



# PUBLIC WORKSHOP

## IDAHO POWER COMPANY

APPLICATION TO STUDY NET EXCESS ENERGY FROM CUSTOMER  
ON-SITE GENERATION  
CASE NO. IPC-E-21-21

IDAHO PUBLIC UTILITIES COMMISSION  
October 26, 2021, 6:00PM (MDT)

# INTRODUCTIONS

**Adam Rush – Public Information Officer**

**Taylor Thomas – Utilities Analyst**

**Travis Culbertson – Utilities Analyst**

**Yao Yin – Utilities Analyst**

**Jolene Bossard – Utilities Compliance Investigator**

# IDAHO PUBLIC UTILITIES COMMISSION

Established in 1913. Idaho Code Sections 61, 62, and 63.

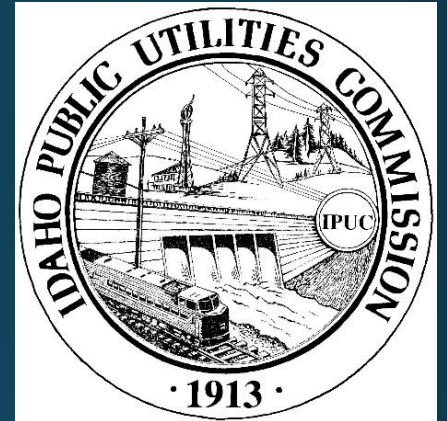
The Commission regulates Idaho's investor-owned utilities, ensuring adequate service and reasonable rates.

The Commission is made up of three commissioners appointed by the Governor.

The Commission makes the decisions in each case.

Commission Staff is made up of Auditors, Consumer Advocates, Engineers & Technical Analysts.

Commission Staff is a party in all filed cases and provides comments and recommendations to the Commissioners.



# PARTICIPATION

## ONLINE:



- To chat open the feature in WebEx, select the chat icon in the lower right portion of the meeting window.
  - Type your questions or comments in the chat box;
  - Please be sure to use the “all panelists” option in the drop-down list when using chat to ensure your message will be seen by all.
- To speak directly online, click on the hand icon in the lower right corner by your name to be un-muted.

## BY PHONE:

- Press \*3 to raise and lower your hand;
  - When your line has been un-muted, you will hear an announcement indicating you’ve been un-muted.

The presentation will be available on the Commission’s homepage at [puc.idaho.gov](http://puc.idaho.gov)  
(Workshop is recorded)

# APPLICATION

- On June 28, 2021, Idaho Power Company (“Company”) applied to the Commission to begin a multi-phase process for a comprehensive cost and benefit study of on-site generation

## Why File for a case to study net excess energy from customer generators?

- Commission Order No. 34046:
  - “IT IS FURTHER ORDERED that Idaho Power shall initiate a docket to comprehensively study the costs and benefits of on-site generation on Idaho Power’s system, as well as proper rates and rate design, transitional rates, and related issues of compensation for net excess energy provided as a resource to the Company.”
- Commission Order No. 34509:
  - “The Company Must Prepare and File a Credible and Fair Study on the Costs and Benefits of Distributed On-Site Generation to the Company's System.”

# Background

The Commission identified the following criteria for a credible and fair study:

1. The study must use the most current data possible and the data must be readily available to the public, and in the Commission's decision-making record.
2. The Company must design the study in coordination with the parties and the public, and the final scope of the study will be determined by the Commission.
3. The study must be written so it is understandable to an average customer, but its analysis must be able to withstand expert scrutiny.

# Case Processing so far

- On June 28, 2021, Idaho Power Company applied to the Commission to begin a multi-phase process for a comprehensive cost and benefit study of on-site generation
- On August 30, 2021, the Parties met and agreed that Staff would file with the Commission the Initial Framework to Study ("Study Framework") on September 30, 2021. The Study Framework is based on initial work completed by the Parties and discussed on September 22, 2021.
- On September 30, 2021, Staff filed the Study Framework based on initial work completed by the Parties.
  - [Study Framework.pdf \(idaho.gov\)](#)
  - [www.puc.idaho.gov](http://www.puc.idaho.gov) (Case Number: IPC-E-21-21)
- On October 20, 2021, Idaho Power Company held a public workshop on this case
  - <https://www.idahopower.com/customergeneration>

# Upcoming Dates

EVENT	DATE
TELEPHONIC CUSTOMER HEARING	October 28, 2021 (6:00 PM)
WRITTEN COMMENTS DUE	November 16, 2021
REPLY COMMENTS DUE	November 30, 2021



# Study Framework

- Measurement Intervals:
- Export Credit Rate (“ECR”)
  - *Avoided Energy Value*
  - *Avoided Capacity Value*
  - *Avoided Transmission and Distributions Costs*
  - *Avoided Line Losses*
  - *Integration Costs*
- Recovering Export Credit Rate Expenditures
- Cost-of-Service and Rate Design
- Project Eligibility Cap
- Environmental and Other Benefits
- Implementations Issues
  - *Billing Structure*
  - *Export Credit Expiration*
  - *Frequency of Export Credit Rate Updates*
- Other Party Proposals
  - *Avoided Risk #10*
  - *Off Site Non-exporting Customers #24*
  - *City of Boise #25*
  - *Tidwell Position #26*

# Export Credit Rate (“ECR”)

## Idaho Power Proposal

- Apply Export Credit Rate to on-site generation customer’s net exported energy netted either hourly or instantaneously.
- (Look into the existing net metering design for the monthly measurement interval.)

# Export Credit Rate (“ECR”)

## Summary of Intervenor study proposals

- kWh credits vs. monetized credits
- Either type of credits can be applied to any interval.
- ECR study needs a time horizon.
- Use a neutral third party to conduct the study.

# Components of Export Credit Rate

## Idaho Power Proposal

- Avoided Energy Value
- Avoided Capacity Value
- Avoided Transmission and Distribution Costs
- Avoided Line Losses
- Integration Costs
- Environmental and other benefits.

# Avoided Energy Value

## Definition

- The cost of generation or purchases from the wholesale market that can be avoided due to exported energy from customer generators.

# Avoided Energy Value

## Idaho Power Proposal

- Energy price assumptions in the Company's most recently acknowledged Integrated Resource Plan ("IRP")
- Market index price assumptions.
- Adjustment for lack of Firmness
  - Definition: Firmness can be defined as the extent to which the quantity and the time of energy exported meets expectations.

# Avoided Energy Value

## Summary of Intervenor study proposals

- Other methods should be also studied.
- Hour, day, month, year.
- Forward-looking basis.
- Backward-looking basis.
- Firmness based on predictability.

# Avoided Capacity Value

## Definition

The cost of incremental generation capacity the Company needs to meet customer load in the future that can be avoided due to capacity reliably contributed by customer generators.



# Avoided Capacity Value

## Idaho Power Proposal

- Analyze the capacity value of exported energy provided by customer-generators.
- Provide the calculations and documentation for evaluating the capacity resource value and the contribution to peak.

# Avoided Capacity Value

## Summary of Intervenor study proposals

- Capacity deficiency period.
- Different methods should be explored.
- Identify highest annual customer load hours.
- Two rate designs.
- With and without batteries.

# Avoided Transmission and Distribution Costs

## Definition

- The cost of incremental transmission and distribution capacity that the Company can defer or avoid, due to capacity reliably contributed by customer generators.

# Avoided Transmission and Distribution Costs

## Idaho Power Proposal

- Quantify the value of transmission and distribution costs that could be avoided by net exported energy

# Avoided Transmission and Distribution Costs

## Summary of Intervenor study proposals

- Avoided transmission costs and avoided distribution costs should be separated.
- Location value.

# Avoided Line Losses

## Definition

- An adjustment that can potentially increase avoided capacity and energy cost due to avoiding transmission and distribution line losses by customer generators who export energy closer to load.

# Avoided Line Losses

## Idaho Power Proposal

Quantify avoided line losses associated with avoided energy value and avoided capacity value.

# Avoided Line Losses

## Summary of Intervenor study proposals

- Adjustment to avoided energy value and avoided capacity value.
- Distribution level voltages versus transmission level voltages.



# Integration Costs

## Definition

An adjustment that decreases avoided capacity and energy costs due to additional cost the Company incurs to integrate variable, intermittent customer generation required for system reliability.

# Integration Costs

## Idaho Power Proposal

- Study methods for determining the integration costs of customer generators.
- Determine if ECR should be reduced to account for integrating customer-generator resources.

# Integration Costs

## Summary of Intervenor study proposals

- Penetration level and impacts on system integration costs.
- Individual basis.
- With and without batteries.

# Measurement Intervals

- Measure the length of time between meter reads:
  - Monthly
  - Hourly
  - Separate Channel or “Instantaneous” or “Real-time”
- Calculate the class revenue requirement.
- Calculate the export credit payments.
- Analyze bill impacts to existing customer-generators, by usage.

*See pages 7-8, numbers 1-3, for additional recommendations on Measurement Intervals from Staff, Clean Energy Opportunities of Idaho, Idaho Clean Energy Association, Idaho Solar Owners Network, and Idaho Conservation League.*

# Recovering Export Credit Rate Expenditures

- Quantify the annual costs under varying assumed Export Credit Rate values.
- Analyze how these costs would be allocated and recovered by rate class.

*See page 13, numbers 11-12, for additional recommendations on Recovering Export Credit Rate Expenditures from Staff, Clean Energy Opportunities of Idaho, and Idaho Clean Energy Association.*

# Cost-of-Service & Rate Design

- Evaluate cost-of-service methodology for customer-generators.
- Evaluate potential rate designs for customer-generators.

*See pages 13-14, numbers 13-15, for additional recommendations on Cost-of-Service and Rate Design from Staff, Clean Energy Opportunities of Idaho, Idaho Clean Energy Association, Richard and Wesley Kluckhohn, and Micron Technology, Inc..*

# Project Eligibility Cap

- Analyze pros and cons of setting a customer's project eligibility cap according to a customer's demand as opposed to predetermined caps of 25 kW and 100 kW.

*See pages 14-15, number 16, for additional recommendations on Project Eligibility Cap from Staff, Clean Energy Opportunities of Idaho, Idaho Clean Energy Association, Idaho Solar Owners Network, and Idaho Conservation League.*

# Environmental and Other Benefits

- Evaluation of the quantifiable environmental and other system benefits provided by customer-generators.

*See pages 15-18, numbers 17-18, for additional recommendations on Environmental and Other Benefits from Staff, Clean Energy Opportunities of Idaho, Idaho Solar Owners Network, Idaho Clean Energy Association, City of Boise, and Idaho Conservation League.*



# Implementation Issues

- Billing Structure:
  - Explain how potential customer-generators and on-site generation system installers will have accurate and adequate data and information to make informed choices about the economics of on-site generation systems over the expected life of the system.
- Export Credit Expiration:
  - Quantify the magnitude, duration, and value of accumulated export credits.
  - Explain the need for the credits to expire.
    - a) Show how the Company does or does not benefit from the expiration of customer export credits.
    - b) Show how non generating customers are harmed or benefited from the expiration of customer export credits.
      - i. Quantify, the impact to non generating customers of a 2-year, 5-year, and 10-year expiration period.
- Frequency of Export Credit Rate Updates:
  - Quantify the impact of biennial updates as compared to annual updates of the ECR.

*See pages 18-21, numbers 19-23, for additional recommendations on Implementation Issues from Staff, Idaho Clean Energy Association, Kiki Tidwell, Idaho Solar Owners Network, City of Boise, and Idaho Conservation League.*

# Other Areas

- Industrial Customers of Idaho Power:
  - Analyze Feasibility of off-site Non-Exporting net metering facilities
    - Analyze how an off-site distributed energy resources (“DER”) energy could be credited to the physical site of the DER's actual load

*See page 21, number 24, for Industrial Customers of Idaho Power recommendation for additional areas to study*

# Other Areas

- City of Boise:
  - Utilize consistent and reasonable penetration levels of on-site generation throughout the study. Current levels, 10x, and 25x would be appropriate.
  - Quantify and evaluate the customer generator capacity resource value for customer generators with 4 hours of available on-site energy storage
    - *See page 21-22, number 25, for City of Boise recommendation for additional areas to study*
- Avoided Risk
  - Quantify and analyze the fuel price guarantee value provided by customer generators at each penetration level (current levels, 10x, and 25x).
  - *See page 13, number 10, for City of Boise's recommendation to study Avoided Risk*

# Other Areas

- Tidwell:
  - Provide studies on the benefits to the grid and to all ratepayers when onsite generation and micro-grids can reduce load at peak power demands
  - Study should be designed to focus on how to encourage more distributed generation, more sharing of electrons and credits with workforce or low-income customers
  - Study the physical constraints of existing rules for on-site generators in multifamily buildings.
  - Please provide updated facts and data about total on-site generation information

*See page 22, number 26, for Kiki Tidwell recommendation for additional areas to study*

# Review Process

## What is next?

- Staff and other parties will continue its review the Application.
- Verify and review the following:
  - Proposed areas of study
  - Additional Areas of Study
  - Public Comments
  - Develop recommendations

# Review Process

## What is next?

- Customer Hearing
- Commission will deliberate and issue Final Order
- Phase 2: “Study Review”

# CUSTOMER COMMENTS

Customer written comments are due no later than November 30, 2021  
(Reference Case Number IPC-E-21-21)

- Internet Website Address – [www.puc.idaho.gov](http://www.puc.idaho.gov)
  - Select - Case Comment Form  
(ONCE COMMENTS ARE SUBMITTED, THEY BECOME PUBLIC RECORD)
- Email Address – [secretary@puc.idaho.gov](mailto:secretary@puc.idaho.gov)
- Mail – IPUC, PO Box 83720, Boise, ID 83720-0074
- Telephonic Customer Hearing – THURSDAY, OCTOBER 28, 2021, AT 6:00 PM

COMMENTS ONLY  
(QUESTIONS WILL NOT BE ADDRESSED)

# WEBSITE HOMEPAGE

Internet Website Address – [www.puc.idaho.gov](http://www.puc.idaho.gov)

The screenshot shows the homepage of the Idaho Public Utilities Commission. The header features the IDAHO PUBLIC UTILITIES COMMISSION logo and a search bar. The navigation menu includes Home, Cases, File Room, Laws & Rules, Consumers, Press Releases, About us, and Contact us. The main content area has a sidebar with links to Case Comment Form, Annual Gross Intrastate Revenues Report Form, Electric, Telecom, Water, Natural Gas, Rail Safety, Pipeline Safety, and Multi-Utility. A red arrow points to the Case Comment Form link. The News Updates section lists recent orders and rulemaking cases. The Consumers section includes links for Consumer Complaint / Inquiry Form, Frequently Asked Questions, and Consumer Resources. A video player at the bottom shows a Public Utilities Commission Video with Watch later and Share buttons.

**IDAHO PUBLIC UTILITIES COMMISSION**

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**Annual Gross Intrastate Revenues Report Form**

**Electric**

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**Natural Gas**

**Rail Safety**

**Pipeline Safety**

**Multi-Utility**

**Consumers**

Consumer Complaint / Inquiry Form  
Frequently Asked Questions  
Consumer Resources

**News Updates**

- Order No. 35095: Adopting the Commission's Safety Regulations by Order
- Proposed Revision to IPUC Rules of Procedure Case No. RUL-U-21-01
- Notice of Intent - Negotiated Rulemaking Case No. RUL-U-21-01
- In Re COVID-19 Response - Order No. 35058
- Idaho Public Utilities Commission will host telephonic

**Public Utilities Commission Video**

Watch later Share



# CASE COMMENT FORM

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### Case Comment or Question Form

Use this form to **file a comment** or **ask a question about a utility case** pending before the Commission. If you know the case number, please include it.

Submit electronically below or send in to:

Idaho Public Utilities Commission  
P O Box 83720  
Boise, Idaho 83720-0074  
FAX: (208) 334-3762

Use the [Consumer Complaint / Inquiry Form](#) if you need help resolving a problem with a utility or have a question about your bill, disconnection of service, service reliability and outages, cost of a line extension, customer service, or other issues that are not related to a utility case.

**Case Comment Form**

Use this form to file a comment or ask a question about a case

Case Number:

First Name:

Last Name:

Address:

City:

State:

Zip:

Daytime Phone:

Email:

Utility Company:

I acknowledge that submitting a comment in an open case constitutes a public record under Idaho Code § 74-101 (13) and all information provided by me on this form is available for public and media inspection. My comment may be reviewed by the utility.

Ask a question or state your comment:



# CASE SCHEDULE



EVENT	DATE
TELEPHONIC PUBLIC WORKSHOP by COMPANY	October 20, 2021 (6:00 PM)
TELEPHONIC PUBLIC WORKSHOP by STAFF	October 26, 2021 (6:00 PM)
TELEPHONIC CUSTOMER HEARING	October 28, 2021 (6:00 PM)
WRITTEN COMMENTS DUE	November 16, 2021
REPLY COMMENTS DUE	November 30, 2021

# TELEPHONIC CUSTOMER HEARING

**THURSDAY, OCTOBER 28, 2021, 6:00 PM**

- To listen only, call 1-800-920-7487, and enter code 9877 951#
- To submit verbal testimony, call 1-800-920-7487, and enter 6674 832#

COMMENTS ONLY (QUESTIONS WILL NOT BE ADDRESSED)  
VERBAL COMMENTS ALSO BECOME PART OF THE PUBLIC RECORD

## CUSTOMER COMMENTS

Written comments are due no later than NOV. 30, 2021

(Please reference Case Number IPC-E-21-21)

- Website – [www.puc.idaho.gov](http://www.puc.idaho.gov)
- Email Address – [secretary@puc.idaho.gov](mailto:secretary@puc.idaho.gov)
- Mail – IPUC, PO Box 83720, Boise, ID 83720-0074



# ?? QUESTIONS ??

You can find case information and file comments on the PUC website:

[www.puc.idaho.gov](http://www.puc.idaho.gov)

Case Number: IPC-E-21-21