## **Background for Development of the Tiered Rates Methodology**

#### Phase 1

Purpose: develop common understanding of the current state of the system, including (a) operation of resources, (b) reliance on market transactions, (c) risk management, and (d) accounting systems.

Timing: complete by mid-February 2007

Tasks: half-day meetings (i.e., 2 meetings per day) on each of four subjects, to address the following questions (among others):

### I. Operations

- A. Generally, what are the factors that influence the operation of the system, how do those factors affect system operation and how does BPA manage the system to serve its customer loads?
- B. What types of operational decisions (actions) are made (taken) hourly, daily, at pre-schedule, in real-time, and on various planning bases (e.g., weekly, monthly, etc.)? These could include "spill", "store", "generate", etc.
- C. What <u>flexibility</u> is there to meet unexpected load fluctuations from existing resources? How is that flexibility best defined, in order to incorporate it into product definitions and rate design?
- D. What <u>limits</u> are there on the ability of existing resources to meet variations in loads? How are those limits best defined, in order to incorporate them into product definitions and rate design?
- E. Are there any specific times of the day, week, month, year that present a larger challenge to manage than others? Are there any specific system conditions that present a larger challenge to manage than others? Why, and how does BPA respond?
- F. How are Block and Load Following types of obligations built into hydro operations, including the various planning horizons?
- G. How do transmission requirements interact with power operations? For example, how much impact do redispatch or other transmission requests have on power operations and in what time frame(s)?

#### II. Reliance on markets

- A. What types of transactions does the trading floor engage in on a regular basis (duration, physical trades, financial trades, quantities, etc.)? Why does the trading floor engage in these types of transactions? Which "markets" does BPA engage in (e.g., spot market purchases and sales at Mid-C, energy exchanges, options to put/call energy)?
- B. How do these transactions vary over time? For example, is it more likely that BPA is engaged in selling or buying at specific times of the day, month, or year?
- C. Are there conditions under which BPA is able to meet all of its load obligations without any reliance on any markets? If so, what are those conditions? How often do they occur? How predictable are they? About how much of BPA's obligation to serve can be met without reliance on markets (%)?
- D. If a spot power market did not exist at all, would BPA be able to meet its current contractual obligations to serve in a reliable manner (setting aside the cost of actually doing so) under all conditions? Under only some conditions? If so, which conditions?

# III. Risk management

- A. For each type of market exposure identified in section II, what options are currently available to manage or mitigate the risk of price fluctuations? Without revealing hedging strategies, how does BPA use hedges to mitigate risk?
- B. Which entity (or entities) is best positioned to manage each type of risk?
- C. How does BPA currently identify and manage market and supply risks? Which risk management tools does BPA currently use?
- D. Could BPA offer to provide risk management services on a more unbundled basis than it does today (i.e., via something other than PNRR)?
- E. Which power products under consideration for post-2011 (e.g., Slice, Block, Load Following) are associated with which risks?

Background for Development of the Tiered Rates Methodology January 2007

## IV. Accounting systems

- A. Is BPA's revenue and accounting systems set up to handle different product costs and risks?
- B. What changes are necessary in order for these systems to track costs and risks by product type post-2011 (i.e., separating Tier 1 from Tier 2 and separating different Tier 2 products from each other)?
- C. What is the "work stream" necessary to accomplish a sufficient level of tracking by 10/1/2011?

# **Later Phases**

Purpose: identify those unbundled services that BPA can and cannot provide without reliance on the market to support the existing system; identify methods to manage the risk of exposure to market conditions; outline contractual provisions to address such risk management needs.

Purpose: define services that must be unbundled and priced in a tiered rates world; tie the provision of those services to either embedded cost or market-based prices (or perhaps some combination of the two); complete outline of contractual provisions to address all such differences among products.