

# **BP-14 Generation Inputs Workshop**

**October 10, 2012**



## Issue

- In the FY 2014-2015 rate period BPA is looking at ways to encourage non-Federal generators to offer balancing services which can be deployed by BPA when providing Energy and Generator Imbalance.
  - “Deploy” in this context means BPA has contractually acquired the right to increase the output of a non-Federal resource during an hour.
- The current energy settlement method under Generation and Energy Imbalance, which is based on an hourly market index, does not necessarily represent the incremental cost of deployment of non-Federal generation.
- BPA needs to develop a method to collect deployment costs for non-Federal generators that exceed market prices reflected in an hourly market index.
- Payment of deployment costs in excess of the hourly market index incentivizes the provision of non-Federal generation to support balancing service.



## Objective

- Objective for proposing this change
  - Promote a liquid capacity market that BPA and customers can access when necessary.
  - Encourage better scheduling practices through price signals.
  - Avoid overloaded capacity costs by fairly compensating generators for the energy taken.
  - Cost recovery. Compensation needs to be based on a pass-through of costs.



## Context

- In Order 890, the Federal Energy Regulatory Commission (FERC) set out three principles that charges for both energy and generator imbalance charges:
  - 1) the charges must be based on incremental cost or some multiple thereof;
  - 2) the charges must provide an incentive for accurate scheduling, such as by increasing the percentage of the adder above (and below) incremental cost as the deviations become larger; and
  - 3) the provisions must account for the special circumstances presented by intermittent generators and their limited ability to precisely forecast or control generation levels, such as waiving the more punitive adders associated with higher deviations.



## Context

- Traditionally BPA has supplied the reserves necessary to meet all Generation and Energy Imbalance needs from Federal resources. The energy accessed under these products has been settled at an hourly index.
- The hourly index is a reasonable estimate of the opportunity cost of hydro generation and meets the three principles set out by the FERC.
- But, Staff does not believe this method is an accurate representation of the energy costs associated with all thermal resources that can be used to provide balancing reserves.
- BPA is looking to regional non-Federal resources to improve BPA's ability, beyond the capability of Federal resources, to provide Energy and Generator Imbalance for loads and resources in the BPA Balancing Authority.



## Application of Energy Prices to Imbalance Energy Calculation

- Staff is proposing to change the determination of Incremental Cost to a weighted average hourly cost of energy deployed for imbalance. For Federal Columbia River Power System-provided services, the hourly market index rate will continue to be used as a proxy as it is today. For non-Federal generators, the hourly price would be the price for energy that is deployed.
- Incremental reserves description from the Ancillary and Control Area Service (ACS) rate schedule.
  - The proposed change in Incremental costs would apply to situations of Energy Imbalance negative deviation (“actual energy delivered is less than scheduled) and Generation Imbalance positive deviation (“actual generation is less than scheduled”).
- Decremental reserves description from the ACS rate schedule.
  - Incremental costs would remain at an hourly market index price in situations of Energy Imbalance positive deviation (“actual energy delivered is more than scheduled) and Generation Imbalance negative deviation (“actual generation is greater than scheduled”).



## Application

- BPA would pay the generator that agrees to provide imbalance energy based on the contract price for energy deployed, and then BPA would charge customers based on the weighted average hourly cost of non-Federal energy deployed and Federal energy deployed.
- BPA would deploy Federal and non-Federal resources to provide imbalance energy service based on cost and reliability considerations.
- The dispatch order will be established as part of the Enhanced Supplemental Service development process.



## Application

- Cost Recovery, BPA is revenue neutral.
- Customers likely to prefer a weighted average cost approach over paying based on the last 10 MW deployed. (FERC pro forma method)
- Provides cost transparency to end-user, promotes more accurate scheduling practices than existing price but less incentive than pro-forma.
- Provides incentive for non-Federal generators to participate in market by ensuring they are adequately compensated for the capacity and energy provided.
- Once system is developed the settlement process should be relatively straight forward.
- May serve to minimize capacity costs by ensuring energy payments cover all costs of energy deployed.





## Uncommitted Scheduling

- Close out discussion on uncommitted scheduling for Variable Energy Resource Balancing Service

