



## **WHITEPAPER FOR “PROVIDER OF CHOICE” CONTRACT DISCUSSIONS: Why BPA Is Required To Sell From A Pooled System Of Resources**

### **I. Statutory Foundation Underlying System Sales**

A system sale is a “sale to a customer, usually wholesale, from the seller’s system as a whole, without identifying a specific resource as being the creator of the power being sold.” *See* BPA Dictionary.<sup>1</sup> Bonneville is the statutorily-designated marketer for power generated by the system of federal dams in the Northwest. Bonneville is required to market from these dams (and non-federal resources that Bonneville acquires) as pooled system, the entirety of which Bonneville uses to meet its contractual power supply obligations.

The system Bonneville sells from is composed of: an interconnected system of hydroelectric plants known as the Federal Columbia River Power System (FCRPS), the non-federal nuclear power plant Columbia Generating Station, a variety of small non-federal resources (mostly small hydro and wind), and wholesale market purchases. Bonneville sells power produced by these pooled resources to satisfy a statutory obligation to supply regional power customers (public bodies, electric cooperatives, and investor-owned utilities) with all of the power they need, beyond what their own resources can produce to serve their load.

Except for an initial, brief period in the late 1930’s and early 1940’s of marketing power produced only by the Bonneville dam, Bonneville has not marketed power generated from an individual project. The foundation for Bonneville marketing federal power based on the system was developed over 80 years. As the system of interconnected and interdependent federal projects grew, Bonneville met growing requests for federal power by regional power customers with power produced by those projects. Over this long period of time Bonneville was guided by multiple parts of Bonneville’s statutes, legislative history, and federal executive orders.

The next sections discuss the pertinent provisions.

#### **A. Bonneville Project Act of 1937 (16 U.S.C. § 832 et seq.)**

This Act created the Bonneville Power Administration and granted the Administrator the authority to enter into contracts at wholesale for the sale and/or disposition of power produced by the Bonneville dam. When Grand Coulee dam was built and began operation in 1941, the Administrator was delegated the authority under Executive Order 8526 to market that project’s power, in addition to power produced by Bonneville dam. The power produced by both dams was used to satisfy the Administrator’s growing contractual obligations.

---

<sup>1</sup> The BPA Dictionary is an internal document.



## **B. Flood Control Act of 1944 (16 U.S.C. § 825s)**

This Act made express the authority of the Secretary of Energy (formerly Interior) to transmit and dispose of energy generated by Army Corps of Engineers projects. For purposes of this memo, the legislative history of this Act is extremely relevant.

In hearings before the Senate Committee on Commerce, the Secretary of Interior, Harold Ickes, requested the inclusion of a power marketing provision, pointing out that the proposed authorization of the Snake River and Umatilla dams (McNary) would involve the generation of hydro power for use in Bonneville's area:

*Physical integration of the power facilities at these new projects with the existing facilities of the Bonneville Power Administration will be needed for most efficient and economical marketing of energy. At present the Administration maintains a network of high-voltage transmission lines in Oregon and Washington over which the power generated at Bonneville and Grand Coulee Dams is sold, and with which the proposed new projects should be interconnected in order to make the best use of all available power. . . .<sup>2</sup>*

This testimony recognizes that, as a practical matter, the most efficient way to operate an interconnected hydro system like the FCRPS is as a pooled resource, because generation at up-river dams results in water flowing down through the system. Operated as a pooled system, rather than as standalone projects, the FCRPS creates more energy and capacity. Producing more energy and capacity is consistent with the Bonneville Project Act's statutory directive to encourage the widest possible use of "all electric energy that can be generated and marketed . . . ." 16 U.S.C. § 832a(b).

Thus, under the authority granted in the Flood Control Act, and in concert with Bonneville's authority to construct transmission, additional federal dams (in particular The Dalles, John Day, McNary, and Chief Joseph) were constructed on the Columbia River and interconnected and integrated with the existing federal dams and sold as pooled, system power.

## **C. Regional Preference Act of 1964 (16 U.S.C. § 837 et seq.)**

This Act focuses on assuring Bonneville meets its Pacific Northwest energy requirements, by supplying power from the whole federal system, before it sells surplus federal system power to entities outside the Pacific Northwest. Specifically, section 2 (16 U.S.C. § 837a) provides that "the sale, delivery, and exchange of electric energy generated at, and peaking capacity of, Federal hydroelectric plants in the Pacific Northwest for use outside the Pacific Northwest shall be limited to surplus energy and surplus peaking capacity." Because it is in the plural form

---

<sup>2</sup> Secretary of the Department of Interior, Harold Ickes, Senate Committee on Commerce hearings on H.R. 3961 (May 1944) (emphasis added).



(“hydroelectric plants”) this language encompasses the whole, interconnected system of Federal hydro projects and similarly encompasses surplus produced in the aggregate.

Likewise, the legislative history of this Act defined the meaning of “energy requirements of any Pacific Northwest customer” as the “share of the PNW load which the *Federal system* must meet . . . .”<sup>3</sup> Thus, here again we see Congress directing Bonneville to use the whole system to meet any particular customer’s requirements.

#### **D. 1966 Third Powerhouse Act, Grand Coulee Dam, (16 U.S.C. § 835j et seq.)**

This Act granted the Secretary of the Interior the authority to construct, operate, and maintain the third powerhouse at the Grand Coulee hydro project. In addition, Congress included a provision which required the Secretary of the Interior (who reviewed Bonneville’s rates at the time) to prepare a consolidated financial statement of all federal projects that make up the FCRPS. *See* 16 U.S.C. § 835j. This consolidated financial statement allows the President and Congress to see whether, on a system-wide basis, the FCRPS is paying for itself.

The accompanying legislative history explains that the consolidated financial statement for the FCRPS follows from the way the projects are operated:

[The consolidated financial statement] rests on the premise that all revenues and all costs of the individual projects which are covered by the consolidated financial statement are in fact, and should in law be treated as being pooled. It thus reflects and is an outgrowth of the factual situation in the Columbia River Basin today.<sup>4</sup>

Most significantly, Congress described at length the interconnected state of the projects, which supported treating the FCRPS financially as a single system:

These numerous powerplants, linked together as they are both by transmission lines and by, in most cases, a common source of water supply are and *must be operated as a unit, not as if they were separate and competing enterprises. Only thus can maximum efficiency be attained, the power demands of the area satisfied, and operating costs minimized.*

The other side is equally clear. Just as the transmission grid draws on numerous Federal power installations for its supply of energy, so it delivers to numerous customers throughout its service area. Customer A does not know and does not care whether his energy purchases come from power source X, Y, or Z, and power source X does not know or care whether its output is delivered to customer A, B, or C. *The chances are, however, that A, B, and C all draw energy, directly or by*

---

<sup>3</sup> Senate Report 1748, 87<sup>th</sup> Cong., 2d Sess., Committee on Interior and Insular Affairs (July 20, 1962), at 9 (emphasis added).

<sup>4</sup> Committee on Interior and Insular Affairs report (89<sup>th</sup> Cong., 2d Sess., Rept. No. 1409 (April 1, 1966)), at 4-5.



*displacement, from X, Y, and Z and that the amount which they draw from each of these sources varies from season to season, from day to day, and even from hour to hour.*<sup>5</sup>

This situation is no different today. Bonneville’s customers, whether in Washington state or other parts of Bonneville’s service territory, all draw energy from numerous federal projects, as well as from Columbia Generating Station and from market purchases Bonneville has made--and the amount which they draw from each of these sources varies from season to season, from day to day, and from hour to hour.

**E. Northwest Power Act (16 U.S.C. § 838 et seq.)**

The system sales construct is deeply embedded in the Northwest Power Act in several operative provisions.

First, the concept of a pooled system is reflected in the term “Federal base system resources,” which is defined as: (A) the Federal Columbia River Power System hydroelectric projects; (B) resources acquired by the Administrator under long-term contracts in force on December 5, 1980; and resources acquired by the Administrator in an amount necessary to replace reductions in capability of the resources referred to in (A) and (B). The last provision, regarding “resources acquired,” is noteworthy. It is what makes the market purchases that BPA buys a part of BPA’s pooled system of resources.

Second, section 5(b)(1) directs the Administrator to sell, whenever requested, electric power to each requesting public body, cooperative, IOU, and federal agencies as authorized in section 5(b)(3)] The Act’s rate directives specify that the electric power sold under such contracts is supplied by the FBS at the applicable rates set to recover the cost of FBS resources used to supply general requirements load.

Third, the Act specifically permits the Administrator to restrict his supply obligations under contract in an event known as a “resource insufficiency.” Specifically, section 5(b)(6) provides that the restriction shall not be applicable to Bonneville’s public customers until the total of such customers’ “firm loads to be served by the Administrator equals or exceeds the firm capability of the *Federal base system resources*.” In other words, Bonneville’s firm power supply obligation to its public customers is tied to the *combined* supply produced by the resources that make up the FBS. Thus, Bonneville cannot declare an insufficiency if only one or two projects are incapable of meeting customers’ demand for power; the combined output of the FBS must be insufficient.

Fourth, section 6 provides resource acquisition authority. It authorizes Bonneville to acquire resources to replace lost generating capability of the FBS. This authority is based on lost capability of the FBS *in the aggregate*. Bonneville need not replace lost capability at specific

---

<sup>5</sup> *Id.* at 5 (emphasis added).



projects. Here again, Bonneville is directed to manage the system as a whole, pooled group of resources.

## II. Bonneville's Statutory Rate Directives Are Based On System Sales

Bonneville's rate directives reflect its marketing of federal power on a system basis. The key concept is that Bonneville's rates meld the system's cost. Historically, as the FCRPS projects grew in number, their individual project costs were melded with the other projects and formed Bonneville's average rate.

For example, section 6 of the Bonneville Project Act originally governed Bonneville's rate setting and stated that Bonneville's "rate schedules may provide for uniform rates . . ." 16 U.S.C. § 832e. Three years later, Grand Coulee dam was under construction and Executive Order No. 8526 authorized the Administrator to market Grand Coulee power, and provided that the power be sold at rates set by the Secretary of the Interior who, in turn, authorized the Bonneville Administrator to sell Grand Coulee's power under Bonneville's existing rate schedules.<sup>6</sup>

As additional federal projects came on line, Bonneville continued to sell power at a uniform rate reflecting the engineering and operational characteristics of the system. The system being a pool of resources operated as an integrated unit.

Today, Bonneville's rate directives are chiefly contained in section 7 of the Northwest Power Act. Section 7(b)(1) expressly ties the establishment of rates to the overall system costs of the FBS:

The Administrator shall establish a rate or rates of general application for electric power sold to meet the general requirements of public body, cooperative, and Federal agency customers within the Pacific Northwest, and loads of electric utilities under section 839c(c) of this title. Such rate or rates shall recover the costs of that portion of the Federal base system resources needed to supply such loads until such sales exceed the Federal base system resources. Thereafter, such rate or rates shall recover the cost of additional electric power as needed to supply such loads, first from the electric power acquired by the Administrator under section 839c(c) of this title and then from other resources.<sup>7</sup>

Likewise, section 7(a)(2)(B) requires that Bonneville's rates be "based upon the Administrator's total system costs . . ." 16 U.S.C. § 839e(a)(2)(B). In short, these directives reflect that Bonneville markets power on a system basis (including market purchases that become a part of that system) and Bonneville's customers receive varying output of each of these resources, and benefit from the diversity and coordinated

<sup>6</sup> See Secretary of Interior Memo Nov. 2, 1940.

<sup>7</sup> 16 U.S.C. § 839e(a)(1).



operation of these resources, and therefore are responsible for the melded “total system costs.”

Otherwise, if the whole system were not being used to supply Bonneville’s customers, then Bonneville could face under-recovering its costs if, for example, a customer challenged Bonneville’s ability to allocate the costs of nuclear projects, fish and wildlife, conservation, and other costs not directly related to the generating costs of a specific project. That would create an internal conflict among Bonneville’s customers as to which customers are responsible for which costs of which projects at which time.

### **III. Conclusion**

Bonneville’s statutes and legislative history form the foundation for Bonneville selling power from the system. They direct that the system is to be operated and treated as a whole rather than as individual projects. This structure reflects the reality that once there was more than one project and transmission lines were in place to interconnect the projects with load centers, the system was operated as a whole and contracts for system sales were put into place.

Due to the variability in loads, the need to meet non-power requirements (i.e., fish, flood control, irrigation, navigation, recreation) and the shape of the run-off (limited fuel supply) Bonneville relies on the system’s flexibility to determine the most efficient operation on a daily and hourly basis. In addition, Bonneville’s rate directives reflect the recovery of Bonneville’s total system costs and the recovery of FBS resource costs from sales of system power to firm power loads pursuant to section 7(b)(1).

Any sale from a specific resource or exclusion of particular resources from a system sale would be inconsistent with the above statutory foundations and would put specific limitations on how the system is operated. This would infringe on Bonneville’s flexibility and ultimately reduce the overall output of the system. The laws discussed above and this practical rationale provide the legal foundation for system sales.