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Attorney for the Commission Staff

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF IDAHO POWER)	
COMPANY'S APPLICATION FOR APPROVAL)	CASE NO. IPC-E-15-20
OF CAPACITY DEFICIENCY TO BE USED FOR))	
AVOIDED COST CALCULATIONS.)	COMMENTS OF THE
)	COMMISSION STAFF
)	

COMES NOW the Staff of the Idaho Public Utilities Commission, by and through its Attorney of record, Daphne Huang, Deputy Attorney General, submits the following comments.

BACKGROUND

On July 2, 2015, Idaho Power Company filed an Application with 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). The Company asked that the Application be processed under Modified Procedure.

Under PURPA, electric utilities must purchase electric energy from qualifying facilities (QFs) at rates approved by the applicable state regulatory agency – in Idaho, this Commission. 16 U.S.C. § 824a-3; *Idaho Power Co. v. Idaho PUC*, 155 Idaho 780, 789, 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”).

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, 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.* The Commission elaborated:

In 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.” *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.

In 2014, the Commission confirmed July 2021 as Idaho Power’s capacity deficiency period for use in the incremental cost IRP methodology. Order No. 33159 at 9.

Idaho Power states it “currently utilizes a first capacity deficit of July 2021.” Application at 2. Also, the Company notes that it filed its 2015 IRP (Case No. IPC-E-15-19) with the Commission on June 30, 2015. According to Idaho Power, its 2015 IRP “identifies the first capacity deficit occurring in July 2025.” *Id.*

Idaho Power’s Application includes Table 1, which “shows a first capacity deficiency of 14 megawatts [(MW)] occurring in July 2025.” *Id.* at 3. According to the Company, this “includes 461 MW of PURPA solar that was under contract when the analysis of Table 1 was completed for the 2015 IRP.” *Id.* However, after Table 1 was developed in the 2015 IRP, “four PURPA Energy Sales Agreements (“ESAs”) were terminated due to failure of the projects to

perform” per their terms and provisions. *Id.*, citing Case Nos. IPC-E-14-28, IPC-E-14-29, IPC-E-14-30, and IPC-E-14-31. Idaho Power provides that the “total amount of capacity for these four terminated ESAs was 141 MW.” *Id.* at 3-4.

Idaho Power’s Application also includes Table 2, which shows an “updated peak-hour surplus/deficit chart,” reflecting removal of the 141 MW of PURPA. *Id.* at 4. Idaho Power states, “Removal of the 141 MW of terminated PURPA solar projects results in a first capacity deficit of 47 MW in July 2024, one year earlier than that shown in Table 1 and the 2015 IRP.” *Id.* The Company asks that “a first capacity deficit of July 2024 be utilized for avoided cost calculations for both the SAR and IRP methodologies.” *Id.*

STAFF ANALYSIS

The 2015 IRP indicates that a first capacity deficiency of 14 MW occurs in July 2025 (*See* boxes in Attachment A). Since the 2015 IRP analysis was completed, however, four PURPA projects have been terminated, totaling 141 MW. The removal of the 141 MW of solar projects affects two variables in the IRP analysis: Cogeneration and Small-Power Producers (CSPP), and Market Purchases (*See* triangles in Attachment A). This results in a first capacity deficiency of 47 MW that occurs in July 2024.

For each of the removed projects, a capacity credit (approximately 53%) is applied to 141 MW nameplate capacity to reach a final, effective reduction of 74 MW. Therefore, the CSPP (PURPA) values in the analysis are reduced by 74 MW. In addition, the Market Purchases values need to increase, within the transmission limit, to compensate for the decrease in CSPP (PURPA) generation. As a result, the new first capacity deficiency occurs in July 2024. Staff Table 1 shows the effects of the four solar projects on the CSPP, the Market Purchases, and the Monthly Surplus/Deficit.

Staff Table 1. Effects of Four Solar Projects


	Original Values for July 2024 (MW)	New Values for July 2024 (MW)
CSPP (PURPA)	405	$405 - 74 = 331$
Market Purchases	239	$239 + 74 = 313 > 266$ (266 = transmission capacity available)
Monthly Surplus /Deficit	0	$74 - (266 - 239) = 47$

Based on the revised capacity deficiency, Staff updated the Surrogate Avoided Resource (SAR) Model, and calculated new avoided cost rates (see Attachment B).

RECOMMENDATIONS

Staff has reviewed Idaho Power's updated capacity deficiency as a result of the removal of 141 MW of solar projects, and confirms that the new first capacity deficiency occurs in July 2024. Staff also updated the SAR Model and the avoided cost rates, and recommends that the Commission approve the new rates to reflect the removal of the 141 MW of solar projects.

Respectfully submitted this 21st day of August 2015.


Daphne Huang
Deputy Attorney General

Technical Staff: Rick Sterling
Yao Yin

i:umisc:comments/ipce15.20djhrpsyy comments

Attachment A. First Capacity Deficiency in 2015 Integrated Resource Plan-Appendix C

	1/2025	2/2025	3/2025	4/2025	5/2025	6/2025	7/2025	8/2025	9/2025	10/2025	11/2025	12/2025
Load Forecast (95th% w/no DSM)	(2,673)	(2,698)	(2,438)	(2,308)	(3,164)	(3,773)	(4,350)	(3,571)	(3,454)	(2,453)	(2,533)	(2,970)
Existing DSM (EE)	72	81	89	67	101	124	136	94	105	76	76	90
Load Forecast (95th% w/DSM and EE)	(2,601)	(2,617)	(2,350)	(2,240)	(3,062)	(3,649)	(4,215)	(3,476)	(3,349)	(2,377)	(2,456)	(2,880)
Non-forecasted trended EE	86	97	106	81	121	149	163	113	126	92	92	108
Existing Demand Response	0	0	0	0	0	390	390	337	0	0	0	0
Peak-Hour Forecast w/DSM (EE)	(2,515)	(2,520)	(2,243)	(2,159)	(2,941)	(3,109)	(3,661)	(3,026)	(3,224)	(2,285)	(2,365)	(2,772)
Existing Resources												
Total Coal	966	966	0	0	966	966	966	966	966	703	703	966
Total Gas	716	716	716	416	716	716	716	716	716	416	716	716
Hydro (90th%)—HCC	1,052	1,050	956	1,075	1,133	981	1,000	699	708	874	713	765
Hydro (90th%)—Other	197	202	190	201	296	302	277	202	207	209	184	185
Sho-Ban Water Lease	0	0	0	0	0	0	0	0	0	0	0	0
Total Hydro (90th%)	1,250	1,252	1,146	1,276	1,430	1,283	1,277	901	914	1,082	897	950
CSPP (PURPA)	74	76	203	235	375	406	405	396	359	232	204	76
PPAs												
Elkhorn Valley Wind	5	5	5	5	5	5	5	5	5	5	5	5
Raft River Geothermal	9	9	9	8	7	7	8	8	8	10	9	9
Neal Hot Springs Geothermal	25	24	22	19	14	15	11	13	16	15	20	26
Clatskanie Exchange—Take	0	0	0	0	0	0	0	0	0	0	0	0
Clatskanie Exchange—Return	0	0	0	0	0	0	0	0	0	0	0	0
Total PPAs	39	38	36	32	27	27	23	26	29	30	35	40
Market Purchases	0	0	142	200	0	0	261	21	240	0	0	24
Existing Resource Subtotal	3,045	3,048	2,243	2,159	3,513	3,398	3,648	3,026	3,224	2,463	2,555	2,772
Monthly Surplus/Deficit	0	0	0	0	0	0	(14)	0	0	0	0	0
2015 IRP Resources												
2025 Boardman to Hemingway Transmission	200	200	200	500	500	500	500	500	500	200	200	200
2030 New DR	0	0	0	0	0	0	0	0	0	0	0	0
2030 Ice TES	0	0	0	0	0	0	0	0	0	0	0	0
2031 Combined Cycle Combustion Turbine	0	0	0	0	0	0	0	0	0	0	0	0
New Resource Subtotal	200	200	200	500	500	500	500	500	500	200	200	200
Monthly Surplus/Deficit	0	0	0	0	0	0	0	0	0	0	0	0
Remaining Monthly Surplus/Deficit	731	728	200	500	1,072	759	486	500	500	378	390	200

IDAHO POWER COMPANY AVOIDED COST RATES FOR WIND PROJECTS XXXX, 2015 \$/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
	2015	2016	2017	2018	2019	2020		
1	33.36	34.06	34.42	35.69	39.37	43.05	2015	33.36
2	33.70	34.23	35.03	37.46	41.14	44.46	2016	34.06
3	33.92	34.68	36.36	39.17	42.63	45.61	2017	34.42
4	34.31	35.72	37.84	40.68	43.86	46.58	2018	35.69
5	35.17	36.96	39.23	41.96	44.90	47.94	2019	39.37
6	36.24	38.19	40.44	43.05	46.22	49.20	2020	43.05
7	37.33	39.30	41.51	44.33	47.44	50.39	2021	46.00
8	38.34	40.30	42.73	45.54	48.61	51.37	2022	48.19
9	39.27	41.44	43.88	46.68	49.58	52.14	2023	49.99
10	40.31	42.52	44.98	47.65	50.36	52.79	2024	54.59
11	41.32	43.55	45.92	48.45	51.04	53.39	2025	57.23
12	42.29	44.45	46.71	49.14	51.66	53.99	2026	59.91
13	43.14	45.22	47.40	49.77	52.27	54.61	2027	60.85
14	43.87	45.89	48.03	50.39	52.88	55.22	2028	61.00
15	44.52	46.50	48.65	51.01	53.49	55.82	2029	61.68
16	45.12	47.10	49.25	51.61	54.09	56.46	2030	62.91
17	45.70	47.70	49.84	52.20	54.70	57.10	2031	64.98
18	46.26	48.27	50.42	52.81	55.33	57.72	2032	67.39
19	46.81	48.83	51.01	53.42	55.93	58.36	2033	69.48
20	47.35	49.39	51.60	54.00	56.55	59.04	2034	71.93
							2035	75.31
							2036	78.62
							2037	80.55
							2038	84.88
							2039	90.07
							2040	95.53

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 2015, released April 14, 2015. See Annual Energy Outlook 2015, Table 3.8 Energy Prices by Sector-Mountain at http://www.eia.gov/forecasts/aeo/tables_ref.cfm#supplement/

IDAHO POWER COMPANY Page 1

IDAHO POWER COMPANY AVOIDED COST RATES FOR SOLAR PROJECTS XXXX, 2015 \$/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
	2015	2016	2017	2018	2019	2020		
1	33.36	34.06	34.42	35.69	39.37	43.05	2015	33.36
2	33.70	34.23	35.03	37.46	41.14	44.46	2016	34.06
3	33.92	34.68	36.36	39.17	42.63	45.61	2017	34.42
4	34.31	35.72	37.84	40.68	43.86	46.58	2018	35.69
5	35.17	36.96	39.23	41.96	44.90	53.12	2019	39.37
6	36.24	38.19	40.44	43.05	50.36	57.89	2020	43.05
7	37.33	39.30	41.51	47.74	54.58	61.62	2021	46.00
8	38.34	40.30	45.58	51.52	58.01	64.52	2022	48.19
9	39.27	43.86	48.97	54.68	60.77	66.82	2023	49.99
10	42.40	46.90	51.87	57.29	63.00	68.71	2024	85.12
11	45.13	49.54	54.30	59.44	64.88	70.35	2025	88.22
12	47.54	51.80	56.34	61.26	66.51	71.83	2026	91.35
13	49.62	53.71	58.09	62.87	68.00	73.20	2027	92.75
14	51.40	55.37	59.65	64.34	69.37	74.47	2028	93.37
15	52.97	56.85	61.07	65.69	70.64	75.66	2029	94.51
16	54.37	58.22	62.39	66.95	71.83	76.81	2030	96.23
17	55.67	59.48	63.61	68.12	72.97	77.93	2031	98.78
18	56.88	60.66	64.76	69.25	74.08	78.96	2032	101.69
19	58.00	61.76	65.85	70.33	75.10	79.99	2033	104.28
20	59.05	62.82	66.91	71.34	76.11	81.02	2034	107.25
							2035	111.14
							2036	114.98
							2037	117.44
							2038	122.31
							2039	128.05
							2040	134.07

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 2015, released April 14, 2015. See Annual Energy Outlook 2015, Table 3.8 Energy Prices by Sector-Mountain at http://www.eia.gov/forecasts/aeo/tables_ref.cfm#supplement/

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IDAHO POWER COMPANY AVOIDED COST RATES FOR NON-SEASONAL HYDRO PROJECTS XXXX, 2015 \$/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
	2015	2016	2017	2018	2019	2020		
1	33.36	34.06	34.42	35.69	39.37	43.05	2015	33.36
2	33.70	34.23	35.03	37.46	41.14	44.46	2016	34.06
3	33.92	34.68	36.36	39.17	42.63	45.61	2017	34.42
4	34.31	35.72	37.84	40.68	43.86	46.58	2018	35.69
5	35.17	36.96	39.23	41.96	44.90	52.62	2019	39.37
6	36.24	38.19	40.44	43.05	49.96	57.04	2020	43.05
7	37.33	39.30	41.51	47.41	53.89	60.53	2021	46.00
8	38.34	40.30	45.30	50.94	57.10	63.25	2022	48.19
9	39.27	43.63	48.48	53.91	59.69	65.39	2023	49.99
10	42.20	46.47	51.20	56.35	61.78	67.17	2024	82.16
11	44.76	48.96	53.49	58.37	63.54	68.70	2025	85.21
12	47.03	51.08	55.40	60.09	65.07	70.10	2026	88.30
13	48.99	52.88	57.06	61.60	66.47	71.40	2027	89.65
14	50.67	54.45	58.52	62.98	67.77	72.60	2028	90.23
15	52.15	55.85	59.86	64.27	68.97	73.74	2029	91.33
16	53.47	57.14	61.11	65.46	70.11	74.84	2030	92.99
17	54.70	58.34	62.27	66.58	71.20	75.91	2031	95.50
18	55.85	59.46	63.36	67.65	72.26	76.90	2032	98.36
19	56.91	60.51	64.41	68.69	73.24	77.89	2033	100.90
20	57.92	61.52	65.42	69.66	74.21	78.89	2034	103.82
							2035	107.66
							2036	111.45
							2037	113.86
							2038	118.67
							2039	124.37
							2040	130.33

Note: The rates shown in this table have been computed using the U.S. Energy Information Administration (EIA)'s Annual Energy Outlook 2015, released April 14, 2015. See Annual Energy Outlook 2015, Table 3.8 Energy Prices by Sector-Mountain at http://www.eia.gov/forecasts/aeo/tables_ref.cfm#supplement/

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IDAHO POWER COMPANY AVOIDED COST RATES FOR SEASONAL HYDRO PROJECTS XXXX, 2015 \$/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
	2015	2016	2017	2018	2019	2020		
1	33.36	34.06	34.42	35.69	39.37	43.05	2015	33.36
2	33.70	34.23	35.03	37.46	41.14	44.46	2016	34.06
3	33.92	34.68	36.36	39.17	42.63	45.61	2017	34.42
4	34.31	35.72	37.84	40.68	43.86	46.58	2018	35.69
5	35.17	36.96	39.23	41.96	44.90	56.15	2019	39.37
6	36.24	38.19	40.44	43.05	52.78	62.95	2020	43.05
7	37.33	39.30	41.51	49.72	58.74	68.16	2021	46.00
8	38.34	40.30	47.24	55.01	63.50	72.20	2022	48.19
9	39.27	45.28	51.94	59.35	67.30	75.38	2023	49.99
10	43.62	49.45	55.89	62.91	70.38	78.00	2024	102.93
11	47.35	53.04	59.19	65.85	72.95	80.24	2025	106.29
12	50.60	56.08	61.96	68.34	75.18	82.24	2026	109.69
13	53.40	58.66	64.33	70.52	77.17	84.05	2027	111.35
14	55.79	60.90	66.43	72.47	78.99	85.70	2028	112.24
15	57.90	62.89	68.32	74.26	80.64	87.23	2029	113.67
16	59.77	64.70	70.05	75.89	82.18	88.69	2030	115.66
17	61.48	66.36	71.64	77.41	83.63	90.07	2031	118.50
18	63.06	67.89	73.12	78.84	85.01	91.36	2032	121.70
19	64.52	69.31	74.51	80.20	86.29	92.61	2033	124.58
20	65.88	70.65	75.83	81.46	87.53	93.84	2034	127.84
							2035	132.04
							2036	136.19
							2037	138.96
							2038	144.14
							2039	150.21
							2040	156.55

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: The rates shown in this table have been computed using the U.S. Energy Information Administration (EIA)'s Annual Energy Outlook 2015, released April 14, 2015. See Annual Energy Outlook 2015, Table 3.8 Energy Prices by Sector-Mountain at http://www.eia.gov/forecasts/aeo/tables_ref.cfm#supplement/

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IDAHO POWER COMPANY AVOIDED COST RATES FOR OTHER PROJECTS XXXX, 2015 \$/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
	2015	2016	2017	2018	2019	2020		
1	33.36	34.06	34.42	35.69	39.37	43.05	2015	33.36
2	33.70	34.23	35.03	37.46	41.14	44.46	2016	34.06
3	33.92	34.68	36.36	39.17	42.63	45.61	2017	34.42
4	34.31	35.72	37.84	40.68	43.86	46.58	2018	35.69
5	35.17	36.96	39.23	41.96	44.90	51.25	2019	39.37
6	36.24	38.19	40.44	43.05	48.86	54.75	2020	43.05
7	37.33	39.30	41.51	46.51	52.01	57.57	2021	46.00
8	38.34	40.30	44.55	49.36	54.62	59.78	2022	48.19
9	39.27	42.99	47.14	51.80	56.74	61.52	2023	49.99
10	41.65	45.32	49.39	53.81	58.45	62.97	2024	74.11
11	43.76	47.38	51.28	55.47	59.89	64.24	2025	77.05
12	45.65	49.15	52.87	56.89	61.16	65.40	2026	80.02
13	47.28	50.65	54.24	58.15	62.33	66.50	2027	81.25
14	48.69	51.95	55.46	59.31	63.43	67.53	2028	81.70
15	49.92	53.12	56.59	60.40	64.45	68.51	2029	82.68
16	51.04	54.21	57.65	61.42	65.43	69.47	2030	84.22
17	52.07	55.23	58.65	62.38	66.39	70.42	2031	86.59
18	53.05	56.19	59.59	63.32	67.32	71.30	2032	89.32
19	53.97	57.10	60.50	64.23	68.19	72.19	2033	91.74
20	54.83	57.98	61.39	65.09	69.06	73.09	2034	94.51
							2035	98.22
							2036	101.87
							2037	104.14
							2038	108.81
							2039	114.36
							2040	120.18

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 2015, released April 14, 2015. See Annual Energy Outlook 2015, Table 3.8 Energy Prices by Sector-Mountain at http://www.eia.gov/forecasts/aeo/tables_ref.cfm#supplement/


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CERTIFICATE OF SERVICE

I HEREBY CERTIFY THAT I HAVE THIS 21st DAY OF AUGUST 2015, SERVED THE FOREGOING **COMMENTS OF THE COMMISSION STAFF** IN CASE NO. IPC-E-15-20, BY MAILING A COPY THEREOF, POSTAGE PREPAID, TO THE FOLLOWING:

DONOVAN E WALKER
REGULATORY DOCKETS
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RANDY ALLPHIN
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SECRETARY