Spectrum of BP16 Decisions

This document is meant to serve as a grounding exercise used to focus the group on specific issues and a range of possibilities. The intent is to use this document as the start of a customer-vetted comprehensive list that can be used to inform future workshop discussions. BPA staff attempted to provide a reasonable number of potential solutions under each issue, without taking into consideration popularity, a full understanding, or likelihood of adoption. Further, BPA has not identified the criteria or principles that these "potential solutions" should be measured against to determine how "potential" they really are. Consistent with the terms of the settlement, nothing in this document obligates Bonneville or anyone else to any specific outcome or decision.

Lastly, this document was crafted, in large part, given the construct available today. This was done for two reasons: 1) the workshops are focused on a range of possibilities for BP16, and 2) it is extremely challenging to draft potential solutions to today's identified and interdependent issues given a completely new and unknown construct. For example, the development of a resource sufficiency requirement and an Energy Imbalance Market in the PNW could change the issues and their potential solutions significantly.

*Status Quo

A: What are the Balancing Services offered in BPA's OATT?

1) How many service levels will BPA offer?
   a) One
   b) One + Supplemental Service
   c) Two + Supplemental Service*
   d) Three + Supplemental Service
2) What is the statically planned level of service for that, or those, service level(s)?
   a) Planned >99.7 percent
   b) Planned 99.7 percent
   c) Planned 99.5 percent*
   d) Planned 95 percent
   e) Reliability minimum based on other tools available when Station Control Error is larger than capacity held.
   f) Other
3) What self-supply options are available?
   a) Self-supply
   b) Self-supply + CSGI*
4) Will BPA attempt to purchase or provide additional capacity above the planned amount closer to the actual scheduling window?
   a) Yes
   b) No
   c) Depends on the service elected*
5) What happens when Station Control Error is larger than capacity held?

a) BA Reliability Tool (*e.g.*, DSO)*
~~b) Load shedding~~
~~c) Lean on Power Services~~
d) Use more ACE flexibility as allowed under RBC
e) Energy from an available market
f) Bi-lateral energy and/or ACE diversity between BAs
g) Energy from Power Services if Power Services determines it is available to support Loads and Full Service
h) Predefined combination of above
i) Forecasting/scheduling requirements during periods of volatility
j) Other

6) What scheduling options are available?
   a) Uncommitted*
   b) 40/60 Committed Scheduling (persistence or qualifying forecast)
   c) 30/60 Committed Scheduling (persistence or qualifying forecast)*
   d) 40/15 Committed Scheduling (persistence or qualifying forecast)*
   e) 30/30 Committed Scheduling (persistence or qualifying forecast)*
   f) 30/15 Committed Scheduling (persistence or qualifying forecast)*
   g) Other
7) How often can customers change their level of service or scheduling commitment?
   a) Rate Case*
   b) Annually with 90 day notice*
   c) Quarterly with 90 day notice*
   ~~d) Anytime~~
   e) Depends on the service, stranded costs, and rate making assumptions
   f) Other

B: If "yes" to A(4), when will BPA identify the amount of additional capacity needed to provide the OATT service?

1) Preschedule*
2) Daily
3) Real-time
4) A combination of preschedule and daily
5) A combination of preschedule, daily, and real-time

C: How will BPA source the capacity needed to provide the service?

1) FCRPS Sourced
   a) How will BPA determine how much Rate Case planned capacity is available from the FCRPS?
      i) Annual High probability availability based on BPA expert opinion ~ 900 MW *inc* and 1100 MW *dec**
         (1) What happens when BPA cannot operationally provide the Rate Case planned amount?

(a) Attempt to purchase an amount equal to MW amount no longer available from the FCRPS
(b) Use real-time reserve requirement tool to inform decision to purchase replacement capacity
(c) Use tools as identified in A(5)
(d) Dynamic a, b, and c*

ii) Seasonal high probability availability based on BPA expert opinion ~reductions in spring
(1) What happens when BPA cannot operationally provide the Rate Case planned amount?
(a) Attempt to purchase an amount equal to MW amount no longer available from the FCRPS
(b) Use real-time reserve requirement tool to inform decision to purchase replacement capacity
(c) Use tools as identified in A(5)
(d) Dynamic a, b, and c

iii) Near 100 percent availability based on BPA expert opinion and amount needed to support Load

b) How will BPA determine how much preschedule capacity is available from the FCRPS?
i) Power Services will not provide preschedule capacity.
ii) Power Services will not plan to make preschedule capacity available, but may offer if Power Services determines it is available.
~~iii) Power Services will always plan to make the high probability amount available up to preschedule and release it if not needed.~~

c) How will BPA determine how much sub-preschedule capacity is available from the FCRPS?
i) Power Services will not provide additional capacity sub-preschedule
ii) Power Services will not plan to make sub-preschedule capacity available, but may offer if Power Services determines it is available.
~~iii) Power Services will always plan to make the high probability amount available sub-preschedule and release it if not needed.~~

2) Non-Federal Sourced
a) Informed by B, at what intervals will BPA attempt to purchase Non-Federal capacity?
i) Long-term, Preschedule, and real-time if available
ii) Long-term and Preschedule*
iii) Quarterly, Monthly, and Daily

3) Energy without capacity
a) Forecast some reliance on energy based (with sufficient tools based on A(4))
b) No forecasted reliance on energy (with sufficient tools based on A(4))

D: How will BPA dispatch Federal and non-Federal capacity?

1) At BPA's discretion
2) Modified economic dispatch with non-Federal somewhere in the middle of the stack*
~~3) Dispatch non-Federal first~~

~~4) Dispatch non-Federal last~~

E: How will the costs of providing balancing services be allocated?

1) Capacity costs
   a) Capacity obligation of Load, VERs, and DERs.
      i) Rate Case ISD Calculation with diversity shared to all groups*
      ii) Hourly ISD Calculation with diversity shared to all groups
      iii) Load holds Rate Case undiversified need. Diversity benefit shared with VERs and DERs only
      iv) Other
   b) Rate design
      i) Dynamic tiered
      ii) Static tiered
      iii) Melded
   c) Planned FCRPS sourced capacity
      i) Embedded Unit Cost
         (1) Costs in numerator
            (a) Big 10 hydro resources without fish costs and secondary credit
            (b) Big 10 hydro resources with fish costs and secondary credit
            (c) Big 10 hydro resources with fish costs and no secondary credit
            (d) All PS costs and no secondary credit
            (e) All PS costs with secondary credit
         (2) MW in denominator
            (a) Big 10 120-hour average water
            (b) Big 10 120-hour critical water
            (c) Big 10 1-hour average water
            (d) Big 10 1-hour critical water
            (e) Big 10 other
            (f) All resources 120-hour for hydro at average water
            (g) All resources 120-hour for hydro at critical water
            (h) All resources 1-hour for hydro at average water
            (i) All resources 1-hour for hydro at critical water
            (j) All resources other for hydro
      ii) Risk Sharing
         (1) DDC/CRAC/PNRR share
         (2) None
         (3) True-up of identified expenses
      iii) Rate or cost adjustments to impacted customers if actual amount supplied from FCRPS is different than amount used to set rate
         (1) None
         (2) Rate Case defined fixed discount to FCRPS unit cost
         (3) Refund based on actuals

d) Short-term FCRPS sourced capacity
   i) Embedded unit cost
   ii) Higher of embedded unit cost or opportunity cost
e) Non-Federal sourced capacity
   i) Forecast cost
   ii) Formula
   iii) Forecast and formula

2) Energy costs (EI/GI)
   a) Mapped to capacity
   b) Weighted cost when capacity is used
   c) Highest incremental cost with cost difference returned to non-offenders
   d) Highest opportunity cost (CAL LMP or Mid-C) with no rebate to non-offenders

F: What penalties apply to BPA's balancing services?

1) None (if all wind on committed scheduling and automated)
2) Persistent Deviation revised
3) Persistent Deviation status quo
4) Other
5) Capacity acquisition cost under energy imbalance if LSE in BA has identified insufficient capacity resources under BPA business practice (applied if resource adequacy standards are determined through a Transmission Business Practice).

G: How will short-term FCRPS-sourced balancing capacity sales impact Slice and Non-Slice customers?

1. No impact to Slice customers
2. Slice Computer Application impact as well as revenue credit impact

H: Should the billing determinate for DERBS include a deadband and if so, how large?

1. No
2. 2 MW
3. 3 MW
4. Other