

ADMINISTRATOR'S RECORD OF DECISION

Industrial Incentive Rate Sale for Idle Pacific Northwest Industrial Production from October 1, 1995 to September 30, 1996

INTRODUCTION

The Bonneville Power Administration (BPA) has decided to offer up to 700 average megawatts (aMW) of short-term (one year) surplus firm power to restart idled Pacific Northwest (PNW) industrial loads. The power will be priced monthly and will average 17.83 mills per kWh at 100% load factor. This offer will first be made to public utilities who are preference customers. These contracts are available from October 1, 1995 through September 30, 1996. In an effort to serve as much idled industrial capacity load as possible, BPA is making a surplus firm power offer that is competitive in the current market situation. In making the offer, BPA is continuing its Market-Driven approach for participation in the increasingly competitive electric power market.

This decision is consistent with BPA's Business Plan, the Business Plan Final Environmental Impact Statement (BP EIS) (DOE/EIS-0183, June 1995), and the Business Plan Record of Decision (ROD) (August 15, 1995). In response to a need for sound policy to guide its business direction under changing market conditions, BPA explored six alternative plans of action in its BP EIS. The six alternatives were as follows: Status Quo (No Action), BPA Influence, Market-Driven, Maximize Financial Returns, Minimal BPA, and Short-Term Marketing. The BP EIS examined each of these six alternatives under two widely differing hydro operation scenarios from a parallel environmental process (the Columbia River System Operation Review (SOR)). The SOR will determine the operating requirements necessary to serve the multiple purposes of the Federal hydro facilities in the Columbia River Basin. The decisions about operating requirements will define the power operation for all BPA power transactions, including this sale.

In the subsequent Business Plan ROD, the BPA Administrator selected the Market-Driven alternative. Although the Status Quo and the BPA Influence alternatives were the environmentally preferred alternatives, the differences in total environmental impacts among alternatives were relatively small. Other business aspects, including loads and rates, showed greater variation among the alternatives. The Market-Driven alternative strikes a balance between marketing and environmental concerns. It also helps ensure BPA has the financial strength necessary to maintain a high level of support for public service benefits such as energy conservation and the fish and wildlife program.

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The BP EIS and ROD were also intended to guide BPA in a series of related decisions on specific issues and actions. The decision to offer surplus firm power to restart idled industrial loads is one of these subsequent actions and the subject of this tiered ROD. Tiering subsequent RODs to the Business Plan ROD helps to clearly delineate BPA decisions and provides a logical framework for connecting broad programmatic decisions to more specific segment and contract actions. Before taking specific action on any of these issues, BPA affirmatively stated that it would review the BP EIS to ensure that a particular action was adequately covered within the scope of the BP EIS and, if appropriate, issue a tiered ROD. This ROD, which summarizes and incorporates information from the Business Plan ROD, is the result of such a review; it describes specific information on this one-year industrial incentive rate sale. It also provides a summary of the environmental impacts associated with this decision, as described in the BP EIS.

DESCRIPTION OF CUSTOMERS

This offer is available to preference customers and Direct Service Industrial (DSI) customers with idled industrial production loads. No preference customers have thus far indicated an interest in executing a similar contract for their idled industrial production loads. Recent offers to the preference customers have been made at rates of between 17.25 and 17.50 mills per kWh which they did not accept. BPA expects that the DSIs will have the most interest in the industrial incentive rate sale.

The DSIs are a group of industrial firms that operate plants in the PNW and that purchase power directly from BPA. These plants primarily use electricity-intensive industrial processes to make products such as aluminum and other primary metals, pulp and paper, ferroalloys, and chlorine and sodium hydroxide. The DSIs constitute a substantial portion of BPA's loads and revenues. Currently, DSI operations represent about 2500 MW of BPA load. Even with the recent low commodity prices and limited aluminum production over the past several years, the DSIs accounted for 20 to 25 percent of BPA's revenues during the past three fiscal years.

STATUTORY GUIDELINES

BPA is obligated to recover its costs in accordance with sound business principles, including the amortization of the Federal investment in the Federal Columbia River Power System over a reasonable period of years (16 U.S.C. § 839e). The agency is obligated to "encourag[e] the widest possible diversified use of electric power at the lowest possible rates to consumers consistent with sound business principles." (16 U.S.C. § 838g). The Administrator has wide discretion to take those actions which he considers to be necessary or appropriate to carry out these and other duties imposed by law (16 U.S.C. § 832a(f) and 838i(b)). In addition, one of the purposes of the Pacific Northwest Power Planning and Conservation Act (Northwest Power Act) is

to assure the Pacific Northwest an adequate, efficient, economical and reliable power supply (16 U.S.C. § 839(2)). The Northwest Power Act imposes limitations on the amount of power the Administrator may sell to the DSIs (16 U.S.C. § 839c(d)(3)).

CONTRACTUAL BACKGROUND

All of the DSIs have long-term power sales contracts with BPA for purchase of power. These contracts were offered in accordance with the Northwest Power Act. These existing contracts divide power service into four quartiles, or 25 percent blocks. The bottom three quartiles are served with firm power from both a planning and an operational standpoint. The top quartile is served with power that is firm from an operational standpoint only. Thus, although BPA does not incorporate the top quartile into its long-term resource acquisition strategy, the agency does operate its available resources to provide power to the top quartile as if it were firm. BPA plans its resources to serve the top quartile on a yearly basis only. BPA may, however, interrupt the top quartile for indefinite periods to meet its other firm power obligations.

Aluminum prices were low from mid-1991 through early 1994. This situation resulted from the large inventory of metals due to the world economic slowdown, the continued operations of Western smelters, and the large metal exports of former Soviet Union smelters. To help alleviate this situation, several major aluminum-producing nations met in January 1994 to sign a Memorandum of Understanding to voluntarily close aluminum smelter production in accordance with market forces until the large metal inventories were reduced. This resulted in PNW smelter capacity closures.

Because of a recent series of dry years and changes in hydro system operations to enhance salmon runs, BPA service to the DSI top quartile has declined in recent years. Top quartile service was restricted for most of the period from August 1992 until December 1994. This restriction, as well as the low aluminum prices during most of this period, resulted in significant idle industrial capacity.

In late 1994, however, BPA made two offers to help bring up DSI production. First, BPA offered enhanced top quartile service that would provide the DSIs greater supply certainty than they had had in the past. Second, BPA made a surplus firm power offer that gave the DSIs both supply certainty and rate certainty for two years. At the time BPA made these offers, aluminum prices had recovered from their previously depressed levels. In November 1994, aluminum averaged 92 cents per pound. Thus, the companies had substantial incentive to resume production. The offer of enhanced top quartile service resulted in 185 aMW of increased load, while the surplus power offer resulted in 28 aMW of additional load. In addition, in early 1995, two companies that had restored top quartile service converted 50 megawatts of their top quartiles to surplus firm power. However, not all of the DSIs took advantage of these offers.

With the power market getting more competitive, BPA's customers were approached by numerous potential power suppliers offering less expensive power than BPA. BPA's

current power sales contracts precluded customers from purchasing power from other suppliers, except under specific circumstances. However, BPA had announced its intention to offer new power sales contracts in October 1995 that would allow all customers to shop for power on the market. At the same time, BPA would be proposing five-year rates that would offer its customers the flexibility and rate certainty that other power suppliers were offering.

BPA subsequently changed the date for its new power sales contracts to become operationally effective to October 1996 (one year later), and announced its proposal for a one-year across-the-board extension of current rates with a four percent surcharge. The surcharge will enable BPA to meet its statutory cost-recovery requirements and to satisfy its debt-repayment obligation to the U.S. Treasury. BPA deferred its proposal for five-year rates until 1996, when two- and five-year rates would be offered.

The DSIs, expecting access to the power market starting October 1995, initially opposed any rate increase. However, a compromise was reached. The DSIs would not contest the one-year extension and four percent surcharge. BPA agreed to a limited waiver and release of the DSIs' obligation to purchase power for their top quartile loads from BPA.

Thus, in April 1995, BPA signed a Waiver and Release Agreement that allows the DSIs to terminate part of their power purchases from BPA. Under this agreement, the DSIs are allowed to eventually purchase up to their entire top quartile amount from third parties without reducing their contract demand and without regard to the termination provisions in the current contract. This Waiver and Release Agreement goes into effect on October 1, 1995, and continues until the current contracts expire in 2001. For the one-year period from October 1, 1995 through September 30, 1996, the DSIs can purchase one-half of their top quartile load from third parties, subject to an aggregate limit of 250 aMW. Beginning October 1, 1996, the DSIs may purchase their entire top quartile load from other suppliers, while remaining under their current contract. Alternatively, BPA and its customers (including the DSIs) may agree on new contracts to commence in October 1996.

On September 18, 1995, BPA offered surplus firm top quartile power up to 250 aMW to the DSIs at 19.5 mills per kWh at 100% load factor. Under this offer, the DSIs only took 81 aMW from October 1, 1995 through September 30, 1996.

In addition, in the spring of 1995, BPA offered an Industrial Economic Development Incentive Rate Sale of short-term (April 1 to July 31, 1995) surplus firm power to restart idled industrial loads. The price was 16.0 mills per kWh for deliveries at 100 percent load factor. The power was generated from water that was flushed down the Columbia River system in the spring and early summer to aid fish migration. The incentive rate sale was responsible for restarting 155 aMW of idle industrial load. Although aluminum prices were high enough to justify the restart of PNW smelter capacity, many aluminum companies restrained any production restarts due to the worldwide Memorandum of Understanding.

The DSIs still have over 700 aMW of idle capacity, the majority of which is for aluminum production. The aluminum inventories on the London Metals Exchange (LME) are now only one-fifth the level that they were when the worldwide understanding to restrain aluminum production was signed. In addition, many industry analysts predict that the LME aluminum inventories will be virtually gone by the end of 1995. The virtual elimination of the large LME aluminum inventory is expected to be the trigger point for the expiration of the worldwide production restraint and the restart of massive idled worldwide aluminum production capacity. Aluminum prices have been between 80 and 90 cents per pound for several months and are high enough to justify all PNW aluminum smelters restarting idled production. BPA forecasts that the aluminum prices will remain at or near these levels for several years.

Aside from the question of whether the DSIs will be purchasing power from BPA starting in October 1996, there is a definite risk that the DSIs may purchase only a limited amount of BPA power from October 1995 to September 1996. BPA's industrial power rate from October 1995 to September 1996 will be 26.9 mills per kWh, subject to some variation due to the variable rate schedule, which is tied to the price of aluminum. Because BPA's current industrial power rate may be uneconomic to restart idled production, the smelters may either not restart production until October 1996, when BPA may be able to institute lower industrial firm power rates, or give BPA notice by the end of September 1995 to terminate their present power sales contracts after March 31, 1996.

With the potential that 700 aMW of idled DSI capacity may not restart between October 1995 and September 1996, BPA is offering this one-year incentive rate sale at an average rate of 17.83 mills per kWh. The difference between the regular DSI rate during this period of 26.9 mills and the proposed incentive rate sale of 17.83 mills equates to a seven cents per pound incentive to the average PNW aluminum smelter to restart idled production. Alternatively, the smelters could not restart idle production until October 1996, or else restart idle production soon and give BPA notice by September 30, 1995, of the termination of their contracts. Thus, the DSIs could terminate their contracts with BPA as of April 1, 1996, and pay the high 26.9 mills BPA rate only until that time. If the DSIs terminate their contracts, they can then take advantage of the cheaper spring and summer energy due to increased water starting April 1996.

BPA also proposes to offer new 5-year power sales contracts to the DSIs which would take effect in October 1996. (Consistent with the decisionmaking framework announced by BPA, this 5-year "block" sale of power to the DSIs will be the subject of a separate ROD tiered to the BP EIS.) Should any other power supplier be successful in capturing any portion of the increased sales due to the restart of idle industrial capacity, it would be easier for that power supplier to continue sales to that DSI after next October. BPA will have a better chance to continue serving DSI loads under new 5-year power sales contracts if BPA is serving the DSI loads until the end of September 1996.

DECISION TO OFFER INDUSTRIAL INCENTIVE RATE SALE

Value of Maintaining High DSI Loads

The DSIs provide valuable system benefits to BPA and its customers.

- **Revenues:** The DSIs provide a significant portion of BPA's annual revenues. DSIs normally provide between 20 to 25 percent of BPA's revenues, (depending on aluminum markets and PNW streamflows) at a relatively low cost.
- **Efficient Use of Flow Augmentation:** DSI loads help to reduce the economic impacts of river flow augmentation implemented to aid in the recovery of Columbia River fisheries. Current river operations call for release of large amounts of water from the reservoirs in the spring and early summer to aid in the down river migration of salmon smelts. As opposed to BPA's larger utility customers which shift from BPA service to their own surplus hydroelectric supplies during this time, operating DSI loads provide a continuing market for what would otherwise be "dump power". With increased DSI loads, which are constant year-round, BPA is better able to withstand the enormous fishery migration costs that it is facing.
- **System Operating Flexibility:** DSIs provide important operating flexibility to the hydro-thermal system. Operation of DSI plants during the night allows BPA to import power to the system when market prices are cheapest. This ability to import power at night, in turn, allows the agency to engage in valuable power exchange arrangements with Southwest utilities, thereby allowing the agency to store its own hydroelectric power in the Federal Columbia River Power System reservoirs for more valuable daytime use.
- **Stability Reserves:** BPA's contractual rights to interrupt DSI loads provide readily available stability reserves. Immediate interruptibility of BPA's large, 24-hour-per-day DSI loads provides necessary stability reserves for operation of BPA's DC Intertie at levels greater than 1500 MW of imports to the region. These reserves protect the interconnected systems of the Western Systems Coordinating Council from breaking up or "islanding" in the event of an emergency outage of the DC Intertie.

Competitive Challenge

The electric utility industry is becoming increasingly competitive and dynamic. Four factors are substantially affecting BPA's ability to compete: market change, increased non-power responsibilities, deterioration of BPA's cost/price advantage, and lost hydro output. BPA faces serious financial challenges. In fiscal year 1993, expenses exceeded revenues by \$297 million. A major factor in this loss was "special water releases devoted to wild fish." (*BPA 1993 Annual Report* at 16). Moreover, BPA now faces intense competition for its customers. BPA's customers are receiving regular solicitations from other power suppliers, and several have reached agreements with our

competitors. Four DSIs have already committed to purchase 185 aMW of non-BPA power from other suppliers. Most recently, on September 12, 1995, another DSI, Columbia Falls Aluminum, announced that it will also purchase 245 aMW of its 345 aMW capacity from non-BPA power suppliers. To the extent permitted by statute and consistent with sound business principles, BPA must meet this competitive challenge by structuring power products that meet customers' needs while improving BPA's revenue situation. Testimony in BPA's current rate case describes in detail the competitive challenge facing BPA. (See Moorman and Evans, WP-96-E-BPA-09, and Norman and Oliver, WP-96-E-BPA-10.) The information in this testimony is significant in the decision to make this surplus firm power offer.

Surplus Firm Power Offer

BPA plans to offer up to 700 aMW of short-term surplus firm power to restart idled PNW industrial loads starting October 1, 1995. The power will be available only for idle loads. It may be used to serve plant capacity that is currently shut down and for which no previous request has been made for an increase in service or no previous approval has been given for an increase in Operating Level or Operating Demand. Each customer can elect to start taking power any time during the 12 month period, on the condition that they will continue to take (or pay for) the load until the end of September 1996. BPA will price each month's power, and charge the applicable monthly power rate to the customer's monthly loads.

BPA has analyzed the costs it expects to incur in purchasing power on the market to serve these contracts when its own power is not available. Based on BPA's extensive experience of purchasing short-term power supplies on the open market and its analysis of near-term projected prices, and taking into account the impacts of both average and low water conditions, BPA expects to achieve net revenues from these transactions at an average rate of 17.83 mills per kWh.

The power will be priced monthly. The monthly power rates at 100 percent load factor are as follows:

<u>1995-96</u>	<u>Mills</u>
October	18.00
November	21.00
December	22.00
January	20.00
February	19.00
March	17.00
April	16.00
May	13.00
June	13.00
July	17.00
August	19.00
September	19.00

The market information used in this analysis is proprietary. BPA has determined that the net revenues are high enough to justify these contracts. BPA acknowledges risk in this surplus power sale strategy. It is possible that market prices will change so significantly that BPA will be unable to recover its power purchase costs. However, BPA is confident enough to predict that the potential benefits outweigh the risks of this short-term obligation.

Benefits to Other BPA Customers

BPA's other customers should benefit from this arrangement. Some of the load served with this surplus firm power would have gone to competing power suppliers if this sale were not offered. Net revenues should be generated based on (1) the use of excess hydroelectric generation during the spring and early summer to serve these loads at low cost while producing high power revenues during this period, and (2) the ability to purchase other necessary power supplies on the market at a cost sufficiently low to produce overall net revenues.

The SP power contracts do not diminish BPA's ability to meet any of its other firm power obligations. BPA intends to purchase power in the market when no Federal Columbia River Power System power is available to serve these contracts after first meeting BPA's other firm obligations. Reliability of service to other customers will increase with the stability reserves provided by additional DSI loads.

ENVIRONMENTAL ANALYSIS

Consistent with the Business Plan ROD (August 15, 1995), the BP EIS was reviewed to determine if marketing short-term, surplus firm power to restart idled PNW industrial capacity was adequately covered within the scope of the BP EIS. The action is consistent with the Market-Driven alternative analyzed in the EIS and selected as BPA's course of action in the Business Plan ROD in that BPA is making this offer in order to "fully participate in the competitive market for power" (BP EIS, Section 2.2.3, P. 2-9) for the DSI load.

The BP EIS showed that environmental impacts are determined by the responses to BPA's marketing actions, rather than by the actions themselves. These marketing responses include resource development, resource operation, transmission development and operation, and consumer behavior, including the response of industrial firms to the offer.

Environmental Impacts

It is expected that the aluminum smelter DSIs are most likely to accept the offer of short-term (October 1, 1995 through September 30, 1996) surplus firm power to restart idled PNW industrial capacity. The BP EIS addressed the environmental impacts of the aluminum smelter DSIs in Section 4.3.3.5 (P. 4-59). Principle impacts of the offer may

include increases in emissions of greenhouse gases (carbon monoxide, carbon dioxide, carbon tetrafluoride, and carbon hexafluoride), sulfur dioxide, hydrogen fluoride, and carcinogenic polycyclic aromatic hydrocarbons to the extent that aluminum production is actually increased. However, in the long-run (i.e., after expiration of surplus firm sales under this offer), the BP EIS projected that aluminum prices and power costs and availability will be such that the PNW smelters will operate at capacity regardless of any short-term effects of this offer.

Marketing Impacts

Since this is an offer of surplus power for only one year, environmental impacts as a result of changes in resources development are very unlikely. If DSIs give notice to terminate their existing power sales contracts and bring up idled capacity beginning in April 1996 with other non-BPA power sources (such as power purchases, Independent Power Producers, or service from other utilities) the operation of combustion turbines might increase, leading to predictable increases in emissions of nitrogen oxides, carbon monoxide, and carbon dioxide from these thermal generating resources. Existing transmission facilities are adequate to deliver any power purchased under the offer by the aluminum smelter DSIs, so there will be no environmental impacts as a result of transmission facility development or modifications. The BP EIS predicted no statistically significant change in consumer behavior as a result of the Market-Driven alternative (BP EIS, P. 4-116). Since this offer is only a small part of potential marketing activity supposed under the Market-Driven alternative, essentially no environmental effect is projected.

Mitigation

In making surplus power sales under the Market-Driven approach, BPA understands that conditions that permit the agency to function successfully may change over time. Therefore, the market-driven approach contains preparatory mitigation measures (response strategies) to respond to change and to allow the agency to balance costs and revenues. Such mitigation will enhance BPA's ability to adopt to changing market conditions.

These response strategies, which include means to decrease spending, increase revenues, and transfer costs, could be implemented if BPA's costs and revenues did not balance. BPA has already decided in the Business Plan ROD to apply as many mitigation response strategies as necessary whenever BPA's costs and revenues do not balance. These mitigation strategies, or equivalents, will be implemented to enable BPA to best meet its public service and environmental obligations, while remaining competitive in the wholesale electric power market.

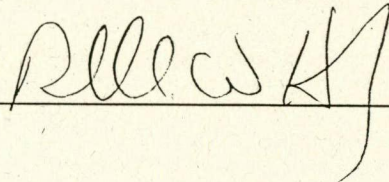
PUBLIC AVAILABILITY

This ROD will be distributed to all interested and affected persons and agencies. Copies of the Business Plan, BP EIS, the BP EIS ROD, and this ROD are available from BPA's Public Involvement Office, P.O. Box 12999, Portland, Oregon 97212. Copies of these documents may also be obtained by using BPA's nationwide toll-free document request line, 1-800-622-4520.

CONCLUSION

This short-term offer, by encouraging the wide and diversified use of electric power, will generate needed additional revenues for BPA and will benefit the Pacific Northwest economy. The additional revenues will help BPA meet its statutory obligation of maintaining the lowest possible rates to its customers consistent with sound business principles while recovering its costs. BPA's ability to implement public service benefits while maintaining an economic power supply will be facilitated by this offer.

Issued in Portland, Oregon on



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