# **Determining Net Requirements**

In December 1998 the Bonneville Power Administration released its Federal Power Subscription Strategy. Subscription is a process that will enable the people of the Pacific Northwest to share the benefits of the Federal Columbia River Power System after 2001 while retaining those benefits within the region for future generations. The primary means of distributing the benefits of the FCRPS is through the sale of federal power at cost to eligible Pacific Northwest customers. This discussion paper presents, in general terms, BPA's draft proposal for determining how much federal power an eligible customer is entitled to purchase. This discussion is intended for a general audience. For a detailed legal and technical discussion of this issue refer to, "Process for Addressing Northwest Power Act Section 5(b) and Section 9(c) Issues Under Subscription."

## Net requirements

Before determining how much power a customer is entitled to purchase, BPA must first consider whether an applicant is eligible to purchase federal power as defined by the Bonneville Project Act of 1937. Eligibility will be determined by assessing a customer's ability to meet BPA's standards for service. For more information on the issue of eligibility and standards for service, see the BPA discussion paper, "Eligibility and Standards for Service to Purchase Federal Power."

The term "net requirement" means the amount of federal power that a public utility, cooperative or investor-owned utility is entitled to purchase from BPA to serve its consumer's load. The definition is based on section 5(b)(1) of the Northwest Power Act of 1980 under which BPA offers to sell power in excess of a customer's own firm resources. In calculating net requirements, Congress also directed BPA to consider exports of nonfederal resources outside the Pacific Northwest. These considerations are based on section 9(c) of the Northwest Power Act as well as section 3(d) of the Regional Preference Act of 1964.

The method of calculating net requirements is an important issue because it determines the amount of federal power an eligible customer can receive. Section 5(b)(1) of the Northwest Power Act says that a BPA customer is entitled to purchase an amount of cost-based federal power needed to meet its net requirement. A customer's net requirement is equal to the difference between its consumer firm loads and the amount of nonfederal generation and power obtained through contracts that the customer uses to serve those loads.

BPA first implemented the net requirements mandate of the Northwest Power Act through mechanisms in its 1981 contracts including the Firm Resource Exhibit (FRE), the Assured Capability Exhibit and other contract provisions. A FRE is a list of firm resources to be used by the customer in serving its load. A firm resource is one that can contribute a specific amount of electricity for operational and power planning purposes to serve a customer's loads. All of the contracts negotiated in 1981 will terminate by October 2001 and must be replaced. The wholesale electricity market has undergone major changes since 1981. As a result, this is only

the second time, since the Northwest Power Act became law, that BPA has addressed the issue of how net requirements should be determined.

# Net requirements in a changing market

Deregulation has changed the playing field of the wholesale electricity marketplace causing BPA and other utilities to change the way they do business. The following provides a general overview of some of these changes and how they may affect the determination of net requirements.

#### The market as a firm resource

In 1981 relatively few BPA customers owned generating resources that were used to serve a portion of their load. The operation of most of these resources was managed regionally through the Pacific Northwest Coordination Agreement as if all of the region's federal and nonfederal generating resources were operated by a single utility. The region's utilities knew who owned what resources and what loads they served. Increasingly, BPA's utility customers are relying on power purchases to serve their firm consumer loads. Others have developed new generation resources which they have chosen not to apply to load and do not specify in their Firm Resource Exhibit in their current BPA power sales contract. Investor-owned utilities have not taken load service from BPA and have operated in this manner under the 1981 contracts. In 1996, BPA offered a number of contract amendments to its public utility customers allowing them to reduce their purchases from BPA and serve a portion of their load from the wholesale marketplace. This means that BPA, working with customers and other regional constituents, needs to re-assess how the marketplace should be factored into the calculation of net requirements.

## Separation of utilities' transmission and power sales business lines

Passage of the Energy Policy Act of 1992 resulted in deregulation of the wholesale electricity market through orders 888 and 889 issued by the Federal Energy Regulatory Commission. Among the requirements of FERC order 889 is that investor-owned utilities functionally separate their transmission and power marketing business lines so that a utility's power marketing business has access to no more information about its transmission system than any other participant in the market. The intent of functional separation is to encourage full competition in the wholesale electricity market by providing all marketers equal access to the means of delivery. BPA chose to voluntarily comply with the FERC orders. Historically, one of the ways BPA identified an export of nonfederal resources in determining a customers' power requirements under its BPA contracts was by examining transmission schedules of nonfederal utilities to other utilities outside the Northwest. Under FERC order 889, BPA's Power Business Line no longer has access to this information.

#### Retail load loss for BPA customers

Changes are occurring in the retail electricity industry as well as in the wholesale market. In most states each utility had a service area in which it was the exclusive supplier of electric service to consumers. BPA sold its power to these utilities on a wholesale basis and they resold the electricity to their retail consumers. Under state law retail deregulation, the utility continues

to operate the distribution system but other marketers may compete to supply the electricity to residential, commercial and industrial consumers raising the risk of retail load loss for some BPA customers. As more states deregulate their retail electricity markets, the effect of retail load loss on net requirements may become increasingly important. Of particular concern, is how the loss of industrial and commercial load by a BPA customer could change BPA's obligation to provide net requirement load service. The Northwest Power Act does not distinguish between the various types of loads in determining net requirements. Loss of load service by the utility to another provider may affect the total amount of power a customer could continue to buy from BPA.

## Effects of sales of generating resources and other assets on net requirements

As a result of deregulation, some utilities have sold or are likely to sell generating resources on the market which have historically been dedicated and used to serve Northwest retail consumer load. The buyers of these resources will likely sell their output for the highest price they can receive, either inside or outside of the region.

By law, BPA is required to make factual determinations regarding the sale of certain resources and its effect on BPA's service obligations to all customers and BPA's cost-based rates. Section 9(c) of the Northwest Power Act and section 3(d) of the Regional Preference Act require that BPA reduce the amount of power a utility receives under its BPA contracts based on findings regarding its exports out of the region. Complying with this legal mandate in a competitive market is much more complex than when the wholesale market was regulated and there were comparatively few customers with nonfederal generating resources.

Other utilities have decided to sell portions of their electricity generation and distribution businesses in certain parts of the region. In certain instances, new public power entities are forming and proposing to take over the business formerly provided by investor-owned utilities. Section 5(b)(1) directs BPA to sell power to meet the firm power loads of a utility customer in the Pacific Northwest. BPA must address how changes will be made to the amounts of power BPA sells a customer when that customer no longer serves a particular regional load or serves new loads.

## Questions for net requirements

As a result of these changes, BPA is proposing a conceptual approach to determining net requirements. This approach is intended to answer the following questions:

- 1. In negotiating a power sales subscription contract, how should BPA determine a customer's net requirement based on treatment of the customer's firm resources and loads?
- 2. How will changes in a customer's net requirement be made during the term of its subscription contract?
- 3. How will BPA determine, as required by section 9(c) of the Northwest Power Act and section 3(d) of the Regional Preference Act, the effect of a customer's export of resources on BPA's power contracts obligation to supply power to the customer?

4. What processes need to be implemented to make the factual determinations needed to answer the first three questions?

# BPA's conceptual approach

Here, in broad outline, is BPA's draft proposal:

- A) Continue to administer section 5(b)(1)(A) of the Northwest Power Act today as in the past. This says that a customer cannot purchase federal power to serve firm load within the region that was served by firm resources that existed in the year prior to Dec. 5, 1980.
- B) At a minimum, all resources governed by section 5(b)(1)(B) of the Northwest Power Act that a customer declared in its 1998-1999 Firm Resource Exhibit or equivalent exhibit in 1996 contracts, will be deducted from its net requirement. Customers must also deduct any existing long-term surplus power purchases from BPA. A customer may elect to declare additional resources to further reduce its take of federal power.
- C) Any resource existing on the date the subscription strategy was published that has been used to serve regional firm load at some time during its life will be treated as exported from the region. This will reduce the customer's net requirement unless the customer can demonstrate one or more of the following:
  - 1) The resource fits within the definition of a "market resource" as described in section III. D. 2. of Appendix B of BPA's nonfederal participation in the Pacific Northwest-Pacific Southwest Intertie Section 9(c) Policy;
  - 2) The resource is currently serving regional load under the customer's or another customer's subscription contract; or
  - 3) The administrator had previously determined that export of the resource did not increase BPA's firm energy requirements.
  - 4) The administrator determines a thermal resource could not be conserved or otherwise retained for service to regional load since:
    - The resource was offered for sale in the region to BPA and all of its regional customers for a period of at least one year through a public process at cost plus a reasonable rate of return and there were no purchasers;
    - ii) The resource is permanently auctioned through a public process and was not purchased by a regional purchaser;
    - iii) The administrator determines that the market price for power makes it unreasonable to retain that resource to serve regional load.
- D) A customer can increase its net requirement during the term of its subscription contract with BPA if it loses the output of a resource or contract because of obsolescence, retirement, loss

of contract rights or catastrophic loss. New loads created as a result of such events can be placed on BPA after six months notice.

### Renewable resources

A major goal of BPA's subscription strategy is to provide market incentives for the development of conservation and renewable resources. Accordingly, BPA is proposing the following:

- Up to 200 average megawatts of renewable resources developed or purchased by BPA customers may be used to reduce a customer's take-or-pay obligation for a specified contract period under the BPA subscription contract; or
- A customer may develop new renewable resources and export these resources outside the
  region without reducing that its net requirement, consistent with declaring the renewable
  resource as a market resource.

BPA believes this draft proposal is consistent with its legal mandate to meet the net requirements of all customers currently serving regional firm load or who become qualified BPA customers serving retail load. We believe this draft proposal offers a fair and equitable approach that can be easily administered in the context of today's changing electricity market.

# Opportunity for public comment

A 30-day formal comment period will begin after the proposal has been published in the Federal Register (early April). Bonneville will hold at least one public meeting to discuss the proposal and take comment. Once the Federal Register notice has been published, we will send customers, constituents, Tribal representatives, and other interested parties a notice of the public meeting and provide the dates of the public comment period.

Following the close of the comment period, BPA will evaluate the comments it has received from all parties and publish a Record of Decision on this issue.