



Non-federal Resources in a Day-Ahead Market

May 29, 2024

PROVIDER OF CHOICE

**POST
2028**

Slide 6 updated



Objectives

- Initiate conversation with customers about how non-federal resources could be treated under Load Following and Planned Product with/without a Day-Ahead Market (DAM).
- Opportunity to discuss contract requirements and pricing for non-federal resource support services.

Non-federal Resources in a Day-Ahead Market

- BPA is potentially joining a DAM as the Load Serving Entity for Load Following customers. The service that BPA provides Load Following customers will stay the same.
- BPA will continue to serve a Load Following customers hourly net requirement.
- The way BPA accounts for non-federal resources and the pricing for shaping services and capacity may need adjusting.

Matrix Overview

BPA has put together a matrix for discussion on potential treatment for energy and capacity of non-federal resources dedicated under the Provider of Choice Load Following contract.

- BPA will need more information to refine.
- The following slides use a few DAM terms:
 - Must Offer Obligation - A minimum requirement for each Market Participant with load and/or export obligations to bring enough supply to “cover” those obligations.
 - Self Schedule - represents submission of a static hourly resource output without market adjustability. Such a submission is treated as a price-taker.
 - Bid – generation offers at a specified amount and price in the Day-Ahead market.

Four Views for Non-Federal Resources

Load
Following
No DAM

Planned
Products
No DAM

Load
Following
DAM

Planned
Products
DAM

Load Following – No DAM Treatment

| Load Following | | | | | | | No DAM Treatment | | | |
|-----------------------------------|------------------------|-------------------|---------------------------|-------------------|--|---------------------------|--|---|--------------------|-----|
| Resource Category | Nameplate | Capacity > Energy | Potential Capacity Credit | Exhibit A Amounts | Required Capacity- Based Charges* | BPA Capacity Requirement* | Load Treatment | Energy < Exhibit A | Energy > Exhibit A | |
| 1 New & Existing Small | Less than 1 MW | N/A | N/A | No | No | No | Net Load | PF Rate Design | | |
| 2 Existing Non-Dispatchable | Greater than 1 MW | No | No | Yes | Potentially if needed to meet Exhibit A Amounts | Exhibit A Amounts | Metered/ Scheduled Load minus Exhibit A Amounts | Market Charge Potential UAI or other fees | Market Credit | |
| 3 Existing Dispatchable | Greater than 1 MW | Yes | No | Yes | | YES - TBD | | | | |
| 4 Existing Energy Only | Greater than 1 MW | No | No | Yes | No | No | | | | |
| 5 New Tier 1 Allowance | Up to 5 MW or 50% CHWM | No | No | Yes | No | No | | | | |
| 6 New Tier 1 Allowance + Capacity | Up to 5 MW or 50% CHWM | Yes | Yes | Yes | No | YES - TBD | | | | |
| 7 ACHWM Non-Dispatchable | Greater than 1 MW | No | No | Yes | Yes if any capacity shortfall from flat block of power | Op. Min | | Market Charge Above Op. Min UAI or other fees if < Op. Min | | |
| 8 ACHWM Dispatchable | Greater than 1 MW | Yes | Yes | Yes | No | YES - TBD | | | | |
| 9 ACHWM Committed Purchase | N/A | No | No | Yes | No | Exhibit A Amounts | | UAI | | N/A |

*This might need to change under certain future landscapes, such as new market and resource planning requirements.

Planned Products – No DAM Treatment

| Planned Product | | | | | | | | | No DAM Treatment |
|-----------------------------------|------------------------|-------------------|---------------------------|-------------------|-----------------------------------|---------------------------|---|--|-------------------------------------|
| Resource Category | Nameplate | Capacity > Energy | Potential Capacity Credit | Exhibit A Amounts | Required Capacity- Based Charges* | BPA Capacity Requirement* | Impact on Annual Energy Net Requirement | Impact on Net Requirement Energy True Up | Energy Δ from Exhibit A |
| 1 New & Existing Small | Less than 1 MW | N/A | N/A | No | No | No | Indirectly through load forecast | Actual Generation | PF Rate Design |
| 2 Existing Non-Dispatchable | Greater than 1 MW | No | No | Yes | No | Impacts PNR if Applicable | Exhibit A Amounts | Exhibit A Amounts | Market Charges/ Credits to Customer |
| 3 Existing Dispatchable | Greater than 1 MW | Yes | No | Yes | No | Impacts PNR if Applicable | | | |
| 4 Existing Energy Only | Greater than 1 MW | No | No | Yes | No | No | | | |
| 5 New Tier 1 Allowance | Up to 5 MW or 50% CHWM | No | No | Yes | No | No | | | |
| 6 New Tier 1 Allowance + Capacity | Up to 5 MW or 50% CHWM | Yes | Yes | Yes | No | Yes if Capacity Credit | | | |
| 7 ACHWM Non-Dispatchable | Greater than 1 MW | No | No | Yes | No | No | | | |
| 8 ACHWM Dispatchable | Greater than 1 MW | Yes | Yes | Yes | No | Yes if Capacity Credit | | | |
| 9 ACHWM Committed Purchase | N/A | No | No | Yes | No | No | | | |

*This might need to change under certain future landscapes, such as new market and resource planning requirements.

Load Following – DAM Treatment

| Load Following | | | | | | | DAM Treatment | | | | | | |
|-----------------------------------|------------------------|-------------------|---------------------------|-------------------|--|---------------------------|-------------------|----------------------|---|-----------------------------|----------------------------|------------|-----|
| Resource Category | Nameplate | Capacity > Energy | Potential Capacity Credit | Exhibit A Amounts | Required Capacity- Based Charges* | BPA Capacity Requirement* | Market Treatment | MOO* | Load Treatment | Energy < Exhibit A | Energy > Exhibit A | | |
| 1 New & Existing Small | Less than 1 MW | N/A | N/A | No | No | No | N/A | No | Net Load | PF Rate Design | | | |
| 2 Existing Non-Dispatchable | Greater than 1 MW | No | No | Yes | Potentially if needed to meet Exhibit A Amounts | Exhibit A Amounts | Self Schedule Bid | No Exhibit A Amounts | Cust Pays Exhibit A Amounts at DAM Load Price | Smaller DAM Resource Credit | Bigger DAM Resource Credit | | |
| 3 Existing Dispatchable | Greater than 1 MW | Yes | No | Yes | | YES - TBD | Self Schedule Bid | YES - TBD | | | | | |
| 4 Existing Energy Only | Greater than 1 MW | No | No | Yes | | No | No | Self Schedule Bid | | | | No | |
| 5 New Tier 1 Allowance | Up to 5 MW or 50% CHWM | No | No | Yes | No | No | Self Schedule Bid | No Exhibit A Amounts | | | | | |
| 6 New Tier 1 Allowance + Capacity | Up to 5 MW or 50% CHWM | Yes | Yes | Yes | No | YES - TBD | Self Schedule Bid | YES - TBD | | | | | |
| 7 ACHWM Non-Dispatchable | Greater than 1 MW | No | No | Yes | Yes if any capacity shortfall from flat block of power | | Op. Min | Self Schedule Bid | | | | No Op. Min | |
| 8 ACHWM Dispatchable | Greater than 1 MW | Yes | Yes | Yes | No | YES - TBD | Self Schedule Bid | YES - TBD | | | | | |
| 9 ACHWM Committed Purchase | N/A | No | No | Yes | No | Exhibit A Amounts | N/A | Seller | | | | N/A | N/A |

*This might need to change under certain future landscapes, such as new market and resource planning requirements.

Planned Products – DAM Treatment

| Planned Product | | DAM Treatment | | | | |
|-------------------|--|-------------------------------|---|---|-----------------------------|----------------------------|
| Resource Category | Nameplate | Market Treatment | MOO* | Load Treatment | Energy < Exhibit A | Energy > Exhibit A |
| 1 | New & Existing Small Less than 1 MW | N/A | | | PF Rate Design | |
| 2 | Existing Non-Dispatchable Greater than 1 MW | Same for Self Schedule or Bid | • Load minus portion purchased from BPA via planned product, PLVS, & RSS | BPA Pays Portion of Load served through Tier 1 Block & Tier 2 | Smaller DAM Resource Credit | Bigger DAM Resource Credit |
| 3 | Existing Dispatchable Greater than 1 MW | | | | | |
| 4 | Existing Energy Only Greater than 1 MW | | | | | |
| 5 | New Tier 1 Allowance Up to 5 MW or 50% CHWM | | | | | |
| 6 | New Tier 1 Allowance + Capacity Up to 5 MW or 50% CHWM | | | | | |
| 7 | ACHWM Non-Dispatchable Greater than 1 MW | | | | | |
| 8 | ACHWM Dispatchable Greater than 1 MW | | | | | |
| 9 | ACHWM Committed Purchase N/A | | | | | |

*This might need to change under certain future landscapes, such as new market and resource planning requirements.

Takeaways

- **BPA is looking at how it recovers cost**
 - WRAP and potential DAM requirements around physical resources are changing.
- **BPA will work with customers on the details regarding bringing capacity of Existing dispatchable dedicated resources to serve load.**

Next Steps

- Finish product design.
- Following BPA's decision regarding DAM participation, come back to this topic as part of contract drafting.





Discussion