

EIM Charge Code Allocation #1

Step 1: Introduction and Education

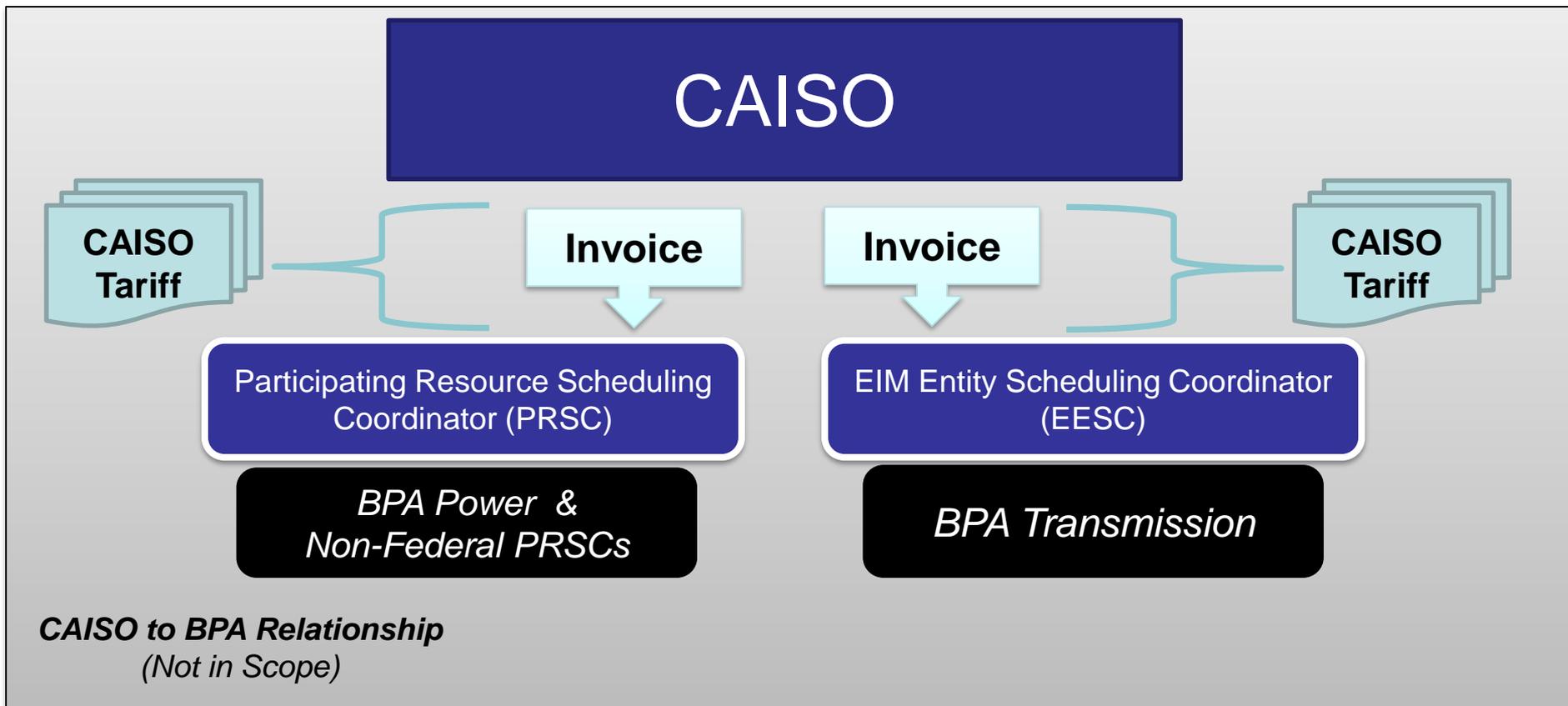
Step 2: Description of the Issue

Objective

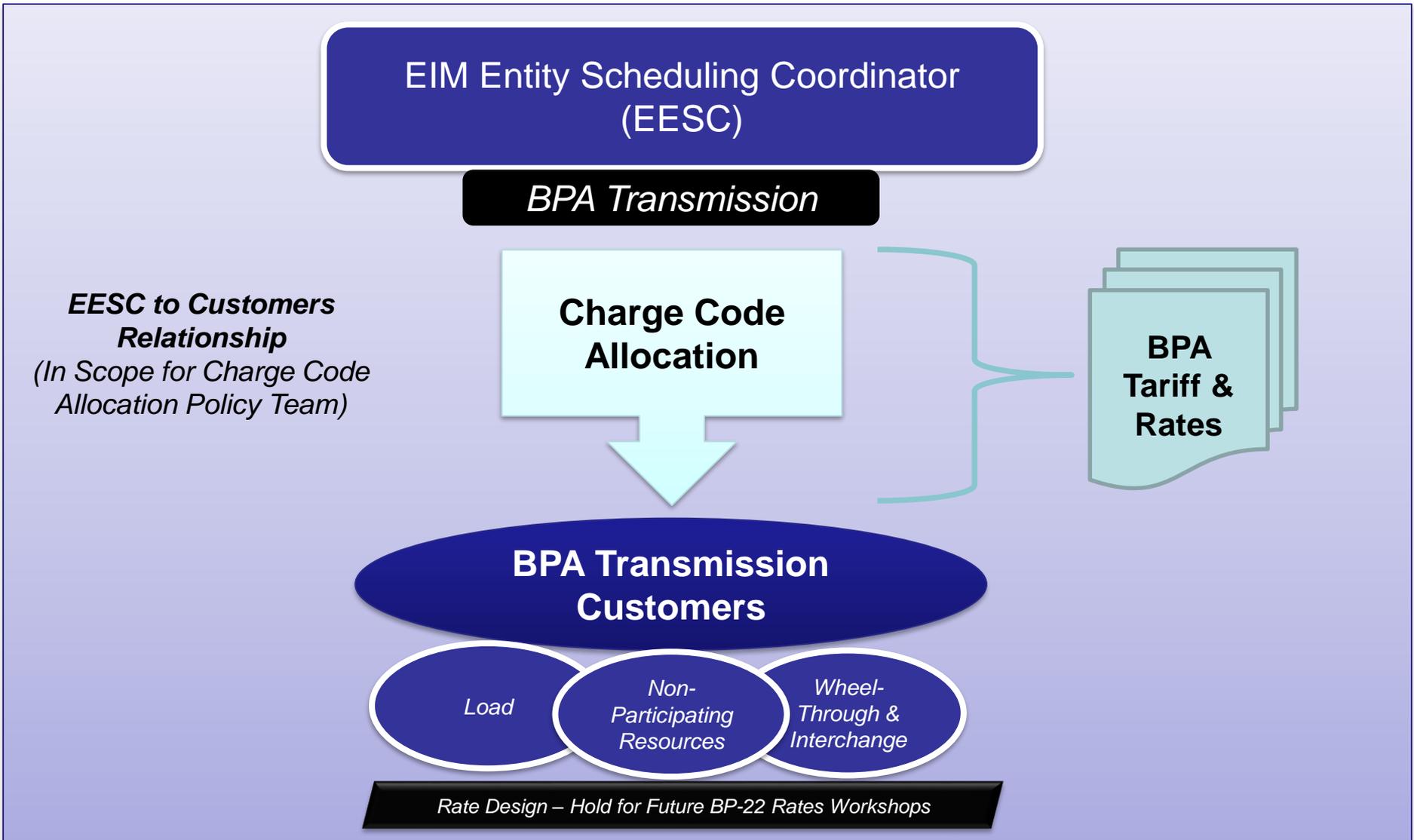
- Address charge code allocation policy issues to determine the approach Bonneville should adopt to recover its costs (or distribute credits) for charge codes it receives as an EIM Entity.

Note: Settlement mechanics (e.g. frequency or type of BPA customer billing) will be addressed separately in future workshops, if there is a sub-allocation methodology adopted.

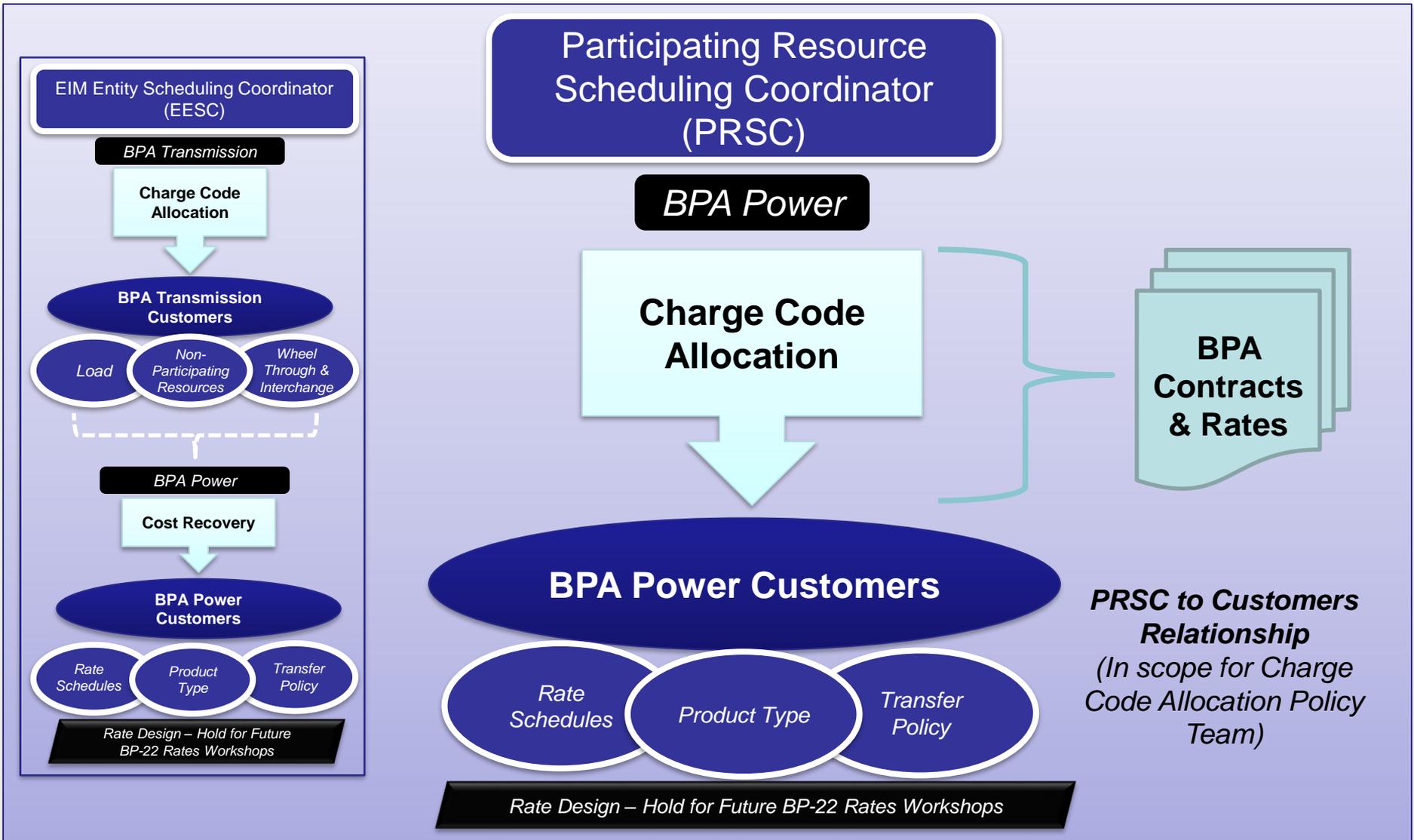
Organizational Relationships: CAISO



Organizational Relationships: EESC



Organizational Relationships: PRSC

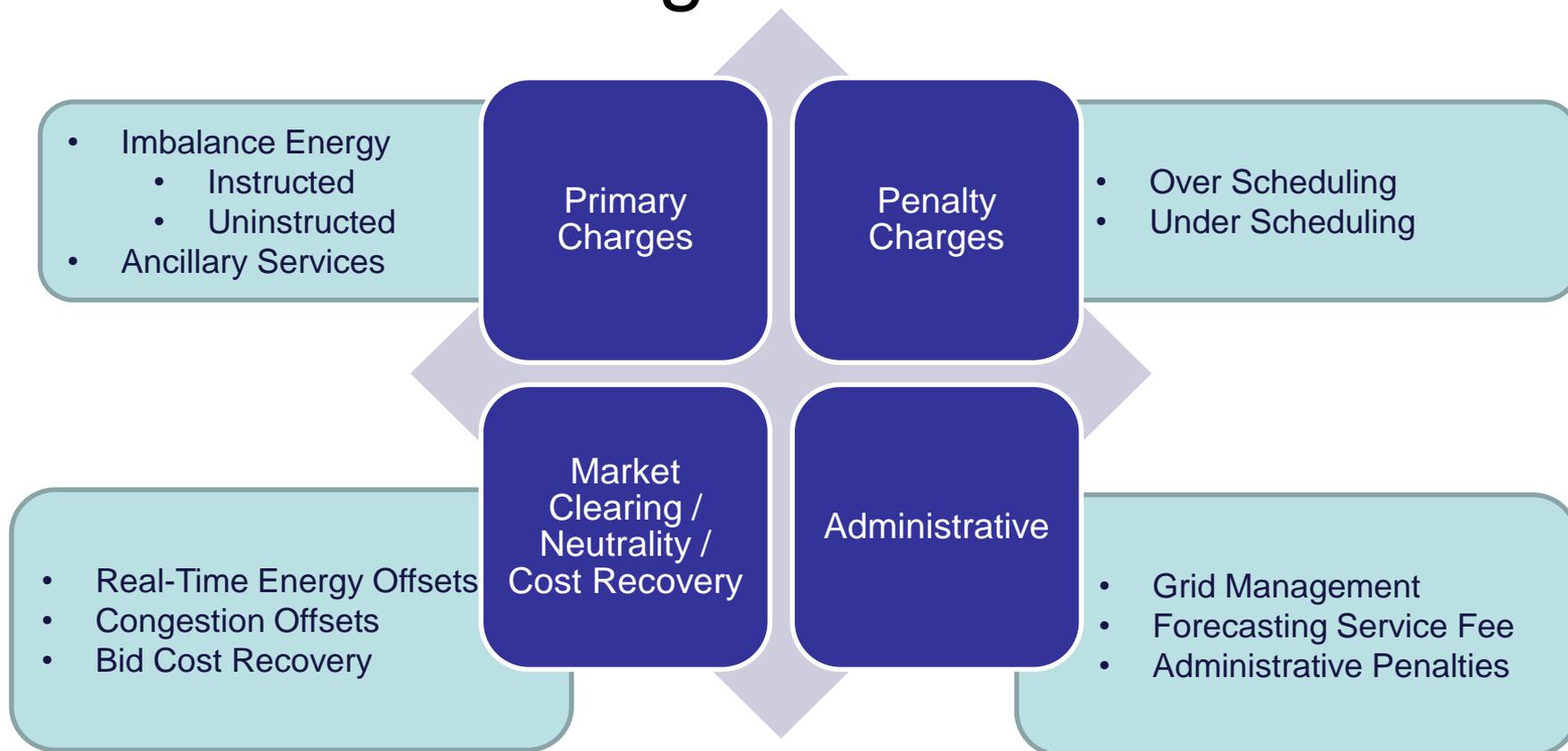


CAISO Settlement Process Consideration

- Direct sub-allocation of EIM Charge Codes to customers would indirectly expose customers to CAISO Settlement process.
- CAISO Settlement Process is Complex and Administratively Burdensome
 - CAISO bills weekly; re-calculates Charge Codes multiple times for up to 3 years.
 - Disputes over sub-allocated EIM Charge Codes would have to be submitted to Bonneville; could lead to Bonneville bringing customer dispute to CAISO.

Bonneville is still considering settlement mechanics, which will be addressed in a future workshop. While developing the charge code allocation methodology, there is awareness that if a sub-allocation methodology is adopted, it could have broad administrative impacts on customers' and Bonneville's billing.

CAISO Charge Code Overview



The following slides provide lists of the charge codes by category for context. The charge code lists contain information on Bonneville's experience with other EIM entities as examples to illustrate the range and volatility that can exist. Examples of Bonneville's experience focused on the largest EIM balancing authorities that Bonneville has load in.

CAISO EIM Charge Code List

Primary Imbalance Charges

CC #	Charge Code Name	CAISO > EIM Entity Allocation		EIM Entity Sub Allocation	PacifiCorp		Idaho Power		NV Energy	
					BPA Peak Load 400+		BPA Peak Load 300+		BPA Peak Load 100<>	
					Monthly		Monthly		Monthly	
		Min Charge	Max Charge	Min Charge	Max Charge	Min Charge	Max Charge	Min Charge	Max Charge	
64600	FMM Instructed Imbalance Energy EIM Settlement	EESC	PRSC	Yes	Varies	Varies	Varies	Varies	Varies	Varies
64700	Real Time Instructed Imbalance Energy EIM Settlement	EESC	PRSC	Yes	Varies	Varies	Varies	Varies	Varies	Varies
64750	Real Time Uninstructed Imbalance Energy EIM Settlement	EESC		Yes	Varies	Varies	Varies	Varies	Varies	Varies
64740	Real Time Unaccounted for Energy EIM Settlement	EESC		No						

Primary Ancillary Service Charges

CC #	Charge Code Name	CAISO > EIM Entity Allocation		EIM Entity Sub Allocation	PacifiCorp		Idaho Power		NV Energy	
					BPA Peak Load 400+		BPA Peak Load 300+		BPA Peak Load 100<>	
					Monthly		Monthly		Monthly	
		Min Charge	Max Charge	Min Charge	Max Charge	Min Charge	Max Charge	Min Charge	Max Charge	
7070	Flexible Ramp Forecast Movement Settlement	EESC	PRSC	Yes						
7071	Daily Flexible Ramp Up Uncertainty Capacity Settlement		PRSC	No						
7076	Flexible Ramp Forecast Movement Allocation	EESC		Yes						
7077	Daily Flexible Ramp Up Uncertainty Award Allocation	EESC	PRSC	Yes	(950)	56,701	(1,064)	5,995	(24,740)	13,918
7078	Monthly Flexible Ramp Up Uncertainty Award Allocation	EESC	PRSC	Yes						
7081	Daily Flexible Ramp Down Uncertainty Capacity Settlement		PRSC	No						
7087	Daily Flexible Ramp Down Uncertainty Award Allocation	EESC	PRSC	Yes						
7088	Monthly Flexible Ramp Down Uncertainty Award Allocation	EESC	PRSC	Yes						

CAISO EIM Charge Code List

Market Clearing / Neutrality / Cost Recovery Charges

CC #	Charge Code Name	CAISO > EIM Entity Allocation		EIM Entity Sub Allocation	PacifiCorp		Idaho Power		NV Energy	
					BPA Peak Load 400+		BPA Peak Load 300+		BPA Peak Load 100<>	
					Monthly		Monthly		Monthly	
Min Charge	Max Charge	Min Charge	Max Charge	Min Charge	Max Charge	Min Charge	Max Charge			
6478	Real Time Imbalance Energy Offset - System	EESC		Yes					381	1,939
64770	Real Time Imbalance Energy Offset EIM	EESC		Yes	(114,282)	133,420	(79,394)	461,270	(32,986)	16,279
67740	Real Time Congestion Offset EIM	EESC		Yes	(45,581)	359,509	(25,288)	(3,683)	(37,911)	2,173
69850	Real Time Marginal Losses Offset EIM	EESC		Yes			(59,009)	18,121	(6,825)	1,348
66200	Bid Cost Recovery EIM Settlement	EESC	PRSC	Yes			(32)	7	(78,549)	133,216
66780	Real Time Bid Cost Recovery Allocation EIM	EESC		Yes	951	31,738	1,093	36,584	(56,642)	3,476
8989	Daily Neutrality Adjustment	EESC		Yes						
8999	Monthly Neutrality Adjustment	EESC		Yes						

Penalty Charges

CC #	Charge Code Name	CAISO > EIM Entity Allocation		EIM Entity Sub Allocation	PacifiCorp		Idaho Power		NV Energy	
					BPA Peak Load 400+		BPA Peak Load 300+		BPA Peak Load 100<>	
					Monthly		Monthly		Monthly	
Min Charge	Max Charge	Min Charge	Max Charge	Min Charge	Max Charge	Min Charge	Max Charge			
6045	Overscheduling and Under scheduling Charge	EESC		Yes					(0)	8,217
6046	Under Scheduling and Over Scheduling Allocation	EESC		Yes	(5,369)	368			(511)	776

CAISO EIM Charge Code List

Administrative Charges

CC #	Charge Code Name	CAISO > EIM Entity Allocation		EIM Entity Sub Allocation	PacifiCorp		Idaho Power		NV Energy	
					BPA Peak Load 400+		BPA Peak Load 300+		BPA Peak Load 100<	
					Monthly		Monthly		Monthly	
					Min Charge	Max Charge	Min Charge	Max Charge	Min Charge	Max Charge
491	Green House Gas Emission Cost Revenue		PRSC	No						
701	Forecasting Service Fee		PRSC	Yes						
1592	EP Penalty Allocation Payment	EESC	PRSC	No						
2999	Default Invoice Interest Payment	EESC	PRSC	No						
3999	Default Invoice Interest Charge	EESC	PRSC	No						
4515	GMC Bid Transaction Fee		PRSC	No						
4564	GMC-EIM Transaction Charge	EESC	PRSC	Yes			2,130	4,026	398	12,353
4575	SMCR -Settlements, Metering, and Client Relations	EESC	PRSC	Yes			-	121	-	10,870
5024	Invoice Late Payment Penalty	EESC	PRSC	No						
5025	Financial Security Posting (Collateral) Late Payment Penalty	EESC	PRSC	No						
5900	Shortfall Receipt Distribution	EESC	PRSC	No						
5901	Shortfall Allocation Reversal	EESC	PRSC	No						
5910	Shortfall Allocation	EESC	PRSC	No						
5912	Default Loss Allocation	EESC	PRSC	No						
7989	Invoice Deviation Interest Distribution	EESC	PRSC	No						
7999	Invoice Deviation Interest Allocation	EESC	PRSC	No						
8526	Generator Interconnection Process GIP Forfeited Deposit Allocation	EESC		No						

Policy Question

- What approach should Bonneville adopt in recovering its costs (or distributing credits) for charge codes that it will receive as an EIM Entity from the CAISO?
 - Should Bonneville roll-in the costs/benefits to its current transmission rates? (completely insulating customers from direct CAISO costs/credits)
 - If not, how should Bonneville recover from customers? (partial insulation, no insulation from costs/credits)
 - E.g. Sub-allocation by each charge code or sub-allocation by charge code grouping

Potential Bonneville Charge Code Allocation Principles

- Full and timely cost recovery, considering cost causation while balancing with simplicity.
- Develop understandable and transparent methodology that we can build upon as we gain experience in the market.
- Feasibility of implementation, recognizing forecasting constraints and administrative implications.

Potential Transmission Charge Code Allocation Principles

- Equitable cost allocation between Federal and non-Federal users of the transmission system.
- Behavior-driven cost causation where practical, to incentivize appropriate market behaviors.
- Mitigate seams and potential for charge code allocation misalignments with other EIM Entities.

Potential Power Charge Code Allocation Principles

- Costs and benefits are allocated among cost pools consistent with the Tiered Rates Methodology and power product purchased from BPA.
- To the extent possible, treat directly connected and transfer customers comparably.
- Maintain similar level of exposure to actual market conditions as is included in power products today.

Methodology Spectrum

Factors to Evaluate:	Complete Insulation	Partial Insulation	No Insulation
Charge Code Allocation	No Allocation of Charge Codes	Sub-Allocate Some Charge Codes	Pass-through All Charge Codes
Forecast in Rates	Full Costs Forecast	Some Costs Forecast	No Costs Forecast
Cost Recovery Mechanism	Risk Mechanism within Rate Structure	Combination of Direct Assignment and Rate Structure	Direct Assignment
Potential Structural Changes	Minimal Changes to Product / Rate Structure	Some Changes to Product / Rate Structure	Changes to Product / Rate Structure
Billing Implications	Minor Changes to Billing	Some Changes to Billing	Re-structuring of Billing
Customer Impact	Low Impact	Moderate Impact	High Impact

Phase Two (Issue Analysis and Alternative Development) will evaluate the feasibility of the factors across the methodology spectrum, which will lead to identifying feasible alternatives.

Complete Insulation

Advantages

- No charge code sub-allocation
- No settlement re-calculation process with customers
- Limited rate schedule changes
- No significant change to customer bills
- Disassociates customer/BPA disputes from BPA/CAISO disputes
- Customers would not need resources to verify CAISO data
- BPA gains experience in the market to provide understanding for future charge code allocation development

Potential Challenges

- Separation of market behavior and cost causation, reducing customer visibility
- Cost recovery would not occur through the EIM design and a financial cost recovery mechanism would need to be determined
- BPA's existing behavioral price signals may not fully align with CAISO's structure for the same action
- Unable to pass on EIM-specific price signals
- Potential seams issues between EIM BAAs

Partial Insulation

Advantages

- Incentivize appropriate market behaviors through charge code allocation
- Enables BPA to develop experience in the market, but begins to stage implementation of sub-allocating
- Customers begin developing experience with CAISO price signals
- Potential for closest alignment with other EIM entities, may reduce seams issues

Potential Challenges

- Opens up potential customer exposure to EIM settlement process, potentially increasing need for customers to validate data
- Begins to create billing complexity, given the volume of settlements
- Bonneville takes on risk of consolidating and allocating charge codes

No Insulation

Advantages

- Cost causation incentivizes appropriate market behavior
- Allocation of costs tie closely to behaviors
- Close alignment with other EIM entities, may reduce seams issues
- Reduces need to design risk mechanisms
- Greatest transparency in the allocation of specific charge codes from CAISO to BPA to customers

Potential Challenges

- Significant change to customer bills to address CAISO settlement processes
- Aligning disputes between CAISO/BPA and Customer/BPA would be complex to administer
- BPA and customers would need to consider increasing resources to validate EIM data
- Not all EIM settlements with BPA will be 100% verifiable, which could create challenges when passed to customers
- With direct assignment, may create greater uncertainty for customers in bills
- May go beyond structure other EIM entities use today, increasing settlement complexity

EIM Charge Code Next Steps

- Feedback on policy questions and charge code allocation principles
 - Please submit to techforum@bpa.gov (with copy to your account executive) by Friday, January 3
- Next Charge Code Allocation Workshop: February 25
 - Phase 2
 - Step 3: Analysis of the Issue
 - Step 4: Alternatives