

LISA D. NORDSTROM Lead Counsel Inordstrom@idahopower.com RECEIVED 2021 NAY 11 PM 3: 49 IDAHO PUBLIC UTILITIES COMMISSION

May 11, 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: Case No. IPC-E-21-13 Idaho Power Company's Application for Approval of its Load Curtailment and Interruption Plan

Dear Ms. Noriyuki:

Attached for electronic filing is Idaho Power Company's Application in the above entitled matter. Also enclosed are Ms. Kathleen Anderson's direct testimony in the abovereferenced matter, as well as the proposed updates to the Company's tariff schedule Rule J, Continuity, Curtailment and Interruption of Electric Service.

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

Very truly yours,

Lin D. Madotrom

Lisa D. Nordstrom

LDN:sh Attachments LISA D. NORDSTROM (ISB No. 5733) Idaho Power Company 1221 West Idaho Street (83702) P.O. Box 70 Boise, Idaho 83707 Telephone: (208) 388-6117 Facsimile: (208) 388-6936 Inordstrom@idahopower.com

Attorney for Idaho Power Company

#### BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

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IN THE MATTER OF IDAHO POWER COMPANY'S APPLICATION FOR APPROVAL OF ITS LOAD CURTAILMENT AND INTERRUPTION PLAN

CASE NO. IPC-E-21-13 APPLICATION

Idaho Power ("Idaho Power" or "Company") hereby respectfully applies to the Idaho Public Utilities Commission ("Commission") pursuant to *Idaho Code* §§ 61-531 and -532 for approval of its 2021 Load Curtailment and Interruption Plan, as well as to update its Electric Service Rule J Continuity, Curtailment, and Interruption of Electric Service. In support of this Application, Idaho Power represents as follows:

#### I. <u>BACKGROUND</u>

1. Idaho Power is a public utility supplying retail electric service to more than 590,000 customers in southern Idaho and eastern Oregon. Idaho Power is subject to the jurisdiction of this Commission in Idaho and to the jurisdiction of the Public Utility Commission of Oregon. Idaho Power is also subject to the jurisdiction of the Federal Energy Regulatory Commission, which has delegated authority to the North American

**APPLICATION - 1** 

Electric Reliability Corporation ("NERC") to develop and enforce mandatory bulk-power system planning and reliability standards throughout North America.

2. <u>Idaho Code § 61-531. Plan for Curtailment of Electric or Gas Consumption</u> compelled the Idaho Public Utilities Commission to require all suppliers of electric power and energy to file with the Commission a plan for the curtailment of electric or gas consumption during an emergency period.

3. <u>Regional Plan</u>. In November 1993 the Commission ordered<sup>1</sup> the electric service suppliers in the state of Idaho to adopt provisions relating to electric service curtailment during periods of prolonged energy shortages such as drought, severe operational constraints, or moratoriums. The provisions were based on the Regional Curtailment Plan for Electric Energy ("Regional Plan"), a plan designed to serve as a guideline for states to use in developing their own individual curtailment plans to deal effectively with long-term energy shortages and to promote curtailment uniformity among the four Pacific Northwest states of Oregon, Washington, Idaho and Montana.<sup>2</sup>

4. <u>Modified Regional Plan</u>. Using the Regional Plan as a working guideline, the Commission ultimately required one modification to the Regional Plan concerning non-compliance penalties; this "Modified Regional Plan" became the State Curtailment Plan.<sup>3</sup> Idaho Power and numerous other utilities adopted the Modified Regional Plan in individual plans that were collectively approved in Commission Order No. 25634.<sup>4</sup> The State Curtailment Plan has not been modified since its adoption in 1994.

<sup>4</sup> Id.

<sup>&</sup>lt;sup>1</sup> In re Adoption of a State-Wide Curtailment Plan for Electric Energy, Case No. GNR-E-93-02, Order No. 25259 (November 24, 1993).

<sup>&</sup>lt;sup>2</sup> The Regional Plan has not been subsequently updated.

<sup>&</sup>lt;sup>3</sup> Case No. GNR-E-93-02, Order No. 25634 (July 11, 1994).

5. In addition to incorporating the Modified Regional Plan, the Company's existing tariff Rule J "Continuity, Curtailment and Interruption of Electric Service" ("Rule J") provides additional information about the regulatory and legal framework surrounding curtailment and interruption of electric service during periods other than long-term energy shortages.

6. <u>2001 Rule J Update</u>. In June 2001, the Company filed an update to its "Electric Load Management Rule J Procedures" ("Rule J Procedures") docketed as Case No. IPC-E-01-20. The Rule J Procedures are high-level guidelines employed by the Company to temporarily interrupt electric service to its customers during emergencies and power shortages and are intended to provide equitable guidelines for the curtailment of power while minimizing adverse impacts to customers and maintaining overall system reliability. These procedures were approved by the Commission in 2001<sup>5</sup> and an update was lodged with the Commission in July 2002.

7. <u>Load Management Procedures</u>. The Company also maintains a more detailed operational procedure manual, the Load Management Procedures ("LMP"), which serves as internal procedural manual for dealing with both short-term and longterm emergencies, interruption and curtailment. The LMP is regularly reviewed and updated by the Company's operations departments.

8. A thorough review of the Modified Regional Plan and the Rule J Procedures revealed that they no longer represented how the Company addresses curtailment. Since the Company filed its Modified Regional Plan in 1993, and Rule J Procedures in 2001 and 2002, changes in technology, industry practices, and generation capacity, load

<sup>&</sup>lt;sup>5</sup> In the Matter of the Application of Idaho Power Company to Update Its Emergency Curtailment Procedures under Tariff Rule J, Case No. IPC-E-01-20, Order No. 28856 (September 17, 2001).

shedding demand response programs, and resource availability have served to make them outdated. In particular, processes related to regional coordination have been updated by the industry reliability organizations such as NERC and the Western Energy Coordinating Council ("WECC"). The WECC is a Regional Entity given authority by the NERC to monitor and enforces compliance with reliability standards. The Company also supports Regional Reliability Coordinators<sup>6</sup>, who monitor voltages, frequencies, and other reliability indices. Moreover, the existing Modified Regional Plan is only for long-term energy shortages and doesn't address short-term supply emergencies resulting from loss of major generation or transmission equipment, regional operating standards, or weather extremes. The currently filed Rule J Procedures similarly need an update to reflect how the Company addresses curtailment.

9. Consequently, the Company requests the Commission approve its 2021 "Load Curtailment and Interruption Plan" ("LCIP"), its current practices and procedures related to curtailment of both a short-term and prolonged nature. The LCIP applies to emergencies declared by state entities<sup>7</sup>, and when directed by the NERC or the WECC (under which authority is delegated to a Regional Reliability Coordinator) and by Idaho Power at its own discretion. The Plan is operational throughout the year and is a tool for safe, efficient load reduction during high stress system events.

<sup>&</sup>lt;sup>6</sup> Idaho Power's current Reliability Coordinator is the RC West, operated by the California Independent System Operator.

<sup>&</sup>lt;sup>7</sup> Pursuant *to Idaho Code* § 61-533 the Commission "shall have the authority to declare an emergency, with or without notice, upon finding that an inadequacy or insufficiency of electric power and energy, or natural or manufactured gas threatens the health, safety and welfare of the citizens of this state." *Idaho Code* § 61-534 states that the Commission "shall have authority to require all suppliers of electric power and energy, or natural or manufactured gas, except agencies of the federal government, to curtail service in accordance with the curtailment plans on file with and approved by the commission." In the Company's Oregon jurisdiction, such emergency authority is provided to the governor of Oregon under Oregon Revised Statutes 176.750-176.820.

10. Further, to enhance transparency and to provide customers with relevant information regarding the Company's procedures related to load curtailment and interruption, the Company is proposing to incorporate the 2021 LCIP into its Rule J tariff.

### II. MODIFICATIONS TO THE EXISTING CURTAILMENT PLAN AND

#### PROCEDURES

11. The Company's 2021 LCIP, which is included as Attachment 1 to this Application and is incorporated into the proposed Rule J included as Attachment 2 to this Application, combines elements of the Modified Regional Plan originally filed in 1993 and the Rule J Procedures last filed in 2002. Previously, the Modified Regional Plan has addressed only long-term regional energy shortages, while the Rule J Procedures cover short-term emergencies. In contrast, the 2021 LCIP contains both short- and long-term operational activities the Company can initiate during emergencies to minimize adverse impacts to customers and restore system stability. The 2021 LCIP addresses the Company's operational approach to:

- Initiation of Load Curtailment,
- Automatic, Remote and Manual Actions,
- Curtailment Stages
- Interruptible Loads,
- Block Rotation,
- Emergency Load Shed Groups, and
- Return to Service.

12. The 2021 LCIP incorporates the Company's current approach to dealing with Curtailment and Interruptions, including adding provisions for load reduction with

demand response and emergency shed groups, clarifying the types of entities that can order Idaho Power to initiate load curtailment, and identifying a broader range of events that could precipitate load curtailment activities.

13. <u>Curtailment Resources</u>. The 2021 LCIP incorporates additional curtailment sources, including interruptible customer load programs such as demand response programs, which if available are the first resources to be used when immediate system stabilization is required. The demand response program provisions of Schedules 23, 81, and 82, including but not limited to operating hours, notification requirements, and incentive payments will not apply for any time period that the Company utilizes a load control device installed under the programs to interrupt a participating customer's load for an electric system emergency.

14. The 2021 LCIP also uses block rotation, the rotational curtailments used in scheduled combinations until the necessary load curtailment is achieved. Block rotation provides equitable treatment to affected customers as the combination of blocks curtailed is dependent on the day of the week and time of day the curtailment is required. The 2021 LCIP also includes emergency load shed groups, predetermined localized groups that are utilized for situations where load reductions might be required for specific high load areas.

15. <u>Events Precipitating Curtailment</u>. Events that may trigger load curtailment, either upon notice from state agencies, the Regional Reliability Coordinator, or at the discretion of the Company, include but are not limited to:

• Fire, flood, drought, winds, generation failures, lack of sufficient generating capacity, equipment failures, governmental authority;

#### **APPLICATION - 6**

- Actions taken to protect the performance, integrity, reliability or stability of the Company's electrical system or any electrical system to which it is interconnected, which actions may occur automatically or manually;
- Actions taken by the Company that in its sole judgment are necessary or prudent for the safety of people and/or equipment;
- Cyber-attacks or software failure of any part of the Company's generation, transmission, and/or distribution system protection and/or control systems.

16. In addition to the content modifications described above, the Company proposes incorporating the LCIP within its Rule J Tariff on file with the Commission. The proposed Rule J incorporating the 2021 LCIP is attached as Attachment 2 to this Application.

#### III. <u>COMMUNICATONS</u>

17. Communications and service of pleadings, with reference to this Application should be sent to the following:

Lisa D. Nordstrom Lead Counsel Idaho Power Company P.O. Box 70 Boise, Idaho 83707 Inordstrom@idahopower.com

Idaho Power Dockets:

Connie Aschenbrenner Rate Design Senior Manager Idaho Power Company P.O. Box 70 Boise, Idaho 83707 caschenbrenner@idahopower.com

dockets@idahopower.com

#### IV. MODIFIED PROCEDURE

18. Idaho Power believes that it would be appropriate to process this case by means of Modified Procedure (i.e., by written submissions rather than by hearing) in accordance with the provisions of RP 201-210 et. Seq. However, if the Commission prefers another procedure for processing, the Company has pre-filed the direct testimony of Company witness Kathleen Anderson.

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#### V. <u>REQUEST FOR RELIEF</u>

19. For the reasons set forth above and in the supporting testimony, Idaho Power respectfully requests that the Commission: (1) issue an order authorizing that this matter be processed by Modified Procedure; and (2) approve the Company's 2021 LCIP and modifications to Electric Service Rule J to incorporate the updated LCIP.

DATED at Boise, Idaho, this 11<sup>th</sup> day of May 2021.

Lin D. Madstrem

LISA D. NORDSTROM Attorney for Idaho Power Company

## **BEFORE THE**

# IDAHO PUBLIC UTILITIES COMMISSION CASE NO. IPC-E-21-13

**IDAHO POWER COMPANY** 

**APPLICATION** 

**ATTACHMENT 1** 

## Load Curtailment and Interruption Plan

## Discussion

Idaho Power will comply with all state and federal mandates to curtail the electric energy used by its customers to prevent an electrical system collapse. Events that may trigger load curtailment—either upon notice from government authorities, the regional reliability coordinator (RC), or at the discretion of the company—include, but are not limited to, the following:

- Fire, flood, drought, winds, generation failures, lack of sufficient generating capacity, equipment failures, governmental authority
- Actions taken to protect the performance, integrity, reliability, or stability of the company's electrical system or any electrical system to which it is interconnected, which may occur automatically or manually
- Actions taken by the company that in its sole judgment are necessary or prudent for the safety of people and/or equipment
- Cyber-attacks or software failure of any part of the company's generation, transmission, and/or distribution system protection and/or control systems

Load curtailment can last for a short time or could last for hours—or even days.

### Plan

### Automatic, Remote, and Manual Actions

Automatic actions occur through the operation of programmed protective equipment installed on the company's electrical system, including, without limitation, equipment such as automatic relays, generator controls, circuit breakers, and switches. This protection equipment is preset to operate under certain prescribed conditions that, in the sole judgment of the company, threaten system performance, integrity, reliability, or stability.

Where Supervisory Control and Data Acquisition (SCADA) equipment is installed, Idaho Power will remotely control switches, circuit breakers, relays, voltage regulators, or other equipment. In areas where no SCADA equipment is installed, actions are performed manually by on-site field personnel. If actions are undertaken, to the extent permitted by the operating characteristics of the electrical system, the company will perform such actions so interruption, curtailment, or fluctuation of service to customers will be accomplished sequentially—unless it is necessary in the sole judgment of the company, or if required by the regional RC to vary the sequence to protect system performance, integrity, reliability, or stability.

#### Curtailment and Interruption

Curtailment and/or interruption of electric service can occur at any time for a multitude of situations. When these situations arise, Idaho Power intends to take appropriate actions to mitigate the situation for reliability while maintaining service continuity to as many customers as practical. Depending on the nature of the situation, mitigation actions will range from actions that will not affect customers to actions that curtail and/or interrupt service, impacting localized areas and/or the entire Idaho Power service area.

Idaho Power will promptly notify and keep state regulatory and reliability authorities informed of the curtailment and/or interruption to electric service.

#### **Rotating Outages and Ongoing Curtailment**

Curtailment and/or interruption of customer load may be necessary to maintain the reliability of the electric system in certain situations. If Idaho Power must curtail or interrupt customer load for any reason, the company's intent is to curtail the appropriate amount of load necessary to mitigate the situation. This is accomplished by selecting the amount or percent of load reduction needed in the Energy Management System (EMS) Load Shedding application. The EMS Load Shedding application allows the operator to select the applicable localized area or necessary portions of the company's service area to curtail the load. Load curtailment is accomplished manually in areas that do not have SCADA connected to the EMS.

A range of curtailment stages associated with increasing levels of energy deficiencies has been developed, incorporating North American Electric Reliability Corporation (NERC) standards. The circumstances necessitating a reduction in electricity consumption in the short term will normally require immediate emergency action to be taken. As such, there may be little or no warning. Sudden equipment outages or loss of generation could potentially lead directly to any curtailment stage without prior notice or progression of the stages described in the following. These stages align with the severity of the energy deficiency and are intended to minimize customer impact.

#### Table 1. Curtailment stages

Stage	Nature	Type of Curtailment
1	All generation resources are committed. Firm customer load, firm transactions, and reserve commitments are met. Concerned about sustaining required contingency reserves.	<ul> <li>Non-firm wholesale energy sales.</li> <li>Ask customers to voluntarily take conservation measures.</li> <li>Issue communications notifying employees of the situation and asking departments to reduce internal utility energy use.</li> </ul>
2	Idaho Power is no longer able to provide expected energy requirements.	<ul> <li>Curtailment actions listed in Stage 1.</li> <li>Interruptible customer load and available demand-response programs.</li> <li>Issue communications requesting government agencies implement their programs to achieve necessary energy reductions.</li> </ul>
3	Idaho Power is unable to meet minimum contingency reserves as required by NERC Standards.	<ul> <li>Curtailment actions listed in Stage 1 and Stage 2</li> <li>Implement emergency load shed and block rotation.</li> </ul>
4	Emergency load shed due to immediate risk posed to electrical reliability.	<ul> <li>Applicable to all customers. May be limited to a specific location if reliability risk is local to an area.</li> </ul>

Demand response programs, if deployed as required action under this plan, will not be operated under the provisions of schedules 23, 81, and 82. The provisions of schedules 23, 81, and 82—including but not limited to, operating hours, notification requirements, and incentive payments—will not apply for any time period the company utilizes a load control device installed under the programs to interrupt a participating customer's load for an electric system emergency.

### Return to Service

Idaho Power will to return service to all its customers when:

- It can meet its load and required operating reserves.
- The reliability of the electric system will not be jeopardized.
- RC approval has been received, if applicable.

## **Revision History**

<b>Review Date</b>	Revisions
05/11/2021	Procedure was adopted.

## **BEFORE THE**

# IDAHO PUBLIC UTILITIES COMMISSION

## CASE NO. IPC-E-21-13

## **IDAHO POWER COMPANY**

**APPLICATION** 

**ATTACHMENT 2** 

I.P.U.C. No. 29, Tariff No. 101

#### RULE J <u>CONTINUITY, CURTAILMENT AND</u> <u>INTERRUPTION OF ELECTRIC</u> <u>SERVICE</u>

1. Electric Service is inherently subject to occasional interruption, suspension, curtailment, and fluctuation. The Company will have no liability to its Customers or any other persons for any interruption, suspension, curtailment, or fluctuation in service or for any loss or damage caused thereby if such interruption, suspension, curtailment, or fluctuation results from any of the following:

a. Causes beyond the Company's reasonable control including, but not limited to, fire, flood, drought, winds, acts of the elements, court orders, insurrections or riots, generation failures, lack of sufficient generating capacity, breakdowns of or damage to facilities of the Company or of third parties, acts of God or public enemy, strikes or other labor disputes, civil, military or governmental authority, electrical disturbances originating on or transmitted through electrical systems with which the Company's system is interconnected, and acts or omissions of third parties;

b. Repair, maintenance, improvement, renewal or replacement work on the Company's electrical system, which work in the sole judgment of the Company is necessary or prudent; to the extent practicable work shall be done at such time as will minimize inconvenience to the Customer and, whenever practicable, the Customer shall be given reasonable notice of such work;

c. Actions taken by the Company, which in its sole judgment are necessary or prudent to protect the performance, integrity, reliability or stability of the Company's electrical system or any electrical system with which it is inter-connected, which actions may occur automatically or manually.

2. The provisions of this rule do not affect any person's rights in tort.

3. Load curtailment and interruption carried out in compliance with an order by governmental authority shall follow the Company's plan entitled "Load Curtailment and Interruption Plan", as outlined below.

I.P.U.C. No. 29, Tariff No. 101

Original Sheet No. J-2

#### RULE J <u>CONTINUITY, CURTAILMENT AND</u> <u>INTERRUPTION OF ELECTRIC</u> <u>SERVICE</u>

#### LOAD CURTAILMENT AND INTERRUPTION PLAN:

#### **OVERVIEW**

1. The Company will comply with all state and federal mandates to curtail the electric energy used by its Customers to prevent an electrical system collapse. Events that may trigger load curtailment, either upon notice from state agencies, the Regional Reliability Coordinator, or at the discretion of the Company, include but are not limited to:

- a. Fire, flood, drought, winds, generation failures, lack of sufficient generating capacity, equipment failures, governmental authority,
- b. Actions taken to protect the performance, integrity, reliability or stability of the Company's electrical system or any electrical system to which it is interconnected, which actions may occur automatically or manually,
- c. Actions taken by the Company that in its sole judgment are necessary or prudent for the safety of people and/or equipment, or
- d. Cyber-attacks or software failure of any part of the Company's generation, transmission, and/or distribution system protection and/or control systems.

2. Load curtailment can last for a short amount of time, but also could last for hours or even days.

#### AUTOMATIC, REMOTE AND MANUAL ACTIONS

1. Automatic actions occur through the operation of programmed protective equipment installed on the Company's electrical system, including, without limitation, equipment such as automatic relays, generator controls, circuit breakers, and switches. This protection equipment is preset to operate under certain prescribed conditions that, in the sole judgment of the Company, threaten system performance, integrity, reliability or stability.

2. Where Supervisory Control and Data Acquisition (SCADA) equipment is installed, the Company will remotely control switches, circuit breakers, relays, voltage regulators or other equipment. In areas where no SCADA equipment is installed, actions are performed manually by on-site field personnel.

3. If actions are undertaken, then to the extent permitted by the operating characteristics of the electrical system, the Company will perform such actions so that interruption, curtailment, or fluctuation of service to customers will be accomplished sequentially, unless it is necessary in the sole judgment of the Company, or if required by the Regional Reliability Coordinator to vary said sequence in order to protect system performance, integrity, reliability or stability.

I.P.U.C. No. 29, Tariff No. 101

#### RULE J <u>CONTINUITY, CURTAILMENT AND</u> <u>INTERRUPTION OF ELECTRIC</u> <u>SERVICE</u>

#### CURTAILMENT AND INTERRUPTION

1. Curtailment and/or interruption of electric service can occur at any time for a multitude of situations. When these situations arise, Idaho Power intends to take appropriate actions to mitigate the situation for reliability while maintaining service continuity to as many customers as practical. Depending on the nature of the situation, mitigation actions will range from actions that will not affect Customers to actions that curtail and/or interrupt service, impacting localized areas and/or the entire Idaho Power service area.

2. Idaho Power will promptly notify and keep state regulatory and reliability authorities informed of the curtailment and/or interruption to electric service.

#### ROTATING OUTAGES AND ONGOING CURTAILMENT

1. Curtailment and/or interruption of Customer load may be necessary to maintain the reliability of the electric system in certain situations. In the event Idaho Power must curtail or interrupt Customer load for any reason, the Company's intent is to curtail the appropriate amount of load necessary to mitigate the situation. This is accomplished by selecting the amount or percent of load reduction needed in the Energy Management System (EMS) Load Shedding application. The EMS Load Shedding application allows the operator to select the applicable localized area or necessary portions of the Company's service area to curtail the load. Load curtailment is accomplished manually in areas that do not have SCADA connected to the EMS.

2. A range of curtailment stages associated with increasing levels of energy deficiencies has been developed, incorporating North American Electric Reliability Corporation (NERC) standards. The circumstances necessitating a reduction in the consumption of electricity in the short term will normally require that immediate emergency action is taken and as such there may be little or no warning. Sudden equipment outages or loss of generation could potentially lead directly to any curtailment stage without prior notice or progression of the stages described below. These stages align with the severity of the energy deficiency and are intended to minimize customer impact.

I.P.U.C. No. 29, Tariff No. 101

Original Sheet No. J-4

#### RULE J <u>CONTINUITY, CURTAILMENT AND</u> <u>INTERRUPTION OF ELECTRIC</u> <u>SERVICE</u>

#### ROTATING OUTAGES AND ONGOING CURTAILMENT (Continued)

Stage	Nature	Type of Curtailment
1	All generation resources are committed. Firm Customer load, firm transactions, and reserve commitments are met. Concerned about sustaining required Contingency Reserves	<ul> <li>Non-firm wholesale energy sales</li> <li>Ask Customers to voluntarily take conservation measures</li> <li>Issue communications notifying employees of the situation and asking Company departments to reduce internal utility energy use.</li> </ul>
2	Idaho Power is no longer able to provide expected energy requirements	<ul> <li>Curtailment actions listed in Stage 1</li> <li>Interruptible Customer load and available demand response programs</li> <li>Issue communications requesting government agencies to implement their programs to achieve necessary energy reductions</li> </ul>
3	Idaho Power is unable to meet minimum Contingency Reserves as required by NERC Standards	<ul> <li>Curtailment actions listed in Stage 1 and Stage 2</li> <li>Implement Emergency Load Shed and Block Rotation</li> </ul>
4	Emergency Load Shed due to immediate risk posed to electrical reliability.	<ul> <li>Applicable to all Customers. May be limited to a specific location if reliability risk is local to an area.</li> </ul>

3. Demand response programs, if deployed as a required action under this plan, will not be operated under the provisions of Schedules 23, 81, and 82. The provisions of Schedules 23, 81, and 82, including but not limited to operating hours, notification requirements, and incentive payments will not apply for any time period that the Company utilizes a Load Control Device installed under the programs to interrupt a participating customer's load for an electric system emergency.

#### RETURN TO SERVICE

Idaho Power will return service to its Customers when:

- The Company can meet its load and required operating reserves.
- The reliability of the electric system will not be jeopardized.
- Reliability Coordinator approval has been received, if applicable.

I.P.U.C. No. 29, Tariff No. 101

#### RULE J <u>CONTINUITY, CURTAILMENT AND</u> <u>INTERRUPTION OF ELECTRIC</u> <u>SERVICE</u>

1. Electric Service is inherently subject to occasional interruption, suspension, curtailment, and fluctuation. The Company will have no liability to its Customers or any other persons for any interruption, suspension, curtailment, or fluctuation in service or for any loss or damage caused thereby if such interruption, suspension, curtailment, or fluctuation results from any of the following:

a. Causes beyond the Company's reasonable control including, but not limited to, fire, flood, drought, winds, acts of the elements, court orders, insurrections or riots, generation failures, lack of sufficient generating capacity, breakdowns of or damage to facilities of the Company or of third parties, acts of God or public enemy, strikes or other labor disputes, civil, military or governmental authority, electrical disturbances originating on or transmitted through electrical systems with which the Company's system is interconnected, and acts or omissions of third parties;

b. Repair, maintenance, improvement, renewal or replacement work on the Company's electrical system, which work in the sole judgment of the Company is necessary or prudent; to the extent practicable work shall be done at such time as will minimize inconvenience to the Customer and, whenever practicable, the Customer shall be given reasonable notice of such work;

c. Actions taken by the Company, which in its sole judgment are necessary or prudent to protect the performance, integrity, reliability or stability of the Company's electrical system or any electrical system with which it is inter-connected, which actions may occur automatically or manually.

2. <u>The provisions of this rule do not affect any person's rights in tort.</u>

Load curtailment and interruption carried out in compliance with an order by governmental authority shall follow the Company's plan entitled "Load Curtailment and Interruption Procedure", as filed with and approved by the Commission.

3. Load curtailment and interruption carried out in compliance with an order by governmental authority shall follow the Company's plan entitled "Load Curtailment and Interruption Procedure and", as filed with and approved by the Commission outlined below.

The provisions of this rule do not affect any persons rights in tort.

IDAHO Issued per Order No. 30508 Effective – March 1, 2008 Issued by IDAHO POWER COMPANY John R. Gale<u>Timothy E. Tatum</u>, Vice President, Regulatory Affairs 1221 West Idaho Street, Boise, Idaho

I.P.U.C. No. 29, Tariff No. 101

Original Sheet No. J-2

#### RULE J CONTINUITY, CURTAILMENT AND INTERRUPTION OF ELECTRIC SERVICE

#### LOAD CURTAILMENT AND INTERRUPTION PLAN:

#### **OVERVIEW**

1. The Company will comply with all state and federal mandates to curtail the electric energy used by its Customers to prevent an electrical system collapse. Events that may trigger load curtailment, either upon notice from state agencies, the Regional Reliability Coordinator, or at the discretion of the Company, include but are not limited to:

- a. Fire, flood, drought, winds, generation failures, lack of sufficient generating capacity, equipment failures, governmental authority,
- b. Actions taken to protect the performance, integrity, reliability or stability of the Company's electrical system or any electrical system to which it is interconnected, which actions may occur automatically or manually,
- c. Actions taken by the Company that in its sole judgment are necessary or prudent for the safety of people and/or equipment, or
- d. Cyber-attacks or software failure of any part of the Company's generation, transmission, and/or distribution system protection and/or control systems.

2. Load curtailment can last for a short amount of time, but also could last for hours or even days.

#### AUTOMATIC, REMOTE AND MANUAL ACTIONS

1. Automatic actions occur through the operation of programmed protective equipment installed on the Company's electrical system, including, without limitation, equipment such as automatic relays, generator controls, circuit breakers, and switches. This protection equipment is preset to operate under certain prescribed conditions that, in the sole judgment of the Company, threaten system performance, integrity, reliability or stability.

2. Where Supervisory Control and Data Acquisition (SCADA) equipment is installed, the Company will remotely control switches, circuit breakers, relays, voltage regulators or other equipment. In areas where no SCADA equipment is installed, actions are performed manually by on-site field personnel.

3. If actions are undertaken, then to the extent permitted by the operating characteristics of the electrical system, the Company will perform such actions so that interruption, curtailment, or fluctuation of service to customers will be accomplished sequentially, unless it is necessary in the sole judgment of the Company, or if required by the Regional Reliability Coordinator to vary said sequence in order to protect system performance, integrity, reliability or stability.

IDAHO	Issued by IDAHO POWER COMPANY
Issued per Order No.	Timothy E. Tatum, Vice President, Regulatory Affairs
Effective –	1221 West Idaho Street, Boise, Idaho

I.P.U.C. No. 29, Tariff No. 101

Original Sheet No. J-3

#### RULE J CONTINUITY, CURTAILMENT AND INTERRUPTION OF ELECTRIC SERVICE

#### CURTAILMENT AND INTERRUPTION

1. Curtailment and/or interruption of electric service can occur at any time for a multitude of situations. When these situations arise, Idaho Power intends to take appropriate actions to mitigate the situation for reliability while maintaining service continuity to as many customers as practical. Depending on the nature of the situation, mitigation actions will range from actions that will not affect Customers to actions that curtail and/or interrupt service, impacting localized areas and/or the entire Idaho Power service area.

2. Idaho Power will promptly notify and keep state regulatory and reliability authorities informed of the curtailment and/or interruption to electric service.

#### ROTATING OUTAGES AND ONGOING CURTAILMENT

1. Curtailment and/or interruption of Customer load may be necessary to maintain the reliability of the electric system in certain situations. In the event Idaho Power must curtail or interrupt Customer load for any reason, the Company's intent is to curtail the appropriate amount of load necessary to mitigate the situation. This is accomplished by selecting the amount or percent of load reduction needed in the Energy Management System (EMS) Load Shedding application. The EMS Load Shedding application allows the operator to select the applicable localized area or necessary portions of the Company's service area to curtail the load. Load curtailment is accomplished manually in areas that do not have SCADA connected to the EMS.

2. A range of curtailment stages associated with increasing levels of energy deficiencies has been developed, incorporating North American Electric Reliability Corporation (NERC) standards. The circumstances necessitating a reduction in the consumption of electricity in the short term will normally require that immediate emergency action is taken and as such there may be little or no warning. Sudden equipment outages or loss of generation could potentially lead directly to any curtailment stage without prior notice or progression of the stages described below. These stages align with the severity of the energy deficiency and are intended to minimize customer impact.

IDAHO	Issued by IDAHO POWER COMPANY
Issued per Order No.	Timothy E. Tatum, Vice President, Regulatory Affairs
Effective –	1221 West Idaho Street, Boise, Idaho

I.P.U.C. No. 29, Tariff No. 101

Original Sheet No. J-4

#### RULE J CONTINUITY, CURTAILMENT AND INTERRUPTION OF ELECTRIC SERVICE

ROTATING OUTAGES AND ONGOING CURTAILMENT (Continued)

Stage	Nature	Type of Curtailment
1	All generation resources are committed. Firm Customer load, firm transactions, and reserve commitments are met. Concerned about sustaining required Contingency Reserves	<ul> <li>Non-firm wholesale energy sales</li> <li>Ask Customers to voluntarily take conservation measures</li> <li>Issue communications notifying employees of the situation and asking Company departments to reduce internal utility energy use.</li> </ul>
2	Idaho Power is no longer able to provide expected energy requirements	<ul> <li>Curtailment actions listed in Stage 1</li> <li>Interruptible Customer load and available demand response programs</li> <li>Issue communications requesting government agencies to implement their programs to achieve necessary energy reductions</li> </ul>
3	Idaho Power is unable to meet minimum Contingency Reserves as required by NERC Standards	<ul> <li>Curtailment actions listed in Stage 1 and Stage 2</li> <li>Implement Emergency Load Shed and Block Rotation</li> </ul>
4	Emergency Load Shed due to immediate risk posed to electrical reliability.	Applicable to all Customers. May be limited to a specific location if reliability risk is local to an area.

3. Demand response programs, if deployed as a required action under this plan, will not be operated under the provisions of Schedules 23, 81, and 82. The provisions of Schedules 23, 81, and 82, including but not limited to operating hours, notification requirements, and incentive payments will not apply for any time period that the Company utilizes a Load Control Device installed under the programs to interrupt a participating customer's load for an electric system emergency.

#### **RETURN TO SERVICE**

Idaho Power will return service to its Customers when:

- The Company can meet its load and required operating reserves.
- The reliability of the electric system will not be jeopardized.
- Reliability Coordinator approval has been received, if applicable.

IDAHO	Issued by IDAHO POWER COMPANY
Issued per Order No.	Timothy E. Tatum, Vice President, Regulatory Affairs
Effective –	1221 West Idaho Street, Boise, Idaho

KATHLEEN ANDERSON

OF

DIRECT TESTIMONY

IDAHO POWER COMPANY

) ) )

IN THE MATTER OF IDAHO POWER ) COMPANY'S APPLICATION FOR ) APPROVAL OF ITS LOAD CURTAILMENT ) AND INTERRUPTION PLAN )

) CASE NO. IPC-E-21-13

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

Q. Please state your name, business address and
 position with Idaho Power ("Idaho Power" or the "Company).
 A. My name is Kathleen Anderson. My business address
 is 1221 West Idaho Street, Boise, Idaho 83702. My present
 position is Real Time Operations and Markets Senior Manager
 in the Load Serving Operations Department.

Q. Please describe your educational background.

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In December of 2000, I received a Bachelor of 8 Α. Administration degree in Finance from Boise State University 9 in Boise, Idaho. In September of 2005, I earned a Master of 10 11 Business Administration degree from the University of 12 Phoenix. I hold a NERC System Operator - Reliability Operator (RC) certification. I obtained the initial certification in 13 2009 and renew it every 3 years after completing the 14 continuing education requirements. The continuing education 15 requirements include training hours dedicated to emergency 16 17 operations.

Q. Briefly describe your work experience with Idaho
 Power.

20 Α. In 2005, I was hired as a Business Analyst in Idaho Delivery 21 Power's Finance Department. My primary 22 responsibilities included reviewing and granting credit to 23 entities wishing to conduct business under the Company's Open Access Transmission Tariff ("OATT"). In addition, I provided 24

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analyst support to the Company's Grid Operations Department,
 assisting with budgeting and other financial and accounting
 duties. In 2006, I transferred to the Grid Operations
 Department as an Operations Analyst and was responsible for
 all contractual obligations of the Company's OATT.

6 In 2009, I became the System Operations Leader in the Grid Operations Department and oversaw all day-ahead and 7 real-time activity conducted under the OATT, as well as all 8 transmission contracts administered by the Grid Operations 9 10 and Load Serving Operations Departments. In 2015, I was promoted to the Transmission and Energy Scheduling Leader 11 12 where, in addition to my then-current duties, I assumed the oversight responsibility of the day-ahead 13 balancing 14 operators.

15 In 2018, I was promoted to the Transmission and Balancing Operations Manager where I assumed responsibility for 16 17 managing Idaho Power's real time system operations which includes transmission, generation dispatch and balancing 18 operations activities. In 2020, I was promoted to my current 19 position of Real Time Operations and Markets Senior Manager 20 21 where, in addition to my then-current duties, I assumed the oversight of Idaho Power's participation in regional market 22 23 activities.

24 ///

Q. What is the purpose of your testimony in this case? A. The purpose of my testimony is to address the Company's application to replace its Modified Regional Plan and Electric Load Management Rule J Procedures ("Rule J Procedures") with the Company's updated Load Curtailment and Interruption Plan, ("LCIP").

Q. What prompted the Company to review its curtailment8 plan and procedures?

Α. The original Modified Regional Plan, which focused 9 10 on long-term regional load curtailment, was developed in the 11 early 1990s. Over time, changes in technology, modifications 12 to industry practices, and changes in generation capacity 13 have served to make the existing Modified Regional Plan 14 obsolete. Further, industry developments, such as regional 15 resource adequacy concerns, wildfires and extreme weather, 16 growth in distributed energy, cybersecurity concerns, and 17 failures of the interconnected grid elsewhere in the United 18 States have all contributed to the development of updated industry standards and procedures to address curtailment and 19 20 interruption. Similar factors impact the need to update the 21 Company's Rule J Curtailment Procedures on file with the 22 Commission.

Q. Please describe current industry practices related
to system reliability and operating standards.

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Idaho Power complies with Federal Energy Regulatory 1 Α. Commission (FERC) regulations and North American Electric 2 Reliability Corporation (NERC) reliability standards and is 3 a member of the Western Electricity Coordinating Council 4 5 (WECC). The WECC is a Regional Entity given authority by the 6 NERC to monitor and enforces compliance. The Company also supports Regional Reliability Coordinators, who monitor 7 8 voltages, frequencies, and other reliability indices. The Company's current reliability coordinator is RC West. 9 operated by the California Independent System Operator. 10

Bulk electric system reliability and operating standards 11 12 for utilities in the western part of the United States provide for a coordinated effort to effectively manage energy 13 shortage situations, which includes: shedding firm load in an 14 emergency situation using the Company's under frequency 15 and/or under voltage load shedding programs to arrest 16 assisting recovery of 17 declining frequency; frequency following under frequency events; and providing last resort 18 19 system preservation measures to prevent a blackout or voltage 20 collapse.

Emergencies that threaten the integrity of the electric system can develop at any time due to shortage of generation or disturbances on the system, either locally or within the Western Interconnection. The circumstances necessitating a

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1 reduction in the demand or consumption of electricity in the 2 short term will require that immediate emergency action is 3 taken and may potentially lead directly to firm load 4 curtailment.

5 Q. Is the 2021 LCIP being submitted simply as a 6 modification of the Company's current curtailment plan and 7 procedures?

8 Α. No. A lot has changed since the Modified Regional Plan was filed in 1993 and the Rule J Curtailment Procedures 9 were last updated in 2002. As noted above, changes in 10 11 technology, industry practices, and generation capacity have 12 made the existing Regional Plan obsolete. Although some elements of the Modified Regional Plan are found within the 13 14 2021 LCIP, the existing Modified Regional Plan and 2021 LCIP 15 vary enough in format and content that it required completely 16 re-writing the curtailment plan.

17 Q. Please summarize the elements of the 2021 LCIP.

18 Α. The 2021 LCIP includes new provisions for load reduction with demand response and emergency load shed 19 20 groups, and clarification regarding what entities can 21 initiate load curtailment. It also covers a broader range of 22 events that can precipitate load curtailment activities. The 2021 LCIP combines elements of the Company's Rule J Procedures 23 24 and the Modified Regional Plan.

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Q. Is the scope of the 2021 LCIP essentially the same as the existing Modified Regional Curtailment Plan or the Rule J Procedures?

No. The existing Modified Regional Curtailment Plan 4 Α. 5 addresses only long-term regional energy shortages; the 2021 6 LCIP focuses on practical and actionable operational activities the Company can initiate during emergencies to 7 8 minimize adverse impacts to customers and restore system stability. The possible causes of a long-term energy shortage 9 10 described within the Modified Regional include: Plan severe operational constraints, 11 prolonged drought, or 12 moratoriums. This limited, narrow approach to curtailment fails to provide direction for addressing more common 13 emergencies such as temporary loss of generation, failed 14 equipment, or extreme weather and temperatures. The 2021 LCIP 15 is broader in scope, addressing both long-term energy 16 temporary power interruptions due 17 shortages and to emergencies and system conditions. 18

Q. Please summarize the curtailment stages identified
 in the 2021 LCIP.

A. The 2021 LCIP describes curtailment stages associated with increasing energy deficits, estimated impacts to customers and the methods that may be employed to reach the required load curtailment necessary to stabilize the bulk

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1 electrical system. These stages incorporate corresponding NERC Alert levels as defined in NERC Standard EOP-011-1, 2 notifications and reporting requirements in each Energy 3 Emergency Alert level for all applicable entities 4 and 5 designated authorized parties and their respective 6 responsibilities.

Q. What new provisions for curtailment sources are8 included in the 2021 LCIP?

9 Α. The 2021 LCIP incorporates several new curtailment 10 sources, including demand response load control capabilities and interruptible customer load shed programs. Electric 11 12 service contracts with certain large customers may allow for 13 curtailment when the Company's contingency reserve, 14 transmission margin, or both are needed to meet system 15 demands. Interruptible Power Service gives the Company the 16 flexibility to curtail load as the first resource used when immediate system stabilization is required. This provision 17 18 has been included in the 2021 LCIP.

The Company also has developed demand response programs with its irrigation and residential customer groups that allow the Company to cycle off participating customers during peak load events using direct load control devices. In the event of a system emergency, the direct load control devices installed at customer locations could be activated to help

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1 manage load. The Company also has a demand response program 2 available to its commercial and industrial customers that 3 requires the customer (often an operations manager) to take 4 action to reduce load at the site. The Company has 5 notification procedures in place and can use these tools to 6 activate an emergency event with these customers.

Q. Why is it important to recognize demand response and interruptible loads and emergency load shed programs as part of the 2021 LCIP?

The Company has demand response programs that can 10 Α. 11 be called upon to achieve reductions in load. The 2021 LCIP 12 also makes use of the Company's load shedding application 13 within its Emergency Management System, and related load shedding procedures, and block rotation, which provides for 14 15 rotational curtailments used in scheduled combinations until the necessary load curtailment is achieved. Block rotation 16 provides equitable treatment to customers as the combination 17 of blocks curtailed is dependent on the day of the week and 18 time of day the curtailment is required. This method spreads 19 the impacts of curtailment to a broad base of customers so 20 21 that no particular group of customers is unduly impacted. 22 Where known and feasible within operational parameters, distribution feeders serving facilities essential to the 23 public welfare are avoided during rotational curtailment. 24

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However, it should be noted that the Company cannot definitively account for all such facilities, nor is it possible to exclude every known facility from the impacts of curtailment.

5 Q. What types of entities may initiate load 6 curtailment under the 2021 LCIP?

7 Α. Under the 2021 LCIP load curtailment will be initiated when directed by the Reliability Coordinator, who 8 has been delegated this authority under NERC standards, by 9 10 order of the Commission, or by the Company at its own 11 discretion. The long-term scope of the Modified Regional Plan limited the initiation of load curtailment to "the state's 12 13 declaration of an energy emergency." The Idaho Legislature 14 delegated authority to declare such an emergency and initiate 15 load curtailment to the Commission under Idaho Code §61-533 and §61-534. In Idaho Power's Oregon service area, the 16 Governor of Oregon is authorized to declare an energy 17 18 emergency under Oregon Revised Statutes 176.750 - 176.820.

19 Q. How does the Company plan to provide customers and 20 external State and regulatory stakeholders with information 21 during an emergency event?

A. Throughout the curtailment period the Company will provide customers and external State and regulatory stakeholders with as much information as possible using

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1 established processes and protocols. The Company has detailed Load Management Procedures (LMP) that describe roles 2 and responsibilities for communications during defined system 3 emergency events. The Company also has developed an Emergency 4 5 Response Communication Plan that provides detailed 6 responsibilities and communications. During all stages of an emergency event, communication responsibilities are assigned 7 8 to specific individuals or departments for communication within the Company, with regulatory and reliability entities, 9 10 and with the general public.

Customers will be able to get outage information through 11 12 customer service, online at idahopower.com, by subscribing to text alerts and if warranted, public communication via media 13 and social media outreach. Providing as much information as 14 possible on a timely basis to customers allows customers to 15 be prepared as possible for a curtailment event and is another 16 way the 2021 LCIP attempts to minimize the impacts of 17 18 curtailment.

19 Q. What is the Company's plan for providing updates to 20 the 2021 LCIP?

A. In general, the 2021 LCIP is intended to broadly address load curtailments and interruptions so as to not require frequent updates, although the current state and regional wildfire and resource adequacy efforts may

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necessitate updates over the next few years. The Company has 1 detailed internal Load Management Procedures that support the 2 3 2021 LCIP and are reviewed and updated at least annually to ensure that the Company is fully prepared to deal with any 4 curtailment situations. As part of that annual review, the 5 Company intends to also review the LCIP and file updates with 6 7 the Commission as necessary.

Please summarize why the Company is filing this 8 Ο. application requesting Commission approval of its 2021 LCIP 9 10 and modifications to Rule J - Continuity, Curtailment and 11 Interruption of Electric Service.

12 Since 1993, there have been changes in Company and Α. 13 industry practices, technology, generation capacity, demand 14 response, and resource availability. The previously approved 15 Modified Regional Plan and the Rule J Procedures no longer 16 represent how the Company addresses curtailment, necessitating a complete re-write of them. 17 The Modified 18 Regional Plan is only for long-term energy shortages and 19 doesn't address short-term supply emergencies resulting from 20 loss of major generation or transmission equipment, regional 21 operating standards, or weather extremes. The 2021 LCIP 22 addresses the Company's operational approach to:

23

24

Initiation of Load Curtailment,

Automatic, Remote and Manual Actions,

25 Curtailment Stages,

1 2 3 4 5	<ul> <li>Interruptible Loads,</li> <li>Block Rotation,</li> <li>Emergency Load Shed, and</li> <li>Return to Service.</li> </ul>
6	The Company believes that the 2021 LCIP is consistent
7	with the public health, safety and welfare, is technically
8	feasible to implement, and properly attempts to balance the
9	impact of any curtailment. Thus, the Company requests that
10	the Idaho Public Utilities Commission approve its 2021 Load
11	Curtailment and Interruption Plan.
12	Q. Does this conclude your testimony?

13 A. Yes.

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1	DECLARATION OF KATHLEEN ANDERSON
2	I, Kathleen Anderson, declare under penalty of perjury
3	under the laws of the state of Idaho:
4	1. My name is Kathleen Anderson. I am employed by
5	Idaho Power Company as a Real Time Operations and Markets
6	Senior Manager in Power Supply.
7	2. On behalf of Idaho Power, I present this pre-
8	filed direct testimony in this matter.
9	3. To the best of my knowledge, my pre-filed direct
10	testimony is true and accurate.
11	I hereby declare that the above statement is true to
12	the best of my knowledge and belief, and that I understand
13	it is made for use as evidence before the Idaho Public
14	Utilities Commission and is subject to penalty for perjury.
15	SIGNED this $11^{th}$ day of May 2021, at Boise, Idaho.
16	Ac to
17	Kathleen Anderson
18	Kathleen Anderson