



# Public Rate Design Methodology (PRDM)

Workshop #2

Chapter 2 Cost Allocations & Chapter 3 Federal System Resources

**Meeting 9 a.m. – 4 p.m.**

January 24, 2024



# Agenda

Time Start	Time End	Topic	Presenter(s)
9 a.m.	9:10	Welcome, Introduction, Agenda	Scott Reed, Policy Lead
9:10	9:30	Plan for Work Group & Workshop #1 Recap	
9:30	10:30	Redline Review: Chapters 1, 11, 7	
10:30	10:40	<b>B R E A K</b>	
10:40	10:50	Orientation for Chapter 2 & 3	Daniel Fisher, Power Rates Manager
10:50	12:00	Chapter 2: Cost Allocations – Deep Dive	Garth Beavon, Rates Economist Daniel Fisher
12:00	1:00	<b>L U N C H B R E A K</b>	
1:00	1:45	Chapter 2: Continued	
1:45	2:00	<b>B R E A K</b>	
2:00	3:00	Chapter 3: Federal System Resources – Deep Dive	Steve Bellcoff, Long Term Power Planning Daniel Fisher
3:00	3:30	Conclusion & Next Steps	Scott Reed
<b>Note: times are approximate</b>			



# Recap of Workshop #1



# Approach to Work Group

- **Goal**
  - Distill and test technical elements of rate design, and present viable alternatives meeting a broad range of interests to larger Workshop Group for consideration
- **Approach**
  - Our focus will be on active, open, engaged and constructive participation
  - We aim to create a space that fosters open dialogue where people feel comfortable being open about their interests
- **Schedule**
  - Work Group sessions will be held at Rates Hearing Room or Room #122 in the 905 building 3/6 or 3/7, 4/23 or 4/25, 5/14 or 5/17
- **Format**
  - All are welcomed to opt in, and the format will be focused on in-person attendance: **To opt in, please email [prdm@bpa.gov](mailto:prdm@bpa.gov)**
  - We understand distance, resources, or other things may make it difficult for you to actively participate in-person, so we will leverage web-ex for particular circumstances with some expectations:
    - Best effort to show up in person
    - Camera on and engaged (black screen can undermine constructive dialogue)
    - In-room camera will be aimed at white-board
- **Communication**
  - Notes capturing the Work Group's collective ideas and constructs will be shared with the larger Workshop Group before any particular construct is proposed for draft
  - Trust is key to this approach – and we will continually work to build and maintain this trust through transparency and clear lines of communication



# Issues Tracking, Feedback, and Review

- **Parking Lot**
  - BPA will maintain a PRDM issues list of items to re-visit so we don't lose track of them over time. You can add to this list at any time during the workshops, working sessions, or via email if something comes up after our gatherings. List will be shared in each workshop.
- **Feedback**
  - Informal – You can provide this while in a workshop or email any team member or our general email address: [prdm@bpa.gov](mailto:prdm@bpa.gov). We will make sure it gets to the right set of people, and respond to these as they come in. If we get several emails that are similar in nature, we'll provide a collective response as quickly as we can.
  - Formal – We won't be soliciting any formal comments until August when our first draft is out for review, but feel free to submit formal letters of comment at any time to our project email address and we will route it to our Executive and Account Executive Teams before submitting formal response.
- **Redline Review**
  - The first portion of each workshop will review the chapter redlines proposed at the previous workshop.
  - Redlines will be made publicly available in MS Word format prior to the workshop, and we will then work through those edits together.
- **Work Group Review**
  - The first portion of each workshop following a Work Group session will share notes, alternatives, any associated analysis, and any proposed changes discussed at session.
  - The larger group will discuss all related issues and prepare initial leanings toward draft changes.

# Redline Review

- Share Word documents & tentative changes (Clean-up related changes discussed at WS #1)
- Chapter 1: Move PRDM Duration language from Chapter 11 to Chapter 1
- Chapter 7: Delete chapter on Shared Rate Plan
- Chapter 11: Delete chapter (move Duration to Chapter 1 and delete section on FERC approval)

# Other possible changes

- We will continue to explore moving away from the use of TOCAs to \$/MWh
  - Possible impacts to internal systems and processes
  - Possible impacts to cash flow and customer bills
  - Test & prove change would have no unintended impacts
- We will continue to explore whether to continue the HLH/LLH construct in rates
  - Will carry this idea forward into rate design discussions in T1, T2, and RSS
  - Will likely inform scenarios to be examined under each (Chapters 5, 6, 8)

Proofs to be shared  
w/Chapter 5

Examine Late Spring  
w/T1, T2, and RSS



# Orienting Chapters 2 & 3

- Chapter 2 establishes the cost basis for setting customer charges and rates, and delineates costs among Slice and Non-Slice customers
- Chapter 3 establishes the link between resources and the quantity of power made available for Tiered service



# Chapter 2: Cost Allocations



# Chapter 2:

## Cost Allocation for Tier 1 and Tier 2

Garth Beavon, Rates Economist







# Tier 1 and Tier 2 Cost Allocation

- Fundamental aspect of Tiered Rates: Costs will be allocated to Cost Pools based on the principles of cost causation, meaning the costs will be allocated to the Cost Pool(s) that benefits from such costs.
- The Cost Allocation Table (TRM Table 2) has guided the allocation of costs among the cost categories: Tier 1 Composite, Tier 1 Slice, Tier 1 Non-Slice, and Tier 2. That Cost Allocation Table conforms to BPA's cost accounting reporting of expenses. Defining the principles and method of that table is the central purpose of Chapter 2 ("Cost Allocations").
- The allocation of costs among the categories (Step 1) has then formed the basis for setting customer charges and rates (Step 2) for firm power sales to customers. The design of those rates is addressed in Chapter 5 ("Tier 1 Rate Design") and Chapter 6 ("Tier 2 Rate Design.") Those chapters will be discussed in future workshops.



# Table 2 Allocated Tiered Cost Table

Table 2  
Allocated Tiered Cost Table

- *Grayed shading in "Actual Data" columns indicates that item is not subject to Slice True-Up.*
- *Blackened row indicates that item is wholly assigned to another Cost Pool.*

## A. Allocation Between Composite and Non-Slice Cost Pools

	A	B	C	D	E	F
	COST ITEM	Year 1 Composite Cost Pool	Year 1 Non-Slice Cost Pool	Year 2 Composite Cost Pool	Year 2 Non-Slice Cost Pool	Resultant allocation shown on Lines:
1	Transmission & Ancillary Services					45 and 159
2	Bad Debt Expense					84 and 161
3	Depreciation					102 and 162
4	Interest Earned on BPA Fund for Power					111 and 163

## B. Composite Cost Pool

	A	B	C	D	E	F
	COSTS AND RATE ADJUSTMENTS	Year 1 Forecast	Actual Data	Year 2 Forecast	Actual Data	Total Rate Period
5	COMPOSITE COST					
6	Expenses:					
7	Power System Generation:					
8	Operating Generation					
9	Columbia Generating Station (WNP-2)					
10	Bureau of Reclamation					

# Cost Pools

<p><u>Cost Step</u></p> <p><b>Cost Pooling (Ch 4)</b></p>	<p><i>Examples</i></p> <p><b>Each item in the Revenue Requirement is present</b></p>	<p><u>Rates Step</u></p> <p><b>Charges and Rates (Ch 5 Tier 1, Ch 6 Tier 2)</b></p>	<p><i>Note</i></p>
<p><b><u>Composite Cost Pool (Tier 1)</u></b></p>	<p>Expenses for power system generation of the existing system. Almost all of BPA's costs.</p>	<p>"Composite Customer Charge."</p> <p>Each customer is assigned a TOCA based on a forecast of that customer's Net Requirement.</p>	<p>Lower-than-forecasted service volumes will result in credits. (Load Shaping Charges.) Thus, the customer's final annual bill would have a smaller result than expected from the TOCA.</p>
<p><b><u>Slice Cost Pool (Tier 1)</u></b></p>	<p>Specific expenses for the implementation of the Slice product.</p>	<p>***</p>	<p>No costs are presently allocated to the Slice Cost Pool)</p>
<p><b><u>Non-Slice Cost Pool (Tier 1)</u></b></p>	<p>Costs and benefits of the Non-Slice products. (E.g. Secondary Energy Credit, Revenues for Risk.)</p>	<p>"Non-Slice Charge."</p>	<p>This cost pool also affects Slice Customers – because of the Block portion of the contract.</p>
<p><b><u>Tier 2 Cost Pool(s) - One for each alternative.</u></b></p>	<p>Acquisitions to serve load under a Tier 2 Alternative. Also, an "Overhead Cost Adder" (portion of general and administrative costs).</p>	<p>"Tier 2 Short Term Charge."</p>	<p>Multiple "Tier 2 Rate Alternatives" have been offered. Each alternative has a distinct Cost Pool, and a corresponding rate.</p>

# Chapter 2: Cost Allocation

- Section 2.1-2.7, Pages 3-15
  - 2.1 Cost Allocation Principles
  - 2.2 Cost Allocation Methodology
  - 2.3 Inclusion of New Expenses & Credits
  - **2.4 Tier 1 (T1) Secondary Energy Credit**
  - **2.5 Interest Earned on Bonneville Fund**
  - 2.6 Actions Prior to Allocating Tier 2 (T2) Costs to T1 Cost Pool
  - 2.7 Slice True-Up

## 2.1 Cost Allocation Principles

- **Cost causation.**
  - Costs will be allocated to the Cost Pool that benefits from such costs. No cost without a Cost Pool.
- **Separation of Tier 1 costs from Tier 2 costs.**
  - Tier 1 costs will be recovered through the Tier 1 rates. Tier 2 costs will be recovered through the Tier 2 rates.
- **Costs separation based on type of service. (Non-Slice, Slice, and Composite.)**
  - Distinct costs to each type of service will be specifically placed in a pool associated with that service.



## 2.2 Cost Allocation Methodology

- Cost allocation will be performed in each 7(i) Process during the term of the Contracts.
  - The allocation of costs to Cost Pools is a ratemaking exercise.
- Paragraph 2.2 sets out the Allocated Tiered Cost Table (Table 2). All costs included in BPA's Power function revenue requirement are listed on the table.
  - Each cost category on the Power function's pro forma income statement is specified.

## 2.2 Tier 2 Cost Pools (cont.)

- As new Tier 2 Rate Alternatives were developed, Cost Pools for each alternative were added. These included Tier 2 Load Growth, Tier 2 Short-Term, and Tier 2 Vintage.
  - Tier 2 Cost Pools are kept separate from one another. Each Tier 2 Rate will recover only the costs of the applicable Tier 2 Cost Pool.
  - As discussed in the Provider of Choice (POC) Draft Policy, BPA is considering implementing an additional Tier 2 Cost Pool under POC: Long-Term Tier 2. This cost pool will include the costs of any firm inventory, inclusive of any augmentation amounts and calculated after all other obligations are considered.

## 2.3 Inclusion of New Expenses & Credits

- Cost Allocation Principles will be applied to New Expenses and New Credits:

23 **2.3 Inclusion of New Expenses or New Credits**  
24 BPA will allocate New Expenses or New Credits to the Cost Pools based on the cost allocation  
25 principles in section 2.1. BPA will propose an allocation of the New Expenses and New Credits  
26 to the appropriate Cost Pools in the next applicable 7(i) Process.

BP-12-A-03  
Section 2  
Page 7

## 2.4 Secondary Energy Credit

- Non-Slice Pool will be allocated a Tier 1 Secondary Energy Credit.
  - These are costs and revenues from the sale of surplus power sold on behalf of non-Slice customers. (The Slice product includes an advance sale of surplus energy, which is delivered when and if available.)
  - This presentation includes further discussion of the treatment of this Secondary Energy Credit.



## 2.5 Interest Earned on the Bonneville Fund

- There is a unique credit, allocated to the Composite Cost Pool. It is based on a historic circumstance occurring in 2001. BPA has called it the “Composite Cost Pool Interest Credit.”
  - It will be addressed in the “Staff Leaning” section of this presentation.

## 2.6 Allocating Tier 2 (T2) Costs to T1 Cost Pool

- This is a contingency paragraph necessary to ensure “The Administrator’s responsibility to recover costs and timely repay the U.S. Treasury.”
  - It permits BPA to allocate a Tier 2 Cost to a Tier 1 Cost Pool when necessary, and after a public process. In BPA's experience under the TRM, there has been no triggering event that would require allocation of Tier 2 Costs to a Tier 1 Cost Pool
  - In the event of a default by a customer purchasing power under a particular Tier 2 Rate, BPA will first seek to recover such amounts from the other purchasers under that Tier 2 Rate. In the event BPA cannot recover all such amounts from that Tier 2 Cost Pool, BPA will allocate any unrecoverable amounts to the Composite Cost Pool.

## 2.7 Slice True-Up

- There is an annual Slice True-Up Adjustment, resulting in a Slice True-Up Adjustment Charge (or Credit).
  - The dollar amount calculated, which may be positive or negative, constitutes the Slice True-Up Adjustment Charge. The Slice product pays for its share of Composite Cost Pool costs, and these costs are subject to being trued up to actual costs.
  - This is essentially a financial risk mitigation method applied to the Slice product. It is a substitute for the specific risk mitigation related to the Non-Slice products. (E.g. PNRR.)



**Staff Leaning:  
Sustain Cost Pooling, Eliminate Bonneville Fund Interest Credit**



# Staff Learning

## Pooled Costs and Tiered Rates

- As discussed in the POC Draft Policy, BPA proposes to sustain the Cost Allocation Principles, Methods, and Pools. These are essential to the Tiered Rate Construct.
  - These principles serve to allocate incremental resource costs incurred to serve Above RHWL load to Tier 2 rates.
  - The Slice product will continue to be free of certain risk mitigation measures applicable to rates for the non-slice products: One such risk mitigation measure is Planned Net Revenues for Risk (PNRR), which is placed in the Non-Slice Cost Pool.

## Staff Leaning

# Exception: 2.5 Interest Earned on the Bonneville Fund

- There is a historical and unique credit in the Composite Cost Pool. This is called the “Composite Cost Pool Interest Credit.”
  - It is an interest credit associated with the “Accretion of Reserves” which resulted in a certain balance held in the Bonneville Fund on October 1, 2001 (called the “Base Amount.”) The Reserves for the Composite Cost Pool is fixed in time at \$586 million. This number is multiplied by whatever interest rate is current.
  - This credit was created to recognize the contributions of customers that had elected the Slice product beginning in 2001 and continued to receive it to the present:

***“All PF customers contributed to the accretion of these reserves. ... However, beginning in FY 2002, Slice customers have not further contributed to the accretion of reserves.” See TRM Section 2.5.***

# Staff Leaning

## 2.5 (cont.) Effect on Non-Slice Cost Pool

- The Non-Slice Cost Pool is also affected by this fixed dollar amount:
  - When the actual Bonneville Fund is on average lower than this 2001 "Base Financial Reserve Amount," the Non-Slice Cost Pool will receive a negative adjustment (a cost). When higher, there is a positive adjustment (a credit).
  - Said another way, the Non-Slice Cost Pool is equal to the "total anticipated credit earned on the Bonneville Fund balances attributed to the Power function less the amount of interest credit included in the Composite Cost Pool." See TRM Section 2.5.
  - This adjustment could be positive or negative:

1 the amount of interest credit included in the Composite Cost Pool. The credit to the Non-Slice  
 2 Cost Pool will be negative if the interest credit allocated to the Composite Cost Pool is greater  
 3 than the total interest credit for a particular year. Table 2, line 4, shows the allocation of the  
 4 interest credit.

## Staff Leaning

# 2.5 (cont.) Eliminate Credit for Pre-2001 Events

- Staff proposes to sunset an interest amount credited to the Composite Cost Pool. All interest in the Bonneville Fund (whatever its true present balance) will be credited to the Non-Slice Cost Pool. For illustration purposes: If the Bonneville Fund is zero, no credit would be applied to either cost pool.
  - Since 2001, the actual Reserve balance is accreted only by the Non-Slice products. Staff believes the 2029 PRDM is the right time to rationalize the treatment of Bonneville Fund Interest. Interest credits should be based on real fund balances only, and not hypothetical balances which have only an historic explanation.
  - The plausible link between contributions from Slice customers by 2001, and the current set Slice customers has become stretched. Out of 17 Slice customers in FY 2012 (beginning of TRM), seven of them have departed the Slice product. If a new customer elected the Slice product in the future, rates for that customer would be shaped by this credit.
  - The logic of a credit for the 2001 "Base Financial Reserve Amount" has become increasingly diluted as the decades have passed. If carried forward to the next contract period, it would become even more so.

## Staff Leaning

# 2.5 (cont.) Power Bill Effects – Mixed for Each Customer

- The effect of this change (elimination of the Composite Cost Pool Interest Credit) will be to simultaneously increase the sum of the Composite Cost Pool and decrease the sum of the Non-Slice Cost Pool.
  - Each customer would see these changes on their power bill. All customers have both a Composite Customer Charge and a Non-Slice Charge. (Slice customers receive a Non-Slice Charge linked to the Block product.)
  - In FY 2023, due to very high interest rates, the Composite Cost Pool Interest Credit was \$25 million. Consequently, the Non-Slice Pool was credited with only \$23 million (rather than the sum of both amounts). Eliminating the Composite Cost Pool Interest Credit will result in Composite Customer charges rising. Non-Slice charges will fall.
  - Comparing customer categories, we see that with the sunseting of the \$586 million 2001 "Base Financial Reserve Amount," Slice customers would see a net power bill rise, and Non-Slice customers would see a net fall. Years with lower interest rates will have a less sizable effect.



## Staff Leaning

# Discussion Topic: Secondary Energy Credit Timing

- Discussion: Should BPA change the timing of the application of the Tier 1 Secondary Revenue Credit?
  - BPA's rate for the Non-Slice product includes a forecast credit from its sales of secondary energy (Secondary Revenue Credit). End-of-year deviations from the forecast are not subject to a "true-up" to actual data.
  - Forecasted revenues for secondary sales can deviate significantly from actuals for a variety of reasons. Given the range of results, BPA collects money ahead of time for the Non-Slice product to build reserves to handle financial volatility (Planned Net Revenue for Risk). Additionally, other cost-adjustment mechanisms are included in rate proposals. Examples of these include Cost Recovery Adjustment Clauses (CRACs), and the Dividend Distribution Clause.
  - As the PRDM is being developed, Staff wishes to visit the question of whether to change the timing of the application of Secondary Energy Credits in the Non-Slice Cost Pool. This change may be made with applicability to all customers, or instead to only a subset of customers who elect in. Also, this change may be linked to other appropriate changes.



# Chapter 3: Federal System Resources



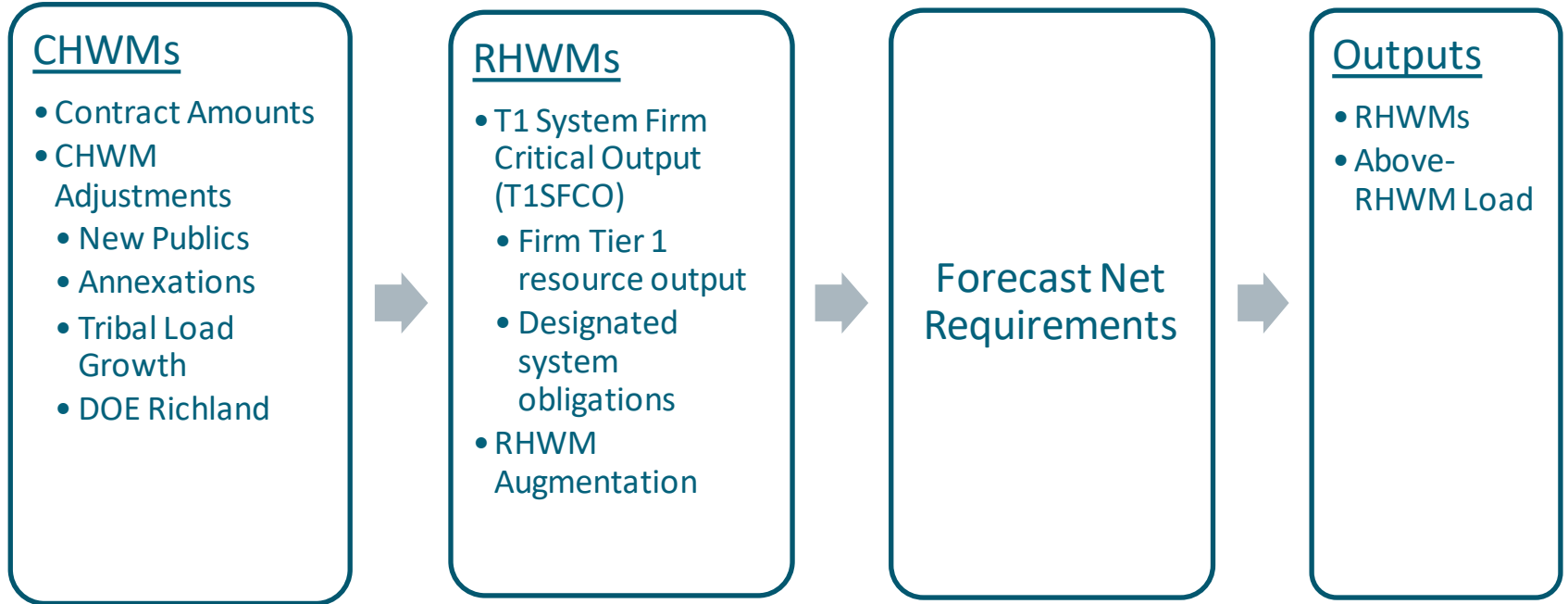


# Chapter 3: Federal System Resources

Steve Bellcoff, Long Term Power Planning



# TRM RHW M Process





# PRDM Pre 7(i) Process

## CHWM

- Contract Amounts
- CHWM Adjustments
  - New Publics
  - Annexations
  - Tribal Load Growth
  - Etc.

## Forecast Net Requirements

## Outputs

- CHWMs
- Above-RHWM Load



# TRM vs. PRDM Inputs and Outputs

TRM

## RHWM Process

- Tier 1 System Output
- RHWM Augmentation
- RHWMs
- Forecast Net Requirements
- Above-RHWM Load

## 7(i)

- System Output Refresh
- Rate Period Augmentation
- Other Augmentation
- Forecast Net Requirement Refresh

## Annual Net Requirement

- Planned Net Requirements
- Slice %
- Block Amounts

PRDM

## Pre 7(i) Process

- Forecast Net Requirements
- Above-CHWM Load

## 7(i)

- System Output
- Slice Augmentation
- Other Augmentation
- Forecast Net Requirement Refresh

## Annual Net Requirement

- Planned Net Requirements
- Slice %
- Block Amounts

# PRDM: Pre 7(i) Process – Determining CHWM & A-CHWM Loads

## Additional for Slice

### Simulated Slice Resource Stack:

- Tier 1 System Resources
- Designated BPA System Obligations
- Slice Augmentation

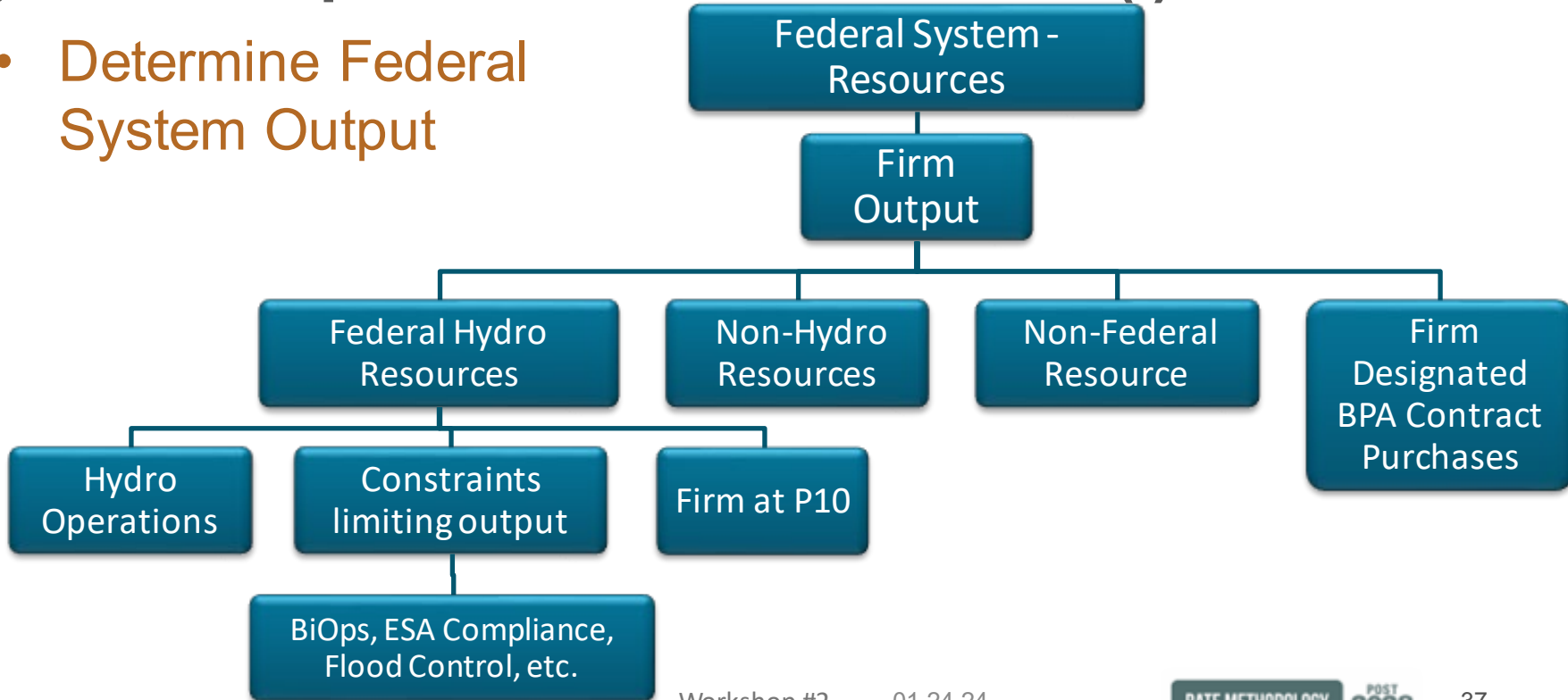
Slice % Calculation

Allocation of Costs for Resource Acquisitions

Firm Inventory treatment

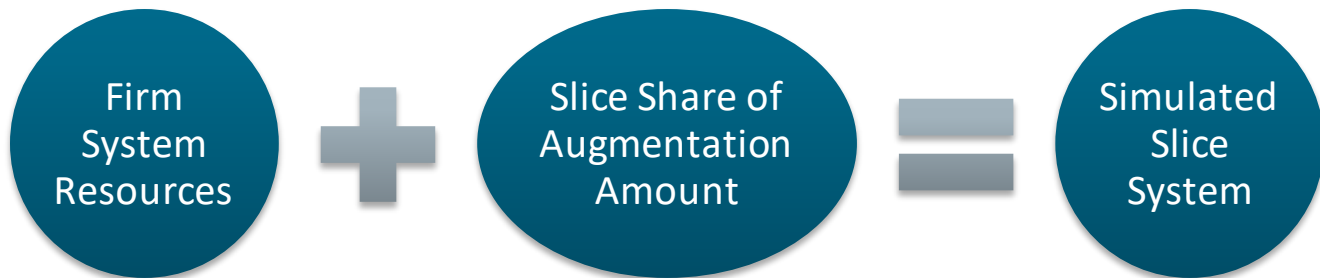
# System Output Calculated in each 7(i) Process

- Determine Federal System Output



# Slice Augmentation - Slice Resource Stack

- The same as TRM, a portion of the Slice Resource Stack will include an amount of augmentation.
  - Does it need to be a flat block, or could it be a percentage share of an actual augmentation amount?
- The amount of augmentation will be defined in the PRDM and calculated in each 7(i) process.
- Slice Share of Augmentation amount will grow and shrink to balance the system output with power sold at a Tier 1 rate.







# Conclusion & Next Steps

# January and February Workshops

February 21, Workshop #3

- Chapter 5: Tier 1 Rate Design

Workgroup 3/6 or 3/7

March 22, Workshop #4

- Chapter 5: Tier 1 Rate Design (Cont.)
- Chapter 6: Tier 2 Rate Design

## 2029 PRDM

- Definitions
- Chapter 1 – Background & Purpose
- Chapter 2 – Cost Allocation
- Chapter 3 – Federal System
- Chapter 4 – T1 Eligibility (CHWM) Move to POC
- Chapter 5 – Tier 1 Rate Design
- Chapter 6 – Tier 2 Rate Design
- Chapter 7 – Shared Rate Plan – Delete
- Chapter 8 – RSS
- Chapter 9 – Risk Mitigation
- Chapter 10 – Other Rate Design
- Chapter 11 – Approval and Duration – Delete/Move
- Chapter 12 – Conditions for Revision
- Chapter 13 – Revision Processes



# Thank you

For feedback, questions, comments please email: [prdm@bpa.gov](mailto:prdm@bpa.gov)

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