

Regional Dialogue Proposed Load Following Product Framework August 28, 2007

Issued on Aug. 27, 2007

For Regional Dialogue Discussion
Purposes Only -- Pre-decisional

Slide 1



Issues Addressed

Overall

- This presentation addresses an approach for the design of the Load Following product.

Background

- Connection to Regional Dialogue Policy and other BPA initiatives
- BPA and customer-developed objectives

Proposal

- Key elements
- Transition from “Full” to “Partial” service is feasible
- Treatment of different resource portfolios (all federal to mixed)
- Additional considerations

Not Addressed in this Packet

- BPA’s leaning regarding Resource Support Services (addressed at a future workshop)
- BPA’s leaning regarding a “bundled” Power and Transmission Product (separate document presented at the RD workshop planned on 9/13)



Connection to Regional Dialogue Policy and Other Initiatives

- The Policy describes the following points regarding the load-following product:
 - BPA intends to offer a single load-following product with terms and possible conditions, like additional required services and pricing treatments specified for customers' non-federal resources to ensure the operation or addition of those resources does not create costs that must be borne by other BPA customers.
 - In addition, customers taking the load-following contract will be able to choose, with notice given, among tier 2 rate alternatives, non-federal resources, or some predefined mix of the two for firm service above their individual Rate Period HWMs.
 - Finally, the load-following product will include terms so a customer will be able to add non-federal resources to its power supply portfolio over time to meet load above its HWM that is not already planned to be served by a take-or-pay Tier 2 obligation, allowing it to transition from having BPA provide power for its entire regional firm consumer load to having that load served by both BPA and non-federal resources.



Connection to Regional Dialogue Policy and Other Initiatives

- In the Regional Dialogue TRM, BPA will attempt to clarify cost causation so that, in general, customers pay for the services they take. BPA's goal is to separate costs of T2 from T1 and to minimize the amount of cross-subsidization. Rate design decisions may produce some exceptions to this principle.
- BPA is concerned about the growing system challenges in meeting its load serving obligations in light of increasing winter deficits, spring surpluses, and growing loads in the summer months.
- BPA has initiated new internal controls and governance structure to improve the efficiency of our key business processes and reduce the risk we face from unintended cost exposure. This initiative resulted from a combination of the customer-supported EPIP and BPA's compliance with OMB Circular A-123). The following changes, among others, have occurred as a result:
 - Standardization and simplification of contracts
 - Additional decision-making controls



Objectives to Guide Design of the Load Following Product

- A. Makes it feasible and practical for customers to develop their own resources to meet their load.
- B. Leaves operational control of customer-owned resources with customers, not BPA.
- C. Does not create material cross-subsidization among classes of BPA customers.
- D. Is reasonably simple to implement.
- E. Gives BPA and customers a reasonable amount of certainty and predictability about their rights and obligations in operating their systems.
- F. Ensures BPA and customers meet their commitments to provide planned firm energy and capacity.
- G. Facilitates, with appropriate notice to BPA, transition by a utility among the services offered under this product to accommodate changes in the utility's resource portfolio.
- H. Provides any needed resource services (as might be required for resources such as wind) on a comparable economic basis whether such resource is a tier 2 purchase, or utility developed.
-  I. Recognizes marketing and operational challenges inherent in the shape of the federal system.
-  J. Minimizes disputes between BPA and customers over non-federal resources.



Crosswalk Objectives to RD Interests and Agency Decision Factors

Agency Key Decision Factors	Regional Dialogue List of Interests	Objectives for Load Following Product Framework
Business/Finance	Lowest Tier 1 Costs and Tier 1 Rates	C, E, I
Business/Finance	Durability/Stability/Contract Enforceability	B, C, D, E, F, J
External Stakeholders	Customer/Regional Support and Equity	A, B, C, D, E, J
External Stakeholders BPA's People/Processes	Certainty of Obligations for All Parties	E, F, J
Business/Finance	Promote Infrastructure Development Consistent with the NW Power Act	A, G
External Stakeholders Environmental	Consistency with BPA Stewardship Obligations	
Legal	Consistency with BPA statutes	
Business/Finance BPA's People/Processes	Simplicity	A, D
External Stakeholders	Advance National Objectives	F



Proposed Framework

Key elements:

- BPA follows the customer's metered load (less metered and/or scheduled non-federal resources or contracted purchase amounts)—at this point this product is not designed to follow the load of a customer that operates its own control area
- One BPA power contract for load following service with differing levels of service from BPA (including "full service") depending on the resources a customer has
- Combinable with resource support service—which is a distinct and separate service that is additive to the basic load support service provided from this product
- Charges associated with resource support would be calculated on a comparable manner to the charges BPA includes for resources it plans to use to meet load at Tier 2 rates
- Resource shaping adjustment applicable to new resources added in a shape other than benchmark either as a separate charge or inherent in the energy/demand rates



Proposed Framework, continued...

At contract signing:

- Customers provide notice for how load above HWM will be met through at least 2016
- Choice between Tier 2 rate alternatives, non-federal resources (either specified or unspecified), or some predefined combination of the two (see the BPA Tier 2 framework for more detail)
- If customers choose to serve some or all of their load above HWM with non-federal resources, they must be firmed either by BPA or from other non-federal sources



Non-federal resource types: high-level definition

- The Load Following Product will be structured to accommodate the following non-federal resource types:
 - **Metered** – A resource located within a customer's service territory (i.e. behind the customer's meter) where actual generation amounts are applied to reduce a customer's load
 - **Scheduled** – Resource amounts applied to load in pre-established, scheduled amounts. Examples of this type of resource are 1) a purchase from a specific contract or 2) amounts based on the actual generation of a specific resource
 - **Dispatchable** – A resource with adjustable output as determined by the customer



Non-federal resource types: high-level definition, continued...

Metered Resource

- If metered resources produce less than established output limits per resource and per utility in total (*currently* 3 MW per resource, 6 MW total, based on nameplate rating), then no charges are required and their operation simply reduces load BPA must serve [the “de minimis” test].
- In the future different limits may apply for different resource types
- When metered resources exceed the de minimis output threshold, BPA would apply a resource support charge for the additional service of absorbing the output and to make BPA’s other customers whole.

Scheduled Resource

- Output from a dedicated *resource* applied to a customer’s load but outside a customer’s service territory will need to be scheduled for service to the customer’s load. The schedules will be designed to mimic actual metered output. Examples of these resources are: run-of-river hydro and renewable resources
- Output associated with unspecified resources or specific *contract* amounts will be provided in an hourly schedule.
 - These scheduled amounts will not be allowed to change within a year.
- Any changes outside of a year to exercise resource removal provisions or to meet new forecasted load above HWM will be subject to notice provisions.



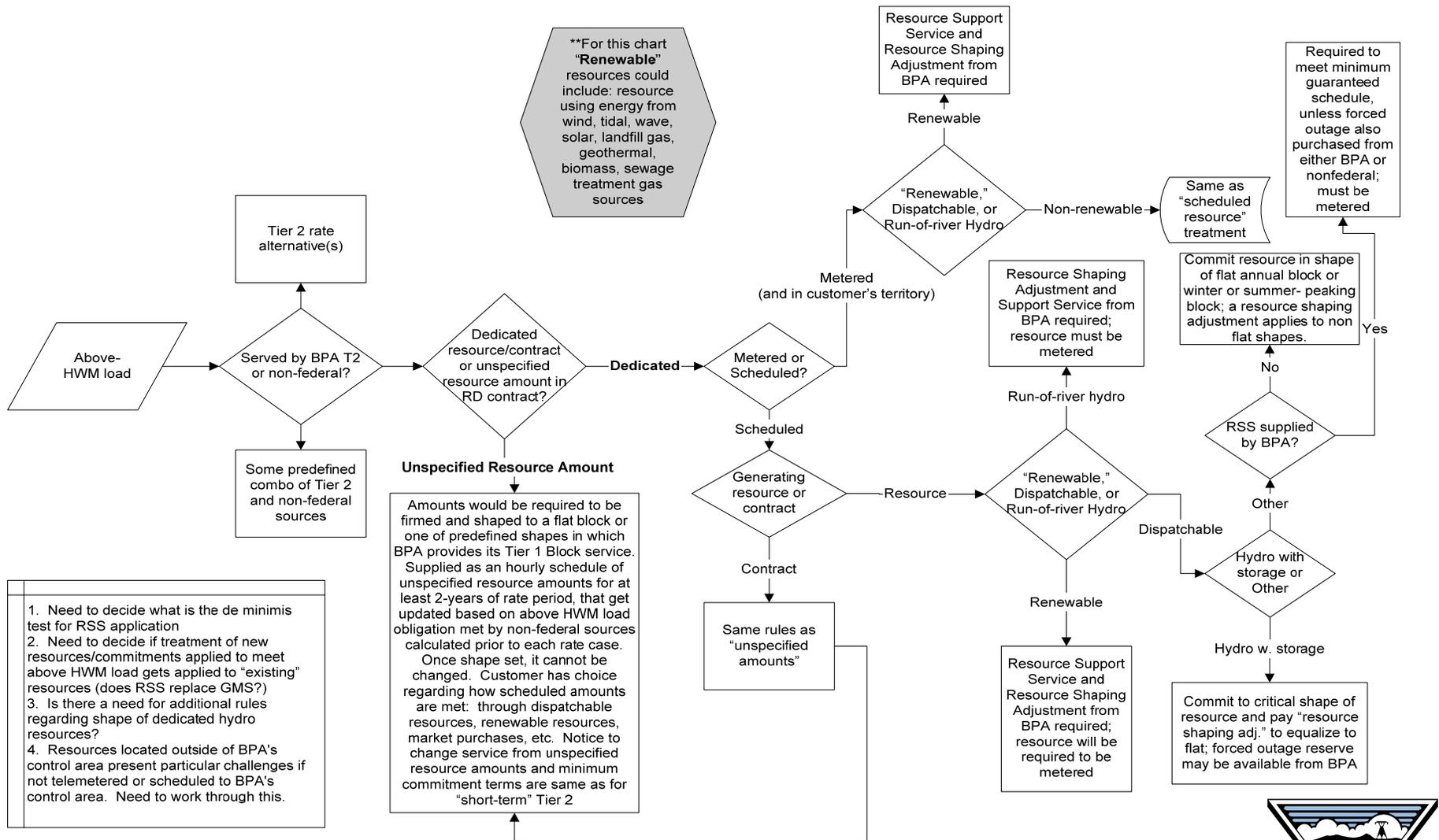
Non-federal resource types: high-level definition, continued...

Dispatchable Resource

- **Background:** Customers with dispatchable resources retain flexibility and control for how they operate their resources. This fact can affect BPA's load serving obligation in ways outside of BPA's planning horizon leading to operational uncertainties and increased risk to BPA's ability to meet its non-power obligations. These uncertainties and risks create a monetary impact on BPA's other customers. During Subscription BPA offered a service to offset these costs called "factoring."
- **BPA's RD Proposal:** BPA would require customers to commit hourly scheduled amounts of power to serve their load for at least the two years of a rate period. Beyond providing this scheduled hourly amount, customers could operate their resources as they desire—selling hourly excess power into the market and meeting hourly power deficits with market purchases or other non-federal sources.
 - Dispatchable hydro would be required to be committed in the critical diurnal shape of the resource
 - All other dispatchable resources would be required to be committed to in either a flat block, or one of the pre-defined winter or summer-peaking block shapes (see BPA's proposed Tier 1 Block framework for more information)
 - Once a shape is established, it cannot be changed except for loss of resource (if it is a dedicated resource)



Non-federal resource types: more detail



1. Need to decide what is the de minimis test for RSS application
2. Need to decide if treatment of new resources/commitments applied to meet above HWM load gets applied to "existing" resources (does RSS replace GMS?)
3. Is there a need for additional rules regarding shape of dedicated hydro resources?
4. Resources located outside of BPA's control area present particular challenges if not telemetered or scheduled to BPA's control area. Need to work through this.

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Proposal for Load Following customers with existing or adding new non-federal resources and market purchases

1. **Unspecified Resources (Firm Resource specified in MW amounts only).** In order to improve the system shape of BPA's summer or winter peaks and better align with customers' total retail loads, this type of resource may be added in the same allowable shapes that BPA offers its Block product (i.e., flat or winter-peaking with amounts in the Nov-Feb months 30% greater than in the other months for customers with a winter-peaking load and flat or summer-peaking with amounts in the Jun-Sept months 30% greater than in the other months for customers with a summer-peaking load). The amounts would be equal for all hours within the month.
 - A resource shaping adjustment would apply to a shape other than the benchmark (flat) shape, unless BPA adopts a rate design that obviates the need for it. These adjustments may result in a credit depending on BPA's determination of the value of the shape selected.
 - Once a customer commits to a shape, it must keep that shape for the minimum commitment term (which would be equal to the short-term Tier 2 commitment term of five years).
 - With three year's notice from the end of the commitment term (five years), the customer may replace its unspecified resource commitment with service at one of the available Tier 2 rates or with new unspecified resource amounts for a subsequent five year minimum or with specified resources.



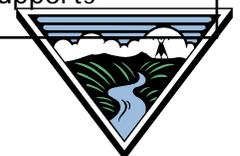
Proposal for Load Following customers with existing or adding new non-federal resources and market purchases, continued...

2. **Specified Resources (Identified actual generation or contract).** In general, shapes other than flat will be allowed, but would face a resource shaping adjustment (credit or charge) either as a separate rate or through our existing rates (with the equal scaling addition). Terms regarding shape apply for specified contract amounts, in addition to specified dispatchable resources. The resource shaping adjustments assume the resource is firmed by either BPA or the customer.
- BPA may explore offering a premium for HLH winter output, for example, and increasing the charge by some factor for spring output.
 - Alternatively, BPA could develop a benchmark that creates a minimum level in the winter and maximum amount in the spring that customers' non-federal resources must meet. If the resource doesn't meet the minimum in the winter then BPA would add a charge or if it surpasses the maximum in the spring, then BPA would discount the value of that amount above the threshold.



Matrix against objectives

Objective	Supports, Neutral, Does Not Support
A. Makes it feasible and practical for customers to develop their own resources to meet their load.	Supports
B. Leaves operational control of customer-owned resources with customers, not BPA.	Supports
C. Does not create material cross-subsidization among classes of BPA customers.	Supports
D. Is reasonably simple to implement.	Supports
E. Gives BPA and customers a reasonable amount of certainty and predictability about their rights and obligations in operating their systems.	Supports
F. Ensures BPA and customers meet their commitments to provide planned firm energy and capacity.	Supports
G. Facilitates, with appropriate notice to BPA, transition by a utility among the services offered under this product to accommodate changes in the utility's resource portfolio.	Supports
H. Provides any needed resource services (as might be required for resources such as wind) on a comparable economic basis whether such resource is a tier 2 purchase, or utility developed.	Supports
I. Recognizes marketing and operational challenges inherent in the shape of the federal system.	Supports
J. Minimizes disputes between BPA and customers over non-federal resources.	Supports



Additional Considerations

Unauthorized Increase Charge (UAI Charge)

- If a customer does not purchase a resource support service from BPA or from non-federal sources, and/or the customer does not follow through on its contractual commitments to resources and takes an amount of power from BPA in excess of what is contractually allowed, that amount will be subject to the penalty rates known as the UAI Charges for energy and demand.
- Current UAI charges are designed as penalty rates, and as conditions change, BPA will regularly reexamine how it calculates its UAI Charge so that no incentive exists to lean on the system. One particular changing condition is the advent of the new resource adequacy standards. These new requirements will likely lead BPA Power to reexamine its charges to the Transmission system for generation inputs provided for reliability purposes.



Additional Considerations, continued...

Targeted Adjustment Clause (TAC)

- The TAC applies to firm power requirements service to regional firm load that results in an unanticipated increase in BPA's projected loads within the rate period.
- The TAC will also apply to subsequent requests made by a customer under a Regional Dialogue contract for requirements service for such customer's load(s) that had been previously served by that customer's 5(b)(1)(A) or 5(b)(1)(B) resources but are discontinued pursuant to BPA's 5(b)9(c) policy.

Resource Removal Provisions

- BPA will revise the 5(b)9(c) Policy to reflect the limited resource removal rights described in the Regional Dialogue associated with new non-federal resource amounts applied to meet load above the HWM.
- Load following customers will not have the right to remove existing resources (customer resource amounts applied under the Subscription contract) within the rate period, because their purchases automatically adjust to changes in their load as noted in the Regional Dialogue.



Additional Considerations, continued...

Resource Support Services

- A future workshop will address some of the attributes this proposed add-on service could have.
- As an alternative to the TAC, a public utility customer may seek service on shorter notice or for a shorter term than required for the short-term Tier 2 alternative. This could be provided as a shorter-term surplus power purchase from BPA than this default option, but it would be at a market-based FPS rate, not PF rates. When requested, BPA would endeavor to provide it, but the availability of such power is not guaranteed and the price would be based on then-current market prices.
- An expansion of BPA's Service and Exchange arrangements will also be explored in the coming weeks.

Transfer Service

- This framework may need to be modified to take into consideration the particularities of serving customers through Transfer Agreements.

Bundled Power and Transmission Load Following Product for NT Customers

- BPA is exploring what form this might take, if offered.



Conclusion

- The next layer of details associated with this proposed product design will address the following:
 - Treatment of existing resources
 - Design/availability of RSS to resources that are “renewable” and not “renewable”
 - Service and exchange agreements
 - Bundled service
 - Transfer service
- This product’s structure is directly linked to the development of and decisions regarding resource support services, Tier 1 rate design, Tier 2 rate design, revisions to the 5(b)9(c) policy, and the design of both the Block and Slice/Block products. Should the nature of these related frameworks change significantly, this framework will need to be revisited.

