INTRODUCTION

Nita Zimmerman

Chief Business Transformation Officer
Avoiding Heat-related Illnesses and Death

• Knowing the symptoms and proper responses to heat exhaustion and heat stroke can save a life. Heat exhaustion and heat stroke can escalate rapidly leading to delirium, organ damage or even death.
  – National Safety Council shares that in 2019, 884 people died and 2,061 were injured in the United States from exposure to excessive heat.

• Best way to avoid heat-related illness is to limit exposure to outdoors on hot days.
  – Air conditioning is the best way to cool off
  – Drink fluids
  – Wear loose, lightweight clothing and a hat
  – Replace salt lost from sweating by drinking fruit juice or sports drinks
  – Avoid spending time outdoors during hottest time of the day
  – Wear sunscreen (sunburn affects the body’s ability to cool itself)
  – Pace yourself when exerting your body

From National Safety Council: Surviving the Hot Weather - National Safety Council (nsc.org)
Heat Exhaustion

• Heat exhaustion can occur when the body loses excessive water and salt. Signs and symptoms can include:
  – Pale, ashen or moist skin
  – Muscle cramps
  – Fatigue, weakness or exhaustion
  – Headache, dizziness or fainting
  – Nausea or vomiting
  – Rapid Heart Rate

• Treat victims quickly:
  – Move victims to a shaded or air-conditioned area
  – Give water or other cool, nonalcoholic beverages
  – Apply wet towels or have victims take a cool shower

From National Safety Council: Surviving the Hot Weather - National Safety Council (nsc.org)
Heat Stroke

• Signs include:
  – Body temperature above 103 degrees
  – Skin that is flushed, dry and hot to touch; sweating has usually stopped
  – Rapid breathing
  – Headache, dizziness or confusion or other signs of altered mental status
  – Irrational or belligerent behavior
  – Convulsions or unresponsiveness

• Take immediate action:
  – Call 911
  – Move victim to a cool place
  – Remove unnecessary clothing
  – Immediately cool the victim, preferably by immersing up to the neck in cold water. Keep cooling until body temperature drops to 101 degrees
  – Monitor breathing and be ready to give CPR if necessary

• Do Not – force a victim to drink liquids, apply rubbing alcohol to the skin, or allow the victim to take pain relievers or salt tablets

From National Safety Council: Surviving the Hot Weather - National Safety Council (nsc.org)
<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 to 9:10 a.m.</td>
<td>Introductions</td>
<td>Nita Zimmerman</td>
</tr>
<tr>
<td>9:10 to 9:15 a.m.</td>
<td>Grid Mod Update</td>
<td>Mark Symonds</td>
</tr>
<tr>
<td>9:15 to 9:25 a.m.</td>
<td>EIM Program Update</td>
<td>Elsa Chang</td>
</tr>
<tr>
<td>9:25 to 10:15 a.m.</td>
<td>Settlements</td>
<td>Rasa Keanini</td>
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<td>Break</td>
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<td>10:30 to 11:40 a.m.</td>
<td>Settlements (cont’d)</td>
<td>Rasa Keanini</td>
</tr>
<tr>
<td>11:40 a.m. to 12:00 p.m.</td>
<td>Open question and answer</td>
<td>Jinah Nakaji</td>
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</table>
Meeting Participation and How to Ask Questions

- After you join the WebEx Event, you will not be able to unmute yourself until the host recognizes and unmutes you.

- 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”

- When finished the Host will re-mute you. Please remember to re-mute and lower your hand when done speaking.

  ▪ Participants on the phone:
    • ‘*3’ to raise hand and lower hand
GRID MODERNIZATION
MOBILIZATION

Mark Symonds
Grid Modernization Director
Grid Modernization Mobilization Status

<table>
<thead>
<tr>
<th>Identify</th>
<th>Define</th>
<th>Integrate</th>
<th>Deliver</th>
<th>Complete</th>
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<td>10%</td>
<td>8%</td>
<td>52%</td>
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- **Agency Enterprise Portal Phase 2** – 09.30.2023
- **AMS MRU Device Event Reporting** – 09.30.2023
- **Power Ops Log Replacement** – 10.01.2024
- **MCIT – Re-Platforming** – 09.30.2023
- **Concurrent Losses** – 09.30.2023
- **Real Time Ops Modernization** – 06.15.2025
- **Wildfire Risk Modeling** – 08.01.2024
- **AGC Modernization** – 09.30.2023
- **Agency Enterprise Portal** – 07.10.2022
- **AMS Replacement** – 07.10.2023
- **AOP & Reliability Assessment** – 12.31.2022
- **BPA Network Model** – 12.31.2023
- **CBC Replacement** – 10.30.2023
- **Data Analytics** – 12.31.2022
- **EIM Bid & Base Scheduling** – 08.26.2022
- **EIM Real Time Operations** – 08.26.2022
- **EIM Settlements Implementation** – 08.26.2022
- **EIM Training Program** – 08.26.2022
- **EIM Testing Program** – 10.01.2022
- **FDGDM** – 12.29.2023
- **Load & Renewable Forecasting** – 10.01.2022
- **Metering Review & Update** – 09.27.2024
- **MCIT – Architecture** – 04.22.2020
- **MCIT – Integration** – 09.30.2020
- **MCIT – Service Management** – 04.29.2020
- **One BPA Outage** – 02.28.2020
- **Outage Tracking System** – 09.30.2018
- **Power Services Training** – 12.31.2020
- **RAS Automatic Arming** – 08.11.2021
- **RC Decision, Planning & Exec.** – 07.14.2021

Updated: 06.16.2022
Date = Completion Date

- **52%**

- **AGC Modernization** – 09.30.2023
- **Agency Enterprise Portal** – 07.10.2022
- **AMS Replacement** – 07.10.2023
- **AOP & Reliability Assessment** – 12.31.2022
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- **RAS Automatic Arming** – 08.11.2021
- **RC Decision, Planning & Exec.** – 07.14.2021

- **30%**

- **CTA Implementation** – 06.30.2019
- **EIM Settlements Scoping** – 10.01.2019
- **ETRM & MMS Expansion** – 05.13.2020
- **Marketing & Settlements System** – 06.30.2018
- **MCIT – Architecture** – 04.22.2020
- **MCIT – Integration** – 09.30.2020
- **MCIT – Service Management** – 04.29.2020
- **One BPA Outage** – 02.28.2020
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EIM Participation Principles

1. Bonneville’s participation is consistent with its statutory, regulatory and contractual obligations.

2. Bonneville will maintain reliable delivery of power and transmission to its customers.

3. Bonneville’s participation is discretionary and Bonneville retains its ability to effectively exit the market in the event participation is no longer consistent with these principles.

4. Bonneville’s participation is consistent with a sound business rationale.

5. Bonneville’s participation is consistent with the objectives of Bonneville’s Strategic Plan.

6. Bonneville’s evaluation of EIM participation includes transparent consideration of the commercial and operational impacts on its products and services.
EIM PROGRAM UPDATE

Elsa Chang

EIM Program Manager
EIM Experience to Date

- BPA operations in EIM have gone reasonably well in our first two months
  - EIM dispatch has been complementary with hydraulic objectives, and we have been moving a lot of water since EIM go-live
  - Experience with oversupply has gone well
    - Staff was well prepared and responded appropriately
    - Systems worked as expected, minimal issues

- Passed Resource Sufficiency (RS) tests almost every hour in May. Per monthly WEIM Transition Period Report for May:
  - BPA BAA observed no infeasibility for undersupply in the fifteen-minute and one infeasibility in the five-minute market.
  - BPA successfully passed over 95.69 percent of its balancing tests and 99.86 percent of its bid-range capacity tests.
  - BPA successfully passed 99.14 percent of its upward flexible ramping sufficiency tests.

- Transmission customer donations of transmission for use in EIM have been steady and we encourage additional donations.
Learning and Improving

• We will continue learning more from participating in the EIM and engaging with CAISO in daily market quality calls to get resolution to issues and concerns.

• The EIM Market Operations Team is a cross-agency collaboration that oversees the market participation
  o bridge the transition from implementation to market operations
  o review BPA's EIM market performance
  o triage cross-organization issues
  o share lessons learned and communicate CAISO related changes
  o develop strategies to optimization market operations

• We also recognize we haven’t met all of our customers’ expectations (delivery of sub-allocation service bills) prior to EIM go live and are working to improve.
## BPA Contacts for EIM

<table>
<thead>
<tr>
<th>Topic / Question Area</th>
<th>Email and Phone</th>
<th>Email (cc)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EIM Services Bill (EESC)</td>
<td><a href="mailto:EESCSettlements@bpa.gov">EESCSettlements@bpa.gov</a> or 503-230-EIM1</td>
<td><a href="mailto:gridmod@bpa.gov">gridmod@bpa.gov</a></td>
</tr>
<tr>
<td>Customer Billing</td>
<td></td>
<td><a href="mailto:gridmod@bpa.gov">gridmod@bpa.gov</a> and Power or Transmission Account Executive</td>
</tr>
<tr>
<td>Metering</td>
<td><a href="mailto:mdm@bpa.gov">mdm@bpa.gov</a></td>
<td></td>
</tr>
<tr>
<td>Customer Portal</td>
<td><a href="mailto:customerportal@bpa.gov">customerportal@bpa.gov</a></td>
<td></td>
</tr>
<tr>
<td>BPA Outage Office</td>
<td>Planned outages: <a href="mailto:bpaoutage@bpa.gov">bpaoutage@bpa.gov</a></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unplanned: Contact BPA’s Generation Dispatcher</td>
<td></td>
</tr>
<tr>
<td>After-hours Outage</td>
<td>Contact BPA’s Generation Dispatcher</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Continued Customer Engagement

• We will schedule an additional workshop if we need more time for today’s material.
• Please submit any questions to gridmod@bpa.gov and we will address them via email, or work with your Account Executive.
EIM SETTLEMENTS

Rasa Keanini
EIM Settlements Product Owner
Agenda

• High Level Overview of EIM Settlements
  – EIM Settlements Update
  – Basic info – EIM Services Bill
  – EIM Settlements Timeline
• EIM Services Bill example
• Tying Detailed Data Files out to Invoice line items
• Measured Demand and Block
• Disputes and Inquiries
EIM Settlements Update:

- Detailed Data Files (DDF) for 5/3 – 5/9 were made available on 7/11
  - Customers may have received detailed data files even if all of the charge/credit values were zero
  - Some customers may have no non-zero values in their detailed data files
  - Also includes Intentional Deviation, Persistent Deviation and Energy Imbalance Reassignment (e.g., non-EIM charges)
- For May, only provide two DDFs: 5/3 – 5/9 and 5/3 – 5/31
- Expect to issue EIM Services bills for May in mid-July
- For June, only provide a single DDF from 6/1 – 6/30
EIM Services Bills will:

- Be issued monthly (around the 25th in a typical month).
- Be completely separate from other BPA bills.
- Include Energy Imbalance associated with EIM Charge Codes.
- Include Intentional Deviation and Persistent Deviation (these penalties will no longer be on the Transmission bill).
- Be distributed from BPA’s billing department like Power and Transmission bills.
- Include contact information for any EIM-S related questions.
- Follow the same initial starting point for bill disputes – customers will contact their Transmission Account Executives to file a bill dispute.
BPA receives from CAISO
- Settlement Statements on a daily basis
- Invoices on a weekly basis

Once BPA gets on a regular cadence, Detailed Data Files will be available weekly via Customer Portal*

On a monthly basis, BPA will bill Transmission customers (EIM Services Bill) – same process as for Transmission bills

*Detailed data files will ONLY be available via Customer Portal
# EIM Imbalance Charges by Customer Type

<table>
<thead>
<tr>
<th>Customer Type</th>
<th>Energy Imbalance Pre-EIM</th>
<th>Generation Imbalance Pre-EIM</th>
<th>EIM Energy Imbalance (EI and GI) 64750, 64600,64700</th>
<th>EIM Interchange* 64600, 64700</th>
</tr>
</thead>
<tbody>
<tr>
<td>Load Following Customer</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Load Following Customer with Generating Resource</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Customer with NPR (Gen)</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Customer receiving EI (pre-EIM)</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Transmission Customer</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

*Any Transmission Customer who is the tagged **Purchasing Selling Entity** on the interchange tag will receive an EIM Services Bill.

A Transmission Customer may fit into more than one of the rows above.
### Charge Code by Position Type

<table>
<thead>
<tr>
<th>Charge Code</th>
<th>Generating Resource</th>
<th>Load</th>
<th>Interchange</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over/Under Scheduling Charge and Allocation</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>6045, 6046</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uplift and Neutrality Charges</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>6478, 64770, 67740, 69850</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Uninstructed Imbalance Energy</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>64750</td>
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<tr>
<td>Instructed Imbalance Energy – FMM</td>
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<td></td>
<td>X</td>
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<tr>
<td>64600</td>
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<td></td>
<td></td>
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<tr>
<td>Instructed Imbalance Energy - RTD</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>64700</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Note:
Bill ID will include customer number – has been redacted.

Bill Period refers to the month/year the bill was created.

Bill Period and Period Ending will be June 2022.
### EIM Services Bill

**EIM SERVICES BILL**

| Customer Name: | Bill Period: July 2022 |
| Customer ID: | Issue Date: July 10, 2022 |

#### INITIAL: 2022-05

<table>
<thead>
<tr>
<th>Charge Code</th>
<th>Description</th>
<th>Current Amount</th>
<th>Previous Amount</th>
<th>Net Amount</th>
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<tbody>
<tr>
<td>15</td>
<td>Prior 2205 Intentional Dev Prnty</td>
<td>$10,482.80</td>
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<td>$10,482.80</td>
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<tr>
<td>20</td>
<td>Prior 2205 Persistent Dev Prnty</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
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<tr>
<td>25</td>
<td>Prior 2205 Imbalance Reassignment</td>
<td>($1,525,860.30)</td>
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<td>($1,525,860.30)</td>
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<tr>
<td>6045</td>
<td>Prior 2205 Over/Under Sched Settle</td>
<td>$1,033.19</td>
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<tr>
<td>6046</td>
<td>Prior 2205 Over/Under Sched Alloc</td>
<td>($6,709.11)</td>
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<td>67740</td>
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<td>69850</td>
<td>Prior 2205 RT Marg Losses Offset</td>
<td>$13,116.93</td>
<td>$0.00</td>
<td>$13,116.93</td>
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</table>

**Net Amount:** $2,000,779.30

---

**Note:**
Bill ID will include customer number – has been redacted.

Bill will indicate Month/Year covered and whether Initial or Recalc.

This is test data – not representative of any particular customer.
High Level: Weekly Detailed Data Files

- Customers may access their weekly zip files via Customer Portal
- The zip file will include multiple Excel files with at least a week’s worth of data in each Excel file
  - First week will be one week of data
  - Second week will include both week 1 and week 2 data
  - Final zip file for the month will include Excel files with a month’s worth of data to allow for comparison against EIM Services Bills
  - Intended purpose is to give customers advance information in the event a dispute with CAISO is needed
- Zip file naming convention: XXXXX_CustNam_TDYYYYMMDD_Version (e.g., Initial, Recalc, etc.)
High Level: Weekly Detailed Data Files

- Excel files are not one to one with charge codes
  - Example: Other EIM Charges Excel file includes four charge codes

- Excel file naming convention:
  XXXXX_CustNam_(GRName)_ReportName_CreationDate_Time_TDYYYYMMDD_Version
  Days

- Level of granularity of data varies
  - 5 min, hourly, daily – depending on report
EIM Charge Code 64750 applies to both Load and Generating Resources.

Reports:
XXXXX_CustNam_GR_GenResourceImbalanceCC64750_64600_64700
XXXXX_CustNam_LoadUIECC64750

If a customer has Generating Resources, they will need to add the sum of the Load file with ALL of the Generating Resource files.
Other EIM Charges: 6478, 69850, 64770, 67740

- Uplift/Neutrality Codes are pretty straightforward
- Validate four EIM Charge Codes with one spreadsheet
### Over/Under Scheduling Charge: 6045

#### Always a charge

#### Only occurred on May 30th
### Over/Under Scheduling Allocation: 6046

![Table of Over and Under Scheduling Amount Allocation](image)

- Always a credit
- Based on metered demand
- Data is on a daily basis
- Depends on eligibility

<table>
<thead>
<tr>
<th>Position Name</th>
<th>Trade Date</th>
<th>Hour Ending</th>
<th>Interval</th>
<th>Fifteen Minute Price</th>
<th>Customer FMM IIE Amount Allocation</th>
<th>RTD Instructed Imbalance Quantity</th>
<th>Real-Time Price</th>
<th>Customer RTD IIE Amount Allocation</th>
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EIM Charge Code 64600 and 64700 apply to both Interchange and Generating Resources.

Reports:
XXXXX_CustNam_GR_GenResourceImbalanceCC64750_64600_64700
XXXXX_InteriteImbalanceCC64600_64700
BONNEVILLE POWER ADMINISTRATION

Measured Demand and Block Customers

- BPA is required to remove the block portion of measured demand (Metered + Exports) for uplift/neutrality charge codes from the customer and pass it along to BPA
- No change needed for customers solely within BPA’s Balancing Authority Area
- For customers who export, will need to start marking Block Tags on August 1st
- May/June/July is being dealt with using a manual process
### Block Tag Example

**Tag ID:** BPAT_LSEL01000001_BPAT

**Tag Code:** 1

**Tag Type:** Normal

**Tag State:** Implemented

**Contact:** A. Person

#### Market Path

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<thead>
<tr>
<th>GENR01</th>
<th>Product</th>
<th>Contract</th>
<th>Misc Info</th>
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#### Physical Path & Transmission

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<tbody>
<tr>
<td>CA</td>
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#### Physical Path

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<th>PS</th>
<th>POR</th>
<th>POD</th>
<th>SE</th>
<th>HO</th>
<th>Misc Info</th>
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<td>GENR01</td>
<td>LSEL01</td>
<td>BPAT</td>
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<tr>
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<td>LSEL01</td>
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</tbody>
</table>

#### Profiles

- **Date:** 7/7/2021
- **Timezone:** PPT
- **Hourly:** Yes

- **Hour Ending:** BPAT
- **Energy (Gen):** 000000001

#### Transmission Requests

<table>
<thead>
<tr>
<th>Type</th>
<th>Requestor</th>
<th>Submission Date</th>
<th>Request State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tag Creation</td>
<td>LSEL01</td>
<td>7/7/2021 6:00 AM</td>
<td>Approved</td>
</tr>
<tr>
<td>Adjustment</td>
<td>LSEL01</td>
<td>7/7/2021 6:32 AM</td>
<td>Approved</td>
</tr>
</tbody>
</table>
Disputes vs. Inquiries

• Dispute process will start the same for EIM Services Bills:
  – If the customer is disputing how BPA sub-allocated EIM Charge Codes
    » Customers dispute EIM Services Bills not the Detailed Data Files
    » Customers have up to six years to dispute a bill
    » Dispute process for EIM Services Bill starts in the same way as any other bill –
      contact Transmission Account Executive with courtesy copy to EESCSSettlements@bpa.gov

- If the customer would like BPA to dispute with CAISO on customer’s behalf
  • Timeline is dependent on CAISO dispute calendar
  • Customer must submit information to BPA at least 7 business days before CAISO deadline
  • If the deadline is missed, BPA cannot dispute with CAISO
  • This dispute process starts with contacting EESCSSettlements@bpa.gov
    – T+9B dispute deadline has passed for days prior to June 6th
    – Not the final chance for disputing CAISO for May activity; T+70B dispute deadline for May 3rd is Sept 13, 2022

• Inquiries
  – Customers may ask questions about their detailed data files and their bills – questions should be
directed to EESCSSettlements@bpa.gov
This diagram represents activity settled and billed for January 1-31.

- **1/13** T+98 for 1/1
- **2/11** T+98 for 1/31
- **2/26** BPA issues bill with T+98 for Jan
- **3/1** CAISO Dispute Deadline for BPA for 1/3 T+98
- **3/15** CAISO Dispute Deadline for BPA for 1/31 T+98
- **4/12** T+708 for 1/1
- **5/10** T+708 for 1/31
- **5/1** CAISO Dispute Deadline for BPA 1/1 T+708
- **5/22** BPA issues bill with T+98 & T+708 for Jan
- **5/29** Customer Dispute Deadline for 1/1
- **6/1** Customer Dispute Deadline for 1/31
- **6/30/2022**

**Notations:****
- Daily CAISO settlement statements
- Weekly detail data for Jan 1-31 operation dates
- Weekly detail data for other dates
- CAISO settlement statement milestones
- CAISO dispute deadline
- Issue EIM services bill
- BPA Tariff required deadline for Customer disputes to be submitted to CAISO

**Legends:**
- **BPA will issue monthly Transmission customer bills based on sub-allocation of T+98 & T+708 settlement statements.**
- **In order for customer disputes with BPA to be considered for a dispute with CAISO, customers will need to submit disputes to BPA at least 7 business days prior to the CAISO T+92B deadline (i.e. T+85B) as stated in BPA’s tariff language.**
- **Customers may dispute charges on their EIM services bill up to 6 years after receiving their bill.”**
What do you need to do?

• Review detailed data files on a timely basis
  – If you identify a discrepancy and want BPA to dispute with CAISO, email EESCSettlements@bpa.gov ASAP (don’t wait for your bill!)
  – If you identify a discrepancy in how BPA sub-allocated to you, contact EESC Settlements Team EESCSettlements@bpa.gov

• Review EIM Services Bill
  – If you have questions, contact EESCSettlements@bpa.gov
  – If you have a dispute, contact your Transmission Account Executive to start the dispute process
Billing process

• Customers will follow the same processes they use today for transmission bills

• Customers may access EIM Services Bills on Customer Portal or they will be emailed to customer if they are not signed up for Customer Portal
EIM on Customer Portal

EIM Services Bills will be located here

Weekly Detailed Data Files will be located here
OPEN QUESTIONS AND ANSWERS
# BPA Contacts for EIM

<table>
<thead>
<tr>
<th>Topic / Question Area</th>
<th>Email and Phone</th>
<th>Email (cc)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EIM Services Bill (EESC)</td>
<td><a href="mailto:EESCSSettlements@bpa.gov">EESCSSettlements@bpa.gov</a> or 503-230-EIM1</td>
<td><a href="mailto:gridmod@bpa.gov">gridmod@bpa.gov</a> and Power or Transmission Account Executive</td>
</tr>
<tr>
<td>Customer Billing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metering</td>
<td><a href="mailto:mdm@bpa.gov">mdm@bpa.gov</a></td>
<td></td>
</tr>
<tr>
<td>Customer Portal</td>
<td><a href="mailto:customerportal@bpa.gov">customerportal@bpa.gov</a></td>
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</tr>
<tr>
<td>BPA Outage Office</td>
<td>Planned outages: <a href="mailto:bpaoutage@bpa.gov">bpaoutage@bpa.gov</a></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unplanned: Contact BPA's Generation Dispatcher</td>
<td></td>
</tr>
<tr>
<td>After-hours Outage</td>
<td>Contact BPA's Generation Dispatcher</td>
<td>N/A</td>
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</tbody>
</table>
Please send your feedback to techforum@bpa.gov by Wednesday, August 3, 2022
Thank you for participating in today’s workshop.

For more information, visit www.bpa.gov/goto/eim.
APPENDIX
## List of Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAA</td>
<td>Balancing Authority Area</td>
<td>ID</td>
<td>Intentional Deviation</td>
</tr>
<tr>
<td>CAISO</td>
<td>California Independent System Operator</td>
<td>IIE</td>
<td>Instructed Imbalance Energy</td>
</tr>
<tr>
<td>CP</td>
<td>Customer Portal</td>
<td>LMP</td>
<td>Locational Marginal Price</td>
</tr>
<tr>
<td>DDR</td>
<td>Detailed Data File</td>
<td>MO</td>
<td>Market Operator</td>
</tr>
<tr>
<td>DERs</td>
<td>Dispatchable Energy Resources</td>
<td>PD</td>
<td>Persistent Deviation</td>
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<tr>
<td>EESC</td>
<td>EIM Entity Scheduling Coordinator</td>
<td>Pnode</td>
<td>Price Node</td>
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<tr>
<td>EI</td>
<td>Energy Imbalance</td>
<td>RS</td>
<td>Resource Sufficiency</td>
</tr>
<tr>
<td>EIM</td>
<td>Energy Imbalance Market</td>
<td>RTD</td>
<td>Real-Time Dispatch</td>
</tr>
<tr>
<td>FMM</td>
<td>Fifteen Minute Market</td>
<td>UIE</td>
<td>Uninstructed Imbalance Energy</td>
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<td>GI</td>
<td>Generation Imbalance</td>
<td>VERs</td>
<td>Variable Energy Resource</td>
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<td>GRSP</td>
<td>General Rate Schedule Provision</td>
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## Report Name by Charge Code/Position Type

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<th>Charge Code</th>
<th>Generating Resource</th>
<th>Load</th>
<th>Interchange</th>
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<td>Uplift and Neutrality Charges</td>
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<td>XXXXX_CustNam_LoadUIECC64750</td>
<td>XXXXX_CustNam_OtherEIMCharges</td>
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<td>Instructed Imbalance Energy – FMM</td>
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</table>
What is being posted

EIM Services Bills
• Bills will be posted similarly to how BPA posts Power and Transmission Bills today on Customer Portal

Detailed Data Files
• Detailed Data Files will be posted weekly as zip files, containing multiple excel files with at least one week’s worth of data
• Reminder – Customers must register for access to Customer Portal in order to view Detailed Data files
Agreements and Legacy System Status

- Customers will be required to sign new CP Agreements
  - Please reach out to your Account Executive or customerportal@bpa.gov to do so

- Legacy Customer Portal (CP) only available for historical data
  - Legacy CP will not be updated
    (no user changes, no live data feeds, no metering reports, etc.)
  - Legacy CP will be retired in calendar year 2022