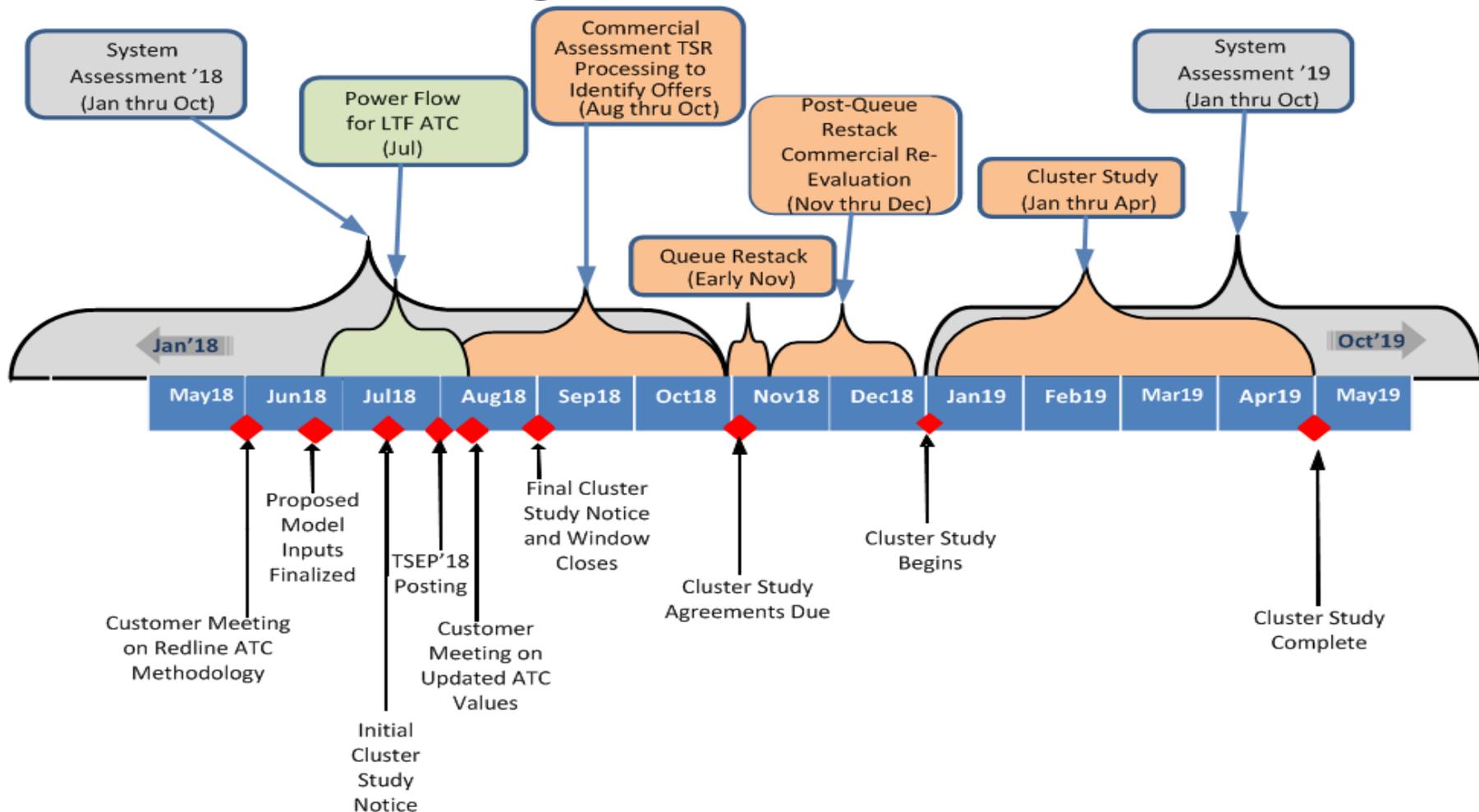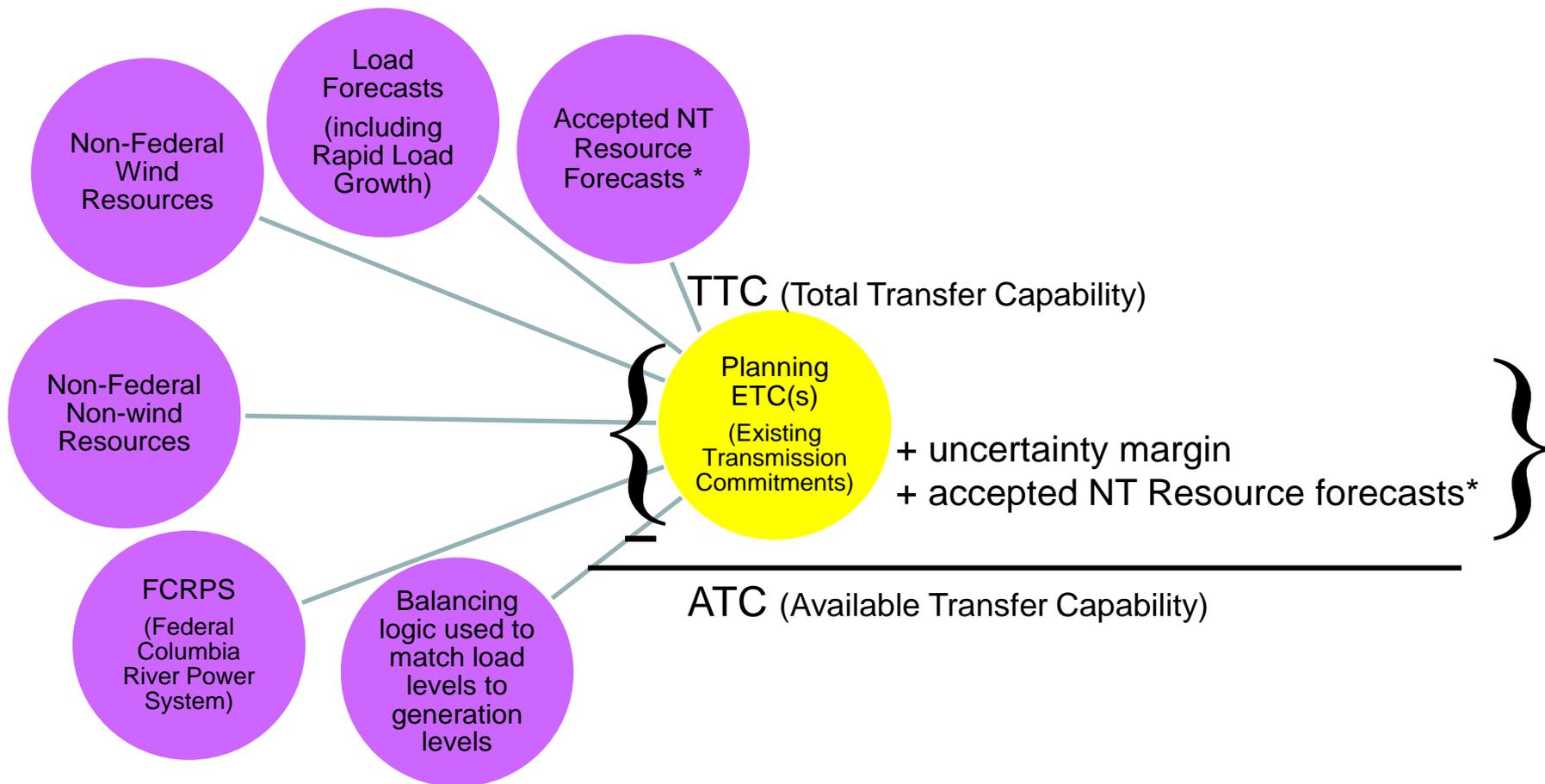# Commercial Assessment Update

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

Non-Federal Wind Resources

Load Forecasts (including Rapid Load Growth)

Accepted NT Resource Forecasts *

Non-Federal Non-wind Resources

FCRPS (Federal Columbia River Power System)

Balancing logic used to match load levels to generation levels

Planning ETC(s) (Existing Transmission Commitments)

TTC (Total Transfer Capability)

+ uncertainty margin
+ accepted NT Resource forecasts*

ATC (Available Transfer Capability)

31

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
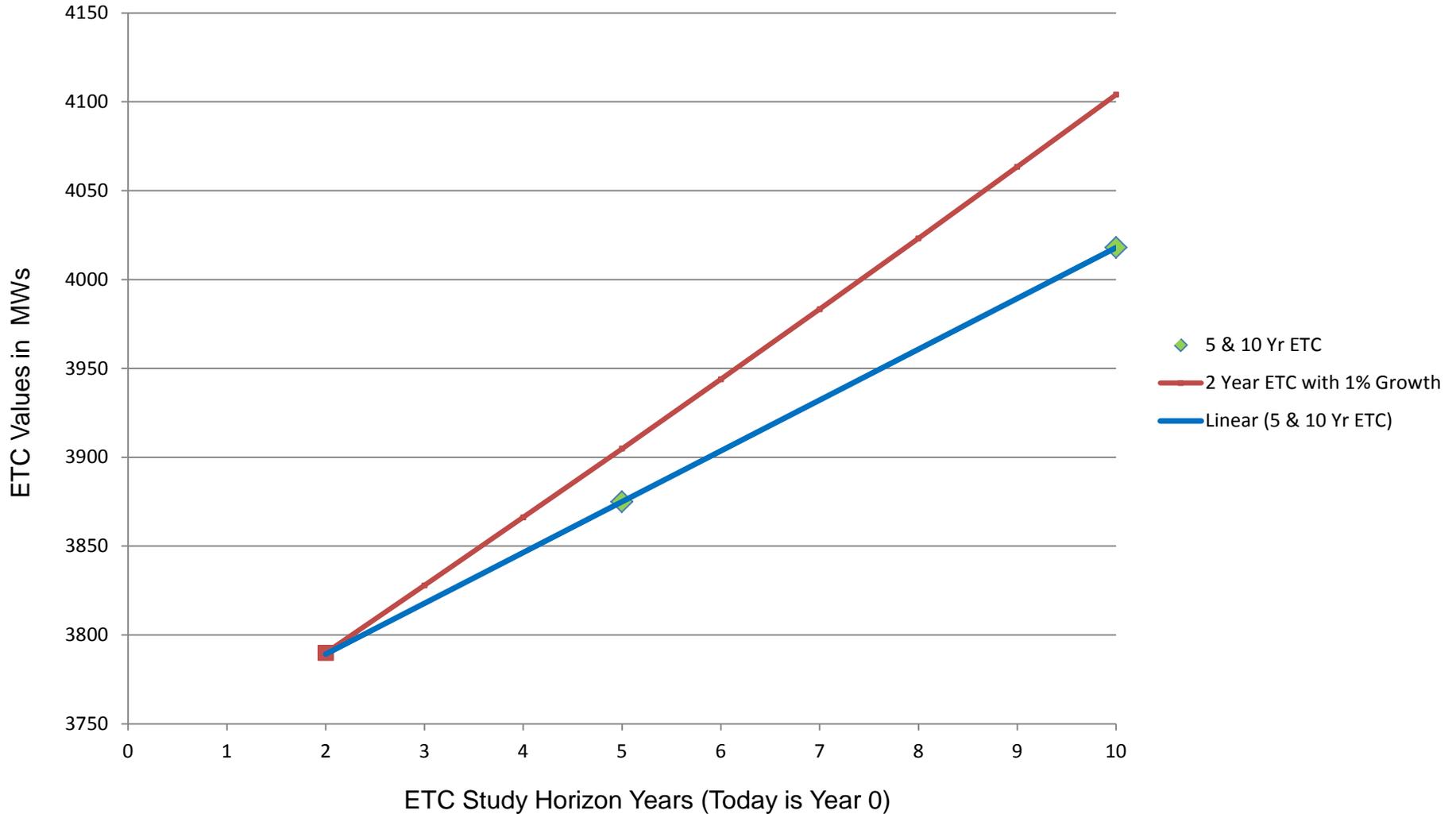
Encumbering for NT Resource Forecasts

- 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.

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

- 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 <u>non-firm</u> market four-months prior to operations.

- *Consistent with current ATC Methodology.*

Timeline for ATC Changes

June	July	August

Red-lined ATC Methodology posted for public comment

June 1st

June 26th

Workshop to announce final changes and publish the updated ATC Methodology document(s)

BPA shares updated long-term ATC values for the Network Flowgates

Early- to mid-August

Public comment period open (1st -15th)

BPA prepares final changes (18th-22nd)

BPA performs long term ATC Base Case update