



Terms and Conditions TC-20 Tariff Proceeding Customer Workshop

5/31/18

Agenda

TIME	TOPIC	PRESENTERS
9:00 - 9:10 AM	Agenda Review & Safety	Rachel Dibble
9:10 – 9:20 AM	Strategic Alignment & <i>Pro Forma</i> Guidance	Jeff Cook
9:20 - 9:45 AM	TC-20 Tariff Development	Rachel Dibble
9:45 - 10:30 AM	TC-20 Procedural Schedule	Rahul Kukreti and Beth Loebach
10:30 – 10:45 AM	Break	
10:45 – 11:30 AM	Losses	Mike Bausch and Chris Gilbert
11:30 – 12:00 PM	Commercial Assessment Update	Bob King and Abbey Nulph
12:00 – 12:15 PM	Wrap up and Next Steps	Rachel Dibble

Alignment with the BPA 2018-2023 Strategic Plan and Transmission Business Model

- Although BPA is not required to adopt FERC's *pro forma* tariff, we believe that there is value (and in fact is a critical step to achieving this strategic vision) in adopting the FERC *pro forma* tariff for our transmission services to the extent possible. Through this tariff, we offer open access transmission service that is consistent with industry products, services, and standards.
- 2018-2023 BPA Strategic Plan, Objective 4d: Offer more standardized products and services by better aligning BPA's Open Access Transmission Tariff with *pro forma* and industry best practices
- TBM v3: Transmission will ensure business certainty and stability for our customers by offering our product portfolio and standardized options under a comprehensive open access transmission tariff, modeled to the extent possible after FERC's *pro forma* tariff.

WE ENERGIZE THE PACIFIC NORTHWEST

Transmission Value Proposition

Operating a High
Performing Grid

Enabling Economic
Growth in the Region

Providing Access to Federal
and Non-Federal Resources
And Markets

Through Excellence in Offering and Managing

Product Portfolio

Providing standardized options
Value-based price profiles
Drawing from integrated regional planning

Infrastructure

Advanced situational awareness
Right-sized investments in assets
Value and risk-based asset management

Long-Term Viability

Data-driven decision making
Integrated and efficient processes
Innovation and continuous improvement

A Dependable and Responsive Business Partner



TC-20 Tariff Development

Feedback from April 21st TC-20 Workshop

- Focus on *pro forma* is good, but TC-20 principles and evaluation criteria are too broad
- Provide specific examples of how the criteria applies
- Explain the connections between Customer workshops that focus on rates, tariff and business practices
- More information on BPA's process getting to recommendations such as other alternatives considered and underlying analysis

BPA's *pro forma* strategic guidance as principles for the new tariff

Consistent with the BPA 2018-2023 Strategic Plan and Transmission Business Model, BPA plans to propose a tariff that is consistent with the FERC *pro forma* tariff to the extent possible. BPA will consider differences from the FERC *pro forma* tariff if the difference is necessary to:

1. Implement BPA's statutory and legal obligations, authorities, or responsibilities;
2. Maintain the reliable and efficient operation of the federal system;
3. Prevent significant harm or provide significant benefit to BPA's mission or the region, including BPA's customers and stakeholders; or
4. Align with industry best practice when the FERC *pro forma* tariff is lagging behind industry best practice, including instances of BPA setting the industry best practice.

Tariff v. Rates v. Business Practice

TC-20 Tariff Proceedings (<https://www.bpa.gov/Finance/RateCases/Tariff%20Proceedings/Pages/default.aspx>)

- BPA will follow the procedural requirements of Section 212(i)(2)(A) of the Federal Power Act (Section 212) to establish a new open access transmission tariff for transmission service across the Federal Columbia River Transmission System. The Section 212 proceeding, which largely follows rate case procedures, will run concurrently with the BP-20 rate proceeding.

BP-20 Rate Cases (<https://www.bpa.gov/Finance/RateCases/Pages/default.aspx>)

- BPA establishes rates for power and transmission services in a rate proceeding, a formal evidentiary hearing process under Section 7(i) of the Northwest Power Act. Prior to the initiation of the rate case, workshops are held to review and discuss upcoming rate case issues.

Transmission Business Practices (<https://www.bpa.gov/transmission/Doing%20Business/bp/Pages/Business-Practices.aspx>)

- BPA's Transmission Business Practices provide customers with the information on how to conduct business with BPA. They are derived from the application of BPA's Open Access Transmission Tariff (OATT) and the Transmission and Ancillary Service Rate Schedules. The Business Practices inform BPA's customers about policies and procedures related to obtaining BPA's products and services.

Tariff v. Rates v. Business Practice

TC-20 Tariff Proceeding

A process to establish terms and conditions of general applicability of transmission service for a new open access transmission tariff. The TC-20 (Terms and Conditions) Tariff Proceeding, which largely follows rate case procedures, will run concurrently with the BP-20 rate proceeding. BPA will hold workshops beginning in the spring/summer of 2018, prior to the commencement of the TC-20 proceeding in the fall of 2018.

BP-20 Rate Proceeding

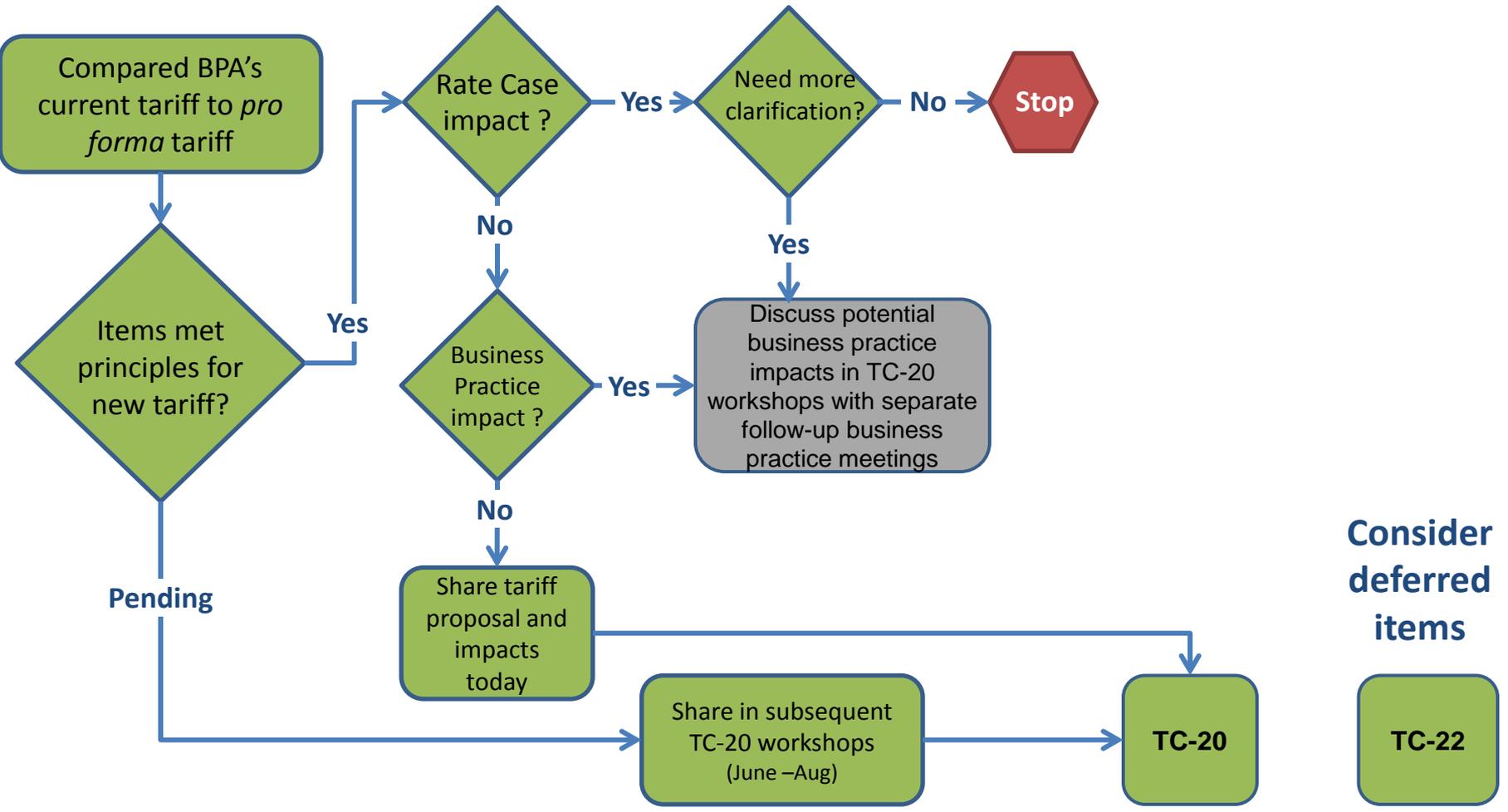
A process to set power and transmission rates for FYs 2020-2021 (Oct 2019 – Sep 2021) and will commence in fall 2018. Pre-rate case workshops will be held in the spring/summer of 2018.

Transmission Business Practice

Are separate process from TC-20 and BP-20 Proceedings. Business practices are derived from the application of BPA's Open Access Transmission Tariff (OATT) as well as the Transmission and Ancillary Service Rate Schedules.

Tariff Workshops

FY 2018	FY 2019	FY 2020	FY 2021
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Consider deferred items

TC-22

Address tariff language for certain topics in a future TC-22 Tariff Proceeding

- Deferred tariff language topics for sections related to:
 - Study Process
 - Excluding undesignations for firm market sales less than one year
 - Attachment C (ATC Methodology)
 - Attachment K (Regional Planning)
 - PTP and NT agreement templates
 - Simultaneous Submission Window (SSW)
 - Creditworthiness
- Identified deviations will be addressed in TC-22
- For TC-20, BPA is proposing to use current tariff language for the new tariff, which has been included in the draft tariff proposal we have posted
 - Specific sections for each topic are also posted

TC-20 Workshop Topics

Today

- **TC-20 Procedural Schedule**
- **Losses**

Subsequent
workshops
(June –Aug)

- Hourly Firm
- Ancillary Services
- Attachment G (NOA)
- Elimination of NT Conditional Firm
- Attachment M and NT Redispatch
- Generator Interconnections (Attachments L and N)
- Losses
- Price Cap and Financial Middleman
- Applicability of new tariff
- Opt-in opportunities
- Two tariff administration
- TC-20 Procedural issues

Pre TC-20 Workshop Timeline

APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	November
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BPA develops proposed tariff language

Customers review proposed tariff language & provide feedback

BPA prepares for TC-20 Initial Proposal



TC-20 begins
November
2018



TC-20 Procedural Schedule

TC-20 Procedural Schedule

Recap of February, 2018 Rules of Procedure workshop:

As context for the proposed procedural rules, BPA shared a handout showing potential alignment of the 7(i) procedural steps for the TC-20 and BP-20 cases

- TC-20 case requires Hearing Officer Recommended Decision and the record to be closed before the Administrator issues his decision.
- Because of this additional step, the handout showed the TC-20 Final Record of Decision (ROD) being issued after the BP-20 Final ROD.

What we heard from customers after the February workshop:

- The TC-20 and BP-20 schedules should align to ensure final RODs are issued around the same time.
- The TC-20 schedule should include an opportunity for briefs on exceptions after the Hearing Officer issues a recommended decision.

TC-20 Procedural Schedule

Bonneville's understanding of the request for additional brief on exceptions to the Hearing Officer's recommendation:

- After Initial Briefs, oral argument, and the Hearing Officer's recommendation, parties would have an opportunity to submit briefs on exceptions to the Hearing Officer's recommendation.
- The Administrator would then issue a draft Record of Decision.
- Parties would have another opportunity to file briefs on exceptions before the Administrator issues a Final Record of Decision.

TC-20 Procedural Schedule

How this informed our thinking:

- Bonneville agrees with the comments to align the BP-20 and TC-20 RODs to the extent practicable, but notes that the schedules for each proceeding are unlikely to align perfectly because the TC-20 schedule includes the Hearing Officer's recommended decision.
- Bonneville expects the exact schedule to be discussed with parties at the prehearing conference.
- Bonneville proposes not to include briefs on exceptions to the Hearing Officer's recommendation, but seeks additional comment on this issue.

TC-20 Procedural Schedule

Bonneville's concerns with the request for briefs on exceptions to the Hearing Officer's recommendation:

- The TC-20 case already includes considerable process before the Hearing Officer's recommended decision: direct cases, rebuttal, discovery, cross examination, Initial Briefs, and oral argument.
 - By the Initial briefing and oral argument stages of the proceeding, Parties will have had sufficient notice and numerous opportunities to comment on all issues in the record before the Administrator issues a draft decision.
- Adding briefs on exceptions to the Hearing Officer's recommendation creates an unnecessary tradeoff between extra process and schedule alignment/efficiency.
 - In order to align the TC-20 and BP-20 RODs, the TC-20 schedule could have even shorter periods between the stages of the case than under Bonneville's proposal. The impact may be greatest on the Hearing Officer.
 - May result in the issuance of a final TC-20 ROD after the BP-20 ROD.
 - Could introduce extraneous arguments that were not considered by the Hearing Officer in the recommended decision.

TC-20 Procedural Schedule

Bonneville's proposed schedule includes briefs on exceptions to the Administrator's draft ROD; it does not include additional briefing to the Hearing Officer's recommendation.

- Ensures that the Administrator's decision is either aligned with the Hearing Officer's recommendation or contains an adequate explanation of any differences from the recommendation based on the entire record, among other things.
- Allows the TC-20 and BP-20 RODs to be issued concurrently. Strikes a balance between adequate process and schedule alignment.
- Provides parties the opportunity to address any perceived deficiencies in the Hearing Officer's recommended decision while also ensuring notice and an opportunity to comment on the Administrator's draft decision, but Bonneville seeks additional comment on this issue.

TC-20 Procedural Schedule

Request for comment:

- Bonneville seeks comment on whether the TC-20 schedule should include an opportunity for briefs on exceptions after the Hearing Officer's recommended decision.
- Bonneville invites parties that support the addition of briefs on exceptions to comment on how additional briefing will satisfy the statutory directives in section 212.

Potential TC-20 Schedule under Bonneville's proposal

	Potential TC-20 Schedule	BP-20 Proposed Schedule
Federal Register Notice Published	November 8	November 8
Prehearing Conference/BPA Direct Case	November 15	November 15
Clarification of BPA's Direct Case	November 28	December 4-5
Parties File Direct Cases	January 17	January 29
Litigants File Rebuttal Cases	February 14	March 12
Cross-exam	March 4-5	April 8-9
Initial Briefs	March 21	April 30
Oral Argument	March 26	May 7
Hearing Officer's Recommended Decision	May 9	--
Draft ROD	June 11	June 11
Briefs on Exceptions	June 28	June 28
Final ROD	July 25	July 25

Alternative: Potential TC-20 Schedule with additional brief on exception

	Potential TC-20 Schedule	BP-20 Proposed Schedule
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Initial Briefs	March 21	April 30
Oral Argument	March 26	May 7
Hearing Officer’s Draft Recommended Decision	April 25	--
Brief on Exception	May 7 (Approx. 1.5 weeks to draft)	--
Hearing Officer’s Final Recommended Decision	May 17 (1 week to draft)	--
Draft ROD	June 11	June 11
Briefs on Exceptions	June 28	June 28
Final ROD	July 25	July 25

Losses

Losses Update

- Last presentation Oct. 17, 2017
- Timeline extended – competition for resources/other projects
- Project broken down into 3 pieces
 - Tariff
 - Methodology
 - Financial Rate Review
- Methodology – looking at granularity/accuracy, reservation and scheduling practices
- Financial – dependency on methodology will determine if financial losses need to be included in the next rate case
- Today's discussion is focused on the tariff change

Tariff Change for Losses Introduction

- Where does BPA identify loss obligations?
 - Tariff Sections 15.7 and 28.5
 - Schedule 9 (loss factors)
 - Real Power Loss Return Business Practice
- Losses will be vacated from Schedule 9 so that it may be used for Generation Imbalance Service (*pro forma* use)
- This has created an opportunity to determine where best to report loss factors.

Losses Industry Scan

- Researched Tariff Language, Loss Factors, and Return Methods
- Reviewed available information from 34 Transmission Providers
- Conducted an email survey of 42 WECC entities
- Findings
 - Most TPs are not *pro forma*
 - Many use their Business Practice
 - Most TPs update their loss factors annually
 - FERC has approved the use of Business Practices

Loss Factors

<p>1. What is the <i>pro forma</i>?</p>	<p>Loss Factors are described in Section 15.7 and Section 28.5.</p>
<p>2. What did we hear?</p>	<p>Customers want the ability to comment on changes to the loss factors.</p>
<p>3. What are we proposing?</p>	<p>BPA is proposing to move the Loss Factors from Schedule 9 to the Real Power Loss Return Business Practice (BP)</p>
<p>4. Which TC-20 tariff principles does it align to?</p>	<p><i>BPA's proposal aligns with the TC-20 principle</i> 4. Align with industry best practice when the FERC <i>pro forma</i> tariff is lagging behind industry best practice, including instances of BPA setting the industry best practice.</p>
<p>5. Why are we proposing this position?</p>	<ul style="list-style-type: none"> • BPA's industry scan revealed most TPs are not <i>pro forma</i> and many use a business practice to convey the loss factor. • The process for changing a business practice is transparent, includes customer input, and is scalable when needed. • The business practice is a single source of all details concerning transmission losses.
<p>6. What are the change impacts?</p>	<ul style="list-style-type: none"> • Schedule 9 will be vacated for use as Generation Imbalance Service. • The Real Power Loss Return BP will be updated to include what is currently in Schedule 9.
<p>7. Is there a rate case impact?</p>	<p>This change does not impact the rate case.</p>

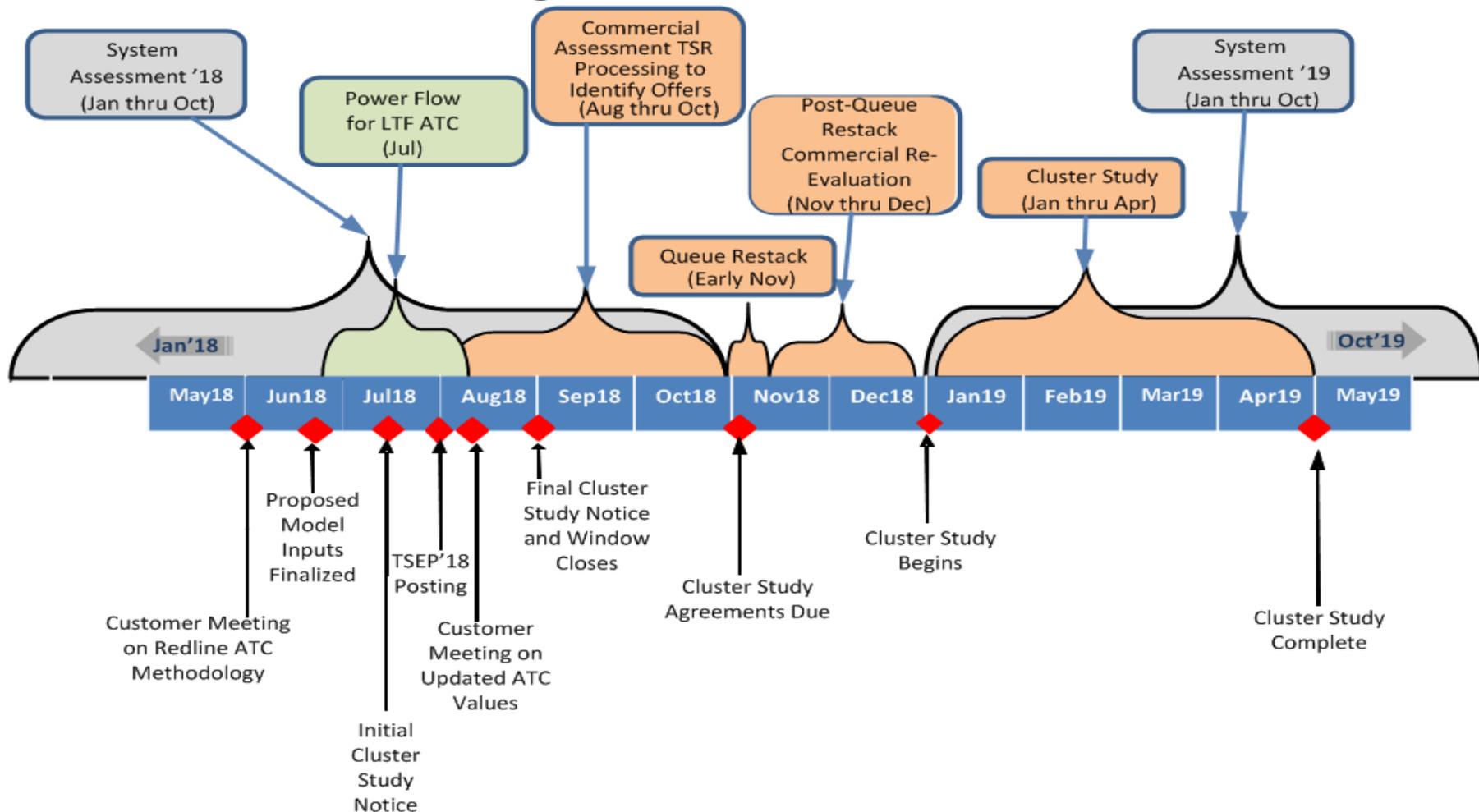


Commercial Assessment Update

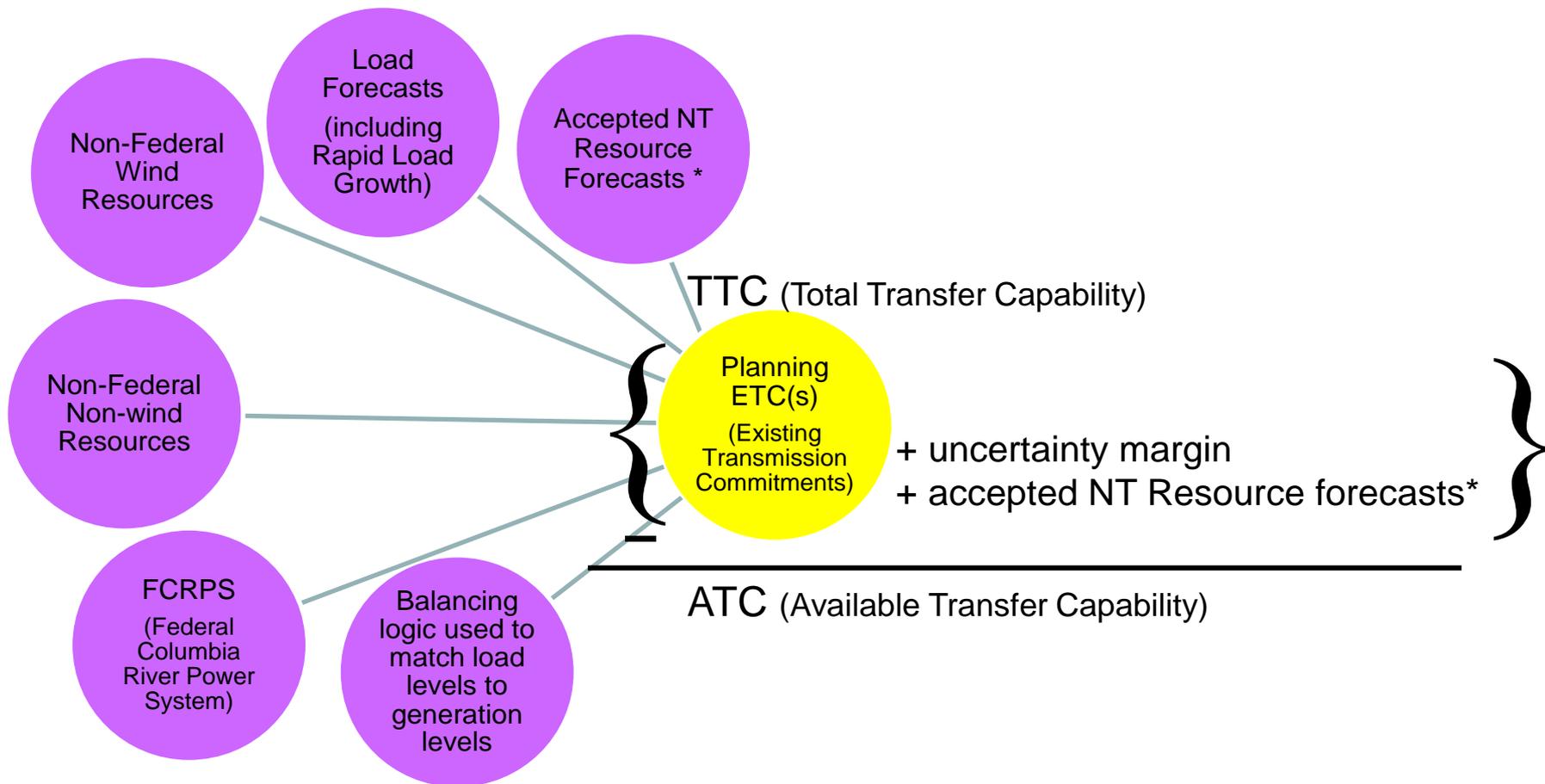
Agenda

- Share proposal for changes to inputs for long term ATC calculations, impacting Network Flowgates
- Open comment period to solicit your feedback

Transmission Integrated Planning Process Timeline



Inputs to Long Term ATC Calculations for Network Flowgates



Load Levels

- For those load forecasts BPA produces, 1-in-2 (average) non-coincidental peak (NCP) load forecasts are used in:
 - Reliability Planning studies;
 - Long-term and short-term ETC studies; and
 - Cluster Studies.
 - *Consistent with current ATC Methodology.*

Non-Federal Resources

- Wind will be modeled in long-term and short-term ATC Base Cases, as well as Cluster Studies, two ways:
 - Wind “off” replaced with balancing logic generation for wind delivered on PTP transmission, and replaced with FCRPS for wind serving NT load; and
 - Wind “on” at contract demand, capped by nameplate.
 - *Consistent with current ATC Methodology.*

- Non-wind will be modeled at contract demand, capped at lower of nameplate or historical peaks/seasonal capability.
 - *Consistent with current ATC Methodology; however, the data used to determine seasonal capability will be refreshed.*

FCRPS

- FCRPS will be modeled with three dispatches that separately stress the hydro system at the Upper Columbia projects, Lower Columbia projects, and Lower Snake projects.
 - Stress levels will be set at nameplate capacity reduced for forecasted FCRPS generator outages for all seasons and all stress cases except the Lower Snake project stress case in late summer.
 - Lower Snake projects in August will be modeled at the peak ten-year historical outflow with an adjustment to account for spill requirements being removed from the projects.
 - *Consistent with current ATC Methodology; however, the forecasted generator outage data will be refreshed.*

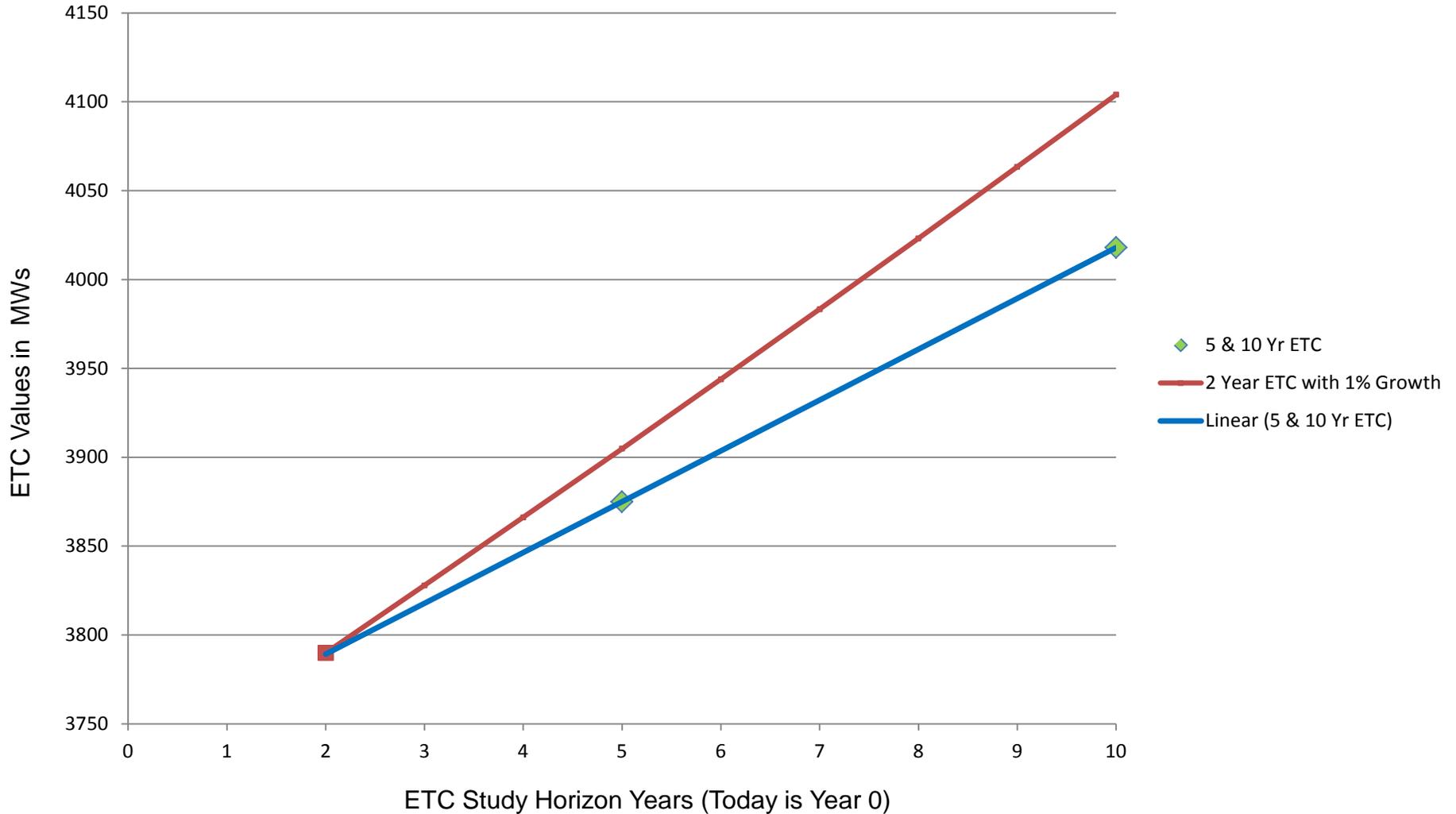
Balancing Logic

- A *pro rata* reduction of all resources, except the stressed FCRPS zone, will be used to achieve balance.
- *Consistent with current ATC Methodology.*

Load Growth

- BPA has been performing the long term ATC studies using a “2 year out” base case and applying a 1% growth factor to determine the 2-10 year ATC values.
- *BPA plans to eliminate the growth factor and instead perform 5 year and 10 year out ETC studies; then interpolate those values to better reflect load growth.*

Load Growth Example



Encumbering for NT Resource Forecasts

- BPA will attempt to model NT Resource forecasts along with NT forecasted load in the Planning ETC(s).
- If necessary, BPA plans to encumber capacity, via Power Transfer Distribution Factor (PTDF) calculations, for the highest impact on each flowgate for all accepted NT forecasts.

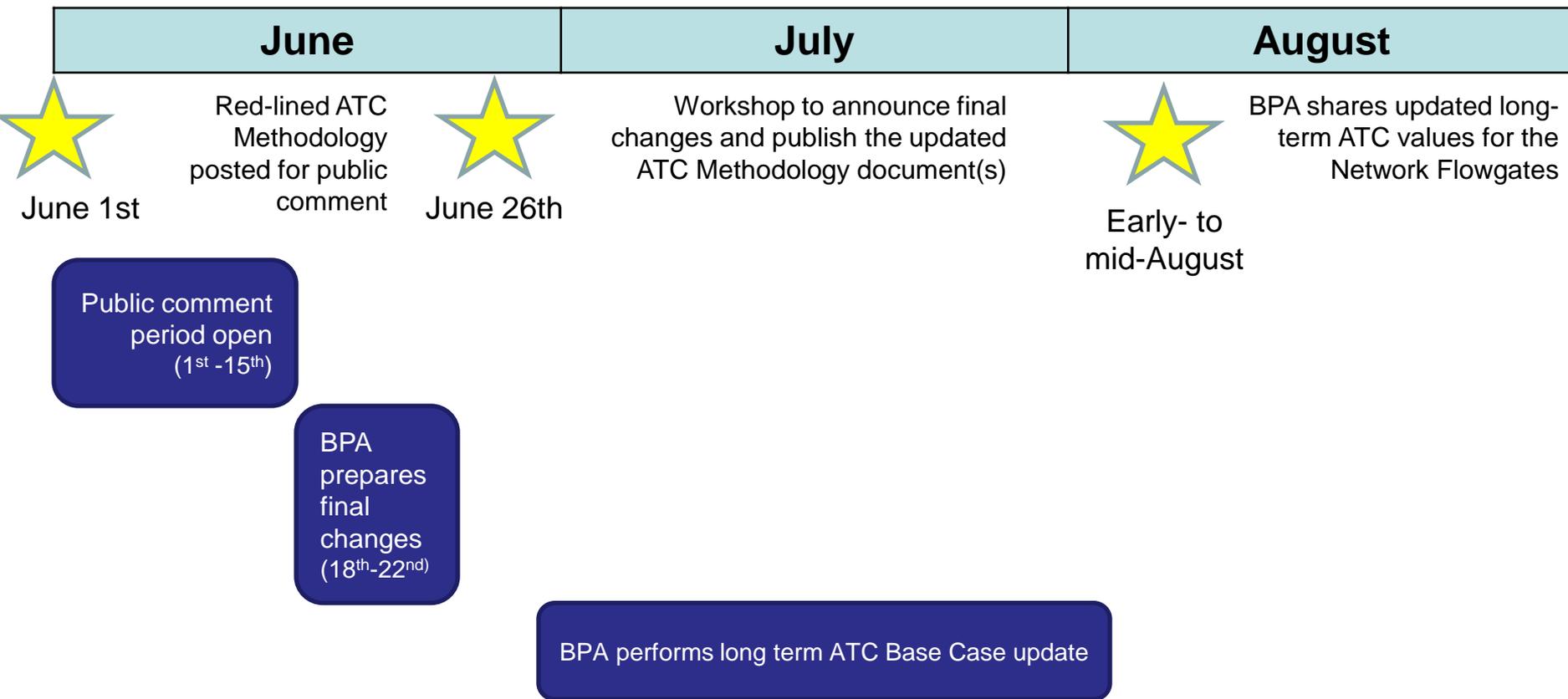
Existing Transmission Commitments (ETC) & Uncertainty Margin

- Several seasonal cases and/or scenarios will be produced for each Base Case, each of which will calculate an ETC for each flowgate.

$$ATC = TTC - ETC_{\text{Firm}} - \text{uncertainty margin}$$

- BPA will use the lowest ETC value across the seasonal cases and scenarios as the “ ETC_{Firm} ” and use the difference between highest and lowest ETC values across the seasonal cases and scenarios as an uncertainty margin.
- This margin is released to the short-term non-firm market four-months prior to operations.
- *Consistent with current ATC Methodology.*

Timeline for ATC Changes





Next Steps

Next Steps

- Comment period
 - Customers should submit comments by June 15, 2018 to the techforum@bpa.gov
 - TC-20 Procedural Schedule
 - Losses
 - Long Term ATC Methodology
- Future Tariff workshops, as discussed this morning, will help develop proposed tariff language.