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IDAHO PUBLIC
UTRITIES COMMISSION

February 3, 2021

VIA ELECTRONIC FILING

Jan Noriyuki, Secretary Idaho Public Utilities Commission 11331 W. Chinden Blvd., Bldg 8, Suite 201-A (83714) PO Box 83720 Boise, Idaho 83720-0074

Re: Ca

Case No. IPC-E-20-30

In the Matter of Idaho Power Company's Application for Authority to Establish Tariff Schedule 68, Interconnections to Customer Distributed Energy Resources

Dear Ms. Noriyuki:

Attached for electronic filing, pursuant to Order No. 34602, is Idaho Power Company's Reply Comments.

If you have any questions about the attached document, please do not hesitate to contact me.

Very truly yours,

Lisa D. Nordstrom

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LDN:slb Attachment LISA D. NORDSTROM (ISB No. 5733) Idaho Power Company 1221 West Idaho Street (83702) P.O. Box 70 Boise, Idaho 83707

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Attorney for Idaho Power Company

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF IDAHO POWER	
COMPANY'S APPLICATION FOR) CASE NO. IPC-E-20-30
AUTHORITY TO ESTABLISH TARIFF	
SCHEDULE 68 – INTERCONNECTIONS	DAHO POWER COMPANY'S
TO CUSTOMER DISTRIBUTED ENERGY	REPLY COMMENTS
RESOURCES.	

Idaho Power Company ("Idaho Power" or the "Company") respectfully submits these Reply Comments in response to the Comments filed by the Staff of the Idaho Public Utilities Commission ("Staff"), Idaho Conservation League ("ICL"), Idaho Sierra Club ("Sierra Club"), and the Idaho Clean Energy Association, Inc. ("ICEA") on January 13, 2021. Idaho Power appreciates the thoughtful review of the Company's proposal and the comments submitted by the parties of record. In Idaho Power's Reply Comments, the Company will provide additional context regarding compliance with Case No. IPC-E-17-

13 and respond to recommendations related to (1) smart inverters, (2) the non-export option, and (3) implementation.

I. BACKGROUND

The Company filed an Application on July 20, 2020, requesting the Idaho Public Utilities Commission ("Commission") authorization to establish tariff Schedule 68, Interconnections to Customer Distributed Energy Resources ("Schedule 68"). The proposed Schedule 68 is intended to comply with Commission Order Nos. 34046 and 34147 from Case No. IPC-E-17-13, which directed the Company to file smart inverter requirements within 60 days of the final adoption of Institute of Electrical and Electronics Engineers ("IEEE") standards 1547 and 1547.1, and to study the feasibility of a non-export option for Distributed Energy Resources ("DER" or "DERs") connection to the Company's system. The Company requests that Schedule 68 become effective 14 days after approval by the Commission.

Parties of record filed comments, including Staff, ICL, Sierra Club, and ICEA, on January 13, 2021. Pursuant to the Notice of Modified Procedure issued by the Commission in Order No. 34817, Idaho Power hereby submits its Reply Comments responding to parties' comments and recommendations.

II. SMART INVERTER SETTINGS

The Company appreciates the thorough review conducted by Staff and the support for approval of the Company's proposal to both establish Schedule 68 and the requirements for incorporating smart inverters. In its Comments, Staff "advises that because the Company does not intend to use the communications protocols specified by IEEE 1547-2018, smart inverters may not provide all the functionality stated by the

Company in IPC-E-17-13."¹ It appears Staff relied on the Commission's summary of the Company's position contained within Order No. 34046,² which was not entirely representative of the Company's position. Page 566 of the transcript in Case No. IPC-E-17-13 corresponds to Dave Angell's direct filed testimony:

Q. What functions does **Idaho Power perform** in order to maintain a safe and reliable distribution system and grid?

A. In order to provide safe and reliable energy on demand, **Idaho Power must perform the following functions**: voltage control, system protection, scheduling, dispatching, and load balancing. These functions are commonly referred to and collectively known as ancillary services. ³

The language Staff cited in its Comments was in response to what functions *Idaho*Power performs – the answer was not referencing smart inverter functions. However, the

Commission's findings that smart inverters provide functionality that is beneficial to
support the ongoing stability and reliability of the Company's distribution system were
based on a correct interpretation of the Company's smart inverter implementation
recommendation. In Order No. 34046, the Commission stated:

¹ Staff Comments, at 4 (emphasis added).

² In the Matter of Idaho Power Company's Application for Authority to Establish New Schedules for Residential and Small General Service Customers with On-Site Generation, Case No. IPC-E-17-13, Order No. 34046, at 20 ("The Company believes that the benefits of smart inverters include providing important ancillary services, such as: voltage control, system protection, scheduling, dispatching, load balancing, and forecasting. *Tr. At* 566.").

³ Case No. IPC-E-17-13, Angell, DI, at 4 (emphasis added).

The Commission now acknowledges that the weight of the evidence supports the proposition that smart inverters provide functionality that is beneficial to support the ongoing stability and reliability of the Company's distribution system. Therefore, we find that the industry's adoption of a smart inverter requirement will **mitigate circuit voltage deviation** in a cost effective manner and is therefore reasonable.⁴

This final language from Commission Order No. 34046 aligns with the voltage control measures that the Company described and requested in Case No. IPC-E-17-13.⁵ The Company is now requesting to implement only the smart inverter functionality necessary to maintain normal operating voltage,⁶ as the Company presented in Case No. IPC-E-17-13, and as the Commission found to be reasonable in Order No. 34046. The Company's proposed settings will improve power quality and provide the opportunity for customers to expand the interconnection of DERs for the long-term interest of the system without requiring costly system upgrades to address issues such as voltage rise. Therefore, the record supports that the Company's recommendation regarding the implementation of smart inverters in this case is consistent with the implementation plan and associated applicable functionality presented by the Company in Case No. IPC-E-17-13.

III. NON-EXPORT INTERCONNECTION OPTION

The Company appreciates the support in Comments from both Staff and ICL for the proposed non-export interconnection option. ICL recommends a modification to the Company's non-export option for systems 3 MVA and larger, suggesting to "only require additional metering and communications equipment if the site-specific studies reveals this

⁴ Case No. IPC-E-17-13, Order No. 34046, at 20 (emphasis added).

⁵ Case No. IPC-E-17-13, Angell, DI, at 23 – 27.

⁶ Ellsworth, DI, at 11-14.

is required to avoid unreasonable impact to the system."⁷ As a point of clarification, the Company's proposal does not intend to create potentially expensive additional equipment when it is not required. Instead, the requirement for metering and communications equipment is necessary to provide operational visibility of the customer generation to ensure critical system operational functions.⁸

Visibility is required for scheduling, dispatching, and load balancing.⁹ In the Western Interconnection overseen by the Western Electricity Coordinating Council ("WECC"), Balancing Authorities like Idaho Power are responsible for forecasting future system loads and resources and maintaining sufficient contingency reserves.¹⁰ Actual data from these customer sites with DERs 3 MVA and larger is critical for maintaining and refining an accurate load and resource forecast. For dispatching, System Operators must consider whether ANSI standard C84.1¹¹ can continue to be met if a large DER system suddenly reduces output.¹² Additionally, for load balancing, System Operators must maintain a real-time balance between system load and system resources to comply with the North American Electric Reliability Corporation's ("NERC") reliability requirements.¹³ Real-time information about the production of larger system resources, such as DERs 3 MVA or greater, provides important real-time visibility into what may be causing an area

⁷ ICL Comments, at 3.

⁸ Ellsworth, DI, at 23.

⁹ Ellsworth, DI, at 24.

¹⁰ WECC Reliability Standard BAL-002-WECC-2, Contingency Reserves.

¹¹ ANSI C84.1-2020, American National Standard for Electric Power Systems and Equipment – Voltage Ratings (60 Hertz).

¹² Ellsworth, DI, at 24.

¹³ NERC Reliability Standard BAL-001-1, Real Power Balancing Control Performance, Requirement R1.

control error deviation.¹⁴ In summary, the Company urges the Commission to approve Schedule 68 and the non-export option as filed to provide Idaho Power with the necessary operational visibility for scheduling, dispatching, and load balancing to safely and reliably manage the Company's system.

IV. SCHEDULE 68 IMPLEMENTATION

Idaho Power offers the following response to ICL's three recommendations regarding the implementation of Schedule 68:

- The Company provide simple education materials and training sessions for all solar installers in Idaho Power's service territory.
- The Company clarify how it will assure correct software settings for smart inverters during system inspections.
- The Company provide annual reporting to address the growth of DERs interconnected on the Company's system.¹⁵
- 1. <u>Education and Training</u>: The Company agrees with ICL that education and training for installers in its service area concerning the requirements of Schedule 68 will be necessary. Idaho Power contends that this outreach is vital to facilitating a streamlined transition to the new interconnection requirements for customer DERs. The Company has developed a plan to provide communication materials to all known installers in Idaho Power's service area if Schedule 68 is approved by the Commission. Communication materials will include email notices, as well as updated materials on the Company's

¹⁴ Ellsworth, DI, at 24.

¹⁵ ICL Comments at 3-4.

website. Additionally, the Company plans to offer virtual training sessions with installers to review the interconnection requirements and answer questions.

- 2. <u>Smart Inverter Settings</u>: Pursuant to the proposed provisions of Schedule 68, a customer¹⁶ must provide the Company with a completed System Verification Form detailing the specifications of all installed components of the completed customer generation system. As a general practice, the Company intends to rely on the customer's self-certification to assure correct software settings have been implemented; however, if necessary, will request the customer provide documentation.
- 3. Annual DER Reporting: ICL recommends that Idaho Power provide annual reporting to address DER systems' growth within its service area. Specifically, ICL suggests describing DER levels, any impacts to distribution circuits, and the potential for additional smart-inverter-based functions, ultimately recommending Idaho Power could include the update in its annual Demand-Side Management report.¹⁷ While not opposed to providing more information on non-exporting DER growth and any system impacts, the Company believes any additional DER reporting is more appropriately included in the Company's annual Net Metering Report.¹⁸

V. CONCLUSION

In consideration of the foregoing, Idaho Power respectfully requests the Commission issue an order approving the Company's proposed Schedule 68 as filed.

¹⁶ In practice, the System Verification Form is often submitted by the installer acting as the customer's agent.

¹⁷ ICL Comments, at 4.

¹⁸ Pursuant to Order Nos. 32846 and 32925 issued in Case No. IPC-E-12-27, Idaho Power submits an annual report updating the Commission on participation levels and growth rates in on-site generation, system reliability impacts, and updates on meter aggregation activity. The Company will file the next report on or before April 30, 2021.

With respect to parties' other recommendations, Idaho Power believes that: (1) Idaho Power's proposal for smart inverter requirements is consistent with all functionality stated by the Company in Case No. IPC-E-17-13; (2) the Company's proposal for non-export systems 3 MVA and greater is fair, just, reasonable, and non-discriminatory; (3) Idaho Power is well equipped to implement Schedule 68 and provide the necessary communication and training materials; and (4) any additional reporting requirements related to customer-owned DERs are appropriately included in the Company's annual Net Metering Report.

DATED at Boise, Idaho, this 3rd day of February 2021.

LISA D. NORDSTROM

Attorney for Idaho Power Company

Lisa D. Madotram

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on the 3rd day of February 2021, I served a true and correct copy of IDAHO POWER COMPANY'S REPLY COMMENTS on the following named parties by the method indicated below, and addressed to the following:

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