31.35	33.83	35.65	36.35	36.74	37.34	2019	34.42
4	32.37	34.48	35.81	36.52	37.18	38.39	2020	35.95
5	33.12	34.80	36.03	36.90	38.01	45.36	2021	36.78
6	33.56	35.11	36.40	37.60	43.63	50.23	2022	36.36
7	33.95	35.52	37.03	42.26	47.82	53.87	2023	37.10
8	34.40	36.13	40.99	45.90	51.10	56.77	2024	38.76
9	35.01	39.57	44.19	48.84	53.79	59.10	2025	42.05
10	38.05	42.42	46.84	51.31	56.00	61.03	2026	79.43
11	40.62	44.83	49.10	53.38	57.86	62.69	2027	81.25
12	42.83	46.92	51.03	55.15	59.48	64.13	2028	82.94
13	44.76	48.72	52.70	56.70	60.90	65.41	2029	84.88
14	46.44	50.30	54.18	58.07	62.17	66.58	2030	86.08
15	47.93	51.70	55.49	59.30	63.32	67.65	2031	87.30
16	49.26	52.95	56.68	60.43	64.38	68.64	2032	88.94
17	50.46	54.09	57.76	61.47	65.37	69.55	2033	90.29
18	51.55	55.14	58.77	62.43	66.27	70.40	2034	92.03
19	52.55	56.11	59.70	63.32	67.12	71.20	2035	93.99
20	53.48	57.01	60.56	64.15	67.92	71.95	2036	95.98
							2037	98.16
							2038	99.87
							2039	101.96
							2040	104.40
							2041	106.11
							2042	108.71

Note: These rates will be further adjusted with the applicable integration charge.

Note: The rates shown in this table have been computed using the U.S. Energy Information Administration (EIA)'s Annual Energy Outlook 2017, released January 2017. See Annual Energy Outlook 2017, Table 3.8 Energy Prices by Sector-Mountain at https://www.eia.gov/outlooks/aeo/tables_ref.cfm

IDAHO POWER COMPANY Page 2

IDAHO POWER COMPANY AVOIDED COST RATES FOR NON-SEASONAL HYDRO PROJECTS XXXX, 2017 \$/MWh New Contracts and Replacement Contracts without Full Capacity Payments								
Eligibility for these rates is limited to projects smaller than 10 aMW.								
LEVELIZED							NON-LEVELIZED	
CONTRACT LENGTH (YEARS)	ON-LINE YEAR						CONTRACT YEAR	NON-LEVELIZED RATES
	2017	2018	2019	2020	2021	2022		
1	28.61	31.48	34.42	35.95	36.78	36.36	2017	28.61
2	29.99	32.89	35.15	36.35	36.57	36.71	2018	31.48
3	31.35	33.83	35.65	36.35	36.74	37.34	2019	34.42
4	32.37	34.48	35.81	36.52	37.18	38.39	2020	35.95
5	33.12	34.80	36.03	36.90	38.01	44.84	2021	36.78
6	33.56	35.11	36.40	37.60	43.22	49.36	2022	36.36
7	33.95	35.52	37.03	41.92	47.11	52.75	2023	37.10
8	34.40	36.13	40.70	45.30	50.16	55.45	2024	38.76
9	35.01	39.33	43.68	48.04	52.67	57.63	2025	42.05
10	37.84	41.99	46.15	50.35	54.74	59.44	2026	76.38
11	40.24	44.24	48.27	52.28	56.48	61.00	2027	78.15
12	42.30	46.19	50.07	53.94	58.00	62.35	2028	79.80
13	44.11	47.87	51.63	55.39	59.33	63.55	2029	81.69
14	45.69	49.35	53.02	56.68	60.52	64.65	2030	82.85
15	47.08	50.66	54.25	57.84	61.61	65.66	2031	84.02
16	48.33	51.84	55.36	58.90	62.61	66.60	2032	85.61
17	49.46	52.91	56.39	59.88	63.54	67.47	2033	86.91
18	50.49	53.90	57.33	60.79	64.40	68.27	2034	88.61
19	51.43	54.81	58.22	61.63	65.20	69.04	2035	90.52
20	52.31	55.67	59.03	62.41	65.96	69.75	2036	92.45
							2037	94.58
							2038	96.24
							2039	98.28
							2040	100.66
							2041	102.32
							2042	104.85

Note: These rates will be further adjusted with the applicable integration charge.

Note: The rates shown in this table have been computed using the U.S. Energy Information Administration (EIA)'s Annual Energy Outlook 2017, released January 2017. See Annual Energy Outlook 2017, Table 3.8 Energy Prices by Sector-Mountain at https://www.eia.gov/outlooks/aeo/tables_ref.cfm

IDAHO POWER COMPANY Page 3

IDAHO POWER COMPANY AVOIDED COST RATES FOR SEASONAL HYDRO PROJECTS XXXX, 2017 \$/MWh New Contracts and Replacement Contracts without Full Capacity Payments								
Eligibility for these rates is limited to projects smaller than 10 aMW.								
LEVELIZED							NON-LEVELIZED	
CONTRACT LENGTH (YEARS)	ON-LINE YEAR						CONTRACT YEAR	NON-LEVELIZED RATES
	2017	2018	2019	2020	2021	2022		
1	28.61	31.48	34.42	35.95	36.78	36.36	2017	28.61
2	29.99	32.89	35.15	36.35	36.57	36.71	2018	31.48
3	31.35	33.83	35.65	36.35	36.74	37.34	2019	34.42
4	32.37	34.48	35.81	36.52	37.18	38.39	2020	35.95
5	33.12	34.80	36.03	36.90	38.01	48.47	2021	36.78
6	33.56	35.11	36.40	37.60	46.12	55.44	2022	36.36
7	33.95	35.52	37.03	44.30	52.11	60.61	2023	37.10
8	34.40	36.13	42.70	49.49	56.75	64.67	2024	38.76
9	35.01	41.03	47.24	53.65	60.51	67.91	2025	42.05
10	39.30	45.05	50.98	57.10	63.59	70.59	2026	97.77
11	42.91	48.43	54.14	59.98	66.17	72.87	2027	99.85
12	45.98	51.33	56.82	62.43	68.40	74.84	2028	101.82
13	48.65	53.82	59.12	64.57	70.34	76.58	2029	104.03
14	50.97	55.99	61.15	66.45	72.07	78.14	2030	105.52
15	53.00	57.91	62.95	68.12	73.62	79.56	2031	107.02
16	54.82	59.63	64.56	69.64	75.04	80.86	2032	108.95
17	56.44	61.17	66.03	71.03	76.34	82.05	2033	110.59
18	57.92	62.58	67.37	72.31	77.53	83.16	2034	112.63
19	59.27	63.87	68.61	73.48	78.63	84.19	2035	114.89
20	60.51	65.07	69.75	74.56	79.67	85.15	2036	117.19
							2037	119.68
							2038	121.71
							2039	124.12
							2040	126.88
							2041	128.92
							2042	131.85

Note: A "seasonal hydro project" is defined as a generation facility which produces at least 55% of its annual generation during the months of June, July, and August. Order 32802.

Note: These rates will be further adjusted with the applicable integration charge.

Note: The rates shown in this table have been computed using the U.S. Energy Information Administration (EIA)'s Annual Energy Outlook 2017, released January 2017. See Annual Energy Outlook 2017, Table 3.8 Energy Prices by Sector-Mountain at https://www.eia.gov/outlooks/aeo/tables_ref.cfm

IDAHO POWER COMPANY Page 4

IDAHO POWER COMPANY AVOIDED COST RATES FOR OTHER PROJECTS XXXX, 2017 \$/MWh New Contracts and Replacement Contracts without Full Capacity Payments								
Eligibility for these rates is limited to projects smaller than 10 aMW.								
LEVELIZED							NON-LEVELIZED	
CONTRACT LENGTH (YEARS)	ON-LINE YEAR						CONTRACT YEAR	NON-LEVELIZED RATES
	2017	2018	2019	2020	2021	2022		
1	28.61	31.48	34.42	35.95	36.78	36.36	2017	28.61
2	29.99	32.89	35.15	36.35	36.57	36.71	2018	31.48
3	31.35	33.83	35.65	36.35	36.74	37.34	2019	34.42
4	32.37	34.48	35.81	36.52	37.18	38.39	2020	35.95
5	33.12	34.80	36.03	36.90	38.01	43.43	2021	36.78
6	33.56	35.11	36.40	37.60	42.09	47.00	2022	36.36
7	33.95	35.52	37.03	41.00	45.18	49.71	2023	37.10
8	34.40	36.13	39.93	43.68	47.61	51.89	2024	38.76
9	35.01	38.67	42.30	45.87	49.63	53.65	2025	42.05
10	37.27	40.80	44.28	47.73	51.31	55.12	2026	68.09
11	39.21	42.61	45.99	49.30	52.72	56.40	2027	69.75
12	40.88	44.20	47.46	50.65	53.97	57.51	2028	71.28
13	42.36	45.57	48.73	51.84	55.06	58.51	2029	73.04
14	43.65	46.78	49.86	52.89	56.05	59.43	2030	74.07
15	44.79	47.86	50.88	53.85	56.96	60.28	2031	75.11
16	45.82	48.83	51.80	54.74	57.80	61.08	2032	76.57
17	46.75	49.72	52.65	55.56	58.59	61.82	2033	77.75
18	47.61	50.54	53.45	56.33	59.32	62.51	2034	79.30
19	48.40	51.31	54.19	57.04	60.00	63.17	2035	81.07
20	49.14	52.02	54.88	57.71	60.66	63.79	2036	82.88
							2037	84.86
							2038	86.38
							2039	88.27
							2040	90.51
							2041	92.01
							2042	94.40

Note: "Other projects" refers to projects other than wind, solar, non-seasonal hydro, and seasonal hydro projects. These "Other projects" may include (but are not limited to): cogeneration, biomass, biogas, landfill gas, or geothermal projects.

Note: The rates shown in this table have been computed using the U.S. Energy Information Administration (EIA)'s Annual Energy Outlook 2017, released January 2017. See Annual Energy Outlook 2017, Table 3.8 Energy Prices by Sector-Mountain at https://www.eia.gov/outlooks/aeo/tables_ref.cfm

CERTIFICATE OF SERVICE

I HEREBY CERTIFY THAT I HAVE THIS 6TH DAY OF SEPTEMBER 2017, SERVED THE FOREGOING **COMMENTS OF THE COMMISSION STAFF**, IN CASE NO. IPC-E-17-12, BY MAILING A COPY THEREOF, POSTAGE PREPAID, TO THE FOLLOWING:

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SECRETARY

CERTIFICATE OF SERVICE