

Post-2028 Residential Exchange Program Average System Cost Methodology Workshop Tuesday, December 16th, 2025

9:00 am – 4:00 pm



December 16th Workshop Agenda

Workshop Topics	Presenter(s)
Introductions, Agenda, and Schedule	Scott Winner
List of Changes to ASCM Part I and II	Paulina Cornejo
Walkthrough of Preliminary ASCM Redline	Paulina Cornejo and Richard Greene
List of Changes to Appendix 1	Michael Edwards
Walkthrough Appendix 1	Michael Edwards
Narrative of Forecast Model	Scott Winner
Forecast Model Procedure	Michael Edwards
Next Steps and Closeout	Scott Winner
Breaks	Est. Times
LUNCH	Noon – 1:00 pm



Post-2028 REP Team

- Kim Thompson, REP Sponsor (VP of NW Requirements Marketing)
- Paulina Cornejo, REP Policy Lead
- Michael Edwards, REP Technical Lead
- Aimee Robinson, Economist
- Richard Greene, Legal Counsel
- Neal Gschwend, Legal Counsel
- Stephanie Adams, Rates and 7(b)(2) Lead
- Jonathan Ramse, Economist
- Daniel Fisher, Power Rates Manager
- Scott Winner, PSRF Supervisor

ASCM Workshop 3 Topics

Workshop 1: Oct. 23rd

Workshop 2: Dec. 3rd

Preliminary ASCM Release: Dec. 10th

Workshop 3: Dec. 16th

- ASCM Structure
- ASC Review Process and Rules of Procedures
- Sections Carried Forward
- Updates to FERC Accounts and ASCM Sections
- Functional Overview of Appendix 1 and Forecast Model
- WS 2 Topics

 Phase 2 Schedule Changes

Proposed Changes:

- Transmission Costs
- Injuries and Damages (Account 925)
- Energy Storage Plant
- Treatment of NLSLs
- Source of Escalation Data
- Meeting Load Growth

- BPA releases
 Preliminary ASCM
 Draft for informal comment.
- Regional parties submit informal comments to the <u>REP2028@bpa.gov</u> inbox.

- Questions on WS 1 and 2 Content
- Walkthrough entire ASCM
- Walkthrough Appendix
 1 Template and
 Forecast Model



Phase 2 Schedule Update

Date	RPSA	ASCM
Nov 25, 2025, Tue	Comments due, Preliminary	
Dec 3, 2025, Wed		WS2
Dec 9, 2025, Tue	Post, Full	
Dec 10, 2025, Wed		Post, Preliminary
Dec 16, 2025, Tue		WS3
Jan 21, 2026, Wed	Comments due, Full	Comments due, Preliminary
Feb 3, 2026, Tue		Post, Full
Mar 6, 2026, Fri	ROD	
Mar 9, 2026, Mon		Comments due, Full
Apr 24, 2026, Fri		ROD
Late Jul 2026		FERC Interim Approval

BPA Staff Responses to Comments

Presenter – Paulina Cornejo

REP Policy Lead

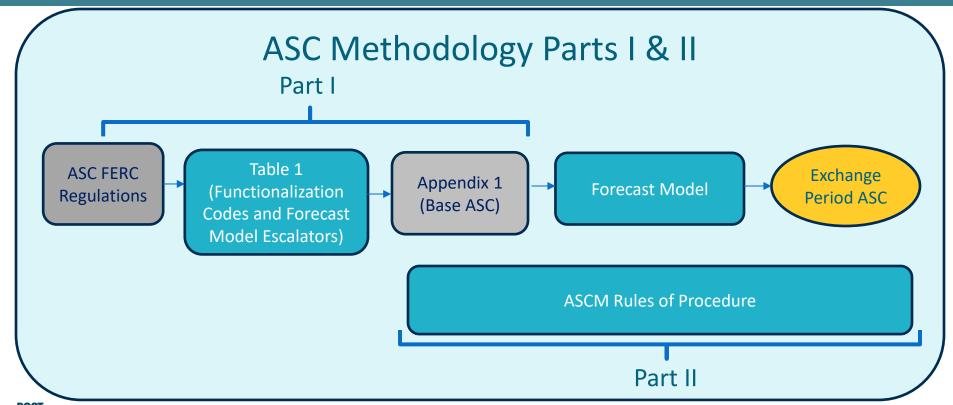


Summary of Changes to the ASCM

Presenter – Paulina Cornejo

REP Policy Lead

ASCM Roadmap



Proposed to Carry Forward from 2008 ASCM

- Retain financial data in the FERC Form 1 (FF1) as the source data to populate the Appendix 1 and determine Utilities' ASCs.
- Set Base Period ASCs from historical FF1 data and escalate forward to establish Exchange Period ASCs.
- Maintain the Major Resource additions and removals provisions, and the Materiality thresholds.
- House the ASC Review Process procedural requirements in the Rules of Procedure and ASC Confidentiality Rules.
- Table 1: Functionalization and Escalation Codes remain unless otherwise proposed.

Proposed Structural Changes from 2008 ASCM

- Segregate the ASCM into two main parts:
 - PART 1: ASC FERC Regs, Table 1, and Appendix 1 Template
 - PART 2: BPA's ASC Rules of Procedure with embedded ASC Confidentiality Rules
- Move substantive text from the Endnotes into the body of the ASCM in Section 301.4 – Base Period ASC.
- Have Endnotes as references to Table 1 instead of the Appendix 1.

Added a document index

Changes to section 301.2, Definitions

- Revised Average System Cost Review Process
- Deleted Contract High Water Mark
- Added Confidential Information
- Deleted Consumer Owned Utility
- Revised Contract System Costs
- Revised Contract System Load
- Added text to Direct Analysis
- Deleted Global Insight
- Added Mid-Rate Period Adjustment

- Deleted Net Requirements
- Deleted Priority Firm Power
- Added PF Exchange Rate
- Added Rate of Return
- Revised Review Period
- Deleted COU references:
 - text on COUs in Labor Ratios
 - Rate Period High Water Mark (RHWM)
 - RHWM Process
 - RHWM Exchange Load
 - RHWM System Resources
 - Tier 1Priced Power
 - Tier 1 System Resources
 - Tiered Rates Methodology



- Changes to section 301.3, Filing Procedures
 - Added reference to the ASC Rules of Procedure
- Changes to section 301.4, Base Period ASC
 - Revised (a) with introductory sentence
 - Revised (c) to point to directly to the Senior Financial Officer Attestation
 - Added to (d) reference to Base Period ASC
 - Updated hyperlink in (e)
 - Added (e)(8) about other supplemental tabs
 - Added to (f)(1) reference to Table 1
 - Expanded (g) to include associated and/or subsidiary companies
 - Deleted (j) because Senior Financial Officer Attestation included in Part II
 - Added new (j) statement on demand-side management and demand response

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Changes to section 301.4: Base Period ASC con't

- Added language to (m)(2) regarding combining functionalizations
- Cleaned up (n) on calculating Distribution Losses and added to (n)(2)
- Clarified (o) on timing of Rate of Return
- Clarified (o)(1)-(3) on timing of federal corporate income tax rate
- Substantive edits to (p) on NLSLs, which were discussed in detail in Workshop 2
- Deleted (v) on treatment of transmission under FERC Order 888
- Added (v) on treatment of Energy Storage Plant
- Added (w) on Injuries and Damages
- Added (x) on treatment of Transmission costs
- Added (y) on Demand-side management and demand response

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Changes to section 301.5, Exchange Period ASC Determination

- Revised (a) with introductory sentence
- Revised language in (a)(2) on escalating to midpoint of Exchange Period
- Replaced in (a)(4) Global Insight with third party
- Changed in (b)(2)(ii)(A)-(D) determination of average ST purchased power prices and sales for resale prices from three years to five years
- Added to (c)(1) reference Residential Purchase and Sale Agreement
- Deleted from (c)(3) transmission investments and long-term transmission contracts
- Deleted (c)(6) on transmission wheeling revenues calculation
- Transferred from 301.4(p) the escalation provisions for NLSLs to 301.5(c)(10)
- Simplified (c)(13) to directly reference the ASC Confidentiality Rules
- Deleted (g) on provisions for Consumer-owned Utilities

- Changes to section 301.6, Changes in ASCM
 - Removed text in (a)
- Changes to section 301.7, Provisions for Public Customers
 - Added provision in the instance a Public customer participates in the REP
- Changes to section 301.8, Appendix 1 Instructions
 - Deleted the entire section as the operative provisions are now housed in 301.4

Table 1 Changes

List of revisions to Table 1

- Added Solar Production, 338.1 338.13
- Added Wind Production, 338.20 338.34
- Added Other Renewable Production, 339.1 339.13
- Added Energy Storage Plant, 387-387.12
- Added Computer Hardware, 397.1
- Added Computer Software, 397.2
- Changed Communication Equipment account number from 397 to 397.3
- Deleted Mining Plant Depreciation, Account 108
- Deleted Leasehold Improvements, Account 108

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Table 1 Changes Cont.

- Deleted line-item Depreciation and Amortization Reserve (Other)
- Added Investment in Subsidiary Companies, 123.1
- Removed "EPA" from Account names, 158.1 and 158.2
- Deleted Preliminary Natural Gas Survey and Investigation Charges, 183.1
- Deleted Other Preliminary Natural Gas Survey and Investigation Charges, 183.2
- Added line for Schedule 2: Capital Structure and Rate of Return
- Added Power Purchased for Storage Operations, 555.1
- Deleted line-item BPA REP Reversal

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Table 1 Changes Cont.

- Deleted Customer Service and Information, 906
- Added Supervision, 907
- Added line-item Commission Approved Injuries and Damages
- Deleted Transportation Expenses (Non-Major), 933
- Added line-item Transmission for Sales for Resale

Changes to Table 1 Endnotes

Moved Endnotes references from Appendix 1 to Table 1

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- Added an Index page
- Deleted a paragraph from the Summary, section 1
- Changes to section 2, Filing Procedures:
 - Added a descriptive paragraph to 2.1
 - Clarified in 2.1.1 the Base Period ASC Filings
 - Modified in 2.1.1.1 the requirements of the Utility's filing package
 - Revised in 2.1.2 provisions on Informational ASC Filings
 - Removed text from each subsection in 2.2
 - Removed text in 2.3 on Utilities without an executed RPSA

Changes to section 3, ASC Review Process

- Added clarifying text to 3.1.1 3.1.3
- Revised 3.1.4 and 3.1.5 regarding intervention petitions
- Added text to 3.3.1 on the discovery process
- Added clarifying text to 3.4 and 3.5.1
- Deleted a paragraph following 3.7.2

Changes to section 4, ASC Review Process Schedule

- Updated the link in 4.2
- Changes to section 5, Access to Filing Utility's Data in Retail Rate Proceedings
 - Added clarifying text in 5.1 5.2 regarding BPA's access to Utility's data in retail rate proceedings

Attachment A, Senior Financial Officer Attestation

- Added the term "Base Period"
- Deleted references to COUs

Attachment B, 2026 ASC Confidentiality Rules

- Transferred terms "ASC Filing" and "Confidential Information" to Part I, Regulations
- Deleted "Utility" definition
- Replaced term "Consent to be Bound" with "Confidentiality Agreement" throughout

Attachment B-1, Confidentiality Agreement

Replaced term "Consent to be Bound" with "Confidentiality Agreement" throughout

B O N N E V I L L E P O W E R A D M I N I S T R A T I O N

Walkthrough ASCM Redline

Presenter – Richard Greene

Senior Attorney-Advisor

Changes to and Walkthrough of Appendix 1

Presenter – Michael Edwards

REP Technical Lead

List of Proposed Changes to Appendix 1 Cont.

- Proposed changes to Schedule 1 tab
 - Changes to Accounts and/or line-items reflected in Table 1
- Proposed changes to Schedule 1A tab
 - No edits
- Proposed changes to Schedule 2 tab
 - No edits
- Proposed changes to Schedule 3 tab
 - Changes to Accounts and/or line-items reflected in Table 1
 - Includes addition of line-item for Commission Approved Injuries and Damages
- Proposed changes to Schedule 3A tab
 - No edits

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List of Proposed Changes to Appendix 1 Cont.

- Proposed changes to Schedule 3B tab
 - Changes to Accounts and/or line-items reflected in Table 1
- Proposed changes to Schedule 4 tab
 - Removed Transmission from ASC calculation
 - Removed RHWM references
- Proposed changes to 3YR PP & OSS tab
 - Added two years of data and reweighted the price spread
- Proposed changes to Load Forecast tab
 - No edits
- Proposed changes to Distribution Loss Calc tab
 - No edits



List of Proposed Changes to Appendix 1 Cont.

- Proposed changes to Salaries tab
 - No edits
- Proposed changes to Ratios tab
 - No edits
- Proposed changes to New Resources- Individual, New Resources- Group,
 Materiality Individual, Materiality Group, Wind Resources Costs tabs
 - No edits
- Proposed changes to NLSL Base New Calc tab
 - Added new line-items
 - Removed the ASC Transmission line-item
- Deleted A-RHWM Ratios, Above-RHWM Base Calc, Tiered Rates tabs

Narrative and Running of Forecast Model

Presenters – Scott Winner

Power Planning and Forecasting Supervisor

A Guide to the Exchange Period ASC

- What We Analyze: The ASC Forecast Model uses a Utility's financial and operational data to calculate the Utility's ASC for the Exchange Period.
- The Model's Approach: The calculation is performed in a single, integrated process within Excel, where all the complex math occurs simultaneously to produce final ASCs.
- Why It's Important: Calculating Exchange Period ASCs is a crucial step in BPA's rate-setting process to determine Exchange Period benefits.
- This section goes through the fundamental steps involved in determining the Utility's Exchange Period ASC, clarifying how all these elements come together in our existing model.

Where the Data Comes From

- Utility's Appendix 1
 - Schedules (Rate Base, ROR, O&M, A&G, wages, revenues, Market purchases & Sales)
 - Load Forecast (Distribution losses)
 - New Resources
 - NLSL(s)
- Third Party Data for Escalation
 - Escalations for specific codes in Table 1
- BPA
 - Energy Price Forecasts
 - Interest rate



Completing the Appendix 1 Schedules

- Initial Cost Data: The Utility populates the Schedules from its FERC Form 1.
- Functionalized PROD, TRANS and DIST/Other:
 - These rows with will be populated first from TOTAL.
- Functionalized Direct:
 - The Utility manually assigns costs from TOTAL.
- Ratio calculations
 - This is done is a specific order, because the resulting PROD, TRANS, and DIST population can feed the next ratio calculation. The order is:
 - PT (Production & Transmission) Costs
 - LABOR Costs
 - TD (Transmission & Distribution) Costs
 - Remaining General Costs: General Plant (GP), General Plant Maintenance (GPM), and Production, Transmission, Distribution & General (PTDG).

Costs to Exchange Period ASC

- The Rate of Return from Schedule 2 is applied to Schedule 1
- Total costs come from Schedules 2, 3, 3A, and 3B
 - Both the Appendix 1 and the Forecast Model keep track of the credits and debits to calculate the total exchangeable costs.
- Base Period ASC
 - Base Contract System Cost/Contract System Load
- Exchange Period ASC
 - Escalated Exchange Period Contract System Costs/Forecasted Exchange Period Contract System Load
 - Updated with new resources and adjusted to exclude NLSLs



Projecting Costs into the Future

Once initial costs are set, the model iterates monthly to the end of the Exchange Period

- Escalators get applied to many Total and Direct Analysis PROD, TRANS, DIST accounts
- Repeat Base Period operations for populating PROD, TRANS, DIST in the schedules
 - Functionalized PROD, TRANS, DIST
 - Recalculate ratios and populate PROD, TRANS, DIST

Short-Term Sales for Resale and Purchases

- Applies to accounts 555 and 447.
- Special operations apply to these accounts in the model to solve for load/resource balance. It is assumed increases in load will be met with short-term Purchases and decreases with short-term Sales.
- The Appendix 1 provides the Utility's Base Period price spread for Purchases and Sales.
- BPA's Energy Price Forecasts are used for estimating future costs, and the price spread estimates the Utility's Purchase and Sales prices.
- The Purchase and Sales costs will be applied to the changes in the load forecasts with Purchases increasing and Sales decreasing costs

Integrating New Resources in the Model

- Costs of new resources are reflected in the Utility's ASC at the time they come online.
- New resources are assumed to be available to serve load growth.
 - New resource energy (MWh) is netted against changes in Load during the Short-Term Sales for Resale and Purchases calculation to achieve load/resource balance.
 - New Resource, long-term contracts, are added to long & intermediate term purchase costs and removed from the Sales and Purchases calculation.

New Large Single Loads

- The NLSL load and associated resource costs are incorporated into the model's monthly iteration cycles at their expected dates.
- The Base Period NLSL inputs are escalated in accordance with the provisions in the ASCM.

Exchange Period ASC

- Numerator Contract System Costs
 - Annualized average of the costs from the first and last monthly calculation of ASC in the model.
 - Except for Accounts 555 and 457, Short-Term Sales for Resale and Purchases, which are values from the midpoint of the Exchange Period
- Denominator Contract System Load
 - Average of first and last year forecasted loads.

Forecast Model Procedure

Presenters – Michael Edwards

REP Technical Lead

Q&A





BONNEVILLE POWER ADMINISTRATION

Closeout

Presenter – Scott Winner

Power Planning and Forecasting Supervisor





Phase 2 Schedule Update

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Communication and Resources

- ❖ Submit written comments and questions to rep2028@bpa.gov.
- Details to attend all Post-2028 REP Phase 2 workshop can be found on BPA's event calendar.
- For REP background, post-2028 public workshop materials, public notices, and additional REP resources, go to the Post-2028 REP webpage.
- ❖ To receive pertinent notifications related to this process sign up for Tech Forum.

Thank you! Post 2028 REP Team

