WAPA-SN Rates Informal Public Process

Western Area Power Administration
Sierra Nevada Region
Monday, June 8, 2020
9:00 AM – 12:00 PM
Web Conference
WebEx Housekeeping Items

• All participants are muted on entry to ensure a smooth remote meeting

• For questions during Q&A periods, please choose one of the following options:
  • Send questions to the host in the WebEx chat
  • Use the “Raise Hand” icon next to your name in participant list. The host will unmute and call on you
  • Phone only participants: When prompted by the host, press *6 from device to unmute yourself on WebEx

• Some questions may be answered later in other presentations

• We will have time for additional questions at the end of the meeting

• Make sure you are not “double-muted” when attempting to talk (i.e. muted on your device in addition to the WebEx client)
# Agenda

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<td>Tony Henriquez</td>
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<td>Welcome and Introductions</td>
<td>Arun Sethi, SN VP and Power Marketing Manager</td>
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<td>Mark Gabriel, WAPA Administrator and CEO</td>
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<td>Autumn Wolfe, SN Rates Manager</td>
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<td>Closing Remarks</td>
<td>Autumn Wolfe, SN Rates Manager</td>
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Welcome and Introductions

Arun Sethi
SN VP and Power Marketing Manager
Opening Remarks

Mark Gabriel
WAPA Administrator and CEO
Rates Accomplishments

• Derived rate anticipated to be less than market price
• $10 million reduction in repayment requirement
• Improved communication & collaboration with Reclamation
Reminder: Why Joining EIM

- Change in generation mix
- Shortage of electric capacity
- Reduced bilateral trading partners
- Price volatility
- Increasingly dynamic system
Position on Markets

- No “one-size-fits-all” solution
- Stay strategic, proactive and aligned with our mission
- Create best possible outcome for our customers and WAPA
Wildfire Preparation & Mitigation

- Follow Wildfire Mitigation Plan
- Collaborating with others
- Active role on ESCC wildfire committee
- TNI-WEA project
COVID-19 Response

- Objective: Ensure continued mission success and protect employees
- Maximized telework
- Social distancing plans in place for Ops & Maintenance
- Collaborating with federal, state & local entities
- No visitors to WAPA facilities
- Starting Responsible Workplace Re-entry
  - Mission-critical travel & training only
Asset Management (AM) Almanac

- Protecting Assets in World of Change
- Support informed and strategic decision making
- Provides info on WAPA’s assets, performance data and trends
Key Takeaways

We are committed to delivering on our mission. Industry is changing at a rapid pace, and we must keep up. Focus on optimizing existing technologies & assets.
Contact/Follow me

Mark A. Gabriel
720.962.7705
gabriel@wapa.gov

wapa.gov
@westernareapower
@MarkAGabriel
Mark Gabriel
WesternAreaPower1
westernareapower
wapa.gov
WAPA-SN’s Proposed Rates Process Timeline

Autumn Wolfe
SN Rates Manager
# Proposed Timeline

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>May 11, 2020</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; Informal Customer Meeting</td>
</tr>
<tr>
<td>Jun 8, 2020</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt; Informal Customer Meeting</td>
</tr>
<tr>
<td>Jun 25, 2020</td>
<td>3&lt;sup&gt;rd&lt;/sup&gt; Informal Customer Meeting</td>
</tr>
<tr>
<td>Jul 10, 2020</td>
<td>4&lt;sup&gt;th&lt;/sup&gt; Informal Customer Meeting (optional)</td>
</tr>
<tr>
<td>Jun-Jul 2020</td>
<td>Federal Register Notice Published (90-Day Comment Period Begins)</td>
</tr>
<tr>
<td>Aug 17, 2020</td>
<td>Formal Customer Public Information &amp; Comment Forum</td>
</tr>
<tr>
<td>Sep-Oct 2020</td>
<td>90-Day Comment Period Ends</td>
</tr>
<tr>
<td>Feb 2021</td>
<td>Final Federal Register Notice Published</td>
</tr>
<tr>
<td>Apr 1, 2021</td>
<td>New Rate Schedules Effective Date</td>
</tr>
</tbody>
</table>
SMUD - Benefits of Participating in EIM

Jon Olson and Debra Warady
Sacramento Municipal Utility District
WAPA-SN’s EIM Potential Benefits: EIM Resource Valuation

Cary Fox, Central Valley Operations, Bureau of Reclamation
Robert Delizo, SN Resources and Scheduling Manager
EIM Resource Assumptions

- Use historical Spinning Reserve hourly capacity available as proxy resource for EIM
- Apply 50MW cap
- Use +/-50MW flexibility from base schedules
- Apply 300MWh cap for cumulative dec bids and 300MWh for cumulative inc bids in one operating day
- Apply +/-600MWh cap for cumulative daily MWh in one operating week (starting on Mondays)
EIM Resource Bidding Strategies

• Use bid pricing strategy to balance dec dispatch (Sub-Balancing Authority Area/SBA to import energy) with inc dispatch (SBA to sell energy) in one operating day
  o Dec when LMP < bid price
  o Inc when LMP > bid price

• Awards in the Fifteen Minute Market (FMM) and Real Time Dispatch (RTD) 5-minute dispatches incremental (or decremental) to FMM awards

Scenarios to achieve low-cost purchases and high-value sales while ensuring adequate water management in the operating day

Case 1: HE 1-24 at CVP breakeven cost
Case 2: HE 1-24 at $0/MW
Case 3: HE 1-12 at $0/MW, HE 13-24 at 0.5 CVP breakeven cost
Case 4: HE 1-12 at $0/MW, HE 13-24 at CVP breakeven cost

\[
CVP \ breakeven \ cost = Weighted \ Average \ Effective \ Rate \ (2006-2019) \\
= $30.92/MWh
\]
ELAP LMP and Dispatch – Case 3

Inc (1) when LMP > bid price, Dec (-1) when LMP < bid price
ELAP LMP and Dispatch – Case 4

Inc (1) when LMP > bid price, Dec (-1) when LMP < bid price
Purchase and Sale MWh, Uncapped

- January – May 2020
Purchase and Sale MWh, Capped

- January – May 2020
Valuation Results

- 300MWh cap for cumulative dec bids and 300MWh for cumulative inc bids in one operating day
- +/-600MWh cap for cumulative daily MWh in one operating week (starting on Mondays)

### Cumulative Energy Imported or Exported, MWh

<table>
<thead>
<tr>
<th>Period</th>
<th>Imported MWh</th>
<th>Exported MWh</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan - Dec 2017</td>
<td>31,116</td>
<td>12,571</td>
</tr>
<tr>
<td>Jan - Dec 2018</td>
<td>58,205</td>
<td>30,271</td>
</tr>
<tr>
<td>Jan - Dec 2019</td>
<td>77,345</td>
<td>49,023</td>
</tr>
<tr>
<td>Jan - May 2020</td>
<td>23,471</td>
<td>11,467</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>190,137</strong></td>
<td><strong>103,332</strong></td>
</tr>
</tbody>
</table>

### Counts of Days with Energy Imported or Exported, days

<table>
<thead>
<tr>
<th>Level of MWh Imported</th>
<th>Days with Imports</th>
<th>Days with Exports</th>
<th>Days with Net Imports</th>
<th>Days with Net Exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 300 MWh</td>
<td>469</td>
<td>212</td>
<td>239</td>
<td>10</td>
</tr>
<tr>
<td>Up to 200 MWh</td>
<td>98</td>
<td>191</td>
<td>146</td>
<td>15</td>
</tr>
<tr>
<td>Up to 100 MWh</td>
<td>40</td>
<td>195</td>
<td>151</td>
<td>46</td>
</tr>
</tbody>
</table>
Valuation Results

- 300MWh cap for cumulative dec bids and 300MWh for cumulative inc bids in one operating day
- +/-600MWh cap for cumulative daily MWh in one operating week (starting on Mondays)

### EIM Dispatch Benefits

<table>
<thead>
<tr>
<th>Period</th>
<th>Case 1</th>
<th>Case 2</th>
<th>Case 3</th>
<th>Case 1</th>
<th>Case 2</th>
<th>Case 3</th>
<th>Case 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan - Dec 2017</td>
<td>547,492</td>
<td>456,712</td>
<td>465,413</td>
<td>488,975</td>
<td>1,079,665</td>
<td>995,502</td>
<td>995,652</td>
</tr>
<tr>
<td>Jan - Dec 2018</td>
<td>762,418</td>
<td>466,116</td>
<td>500,489</td>
<td>561,951</td>
<td>2,615,059</td>
<td>2,336,798</td>
<td>2,346,901</td>
</tr>
<tr>
<td>Jan - Dec 2019</td>
<td>883,852</td>
<td>554,244</td>
<td>624,815</td>
<td>671,127</td>
<td>3,688,920</td>
<td>3,319,424</td>
<td>3,312,071</td>
</tr>
<tr>
<td>Jan - May 2020</td>
<td>248,394</td>
<td>90,091</td>
<td>112,582</td>
<td>134,812</td>
<td>565,035</td>
<td>685,173</td>
<td>679,625</td>
</tr>
<tr>
<td>Total</td>
<td>2,442,156</td>
<td>1,567,163</td>
<td>1,703,299</td>
<td>1,856,865</td>
<td>7,948,679</td>
<td>7,336,897</td>
<td>7,334,250</td>
</tr>
</tbody>
</table>

*Purchase benefits represent cost savings*

### Total EIM Dispatch Benefits = Purchase Benefits + Sale Benefits, $

<table>
<thead>
<tr>
<th>Period</th>
<th>Case 1</th>
<th>Case 2</th>
<th>Case 3</th>
<th>Case 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan - Dec 2017</td>
<td>1,627,157</td>
<td>1,452,215</td>
<td>1,461,065</td>
<td>1,569,506</td>
</tr>
<tr>
<td>Jan - Dec 2018</td>
<td>3,377,477</td>
<td>2,802,914</td>
<td>2,847,390</td>
<td>3,190,147</td>
</tr>
<tr>
<td>Jan - Dec 2019</td>
<td>4,572,772</td>
<td>3,873,668</td>
<td>3,936,886</td>
<td>4,368,780</td>
</tr>
<tr>
<td>Jan - May 2020</td>
<td>813,428</td>
<td>775,264</td>
<td>792,207</td>
<td>830,981</td>
</tr>
<tr>
<td>Total</td>
<td>10,390,835</td>
<td>8,904,060</td>
<td>9,037,549</td>
<td>9,959,415</td>
</tr>
</tbody>
</table>

Case 1: HE 1-24 at CVP breakeven cost
Case 2: HE 1-24 at $0/MW
Case 3: HE 1-12 at $0/MW, HE 13-24 at 0.5 CVP breakeven cost
Case 4: HE 1-12 at $0/MW, HE 13-24 at CVP breakeven cost
Comparison with Spinning Reserve Sales

- Assuming WAPA-SNR participated in EIM for the period January 2017 and onward

### EIM Dispatch Benefits vs. Spinning Reserve Revenues

<table>
<thead>
<tr>
<th>Period</th>
<th>Total EIM Dispatch Benefits = Purchase Benefits + Sale Benefits, $</th>
<th>Spinning Reserve Revenues, $</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Case 1</td>
<td>Case 2</td>
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<tr>
<td>Jan - Dec 2017</td>
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<tr>
<td>Total</td>
<td>10,390,835</td>
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### Net EIM Dispatch Benefits, $

<table>
<thead>
<tr>
<th>Period</th>
<th>Case 1</th>
<th>Case 2</th>
<th>Case 3</th>
<th>Case 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan - Dec 2017</td>
<td>1,026,656</td>
<td>851,713</td>
<td>860,563</td>
<td>969,004</td>
</tr>
<tr>
<td>Jan - Dec 2018</td>
<td>2,300,883</td>
<td>1,726,320</td>
<td>1,770,796</td>
<td>2,113,553</td>
</tr>
<tr>
<td>Jan - Dec 2019</td>
<td>3,317,102</td>
<td>2,617,998</td>
<td>2,681,216</td>
<td>3,113,110</td>
</tr>
<tr>
<td>Jan - May 2020</td>
<td>566,059</td>
<td>527,894</td>
<td>544,838</td>
<td>583,612</td>
</tr>
<tr>
<td>Total</td>
<td>7,210,699</td>
<td>5,723,924</td>
<td>5,857,413</td>
<td>6,779,279</td>
</tr>
</tbody>
</table>
OATT Revisions, Rate Schedules and Business Practices

WAPA-SN
Preparation for EIM Participation

- WASN Operations Draft Business Procedures For EIM Settlements
  - Post to OASIS mid-June, 2020

- Overview of High Level Calculations at Rates Informal Customer Meeting
  - June 25, 2020
  - 9 a.m. to 12 p.m. PDT

- Base Resource, First Preference, and Project Use Customers
  - Submit Comments through WAPA Merchant

- Transmission Customers
  - Submit Comments Directly

- Rate Process Notice of Intent to File New Formula Rates
  - Provided April 28, 2020

- Informal Customer Meetings
  - May 2020 – July 2020

- 90 Day Review Period Begins Late June 2020

- Public Forums Webinar
  - August 17, 2020
  - 9:00 a.m. to 4 p.m. PDT

- 90 Day Review Period Ends Early October 2020

- WAPA OATT Revision 20-01
  - Advance Draft Posted to OASIS June 1, 2020

- 30 Day Comment Period
  - (from posting date of complete draft of proposed revisions to OASIS - approximately June 29, 2020)

- Webinar
  - July 8, 2020
  - 10 a.m. MDT

- 30 Day Comment Period
  - (from the posting date of the draft BPs)
Allocation of EIM Charges

Autumn Wolfe
SN Rates Manager
Tier 1 vs. Tier 2 Allocation

Tier 1 Cost Allocation
• Is the allocation of WAPA’s share of CAISO and BANC charges to WAPA’s Transmission Customers, including WAPA Merchant
• Will require new Rate Schedules

Tier 2 Cost Allocation
• Is the sub-allocation of CAISO and BANC charges from WAPA Merchant to CVP customers
• Discussed at the May 11th Informal Customer Meeting
Allocation of EIM Charges and Benefits
Tier 1 Allocation of EIM Charges and Benefits

**CAISO On-Going Charges: CAISO EIM Charges**

- **WAPA (Transmission Provider)**
  - CAISO Charges are Direct Billed to BANC
  - Includes on-going CAISO and BANC Admin charges (Tier 1 allocation to OATT Tx Customers)

**EIM Rate Schedules**

- **WAPA Merchant as Tx Customer under OATT**
  - Tier 1 charges to be sub-allocated as Tier 2 charges to Merchant customers)

- **Other Transmission Customers under OATT**

**Schedules**

- **Schedule 1S**
  - CAISO EIM: Administrative Charges
  - Pass through EIM administrative charges assigned to WAPA as the Transmission Provider

- **Schedule 4S**
  - CAISO EIM: Energy Imbalance Service
  - Pass through charges or payments to Transmission Customers, such as:
    - Uninstructed Imbalance Energy (UIE)
    - Unaccounted for Energy (UFE)
    - Under/Over-Scheduling Load

- **Schedule 9S**
  - CAISO EIM: Generator Imbalance Service
  - Pass through charges or payments to Transmission Customers, such as:
    - Uninstructed Imbalance Energy (UIE)
    - Instructed Imbalance Energy (IIE)
Example Allocation of EIM Admin Charges
Example Allocation of Energy Imbalance Charges

Allocation for Conforming Loads

CAISO
On-Going Charges: CAISO EIM Charges

Uninstructed Imbalance Energy (UIE) Charges

BANC
CAISO Charges are Direct Billed to BANC

Uninstructed imbalance Energy (UIE) Charges

Allocate - for Load, based on Load Ratio Share; for Intertie, based on e-tags

WAPA (Transmission Provider)
Includes on-going CAISO and BANC Admin charges (Tier 1 allocation to OATT Tx Customers)

Uninstructed Imbalance Energy (UIE) Charges

Allocate - Load Ratio Share Rate Schedule CV-EIMAS

WAPA Merchant as Tx Customer under OATT
(Tier 1 charges to be sub-allocated as Tier 2 charges to Merchant customers)

Other Transmission Customers under OATT

Load Ratio Share of UIE Charges

Tier 1 Allocation of EIM Charges from WAPA (Tx Provider) to Merchant and other Tx Customers

Tier 2 Allocation of EIM Charges from WAPA Merchant to Customers

Load Charges - For Customers within WAPA footprint:
2 customers with load > 1 MW
3 customers with load < 1 MW
4 customers within SMUD SRA; therefore SMUD covers load costs
2 customers with Project Use

EIM costs for TFUD
1. Specific costs will be covered by BANC
2. Remaining costs to PRR

Administration Costs
1. CAISO
2. BANC

PRR

Other BANC Customers Participating in EIM
Overview of Proposed EIM Rate Schedules

Autumn Wolfe
SN Rates Manager
EIM Proposed Rate Schedules

• Proposed New Rate Schedules
  • EIM Administrative Charges (CV-EIM1S)
  • EIM Energy Imbalance Service (CV-EIM4S)
  • EIM Generator Imbalance Service (CV-EIM9S)
Structure of Proposed Formula Rate

• Component 1 - Formula Rate or Penalty

• Component 2 - Regulatory charges or credit passed through to relevant customer when possible or through Component 1

• Component 3 - Balance Authority charges or credits passed through to relevant customer when possible or through Component 1
Administrative Charges
Proposed Rate Schedule CV-EIM1S

• Component 1

The formula rate for EIM Administrative Service Charges shall be sub-allocated to WAPA’s Transmission Customers based on load ratio share for the time period in which WAPA incurs EIM administrative costs.
Energy Imbalance Service  
Proposed Rate Schedule CV-EIM4S

• Component 1

The formula rate for EI service is the deviation of the Transmission Customer’s metered load compared to the load component of the Base Schedule settled as Uninstructed Imbalance Energy (UIE) for the period of the deviation at the applicable Load Aggregation Point (LAP) price where the load is located.

Unless such charges are allocated to the Transmission Customer directly by the EIM Entity, a Transmission Customer shall be responsible for any pass-through charges/credits associated with applicable EI Service charges allocated to WAPA, as Transmission Provider, for its participation in the EIM, in accordance with this rate schedule. WAPA will sub-allocate load charges based on a Transmission Customer’s load ratio share.
• Component 1

Unless such charges are allocated to the Transmission Customer directly by the EIM Entity, a Transmission Customer shall be responsible for any pass-through charges/credits associated with applicable GI Service charges allocated to WAPA, as Transmission Provider, for its participation in EIM, in accordance with this rate schedule. Such charges may include those due to operational adjustments of any affected Interchange. WAPA will direct assign charges or sub-allocate charges based on the Transmission Customer’s load ratio share.
EIM – All Proposed Rate Schedules

• Component 2

Any charges or credits associated with the creation, termination, or modification to any tariff, contract, or rate schedule accepted or approved by the Federal Energy Regulatory Commission (FERC) or other regulatory bodies will be passed on to each relevant customer. The FERC’s or other regulatory bodies’ accepted or approved charges or credits apply to the service to which this rate methodology applies. When possible, WAPA-SN will pass through directly to the relevant customer FERC’s or other regulatory bodies’ accepted or approved charges or credits in the same manner WAPA-SN is charged or credited. If FERC’s or other regulatory bodies’ accepted or approved charges or credits cannot be passed through directly to the relevant customer in the same manner WAPA-SN is charged or credited, the charges or credits will be passed through using Component 1 of the formula rate.
EIM – All Proposed Rate Schedules

• Component 3

Any charges or credits from the Host Balancing Authority (HBA) applied to WAPA-SN for providing this service will be passed through directly to the relevant customer in the same manner WAPA-SN is charged or credited to the extent possible. If the HBA’s costs or credits cannot be passed through to the relevant customer in the same manner WAPA-SN is charged or credited, the charges or credits will be passed through using Component 1 of the formula rate.
No Incremental Transmission Charge for EIM

Unless subsequently imposed by the Market Operator (MO) as part of the MO Tariff and promulgated by WAPA through rate proceedings, there shall be no incremental transmission charge assessed for transmission use related to the EIM. Transmission Customers must have transmission service rights, as set forth in Attachment S.
Overview of Revisions to Existing Rate Schedules

Autumn Wolfe
SN Rates Manager
Revisions to Existing Rate Schedules

• Proposed Revised Rate Schedules
  • Energy Imbalance Service (CV-EID5)
    • Supersedes CV-EID4
  • Generator Imbalance Service (CV-GID2)
    • Supersedes CV-GID1

• Both revised rate schedules include changes to Component 1

• Rate schedules will be extended thru December 31, 2024
Energy Imbalance Service
Proposed Rate Schedule CV-EID5

Current Component 1

EI service is applied to deviations as follows: (1) for deviations within the bandwidth, there will be no financial settlement, unless otherwise dictated by contract or policy; rather, EI will be tracked and settled with energy...

Proposed Component 1

EI service is applied to deviations as follows unless otherwise dictated by contract or policy: (1) deviations within the bandwidth will be tracked and settled financially, at the greater of the California Independent System Operator market price, or WAPA-SN’s actual cost...
GI is applied to deviations as follows: (1) for deviations within the bandwidth, there will be no financial settlement, unless otherwise dictated by contract or policy; rather, GI will be tracked and settled with energy...

GI is applied to deviations as follows unless otherwise dictated by contract or policy: (1) deviations within the bandwidth will be tracked and settled financially at the greater of the California Independent System Operator market price or WAPA-SN’s actual cost...
Proposed Trinity Public Utility District EIM Settlement

Tong Wu
SN Settlements Manager
BANC EIM Entity Settlement for Trinity Public Utilities District (TPUD) – Charge Allocation

• Since TPUD is a First Preference Customer, WAPA will be responsible for real-time deviation charge codes

• BANC will be responsible for all other charge codes allocated to TPUD based on metered load
BANC EIM Entity Settlement for TPUD – Proposed Process

1. BANC will perform daily calculation of TPUD allocations on each BANC Charge assessed to WAPA.
   a. Calculate WAPA portion and assign to WAPA.
   b. Calculate TPUD portion and assign to BANC.

2. Monthly invoice WAPA for WAPA’s portion of the charges.

3. Monthly invoice BANC for TPUD’s portion of the charges.

4. BANC will track TPUD’s portion of the charges.
Follow-Up Items

Autumn Wolfe
SN Rates Manager
Follow Up Items

• Reduction to BANC Implementation Costs
  • Phase 1 Reimbursement, decrease from $461,070 to $297,507

• Additional information on Net Energy Load (NEL) percentages used for the allocation of BANC costs

• Direct Connect vs Non-Direct Connect customers

• Questions and responses from customer meetings will be posted to our website at: https://www.wapa.gov/regions/SN/rates/Pages/Rate-Case-2021-WAPA-194.aspx
  • Some of the more frequently asked questions will be shared at future informal customer meetings
## BANC EIM Implementation Costs

<table>
<thead>
<tr>
<th>Category</th>
<th>Original Total Cost Estimate</th>
<th>Revised Total Cost Estimate</th>
<th>2019 Actual</th>
<th>2020 Estimate</th>
<th>2021 Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase II Decision &amp; Gap Analysis</td>
<td>$60,000</td>
<td>$51,059</td>
<td>$51,059</td>
<td>$0</td>
<td>$0</td>
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<tr>
<td>Phase II Implementation Costs</td>
<td>$1,308,750</td>
<td>$1,003,936</td>
<td>$100,726</td>
<td>$703,645</td>
<td>$199,565</td>
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<tr>
<td>SMUD Support</td>
<td>$81,950</td>
<td>$97,297</td>
<td>$15,049</td>
<td>$61,686</td>
<td>$20,562</td>
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<tr>
<td>Settlements Support</td>
<td>$0</td>
<td>$87,970</td>
<td>$0</td>
<td>$58,646</td>
<td>$29,324</td>
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<tr>
<td>Software Upgrades</td>
<td>$357,600</td>
<td>$399,320</td>
<td>$0</td>
<td>$321,840</td>
<td>$77,480</td>
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<tr>
<td>Utilicast Project Oversight</td>
<td>$750,000</td>
<td>$298,659</td>
<td>$63,625</td>
<td>$183,099</td>
<td>$51,935</td>
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<tr>
<td>CAISO Fees</td>
<td>$59,600</td>
<td>$61,090</td>
<td>$10,430</td>
<td>$40,230</td>
<td>$10,430</td>
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<tr>
<td>Legal Support (BBSW)</td>
<td>$59,600</td>
<td>$59,600</td>
<td>$11,622</td>
<td>$38,144</td>
<td>$9,834</td>
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<tr>
<td>Contingency</td>
<td>$0</td>
<td>$50,197</td>
<td>$0</td>
<td>$39,064</td>
<td>$11,133</td>
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<tr>
<td>Security and Collateral</td>
<td>$163,500</td>
<td>$81,750</td>
<td>$0</td>
<td>$0</td>
<td>$81,750</td>
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<tr>
<td>Phase 1 Reimbursement</td>
<td>$446,900</td>
<td>$297,507</td>
<td>$297,507</td>
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<tr>
<td>Total Estimate</td>
<td>$1,979,150</td>
<td>$1,484,449</td>
<td>$449,292</td>
<td>$742,709</td>
<td>$292,448</td>
</tr>
</tbody>
</table>

* Total cost estimate is spread over 3 years.
BANC Load Ratio Share Percentage

- Net Energy for Load (NEL) is based on load ratio share and used for BANC EIM Phase II cost allocation. As part of the BANC EIM evaluation, a decision was made to use 2017 NEL for BANC members and WAPA.

- Under Phase I, only SMUD joined EIM and paid for all costs of joining EIM. If City of Redding, Roseville Electric Utility, Modesto Irrigation District and WAPA had joined EIM during Phase I, WAPA’s share of implementation cost would have been 10.9%.
BANC Load Ratio Share Percentage

• Under Phase II, City of Redding, Roseville Electric Utility, Modesto Irrigation District and WAPA are joining EIM and are responsible for Phase II implementation costs. Based on 2017 NEL, WAPA’s share of Phase II implementation costs is 29.8%.

• Since SMUD paid EIM costs under Phase I and the Phase II EIM participants will be using some of those systems, WAPA is responsible for its load ratio share of Phase I implementation costs. WAPA’s share of Phase I implementation costs is 10.9%.

• Updated NEL percentages may be used in future allocations.
Direct Connect vs Non-Direct Connect Customers

Allocation for Conforming Loads

CAISO
On-Going Charges: CAISO EIM Charges

Allocation for Non-Conforming Loads

CAISO Charges Direct Billed to WAPA (for Non-Conforming Loads only)
(Note: Conforming loads to be submitted through BANC in accordance with BANC RP and WAPA OATT)

Allocation for Participation in EIM

WAPA
Participation
w/ CVP Generation
(WEIM SCID)

$ Revenue
(dispatch benefits)

$ Expense
(generation deviation)

WAPA: Load Charges
(Using SCID: WIM for non-conforming loads)

Customers with Non-Conforming Loads
Direct Billed

PPR

Allocation of Estimated EIM Implementation Costs

Reclamation EIM Implementation Costs
$1 M

WAPA - EIM Implementation Costs
$545,500

BANC - EIM Implementation Costs

Statement of Estimated EIM Implementation Costs

Administrative
Costs

CAISO

BANC

WAPA

Customers

PPR

Legend

Tier 1 Allocation of EIM Charges from WAPA (Tx Provider) to Merchant and other Tx Customers

Tier 2 Allocation of EIM Charges from WAPA Merchant to Customers

Load Charges - For Customers within WAPA footprint:
2 customers with load > 1 MW
3 customers with load ≤ 1 MW
4 customers within SMUD TBA; therefore SMUD covers load costs
2 customers with Project Use load

EIM costs for TPUD:
1. Specific costs will be covered by BANC
2. Specific costs paid by TPUD
3. Remaining costs to PPR

Administrative Costs
1. CAISO
2. BANC

Practicality

Annual Ongoing Costs
WAPA EIM Administrative Charges ~$164,400 (Estimated) for Vendor Software Solution

PPR

Repayment

Customers

Legend
Customer Comments and Questions

Additional information can be found on WAPA’s Website:

WAPA Rate Case:
https://www.wapa.gov/regions/SN/rates/Pages/Rate-Case-2021-WAPA-194.aspx

SNR EIM Information:
https://www.wapa.gov/regions/SN/PowerMarketing/Pages/western-eim.aspx

Contact Information
Email: SNR-RateCase@wapa.gov
Closing Remarks

Autumn Wolfe
SN Rates Manager
Thank you!