

# Network Integration Transmission Service

June 20, 2012



# Agenda

- NT Redispatch
  - Background
  - Considered Approaches
  - Customer Input
  - Next Steps
- NT Planning
  - Background
  - Considered Approach
  - Next Steps

# Network Integration Transmission (NT) Service - Redispatch

## Tariff Guidance on NT Redispatch

- Section 30.5 of BPA’s Tariff states –
  - “Except as provided in Attachment M, as a condition to receiving Network Integration Transmission Service, the Network Customer agrees to redispatch its Network Resources as requested by the Transmission Provider pursuant to Section 33.2”
  
- Section 33.2 of BPA’s Tariff states –
  - “Except as provided in Attachment M, to the extent the Transmission Provider determines that the reliability of the Transmission System can be maintained by redispatching resources, the Transmission Provider will initiate procedures pursuant to the Network Operating Agreement to redispatch all Network Resources and the Transmission Provider’s own resources on a least-cost basis without regard to the ownership of such resources.”

## Attachment M Redispatch

- BPA has relied on Attachment M to redispatch only the Federal hydro system (the FCRPS) to provide NT Redispatch.
- Attachment M provides for three types of redispatch:
  - *Discretionary*: requested prior to curtailment of any firm or non-firm PTP schedules or secondary NT schedules to avoid or ameliorate curtailments.
  - *NT Firm*: requested for purpose of maintaining Firm NT transmission schedules, after curtailing non-firm PTP and secondary NT schedules consistent with NERC curtailment priority. Redispatch is provided from the FCRPS to the extent it can be done without violating non-power constraints. Non-federal resources are not currently redispatched.
  - *Emergency*: requested upon declaration of a “system emergency” as defined by NERC.

## Additional NT Redispatch Options

- BPA agrees in principle that processes, systems and business practices to implement least cost redispatch from all federal and non-Federal Network Resources with the potential to resolve the transmission constraint is desirable.
- Reduction in FCRPS flexibility.
  - Due to non-power constraints placed on the FCRPS for flood control, fish and wildlife, navigation, recreation, and other special operations, the ability to move/adjust federal generation has become more limited since the inception of Attachment M in 2001.
  - Balancing Authority Area (BAA) requirements such as additional balancing reserves for variable generation have further reduced FCRPS flexibility.
- Additional resources for NT Redispatch are needed to maintain reliable service to Network Loads during transmission congestion.

# NT Redispatch Alternatives Summary

- Today NT Redispatch is provided solely from the FCRPS under Attachment M.
- BPA is currently considering the following alternatives to the status quo for providing NT Redispatch:
  - Alternative 1 – All viable NT Designated Network Resources would be subject to providing NT Redispatch, if available, to maintain Firm NT transmission schedules during transmission congestion events on internal flowgates.
  - Alternative 2 – The FCRPS, under Attachment M, and bilateral market arrangements for Incs and Decs would be available for providing NT Redispatch, to maintain Firm NT transmission schedules, during transmission congestion events on internal flowgates.

# Alternative 1 – Redispatch All Viable Designated Network Resources

- *Description* – All viable NT designated Network Resources would be subject to providing NT Redispatch, if available, to maintain Firm NT transmission schedules during congestion events.
  - During a congestion event, BPA would request the redispatch of viable (Federal and non-Federal) designated Network Resources to preserve Firm NT transmission schedules, if necessary.
  - The redispatch of designated Network Resources would be on a least cost, non-discriminatory basis for resources effective in relieving the flowgate transmission constraint.
  - Currently, NT Customers have approximately 3000 MW of non-Federal designated Network Resources. Not all of this 3000 MW of resources would be considered viable for NT Redispatch.

# Alternative 1- Redispatch All Viable Designated Network Resources

## ■ Pros

- Would provide a greater pool of resources to manage NT Redispatch.
- Would provide greater likelihood of being able to provide NT Redispatch to maintain Firm NT load service during flowgate transmission congestion events.
- Could be staged to add most effective resources first.

## ■ Cons

- Would require development of new processes, procedures, criteria for Redispatch and communication systems to implement NT Redispatch.
- Would place additional administrative responsibilities on NT customers.

## Alternative 2- Redispatch FCRPS & Bilateral Market Agreements

- *Description:* During a congestion event, in order to maintain Firm NT transmission schedules, the FCRPS and strategically placed resources would be available for NT Redispatch.
  - BPA would enter into bilateral agreements with generation located across commonly constrained flowgates in order to make the generation available for NT Redispatch during curtailment events.
  - The combination of the FCRPS and market purchases would enhance BPA's ability to ensure sufficient NT Redispatch capability to maintain Firm NT service during congestion events.

# Alternative 2- Redispatch FCRPS & Bilateral Market Agreements

## ■ Pros

- Would provide access to a greater number of resources available for NT Redispatch to maintain Firm NT transmission service during congestion events.
- Would be able to target strategic resources that provide a significant level of relief across flowgates. This may be less administratively burdensome than redispatching many smaller non-Federal designated Network Resources.
- Implementation would be potentially less complex than Alternative 1.

## ■ Cons

- Likely greater cost exposure due to pre-arranged, bilateral agreements with generators for standing ready to provide NT Redispatch.
- Resources for bilateral agreements may not be available on all flowgates.
- Would require development of new processes, procedures, and systems to communicate the need for NT Redispatch.

## Discussion – Customer Input

- BPA is seeking input on a number of issues related to NT Redispatch.
- Alternative 1:
  - What criteria should be used to determine non-Federal designated Network Resources to be included in NT Redispatch, i.e., size, dispatchability, effectiveness in relieving flowgate constraint?
  - How would a phased approach be designed i.e., largest resources first, most effective resources first, resources in the BAA first?
  - How and when should bid prices and quantities be communicated by NT customers to BPA Transmission, i.e., month-ahead, day-ahead, real-time, through a web-based tool?
  - What is the most efficient means of communicating redispatch requests to NT customers, i.e., a web-based program, telemetry?

## Discussion – Customer Input (cont.)

- BPA is seeking input on a number of issues related to NT Redispatch
- Alternative 2:
  - What should cost threshold be for capacity payments under bilateral agreements?
  - What action should be taken if some flowgate constraints can't be relieved through bilateral agreements?
- Should Alternative 2 be implemented as an interim measure while issues related to Alternative 1 continue to be explored?
- Which Alternative would customers support at this point and why?

# Next Steps

- Gen Inputs Workshop on June 27.
- BPA will continue scoping Alternatives with customers, including
  - Criteria to determine which designated Network Resources would be redispached
  - System requirements
  - Bid protocols
  - Cost thresholds
- BPA will continue working internally on:
  - Analysis of financial impacts
  - System requirements
  - Informational requirements
- If issues on the BPA system increase the need for NT Redispach more rapidly than anticipated, BPA will work with customers to accelerate the project.

# NT Service - Planning

# NT Planning - Background

## ■ Background

- Under section 28.2 of its Tariff, BPA has an obligation to plan the transmission system to serve the NT Customer Network Loads.
- NT Service allows NT Customers to integrate and dispatch a portfolio of resources to serve their Network Load.
  - NT Customers must designate Network Resource (Federal and non-Federal) to serve Network Load on Firm transmission service.

## NT Planning - Background

- Historically, NT Customers have relied heavily on the FCRPS to serve Network Load.
- However, with the advent of Regional Dialogue, renewable requirements, etc., NT Customers have an incentive to integrate non-Federal resources to serve Network Load.
- In order to permit BPA to plan the transmission system to serve Network Loads, NT Customers are obligated to provide annual 10-year load and resource forecasts.

# NT Planning

- BPA is currently considering a process under which:
  - NT Customers may submit request to reserve capacity for forecasted resources through the submission of a Transmission Service Request (TSR).
  - The TSR for a forecasted resource will be evaluated in queue order, considering all previously queued requests.
  - If sufficient capacity is available to accommodate the forecasted resource, the TSR will be placed in CONFIRMED status.
  - If sufficient capacity is not available or if sub-grid constraints exist, the forecasted resource TSR will be placed in STUDY status and will remain in the transmission queue.
  - Prior to service commencement date, the NT Customer must submit a TSR to designate the forecasted resource and meet the Tariff attestation requirements.

# NT Planning – Next Steps

- Next Steps
  - General Customer meeting on NT Planning process seeking customer input – July 2012.
  - BPA decision on NT Planning Process.
  - Development of Business Practices outlining procedures under NT Planning process.
  - Implementation of process.