

# BP-26 Rate Case and TC-26 Tariff Proceeding Workshop

May 22, 2024



# Agenda

Time*	Topic	Presenter
9:00 to 9:10 a.m.	Introduction, Meeting Protocols, Comments and Agenda	Brian McConnell
9:10 to 9:50 a.m.	Transmission Line Ratings – FERC Order 881 implementation	Ashley Donahoo, Gage Marek
9:50 to 10:20 a.m.	ROFR Queue Management	Nadine Hanhan
<b>10:20 to 10:30 a.m.</b>	<b>Break</b>	
10:30 to 11:00 a.m.	PTP Service Agreement – Conditional Firm Service Exhibit	Natasha Bryan
11:00 to 11:15 a.m.	Section 4 update to align with Attachment C (ATC)	Margaret Olczak, Kevin Johnson
<b>11:15 a.m. to 12:15 p.m.</b>	<b>LUNCH</b>	
12:15 to 12:45 p.m.	Western Resource Adequacy Program (WRAP)	Steve Bellcoff
12:45 to 1:15 p.m.	Transmission Sales Forecast (with Montana Intertie)	Danny Chen
1:15 to 1:55 p.m.	Intentional Deviation in the EIM	Frank Puyleart, Eric King
1:55 to 2:00 p.m.	Wrap-up and Next Steps	Brian McConnell

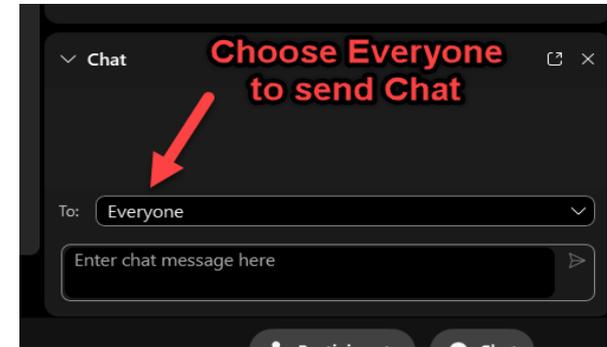
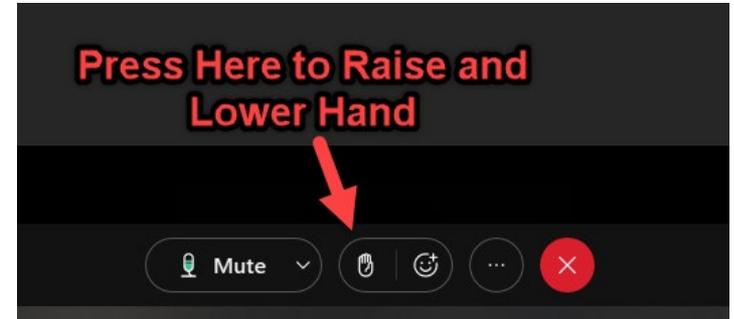
**\* Times are approximate**

May 22, 2024

Pre-Decisional. For Discussion Purposes Only.

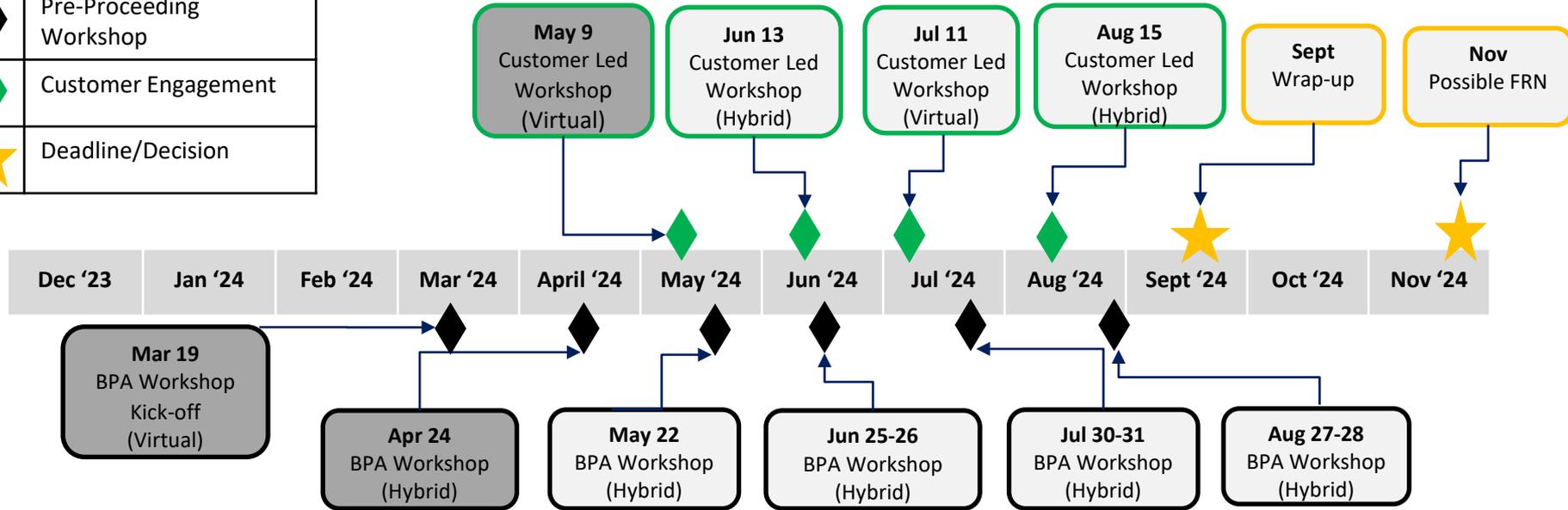
# WebEx Meeting Participation and Asking Questions

- After you join the WebEx, you will be automatically muted.
- Please identify your company in your display name on WebEx.
- **To be recognized for asking a question:**
  1. Use the “Raise your Hand” option to signal you have a question
  2. Or use the Chat option to send a question request to “Everyone”
- Once recognized, unmute yourself and state your name and company before commenting/asking your question – participants in the RHR are also asked to do this.
- When finished speaking please remember to **re-mute** and/or **lower your hand**.



# Proposed BP/TC-26 Pre-Proceeding Workshop Schedule

◆	Pre-Proceeding Workshop
◆	Customer Engagement
★	Deadline/Decision



*Procedural schedule dates are draft only*

# Approach to Customer Engagement

Most identified issues will be presented according to the following process at workshops (multiple steps might be addressed in a single workshop):

**Phase One:  
Approach Development**

**Step 1:  
Introduction & Education**

**Step 2:  
Description of the Issue**

**Phase Two:  
Evaluation**

**Step 3:  
Analyze the Issue**

**Step 4:  
Discuss Alternatives**

**Phase Three:  
Proposal Development**

**Step 5:  
Discuss Customer Feedback**

**Step 6:  
Staff Proposal**

Teams will follow the steps that may be covered in one workshop or more based on the complexity of the issue.

# Customer Led Workshops

- Within one week after every workshop, customers can request a Customer Led workshop that would focus on topics presented in the previous workshop.
- Customers should provide the topic and estimated time needed for discussion with BPA SMEs.
- BPA will not create new content – this is an opportunity to ask further questions on materials previously presented.
- Opportunities for customers to present on topics of interest, where BPA will be in listening mode.

# Customer Comment Process

- Thank you to everyone who submitted comments on the April 24 workshop topics.
- BPA is using the same comment tracking and response process that was developed in BP/TC-24, which includes the following:
  - All customer comments will be posted to the BP-26 Rate Case website.
  - BPA will create a consolidated customer response (CCR) document for each workshop that will be posted/updated at the same time as other workshop materials.
  - The CCR is organized to address comments listed by the workshop date where the comments were received.
  - The CCR will provide direct responses or identify other forums or future BP/TC-26 workshops where BPA expects to provide a response.
    - To the extent possible, BPA will endeavor to provide responses prior to the next workshop in the Customer Comments section on the BP-26 website (updated CCR will be posted with workshop materials)
    - All comments will have a response



# Transmission Line Ratings FERC Order 881



# Background

- FERC issued Order 881 on December 16, 2021, proposing reforms to both the *pro forma* Open Access Transmission Tariff (OATT) and FERC's regulations under the Federal Power Act to improve the accuracy and transparency of transmission line ratings.
- Specifically, the Order calls for:
  - proposing transmission providers to implement ambient adjusted ratings (AARs) on the transmission lines over which they provide transmission service;
  - Regional Transmission Organizations (RTOs) and Independent System Operators (ISOs) to establish and implement the systems and procedures necessary to allow transmission owners to electronically update transmission line ratings at least hourly;
  - transmission owners to share transmission line ratings and transmission line rating methodologies with their respective transmission provider(s) and, in RTOs/ISOs, with their respective market monitor(s).

## The Order goes into effect July 2025

# Background

- **FERC Order 881 major themes:**
  - Seasonal Facility Ratings
  - Emergency Ratings
  - Ambient Adjusted Ratings
    - 10 days out
    - Real-time

# Proposed Adoption

- Attachment M – Transmission Line Ratings

- Definitions:

- “Transmission Line Rating” means the maximum transfer capability of a transmission line, computed in accordance with a written Transmission Line Rating methodology and consistent with Good Utility Practice, considering the technical limitations on conductors and relevant transmission equipment (such as thermal flow limits), as well as technical limitations of the Transmission System (such as system voltage and stability limits). Relevant transmission equipment may include, but is not limited to, circuit breakers, line traps, and transformers.
- Ambient-Adjusted Rating (AAR) means a Transmission Line Rating:
  - Applies to a time period of not greater than one hour.
  - Reflects an up to date forecast of ambient air temperature across the time period to which the rating applies.
  - Reflects the absence of solar heating during nighttime periods, where the local sunrise/sunset times used to determine daytime and nighttime periods are updated at least monthly, if not more frequently
  - Is calculated at least each hour, if not more frequently.
  - Evaluating the need to curtail paths or developing Operating Plans to prevent/mitigate an System Operating Limit (SOL) exceedance on the network.

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# Proposed Adoption

- **Attachment M – Transmission Line Ratings**
  - Definitions:
    - “Seasonal Line Rating” means a Transmission Line Rating that:
      - Applies to a specified season, where seasons are defined by the Transmission Provider to include not fewer than four seasons in each year, and to reasonably reflect portions of the year where expected high temperatures are relatively consistent.
      - Reflects an up-to-date forecast ambient air temperature across the relevant season over which the rating applies.
      - Is calculated annually, if not more frequently, for each season in the future for which Transmission Service can be requested.

# Proposed Adoption

- Attachment M – Transmission Line Ratings

- Definitions:

(4) “Near Term Transmission Service” means Transmission Service which ends not more than 10 days after the Transmission Service request date. When the description of obligations below refers to either a request for information about the availability of potential Transmission Service (including, but not limited to, a request for ATC), or to the posting of ATC or other information related to potential service, the date that the information is requested or posted will serve as the Transmission Service request date.

“Near-Term Transmission Service” includes any Point-To-Point Transmission Service, Network Resource designations, or secondary service where the start and end date of the designation or request is within the next 10 days.

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definition

# Proposed Adoption

- **Attachment M – Transmission Line Ratings**
  - Definitions:
    - “Emergency Rating” means a Transmission Line Rating that reflects operation for a specified, finite period, rather than reflecting continuous operation. An Emergency Rating may assume an acceptable loss of equipment life or other physical or safety limitations for the equipment involved.

# Proposed Adoption

- Attachment M – Transmission Line Ratings

- System Reliability

- If the Transmission Provider reasonably determines, consistent with Good Utility Practice, that the temporary use of a Transmission Line Rating different than would otherwise be required by this Attachment is necessary to ensure the safety and reliability of the Transmission System, then the Transmission Provider may use such an alternate rating. The Transmission Provider must document in its database of Transmission Line Ratings and Transmission Line Rating methodologies on OASIS or another password-protected website, as required by this Attachment, the use of an alternate Transmission Line Rating under this paragraph, including the nature of and basis for the alternate rating, the date and time that the alternate rating was initiated, and (if applicable) the date and time that the alternate rating was withdrawn and the standard rating became effective again.

# Proposed Adoption

- Attachment M – Transmission Line Ratings

- Obligations of Transmission Provider:

- The Transmission Provider must use AARs as the relevant Transmission Line Ratings when performing any of the following functions: (1) evaluating requests for Near-Term Transmission Service; (2) responding to requests for information on the availability of potential Near-Term Transmission Service (including requests for ATC or other information related to potential service); or (3) posting ATC or other information related to Near-Term Transmission Service to the Transmission Provider's OASIS site or another password-protected website.

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section

# Proposed Adoption

- Attachment M – Transmission Line Ratings

- Obligations of Transmission Provider:

- The Transmission Provider must use AARs as the relevant Transmission Line Ratings when determining where to **make flow-based curtailments** (under section 13.6) Firm Point-to-Point Transmission Service or when determining whether to curtail and/or interrupt (under section 14.7) Non-Firm Point-to-Point Transmission if such curtailment and/or interruption is both necessary because of issues related to flow limits on transmission lines and anticipated to occur (start and end) within 10 days of such determination.
    - For determining whether to curtail or interrupt Point-to-Point Transmission Service in other situations, the Transmission Provider must use Seasonal Line Ratings as the relevant Transmission Line Ratings.
    - The Transmission Provider must use AARs as the relevant Transmission Line Ratings when determining whether to **make flow-based curtailments** (under section 33) or redispatch (under sections 30.5 and/or 33) Network Integration Transmission Service or secondary service if such curtailment or redispatch is both necessary because of issues related to flow limits on transmission lines and anticipated to occur (start and end) within 10 days of such determination. For determining the necessity of curtailment or redispatch of Network Integration Transmission Service or secondary service in other situations, the Transmission Provider must use Seasonal Line Ratings as the relevant Transmission Line Ratings.

# Proposed Adoption

- **Attachment M – Transmission Line Ratings**

- **Obligations of Transmission Provider (cont'd):**

- The Transmission Provider must use Seasonal Line Ratings as the relevant Transmission Line Ratings when evaluating requests for and whether to curtail, interrupt, or redispatch any Transmission Service not otherwise covered above in this section (including, but not limited to, requests for non-Near-Term Transmission Service or requests to designate or change the designation of Network Resources or Network Load), when developing any ATC or other information posted or provided to potential customers related to such services. The Transmission Provider must use Seasonal Line Ratings as a recourse rating in the event that an AAR otherwise required to be used under this Attachment is unavailable.
- The Transmission Provider must use uniquely determined Emergency Ratings for contingency analysis in the operations horizon and in post-contingency simulations of constraints. Such uniquely determined Emergency Ratings must also include separate AAR calculations for each Emergency Rating duration used.
- In developing forecasts of ambient air temperature for AARs and Seasonal Line Ratings, the Transmission Provider must develop such forecasts consistent with Good Utility Practice and on a non-discriminatory basis.
- Postings to OASIS or another password-protected website: The Transmission Provider must maintain on the password-protected section of its OASIS page or on another password-protected website a database of Transmission Line Ratings and Transmission Line Rating methodologies . The database must include a full record of all Transmission Line Ratings, both as used in real-time operations, and as used for all future periods for which Transmission Service is offered. Any postings of temporary alternate Transmission Line Ratings or exceptions used under the System Reliability section above or the Exceptions section below, respectively, are considered part of the database. The database must include records of which Transmission Line Ratings and Transmission Line Rating methodologies were in effect at which times over at least the previous five years, including records of which temporary alternate Transmission Line Ratings or exceptions were in effect at which times during the previous five years. Each record in the database must indicate which transmission line the record applies to, and the date and time the record was entered into the database. The database must be maintained such that users can view, download, and query data in standard formats, using standard protocols.

# Proposed Adoption

- **Attachment M – Transmission Line Ratings**

- Sharing with Transmission Providers: The Transmission Provider must share, upon request by any Transmission Provider and in a timely manner, the following information:
  - 1) Transmission Line Ratings for each period for which Transmission Line Ratings are calculated, with updated ratings shared each time Transmission Line Ratings are calculated, and
  - 2) Written Line Rating methodologies used to calculate the Transmission Line Ratings in (1) above.

Exceptions: Where the Transmission Provider determines, consistent with Good Utility Practice, that the Transmission Line Rating of a transmission line is not affected by ambient air temperature or solar heating, the Transmission Provider may use a Transmission Line Rating for that transmission line that is not an AAR or Seasonal Line Rating. Examples of such a transmission line may include (but are not limited to): (1) a transmission line for which the technical transfer capability of the limiting conductors and/or limiting transmission equipment is not dependent on ambient air temperature or solar heating; or (2) a transmission line whose transfer capability is limited by a Transmission System limit (such as a system voltage or stability limit) which is not dependent on ambient air temperature or solar heating. The Transmission Provider must document in its database of Transmission Line Ratings and Transmission Line Rating methodologies on OASIS or another password-protected website any exceptions to the requirements contained in this Attachment initiated under this paragraph, including the nature of and basis for each exception, the date(s) and time(s) that the exception was initiated, and (if applicable) the date(s) and time(s) that each exception was withdrawn and the standard rating became effective again. If the technical basis for an exception under this paragraph changes, then the Transmission Provider must update the relevant Transmission Line Rating(s) in a timely manner. The Transmission Provider must reevaluate any exceptions taken under this paragraph at least every five years.

# Staff Learning

- To propose the *pro forma* Attachment M with BPA's modifications outlined in the presentation
  - New Attachment to be marked as “Attachment S” in BPA's tariff
  - Redline to *pro forma* and a clean version of the proposed tariff language will be provided during the July workshop, after comments have been considered

# Customer Feedback

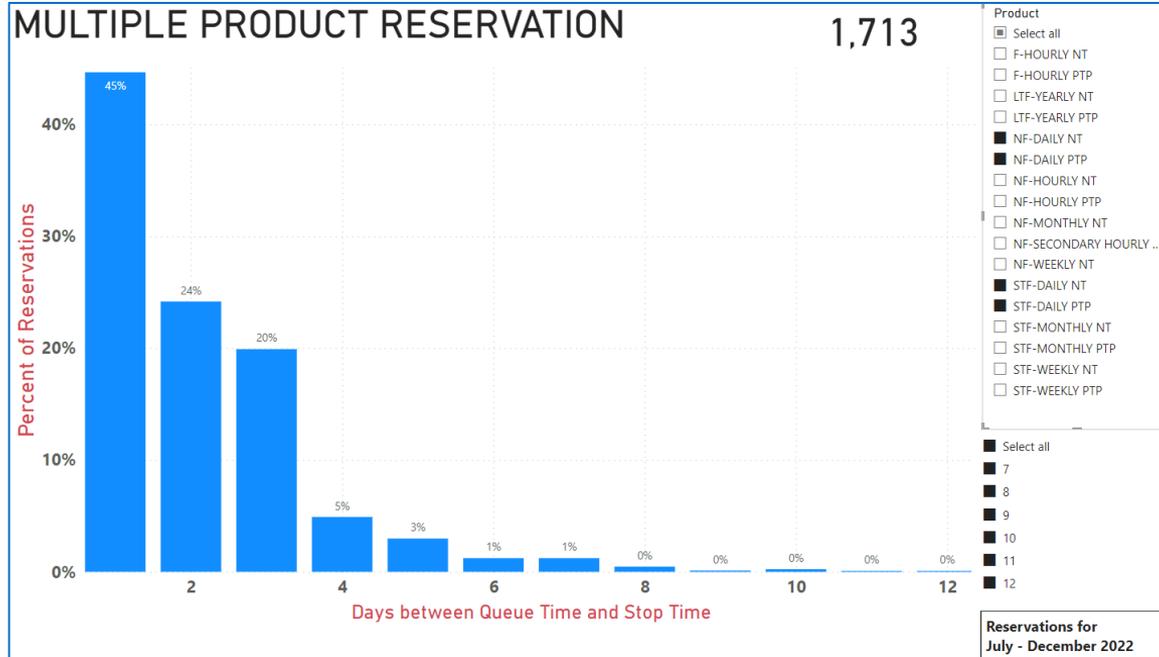
- BPA will collect comments and suggestions on this proposal
  - Please send all feedback to [techforum@bpa.gov](mailto:techforum@bpa.gov) with a copy to your Account Executive
  - Comments are due by June 6, 2024

# Next steps

- BPA will come back in July to cover Steps 5 & 6, to discuss customer feedback and share Attachment S language that will be included in the TC-26 initial proposal

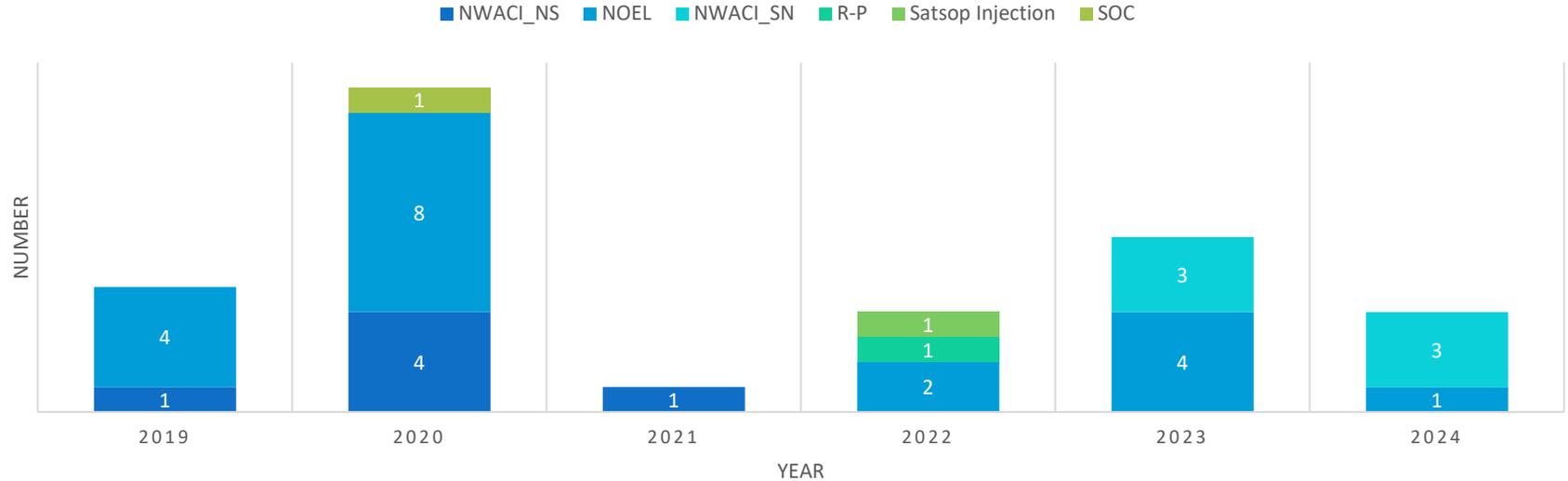
# Q&A?

# Appendix – actual utilization



# Appendix – Curtailment Data

## CURTAILMENTS



**BPA has curtailed 34 different times since 2019, on 6 paths**



# Rights of First Refusal (ROFR) Tariff Change Proposal



# Step 1: Introduction and Education

- BPA currently offers rollover rights to customers who have *requested* at least 5 years of service.
- In 2018, BPA initiated the *Pro Forma* Gap Analysis (PFGA) initiative, where Bonneville identified a gap that grants ROFR for customers *requesting* five years or more in a TSR.

## ***Section 2.2(a) of Bonneville's Tariff***

*Existing firm service customers (wholesale requirements and transmission-only, with a contract term of five years or more other than customers that have signed a Precedent Transmission Service Agreement under sections 19.10 or 32.6), have the right to continue to take transmission service from the Transmission Provider when the contract expires, rolls over or is renewed.*

## ***FERC Pro-Forma Tariff***

*Existing firm service customers (wholesale requirements and transmission-only, with a contract term of five years or more), have the right to continue to take transmission service from the Transmission provider when the contract expires, rolls over or is renewed.*

# Step 1: Introduction and Education (cont'd)

- Discussion of issue in 2018 (PFGA/TC-20)
  - BPA analyzed the status quo practice and determined it would be best to proceed with a hybrid model, implemented in a Business Practice.
  - Customers raised concerns with the hybrid alternative. BPA opted to withdraw the proposed Business Practices and retained the status quo practice.
  - BPA is now re-evaluating this issue, including considering proposing a tariff change in TC-26.

## Step 2: Description of the Issue

- Should BPA change its approach to offering rollover rights based on the requested 5-year term of service or modify Section 2.2 of BPA's Tariff?

# Step 3: Analysis Supporting the Issue

- Context
  - Project timelines inherently lengthy
  - Prone to delays
  - Environmental issues that need to be addressed
  - BPA assumes ROFR in evaluating projects/transmission plans of service
  - Should TSRs lose ROFR, they would need to submit a TSR at the bottom of the queue
  - *Pro forma* concerns from TC-20

## Step 3: Analysis that supports the issue (cont'd)

- Considering the Tariff Principles in evaluating alternatives for this issue.
- Alignment with the *pro forma* tariff
  1. Implement BPA's statutory and legal obligations, authorities, or responsibilities;
  2. Maintain the reliable and efficient operation of the federal system;
  3. Prevent significant harm or provide significant benefit to BPA's mission or the region, including BPA's customers and stakeholders; or
  4. Align with industry best practice when the FERC *pro forma* tariff is lagging behind industry best practice, including instances of BPA setting the industry best practice.
- Meeting the criteria for BPA to consider a deviation from the *pro forma* tariff

# Status Quo

- Conflicts with our Tariff
- Uncertainty around how BPA is resolving this issue
- Previous feedback suggests customers are satisfied with our current process to offer rollover rights to customers who request at least 5 years of service

# Alternative 1 – *Pro Forma*

- Strict implementation would dismantle the work from previous and current studies because BPA would no longer encumber ETC beyond the TSR stop date, if the offer was for less than five years.
- Because project timelines can be lengthy, a *pro forma* policy would have severe deleterious impacts on BPA's ability to provide for new transmission service needs for the region

# Alternative 1 – *Pro Forma* (cont'd)

- If a TSR loses eligibility for ROFR due to delays for circumstances they cannot control, they would have to submit a TSR at the bottom of the queue
- Potentially obsolete business cases
- If a customer no longer has ROFR consideration, there is no incentive for them to continue to support the build
- Past Customer feedback expressed that a *pro forma* alternative creates considerable uncertainty

# Alternative 2 – Tariff Change

## *Section 2.2(a) of Bonneville's Tariff*

*Existing firm service customers (wholesale requirements and transmission-only, with a requested contract term of five years or more other than customers that have signed a Precedent Transmission Service Agreement under sections 19.10 or 32.6), have the right to continue to take transmission service from the Transmission Provider when the contract expires, rolls over or is renewed.*

# Alternative 2 – Tariff Change

- Harmonizes BPA's practices fully with its Tariff
- Allows BPA to continue current planning process
- Aligns with third Tariff Principle, *prevent significant harm and/or provide significant benefits* when compared to pro forma alternative
  - Avoids disruptions to studies
  - Accounts for lengthy project timelines
  - Maintains business cases for projects

# Tariff Change is Staff's Leaning

- Low administrative burden
- Allows BPA to continue providing for new transmission service needs for the region without procedural setbacks
- Aligns BPA's tariff with current practices
- Prevents significant harm and provides significant benefit

# Questions?

# Steps 5 and 6 – Customer Feedback and Staff Proposal

- BPA will collect comments and suggestions on this issue
  - Please send all feedback to [techforum@bpa.gov](mailto:techforum@bpa.gov) with a copy to your Account Executive
  - Comments are due by June 6, 2024
- BPA plans to present steps #5 and #6 to customers in July
  - If no comments are received, BPA will include the Section 4 wording identified in Alternative 2 in BPA's TC-26 initial proposal
  - If comments are received, BPA will consider them in finalizing its TC-26 proposal



**Attachment A**  
**PTP Service Agreement**  
**Conditional Firm Service Exhibit**



# Step 1: Introduction and Education

- **Introduction**
  - BPA identified Attachment A is missing the Conditional Firm Service (CFS) exhibit F.
  - It had been posted externally on BPA's [Forms web page](#) until we recently removed it in 2023 after removing a reference to it from the CFS BP.
  - CFS exhibit F should be added to Attachment A to go with the other exhibits A-E, to include them all together for transparency and to treat all exhibits consistently.
  - BPA proposes limited, non-substantive revisions to BPA's OATT (Tariff) to add a Conditional Firm Service (CFS) exhibit to Attachment A "FORM OF SERVICE AGREEMENT FOR FIRM POINT-TO-POINT TRANSMISSION SERVICE."
- **Education**
  - The pro forma OATT and BPA's OATT contain an Attachment A
    - Service Agreement for firm PTP Transmission Service – enables Transmission Customers to buy transmission service from a Transmission Provider.

## Step 2: Description of the Issue

- The Service Agreement for Firm Point-to-Point (PTP) Transmission Service in Attachment A does not include the Exhibit for Conditional Firm Service (CFS). For example...
  - Attachment A contains exhibits A-E
  - Attachment A is missing the CFS Exhibit F

## Step 3: Data and/or Analysis that Supports the Issue

- See details in the redlined Attachment A
- Otherwise, data and analysis is not applicable

## Step 4: Discussions on Possible Alternatives to Solve Issue

- **Alternative 1 Status Quo**
  - Pro: no work needed in TC-26 to change Attachment A
  - Con: not transparent, inconsistent treatment of exhibits
  
- **Alternative 2 Add CFS Exhibit to Attachment A**
  - Pro: transparent, consistent treatment of exhibits
  - Con: work needed in TC-26 to change Attachment A
  - (Redline in separate document)
  - Add language to the PTP Service Agreement body Section 7 describing the CFS Exhibit F
  - Add the current CFS Exhibit F to Attachment A PTP Service Agreement (currently has exhibits A through E).

# Steps 5 and 6 – Customer Feedback and Staff Proposal

- Staff prefers Alternative 2 for the TC-26 proposal
- BPA will collect comments and suggestions on this proposal
  - Please send all feedback to [techforum@bpa.gov](mailto:techforum@bpa.gov) with a copy to your Account Executive
  - Comments are due by June 6th, 2024
- If no comments are received, BPA will include Alternative 2 in BPA's TC-26 initial proposal
- If comments are received, BPA staff will consider them in our recommendation for initial proposal for TC-26.



# Alignment of Section 4 and Attachment C



# Step 1 – Introduction and Education

- BPA updated Attachment C of its Open Access Transmission Tariff (OATT), effective October 1<sup>st</sup>, 2023
  - Attachment C documents BPA’s methodology for calculating Available Transfer Capability (ATC) and Total Transfer Capability (TTC)
  - Attachment C was updated as part of the TC-24 process
- After this update was made, BPA identified an inconsistency between the updated Attachment C and Section 4 of BPA’s OATT
  - Section 4 is titled Open Access Same-Time Information System (OASIS) and incorporates the terms and conditions regarding the OASIS set forth in FERC’s 18 CFR 37 regulations
- Attachment C and Section 4 are not consistent in documenting the paths for which BPA calculates ATC and TTC

# Step 1 – Introduction and Education

- BPA's OATT Attachment C reads:

## **ATTACHMENT C**

### **Methodology To Assess Available Transfer Capability**

Documents referenced within this attachment are available on the Transmission Provider's website at [www.bpa.gov](http://www.bpa.gov). The Transmission Provider defines Total Transfer Capability (TTC), Existing Transmission Commitments (ETC), Capacity Benefit Margin (CBM) and Transmission Reliability Margin (TRM) in accordance with the North American Electric Reliability Corporation (NERC) Glossary of Terms. **The Transmission Provider defines ATC path as any constraint for which the Transmission Provider calculates ATC.**

# Step 1 – Introduction and Education

- Section 4 of BPA's OATT, which incorporates FERC 18 CFR 37, reads:

## **4 Open Access Same-Time Information System (OASIS)**

Terms and conditions regarding Open Access Same-Time Information System and standards of conduct are set forth in 18 C.F.R § 37 of the Commission's regulations (Open Access Same-Time Information System and Standards of Conduct for Public Utilities) and 18 C.F.R. § 38 of the Commission's regulations (Business Practice Standards and Communication Protocols for Public Utilities).

# Step 1 – Introduction and Education

- 18 CFR 37.6, Information to be posted on the OASIS, reads:

(6) Make file transfers and automated computer-to-computer file transfers and queries as defined by the Standards and Communications Protocols Document.

(b) *Posting transfer capability.* The available transfer capability on the Transmission Provider's system (ATC) and the total transfer capability (TTC) of that system shall be calculated and posted for each Posted Path as set out in this section.

(1) **Definitions.** For purposes of this section the terms listed below have the following meanings:

(i) **Posted path** means any control area to control area interconnection; any path for which service is denied, curtailed or interrupted for more than 24 hours in the past 12 months; and any path for which a customer requests to have ATC or TTC posted. For this last category, the posting must continue for 180 days and thereafter until 180 days have elapsed from the most recent request for service over the requested path. For purposes of this definition, an hour includes any part of an hour during which service was denied, curtailed or interrupted.

## Step 2 – Description of the Issue

- BPA wants to resolve the inconsistency between Attachment C and Section 4 of BPA's OATT and ensure clarity as to the paths for which BPA calculates and posts ATC and TTC.

## Step 3 – Data and/or Analysis that Supports the Issue

- BPA is aiming to resolve a documentation inconsistency between two sections of BPA's OATT: Section 4 and Attachment C

# Step 4 – Discussions on Possible Alternatives to Solve the Issue

- BPA considered the following alternatives to deal with this issue:
  - Alternative 1 Status Quo, do not address this minor inconsistency in documentation
  - Alternative 2 Resolve the inconsistency in documentation by adding the clarification in red to Section 4 of BPA's OATT, stating that to BPA calculates and posts ATC and TTC for ATC paths as defined in BPA's Attachment C

Terms and conditions regarding Open Access Same-Time Information System and standards of conduct are set forth in 18 C.F.R § 37 of the Commission's regulations (Open Access Same-Time Information System and Standards of Conduct for Public Utilities) and 18 C.F.R. § 38 of the Commission's regulations (Business Practice Standards and Communication Protocols for Public Utilities). Notwithstanding these terms and conditions regarding the Open Access Same-Time Information System and Standards of Conduct, the Transmission Provider calculates Available Transfer Capability (ATC) and the Total Transfer Capability (TTC) of the Transmission Provider's system only for ATC paths as defined in Attachment C.

## Steps 5 and 6 – Customer Feedback and Staff Proposal

- BPA will collect comments and suggestions on this issue
  - Please send all feedback to [techforum@bpa.gov](mailto:techforum@bpa.gov) with a copy to your Account Executive
  - Comments are due by June 6, 2024
- If no comments are received, BPA will include the Section 4 wording identified in Alternative 2 in BPA's TC-26 initial proposal
- If comments are received, BPA will consider them in finalizing its TC-26 proposal

# Western Resource Adequacy Program (WRAP) in BP-26



# Resource Adequacy - WRAP

- BPA is an active WRAP participant
- During BP26 Rate Period – WRAP program will become binding, all participants currently active in non-binding status
- Difference between Binding and Non-binding
  - Forward Showing
    - Both Data Submittal and calculations are the same, all loads and all physical resource used to meet those loads submitted
    - Non-Binding deficiencies do not result in charges
    - Binding program deficiencies result in charges
  - Operations Program
    - Both – All data submittal, and sharing calculations required for all participants
    - Non-Binding holdbacks and deliveries are voluntary
    - Binding program holdbacks and deliveries are part of program requirements
    - Both – Deliveries issued and accepted as part of program (binding and non-binding) are settle through WRAP settlement amounts

# Resource Adequacy – Data Requirements

- **Complete Data Submittals**

As a WRAP Participant BPA is expected to make complete program data submittals. As an LRE, under the program rules BPA is responsible to have resources available to serve the peak Total Retail Load of its load Following customers plus a Planning Reserve Margin (PRM). The resources used to serve that load is a combination of federal and non-federal resources as defined in contracts for each customer. WRAP has 3 different time periods with specific data requirements in each

- **Advanced Assessment**
  - Loads = 10 years of historical actual hourly load
  - Resources = 10 years of historical actual hourly generation, resource test data, outage information
- **Forward Showing**
  - Loads = P50 Loads as calculated by program
  - Resources = QCC of all resources used to serve load and PRM
  - PRM = as calculated by program
- **Operations Program**
  - Loads = current forecast
  - Resource
    - current forecast for ROR, Wind, Solar
    - Forced Outages for Storage Hydro and Thermal

# Non-Federal Resource Data

- Non-Federal Resource Data Needed
  - Advanced Assessment
    - Submitted each January, calculates values for year 2 and advisory values for year 5
      - February 2025 = Winter 26/27 and Summer 2027 QCC's and PRM's
    - Register Non-Federal Resources
      - Registration can be done by LRE or project owner
      - 10 Years of Historical hourly Generation
      - Program calculated Qualifying Capacity Contribution QCC
  - Forward Showing
    - Submittal due 7 months in advance of start of season (March 31 and October 31)
    - BPA needs data a minimum of 2 month in advance of deadline to compile, check and verify, complete submittal attestation (9 months)
      - QCC of physical resource (or share of resource) used to serve load QCC
      - WRAP Joint Contract Accreditation Form (JCAF) used to detail resource capacity amounts by both buyer and seller
  - Operations
    - Multi-Day ahead submittal submitted for 6 days ahead of Pre-schedule day
    - Operating Day Submittal = hourly during Operating Day, Actuals = after the fact actual generation by hour
      - Current generation forecast for resources submitted in Forward Showing - 30 days before Operating Day (Run of River, wind, solar)
      - Forced Outage information for Storage Hydro and Thermals
      - Actual Generation for projects submitted in Forward Showing and OPS program

# BP24 Language - Above-RHWM Load

## Resource Adequacy Service

This service will only be applicable if BPA begins participation in the Western Resource Adequacy Program (WRAP) 3B Binding Program and elects a binding summer 2025 season (June 2025 through September 2025).

### 1. Credit for Above-RHWM Load

A Load Following customer with non-Federal resources serving Above-RHWM Load will be eligible to receive a monthly credit in FY 2025 if the customer meets the WRAP forward-showing qualifying capacity capability (QCC) requirement for such non-Federal resources. The customer must submit QCC resource information to BPA by September 15, 2024, for the summer 2025 season.

#### a) Rate

FY 2025 monthly rate is -2.73 mills/kWh.

#### b) Billing Determinant

The qualifying non-federal resource amounts for October 2024 through September 2025 (in kilowatt-hours) identified in Exhibit D of the customer's CHWM contract.

# BP24 Language - New Large Single Loads

## Resource Adequacy Service (continued)

### 2. Charge for New Large Single Loads

A Load Following customer with a New Large Single Load (NLSL) will be subject to a monthly charge in FY 2025 if the customer does not submit to BPA, by September 15, 2024, for the summer 2025 season, either: (a) an approved exclusion attestation for the NLSL in accordance with the WRAP; or (b) QCC resource information for all non-Federal resources serving the NLSL.

#### a) Rate

FY 2025 monthly rate is 2.73 mills/kWh.

#### b) Billing Determinant

The qualifying forecast NLSL amounts for October 2024 through September 2025 (in kilowatt-hours) are identified in Exhibit D of the customer's CHWM contract.

# BP26 - Above-RHWM Load Concept

## Resource Adequacy Service

BPA is an active participant in the WRAP Program – meaning BPA needs information on the resources being used to serve the non-federal resource share of loads

### 1. Credit for Above-RHWM Load

Continue principles put in place in BP24, Load Following customer with non-Federal resources serving Above-RHWM Load will be eligible to receive a monthly credit (winter and summer season) for non-federal resources submitted by the customer that meets the WRAP forward-showing qualifying capacity capability (QCC) requirement. Resource information submittals are complete and submitted to BPA 9 month prior to the beginning of each season (January 31 for Winter, and August 31 for Summer).

#### a) Rate

Calculated as part of Rates process.

#### b) Billing Determinant

The qualifying non-federal resource amounts identified in Exhibit D of the customer's CHWM contract.

# BP26 - New Large Single Loads Concept

## Resource Adequacy Service (continued)

### 2. Charge for New Large Single Loads

Continue principles put in place in BP24,

A Load Following customer with a New Large Single Load (NLSL) will be subject to a monthly charge (winter and summer season), any peak MW NLSL that the customer does not, either: (a) submit a jointly approve a load exclusion attestation for the NLSL in accordance with the WRAP, and meeting any requirements BPA may have; or (b) submit qualifying resources with program QCC's in to BPA 9 month prior to the beginning of each season (January 31 for Winter, and August 31 for Summer) that will be used to serve the NLSL.

**a) Rate**

Calculated as part of Rates process.

**b) Billing Determinant**

The qualifying non-federal resource amounts identified in Exhibit D of the customer's CHWM contract.



# **BP-26 Topic Transmission Sales (FY 2026-2028 Preview)**



# Transmission Preliminary Sales Forecast Assumptions

- Forecast of sales and revenues will evolve as assumptions are updated for the BP-26 Initial Proposal
- Temperature normalized loads sourced from Agency Load Forecast (ALF) for NT, UD, and RFR.
- Network Point-to-Point (PTP LT)
  - Deferral and Renewal forecasts informed by Account Executive inputs.
  - TSEP forecasts (PTP LT Firm and CF) informed by Account Executive and Planning inputs.
- Intertie Point-to-Point
  - Existing and future service informed by Account Executive inputs.
  - IM service assumes the contracted amounts in TGT contract when it expires 9/30/2027.
- Short Term
  - Hydro based on TDA hydro study.
  - Price spreads from Aurora study.

# Montana Intertie Sales

- **Montana Intertie - Changes in Sales for BP-26**
  - Townsend-Garrison, TGT Firm Demand contract expiration September 30, 2027 (end of FY27) terminates in Other Revenues for FY28
  - Montana Intertie Long Term product increases 1,730 MW in FY28 sales
    - IM LT MWs averaged across Rate Period for a 658 average MW gain

# Sales Changes from BP-24 to FY26-28 Preliminary Forecast

Product	Sales Change (avg MW per mo.)	Variance Drivers
PTP LT	+3021	<ul style="list-style-type: none"> <li>○ 890 MW for 2022 and 2023 TSEP, and Conditional Firm.</li> <li>○ 1364 MW of incremental non-TSEP service.</li> <li>○ 1254 MW of new service from generation projected to come online.</li> </ul>
NT	+1592	<ul style="list-style-type: none"> <li>○ Data center server load increases.</li> </ul>
IM LT	+658	<ul style="list-style-type: none"> <li>○ TGT contracts of 1730 MW expires 9/30/27 and takes IM LT service in FY28.</li> </ul>
IS LT	+153	<ul style="list-style-type: none"> <li>○ 1050 MW of new service S-N begins in FY28.</li> </ul>
IS ST	+178	<ul style="list-style-type: none"> <li>○ Updating for recent trends of high S-N flows, particularly in summer periods.</li> </ul>
FPT	No longer active	<ul style="list-style-type: none"> <li>○ Last FPT contract expires in FY25, no longer active in BP-26.</li> </ul>

# Transmission Preliminary Sales Forecast

## Average MW per month

PRODUCT	BP-24			Ref Year					IPR-26 less BP-24
	FY 2024	FY 2025	BP-24 AVG	FY 2025	FY 2026	FY 2027	FY 2028	IPR-26 AVG	
FORMULA POWER TRANSMISSION	2	2	2	1	0	0	0	0	-2
NETWORK INTEGRATION	8,149	8,333	8,241	8,579	9,264	9,816	10,418	9,833	1,592
POINT-TO-POINT LONG TERM	29,692	30,490	30,091	30,343	31,645	33,327	34,364	33,112	3,021
POINT-TO-POINT SHORT TERM	1,320	1,319	1,320	1,273	1,293	1,293	1,293	1,293	-26
MONTANA INTERTIE LONG TERM	88	88	88	121	121	187	1,930	746	658
SOUTHERN INTERTIE LONG TERM	6,025	6,025	6,025	6,034	6,034	6,034	6,467	6,178	153
SOUTHERN INTERTIE SHORT TERM	62	62	62	227	245	245	245	245	183
UTILITY DELIVERY	154	154	154	145	147	148	149	148	-6

# Transmission Preliminary Revenue Credits

## Revenue (\$)

Product Category	Product	2024	2025	BP-24 AVG	2026	2027	2028	IPR-26 AVG	IPR-26 less BP-24
AC-PNW PSW INTERTIE	SINT AC Non Federal O&M	2,209,800	2,209,800	<b>2,209,800</b>	2,209,800	2,209,800	2,209,800	<b>2,209,800</b>	<b>0</b>
DSI DELIVERY	DSI Delivery Charge	408,336	408,336	<b>408,336</b>	384,204	384,204	384,204	<b>384,204</b>	<b>-24,132</b>
FIBER - OTHER REIMBURSABLE REV	Fiber Operations & Maintenance	1,244,616	949,490	<b>1,097,053</b>	907,898	812,574	801,499	<b>840,657</b>	<b>-256,396</b>
FIBER - OTHER REVENUE	Fiber Leases	7,435,483	5,500,883	<b>6,468,183</b>	5,694,890	5,075,251	4,963,328	<b>5,244,490</b>	<b>-1,223,693</b>
LAND LEASES AND SALES	Land Use/Lease/Sale	216,103	216,103	<b>216,103</b>	88,123	88,123	88,123	<b>88,123</b>	<b>-127,980</b>
	Right-Of-Way Lease	79,200	79,200	<b>79,200</b>	79,200	79,200	79,200	<b>79,200</b>	<b>0</b>
MISC SERVICES-LOSS-EXCH-AIR	MISC SERVICE FEES	3,312	3,312	<b>3,312</b>	1,212,912	1,212,912	1,212,912	<b>1,212,912</b>	<b>1,209,600</b>
	Transmission Processing Fee	39,600	39,600	<b>39,600</b>	39,600	39,600	39,600	<b>39,600</b>	<b>0</b>
NFP - DEPR PNW PSW INTERTIE	Amort NonFed PNW AC Intertie	3,467,664	3,467,664	<b>3,467,664</b>	3,493,339	3,493,339	3,493,339	<b>3,493,339</b>	<b>25,675</b>
OPERATIONS & MAINTENANCE	O&M Federal Facility	234,308	234,308	<b>234,308</b>	234,308	234,308	234,308	<b>234,308</b>	<b>0</b>
	O&M Non-Federal Facility	1,086,012	1,086,012	<b>1,086,012</b>	378,720	378,720	378,720	<b>378,720</b>	<b>-707,292</b>
OTHER MISC LEASES	Misc Leases	104,859	104,859	<b>104,859</b>	83,979	83,979	83,979	<b>83,979</b>	<b>-20,880</b>
OTHER REVENUE SOURCES	BPA EQUIPMENT USE	185,186	172,008	<b>178,597</b>	172,008	172,008	172,008	<b>172,008</b>	<b>-6,589</b>
	TRANSMISSION OPERATOR SERVICES	673,320	673,320	<b>673,320</b>	900,000	900,000	900,000	<b>900,000</b>	<b>226,680</b>
	TRANSMISSION PLANNER CFR SERV	0	0	<b>0</b>	269,358	269,358	269,358	<b>269,358</b>	<b>269,358</b>
REMEDIAL ACTION SCHEME	3RD AC RAS GENERATION DROPPING	76,572	76,572	<b>76,572</b>	76,572	76,572	76,572	<b>76,572</b>	<b>0</b>
RESERVATION FEES	PTP Reservation Fee	247,200	206,000	<b>226,600</b>	1,524,400	725,120	0	<b>749,840</b>	<b>523,240</b>
TRANSMISSION SHARE OF IPP	TS SHARE OF RES ENRGY/WHLG-COE	245,697	245,697	<b>245,697</b>	245,697	245,697	245,697	<b>245,697</b>	<b>0</b>
USE OF FACILITIES	UFT Fixed Dollar Amount	3,526,872	3,351,628	<b>3,439,250</b>	3,832,452	3,832,452	2,505,264	<b>3,390,056</b>	<b>-49,194</b>
	UFT Variable Service Amt	228,192	228,192	<b>228,192</b>	250,104	250,104	250,104	<b>250,104</b>	<b>21,912</b>
UTILITY DELIVERY	Utility Delivery Charge	3,050,073	3,064,175	<b>3,057,124</b>	2,911,923	2,932,007	2,950,366	<b>2,931,432</b>	<b>-125,692</b>
WIRELESS/PCS - OTHER REVENUE	PCS Wireless Leases	7,159,377	7,156,596	<b>7,157,987</b>	6,752,700	6,752,700	6,752,700	<b>6,752,700</b>	<b>-405,287</b>
WIRELESS/PCS - REIMBURSABLE	PCS Construction	3,720,000	3,720,000	<b>3,720,000</b>	2,400,000	2,400,000	2,400,000	<b>2,400,000</b>	<b>-1,320,000</b>
	PCS Operations & Maintenance	312,000	312,000	<b>312,000</b>	780,000	780,000	780,000	<b>780,000</b>	<b>468,000</b>

# Transmission Preliminary Other Revenues

**Revenue (\$)**

Product Category		Product	2024	2025	BP-24 AVG	2026	2027	2028	IPR-26 AVG	IPR-26 less BP-24
GENERATION INTEGRATION		Generation Integration BBL	19,445,425	19,799,999	<b>19,622,712</b>	19,893,996	19,893,996	19,893,996	<b>19,893,996</b>	<b>271,284</b>
OTHER REVENUE SOURCES		REGIONAL COMP ENFORCEMENT	2,096,950	2,109,838	<b>2,103,394</b>	2,148,684	2,148,684	2,148,684	<b>2,148,684</b>	<b>45,290</b>
		REGIONAL COORDINATOR	2,096,945	2,109,833	<b>2,103,389</b>	1,798,116	1,798,116	1,798,116	<b>1,798,116</b>	<b>-305,273</b>
TOWNSEND-GARRISON TRANS		TGT Firm Demand	12,227,640	12,227,640	<b>12,227,640</b>	11,928,696	11,928,696	0	<b>7,952,464</b>	<b>-4,275,176</b>



# Intentional Deviation in the EIM Inform



# BP-24 GSRP ID Overview

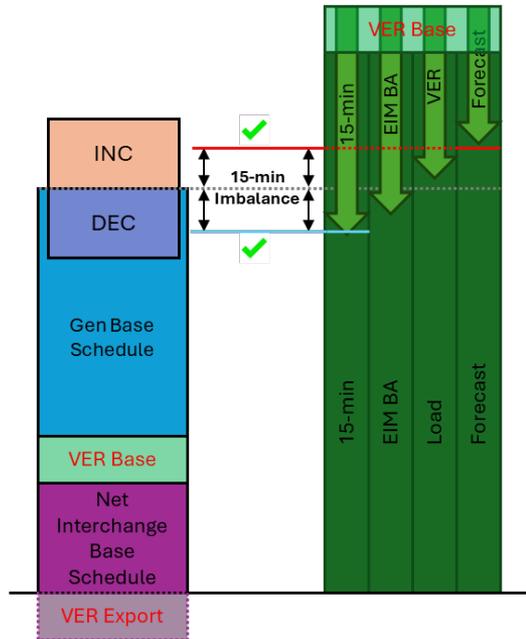
- VER Entities (Wind & Solar) must schedule to within 1 MW of the BPA Forecast to avoid Intentional Deviation
- Exceptions made for:
  - VERs scheduled more accurate than the BPA Forecast
  - VER Participating Resources during market awarded dispatch intervals, where they must deviate from their natural output to comply with the market award.
  - Some Operational Events that alter the output of the VER (Transmission Curtailments, OMP, etc.)
- BPA Forecast is the T-70 VER Forecast (produced 70 minutes before the hour of operation) and posted by no later than 65 minutes prior to the hour of operation
  - Base Schedules for the EIM are due by T-57, so VERs must submit schedules by that time.
- See page 99 of <https://www.bpa.gov/-/media/Aep/rates-tariff/bp-24/Final-Proposal/Appendix-CFinal-Proposal-Transmission-Rates-Schedules-and-GRSPsRev-1BP24A02AP02.pdf>

# Impacts of VERs Scheduling Off of Forecast in EIM

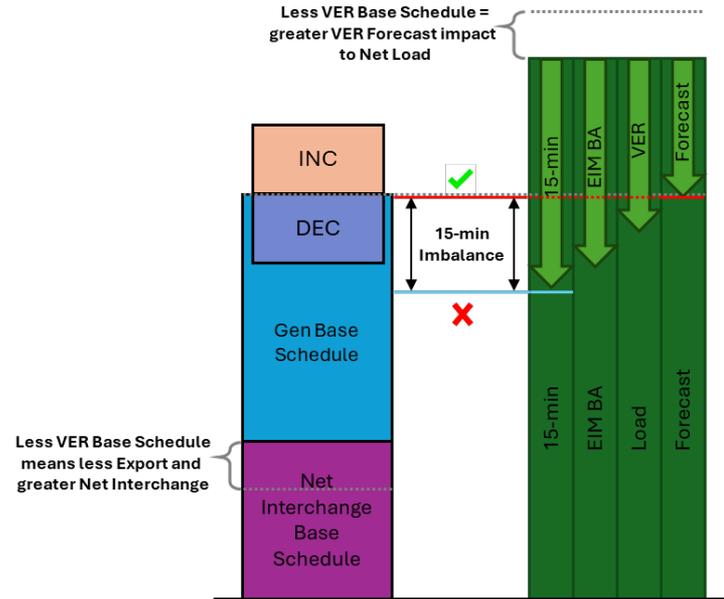
- **EIM Resource Sufficiency Test Impacts**
  - Capacity Test – Schedule versus Forecast difference must be made up with INC/DEC Bids to the EIM
  - Flex Ramp Test – Schedule versus Forecast difference must be made up with ramping INC/DEC Bids to the EIM
- **Balancing Authority Impacts**
  - Consumption of available INC/DEC in the BAA and the EIM
  - Consumption of offered Transmission donations to the EIM
  - During EIM separation and RS Test failures, all schedule error defaults to the BA to serve

# EIM RS Test Impacts Example: Under-schedule & Capacity Test

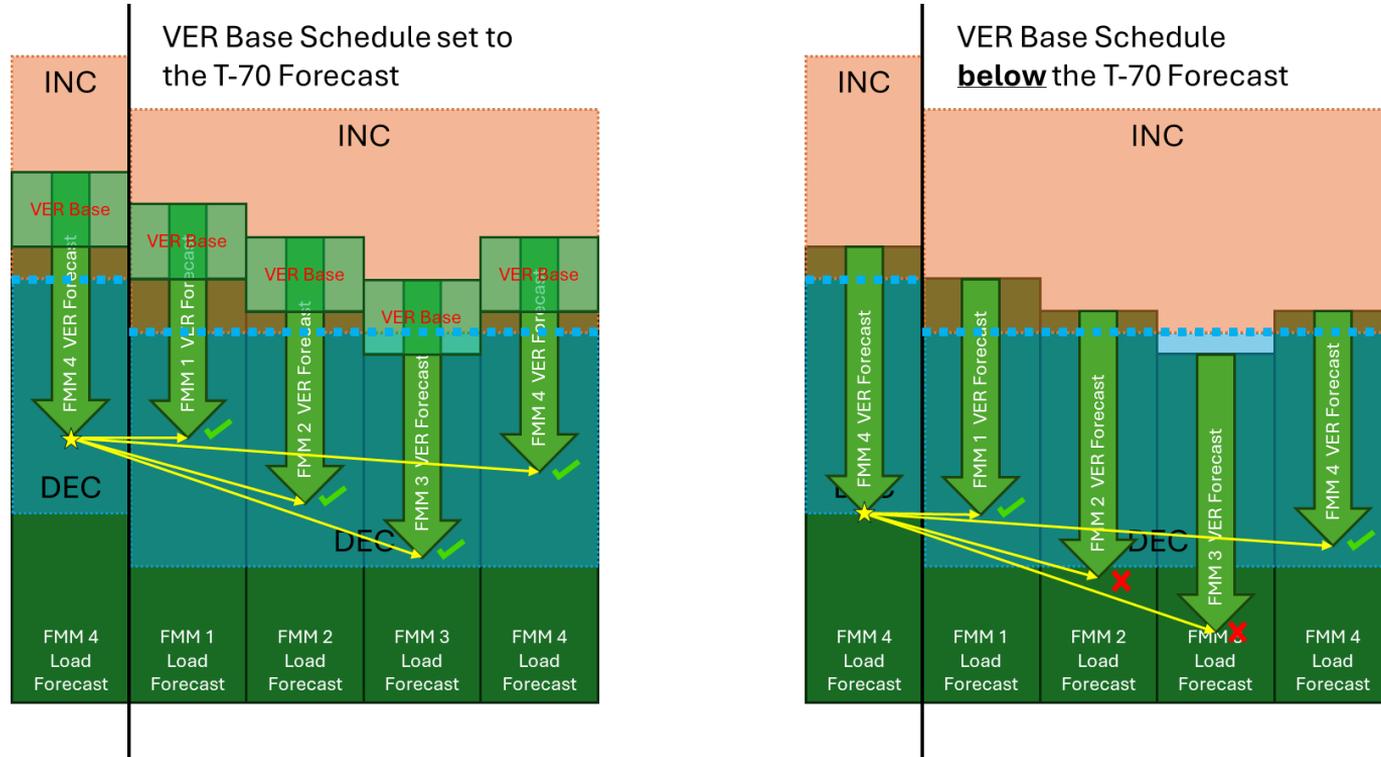
VER Base Schedule set to  
the T-70 Forecast



VER Base Schedule  
**below** the T-70 Forecast



# EIM RS Test Impacts Example: Under-schedule & Flex Ramp Test



# Questions

# Wrap up

- Please send any feedback, with your topic you are addressing by Thursday, June 6, to BPA's Tech Forum at [techforum@bpa.gov](mailto:techforum@bpa.gov), with a cc to your Power and/or Transmission Account Executive.
- If you would like to have a customer led workshop on June 13, please send us the topic that you would like additional information on or send us your proposal by May 29, and how much time you will need, to BPA's Tech Forum at [techforum@bpa.gov](mailto:techforum@bpa.gov), with a cc to your Power and Transmission Account Executive.
- The next workshop will be on June 25-26, and it will be hybrid.



# Appendix



# BP-26 and TC-26 Workshops: Proposed Dates for Topics

Date	Rate/Tariff Topics
June 25 & 26 (Tue-Wed)	<p data-bbox="388 358 664 385"><b>Transmission Rates</b></p> <ul data-bbox="388 401 823 472" style="list-style-type: none"><li data-bbox="388 401 693 429">• Non-EIM Balancing</li><li data-bbox="388 440 823 472">• Balancing Reserves Shortfall</li></ul> <p data-bbox="388 511 568 538"><b>Power Rates</b></p> <ul data-bbox="388 554 823 582" style="list-style-type: none"><li data-bbox="388 554 823 582">• WA Cap-and-Invest Program</li></ul> <p data-bbox="388 620 465 647"><b>Tariff</b></p> <ul data-bbox="388 663 1329 822" style="list-style-type: none"><li data-bbox="388 663 842 691">• GI Reform – Affected Systems</li><li data-bbox="388 702 664 729">• GI Reform – LGIA</li><li data-bbox="388 740 722 767">• Network Loss Factors</li><li data-bbox="388 784 1329 822">• Transmission Planning – FERC NOPR/Order update (inform only)</li></ul>

# BP-26 and TC-26 Workshops: Proposed Dates for Topics

Date	Rate/Tariff Topics
July 30 & 31 (Tue-Wed)	<p data-bbox="401 361 703 390"><b>Transmission Rates</b></p> <ul data-bbox="401 405 1182 527" style="list-style-type: none"><li data-bbox="401 405 1136 440">• Gen Inputs Rates (with New Technology Pilot)</li><li data-bbox="401 450 1182 485">• Generator Interconnection Withdrawal Penalties</li><li data-bbox="401 496 664 531">• Rates Forecast</li></ul> <p data-bbox="401 568 600 598"><b>Power Rates</b></p> <ul data-bbox="401 612 929 734" style="list-style-type: none"><li data-bbox="401 612 886 647">• New Large Single Load (NLSL)</li><li data-bbox="401 658 875 693">• Unauthorized Increase (UAI)</li><li data-bbox="401 704 929 739">• Tier 2 &amp; Demand Charge Pricing</li></ul> <p data-bbox="401 776 490 805"><b>Tariff</b></p> <ul data-bbox="401 820 1358 898" style="list-style-type: none"><li data-bbox="401 820 848 855">• ROFR Queue Management</li><li data-bbox="401 865 1358 900">• Transmission Line Ratings – FERC Order 881 implementation</li></ul>

# BP-26 and TC-26 Workshops: Proposed Dates for Topics

Date	Rate/Tariff Topics
August 27 & 28 (Tue-Wed)	<p data-bbox="452 358 730 385"><b>Transmission Rates</b></p> <ul data-bbox="452 401 888 514" style="list-style-type: none"><li data-bbox="452 401 819 429">• Energy Storage Devices</li><li data-bbox="452 445 761 472">• Non-EIM Balancing</li><li data-bbox="452 489 888 514">• Balancing Reserves Shortfall</li></ul> <p data-bbox="452 554 633 582"><b>Power Rates</b></p> <ul data-bbox="452 598 1313 710" style="list-style-type: none"><li data-bbox="452 598 819 625">• Revenue Requirements</li><li data-bbox="452 642 548 669">• Risk</li><li data-bbox="452 685 1313 710">• Western Resource Adequacy Program (WRAP) – Follow up</li></ul> <p data-bbox="452 751 529 778"><b>Tariff</b></p> <ul data-bbox="452 794 1290 986" style="list-style-type: none"><li data-bbox="452 794 908 822">• GI Reform – Affected Systems</li><li data-bbox="452 838 730 865">• GI Reform – LGIA</li><li data-bbox="452 882 788 909">• Network Loss Factors</li><li data-bbox="452 926 1290 953">• Tariff clean-up – ministerial edits to Attachments L and R</li><li data-bbox="452 969 888 986">• Redline draft proposed tariff</li></ul>