

BPA - Power Business Line - DRAFT
Standard Power Product Descriptions

PRODUCTS

CORE SUBSCRIPTION PRODUCTS

Full Service

Partial Service

Actual (*Under discussion*)

Block (*Under discussion*)

CUSTOMIZED SUBSCRIPTION PRODUCTS

Variable Load Factor

Other

Renewable Resource

NON-SUBSCRIPTION PRODUCTS**

Bilateral Products & Services

Power - Firm, Secondary, Commodity

(Loss Compensation - a subset of "power," above)

Capacity w/out Energy

Storage

Resource Factoring

Preschedule Change Rights

Displacement Rights

Scheduling Services

Reserves, Resource Support

Supplemental AGC

Operating Reserve

Forced Outage Reserve

Complements to Core Products

Block Flexibility; Factoring Product (Under discussion)

Retail Access - Mitigation

Option for Follow-on Subscription Rights

* *Unbundled products currently available through open-market negotiations.*

** *These products are not necessary to meet the power needs of the Full Service customer.*

Standard Power Product Descriptions

Standard power products and services are expected to meet most of the needs of BPA's current customers and those represented by WorkGroup participants. Other needs can be addressed during bilateral discussions. These product descriptions can be the basis for negotiations that meet the needs of individual customers. Custom-tailoring of a standard product or service will be reflected in the price.

Major Changes from May '98 version

1. Products have been regrouped.
2. Option for Follow-on Subscription Rights was incorporated as Complementary product.
3. Secondary-Commodity was altered to include non-Subscription power sales
4. Partial Service Product Descriptions are nearing conclusion.

Note: Standard power products can be the basis for negotiating products that meet the needs of individual customers.

<i>Core Subscription Product</i>	<i>Full Service</i>
General	This product provides the firm power needed to meet actual loads of customers not active in the market.
Term	5-20 years, beginning October 1, 2001 (or another term consistent with the Rate Schedules).
Transmission	Transmission and ancillary services are not included, but BPA can secure these services and package them with this product.
Amount & Shape	BPA will provide continuous power to meet the customer's retail load not met by the customer's resource(s).
Load Growth	BPA will meet the entire load growth needs of the customer, except NLSL.
Load Variations	BPA takes on the risk of variations in power consumption.
Retail Access Load Loss	Customer takes on the risk of retail access load loss, but BPA has both product and contract methods of mitigating this risk.
Resources	Customer has no resources, other than small generating resources limited to 3 MW each, 6 MW total. Resource fluctuations are treated as variations in power consumption.
Linkages	None.
Basis for Payment	Payment is based on measured energy plus demand. Additional payment for Retail Access schedules will be based on scheduled quantities.

Note: Standard power products can be the basis for negotiating products that meet the needs of individual customers.

<i>Core Subscription Product</i>	<i>Partial Service – Actual (Under development)</i>
General	<p>This product is intended for customers who have contractual or generating resources and therefore require a product other than Full Service. This product provides all the firm power the customer needs to meet net actual loads: loads in excess of declared resources.</p> <p>For additional details, refer to Partial Services Addendum.</p>
Term	5-20 years, beginning October 1, 2001 (or another term consistent with the Rate Schedules).
Transmission	Transmission and ancillary services are not included, but BPA can secure these services and package them with this product.
Amount & Shape	To purchase this standard product at unadjusted posted rates, the purchaser must fix its declared resource amounts for all periods ('periods' refers to diurnal or HLH & LLH periods of rate seasons, e.g., calendar months) of FY 2001-2006 prior to contract signature, and in any case, not later than the end of BPA's Subscription Process.
Load Growth	Customer declared resource annual amounts may be stepped up over years 1-5 to reasonably serve projected customer load growth which might exceed the amount BPA would agree to serve at the lowest cost-based rate.
Load Variations	BPA takes on the risk of variations in power consumption
Retail Access Load Loss	Customer takes on the risk of retail access load loss, but BPA has both product and contract methods of mitigating this risk.
Resources	Refer to the Partial Service Addendum for details on Customer Resource Declaration Parameters.
Linkages	None
Basis for Payment	Payment is based on measured energy plus demand. Additional payment for Retail Access schedules will be based on scheduled quantities.

Note: Standard power products can be the basis for negotiating products that meet the needs of individual customers.

<i>Core Subscription Product</i>	<i>Partial Service - Block</i>
General	Take-or-pay blocks of power. For additional details, refer to Partial Services Addendum.
Term	5-20 years, beginning October 1, 2001 (or another term consistent with the Rate Schedules).
Transmission	Transmission (and ancillary services) are not included, but BPA can secure these services and package them with this product.
Amount & Shape	To purchase this standard product at unadjusted posted rates, the purchaser must fix its desired purchase amounts for all periods ('periods' refers to diurnal or HLH & LLH periods of rate seasons, e.g., calendar months) of FY 2001-2006 prior to contract signature, and in any case, not later than the end of BPA's Subscription Process.
Load Growth	None: Amount is fixed.
Linkages	None.
Basis for Payment	Monthly payment is based on contract amounts.

Note: Standard power products can be the basis for negotiating products that meet the needs of individual customers.

<i>Customized Product</i>	<i>Variable Load Factor</i>
General	This product provides the purchaser with a specified amount of capacity and the right to take energy within a specified load factor range.
Term	5-20 years, beginning October 1, 2001 (or another term consistent with the Rate Schedules).
Transmission	Transmission and ancillary services are not included, but BPA can secure these services and package them with this product.
Amount & Shape	Up to a negotiated monthly capacity amount. Customer can specify a monthly load factor range which will be reflected in the pricing. Capacity and minimum load factor are Take-or-Pay.
Load Growth	None: Amount is fixed.
Load Variations	BPA takes on the risk of variations in power consumption within the limits of the specified capacity and load factor.
Resource Fluctuations	No special provision is made for differences between variations in power consumption and resource fluctuations. BPA takes on the risk of such variations within the limits of "Amount and Shape".
Linkages	None.
Basis for Payment	Payment is based on contract demand and amount of energy used (but not less than take-or-pay amount).

Note: Standard power products can be the basis for negotiating products that meet the needs of individual customers.

<i>Customized Product</i>	<i>Renewable and Environmentally Superior Resources</i>
General	This product recognizes the environmental characteristics of some resources and attempts to stimulate markets for renewable resources.
New Renewable Resources	BPA may provide renewable resources which meet this standard: <ul style="list-style-type: none"> • Power generated by new or existing facilities driven by wind, solar, geothermal, or qualifying biomass;
Environmentally Superior Resources	BPA may offer Environmentally Superior power products (ESP) which are consistent with criteria established by others, including state legislatures. Examples include: <ul style="list-style-type: none"> • Power produced by hydropower facilities with nameplate rating under 30 MW. • Hydropower facilities where specific projects and/or system operations are guaranteed to be available and are designated to support an ESP sale and which have been endorsed by NW public interest groups as environmentally superior power resources. • Hydropower facilities sited in locations that do not block anadromous fish passage (with a nameplate rating under 30 MW); • Operations of hydropower facilities due to seasonal flows mandated in accordance with the Endangered Species Act or other required flow management directives; • Operations of hydropower facilities during off-peak hours during the months of April, May, June, or July of any year.
Term	New Renewable Resources: 5-20 years, beginning October 1, 2001 (if available). Environmentally Superior Products: At least one month.
Transmission	Transmission and ancillary services are not included, but BPA can secure these services and package them with this product
Amount/Shape	Flat blocks of power: 100% load factor.
Scheduling	BPA will guarantee the availability of the resource during the term of the sale. BPA will schedule the energy-equivalent of the resource output plus backup power to the customer on an hourly basis.
Disclosure	BPA will provide the purchaser with periodic reports documenting the project source and power delivery schedules associated with this sale.
Backup	BPA will back up the output of this resource with one of the following: renewable resources, system power, or nuclear-free system power (if available), as specified by the customer.
Linkages	To the extent a customer is purchasing a Full Service or Partial Service product, load served by this product will be netted against the Full or Partial load.
Payment	Take-or-Pay: Payment is based on monthly contract amounts.

Note: Standard power products can be the basis for negotiating products that meet the needs of individual customers.

<i>Bilateral Products</i>	<i>Power – Firm, Secondary, Commodity</i>
General	Non-Subscription power is a commodity product normally sold from BPA’s Trading Floor.
Term	Monthly amounts from 1-18 months, or annual blocks of power.
Transmission	Transmission and ancillary services are not included, but BPA can secure these services and package them with this product.
Amount & Shape	As negotiated, but this product is commonly sold as monthly flat blocks of power: 100% load factor on LLH only, on HLH only, or on all hours.
Interruption Rights	Rights to interrupt schedules may be negotiated.
Basis for Payment	Payment is based on amount of power scheduled.

Note: Standard power products can be the basis for negotiating products that meet the needs of individual customers.

<i>Bilateral Products</i>	<i>Capacity</i>
General	<p>Capacity is a customer’s right to purchase and a supplier’s obligation to stand-ready to provide. The need addressed in the past by capacity-without-energy can be met partly by buys and sells from the commodity market rather than with a separate capacity product.</p> <p>The term “capacity without energy” (e.g., “naked capacity”) has been used to describe a common power product in which a supplier stands ready to supply a specified MW/hr level of power, generally in specified HLH only, and the receiver returns the energy in other hours.</p> <p>Additional product features might include cash-out in lieu of energy replacement, ability to defer acceptance of replacement energy, and flexibilities around notice or pre-schedule terms.</p> <p>NOTE: Demand associated with a firm power purchase is incorporated in the power product (1-5).</p>
Term	Any term up to 20 years.
Transmission	Transmission and ancillary services are not included, but BPA can secure these services and package them with this product.
Amount & Shape	<p>The customer can specify the amount and shape including:</p> <ul style="list-style-type: none"> • Maximum number of hours per period during which the customer is able to schedule the capacity • Maximum MW/hr to be scheduled, and • Hours of the day or week the service is required.
Energy Returns	<p>Replacement energy must be returned during a specified time period (as negotiated): Commonly within either 24 hours or 168 hours.</p> <p>Hourly maximum rate of return will be negotiated: a standard return rate could be 100% of the capacity amount.</p>
Linkages	None.
Basis for Payment	Payment is based on the amount of capacity specified in the contract.

Note: Standard power products can be the basis for negotiating products that meet the needs of individual customers.

<i>Bilateral Products</i>	<i>Storage</i>
General	<p>Storage generally has been used to refer to actual use of hydro reservoir space and therefore was constrained by reservoir specifics. It sometimes was attached literally to the water stored but more commonly was measured in energy equivalents.</p> <p>This product generally involves the delivery and return of equal amounts of energy in specified time periods. It is designed for customers that want to deliver energy to BPA at a certain time and have it returned at another time.</p> <p>The product can be designed to include any of the following, but the seasonal shaping of water described in “2” is the traditional use: (1) energy accepted from the customer in LLH and delivered to the customer in HLH, (2) energy accepted from the customer in the spring and returned to the customer in the winter, or (3) energy delivered to the customer in advance of energy being provided to BPA.</p>
Term	The term of this product is negotiable.
Transmission	Transmission and Ancillary services are not included, but BPA can secure these services and package them with this product.
Amount & Shape	Amounts of BPA’s storage capability vary daily. BPA will assess system conditions and will provide storage capability within system limitations. Amounts and timing of storage may be negotiated on a preschedule basis.
Notification	Storage deliveries and returns will be conducted on a preschedule basis.
Spill Guarantee	This standard product is not guaranteed against spill.
Limitations	BPA may limit return of storage to a specified group of peak hours each day.
Reservoirs	This storage is considered system storage and is not tied to a specific reservoir.
Accounting	BPA’s normal storage accounting practices will be used.
Linkages	None.
Basis for Payment	Payment is based on amounts and periods when energy is stored and returned.

Note: Standard power products can be the basis for negotiating products that meet the needs of individual customers.

<i>Bilateral Products</i>	<i>Resource Factoring – (Under discussion)</i>
General	<p>This product generally involves the delivery and return of equal amounts of energy in specified time periods. It is designed for customers that want to deliver energy to BPA at a certain time and have it returned at another time. It can be used for within-day shaping of a resource.</p> <p>The product can be designed to include (1) energy accepted from the customer in LLH and delivered to the customer in HLH, (2) energy accepted from the customer in the spring and returned to the customer in the winter, or (3) energy delivered to the customer in advance of energy being provided to BPA</p>
Term	The term of this product is negotiable.
Transmission	Transmission and Ancillary services are not included, but BPA can secure these services and package them with this product.
Amount & Shape	BPA will negotiate with the customer on a case-by case basis for providing the services necessary to meet the customer's needs.
Firmness	This service may be firm or non-firm based on price and system conditions.
Limitations	BPA may limit delivery of this product to a specified group of peak hours each day.
Linkages	None.
Basis for Payment	Payment is based on the number of MW required to support the service and/or MWh accepted and/or returned.

Note: Standard power products can be the basis for negotiating products that meet the needs of individual customers.

<i>Bilateral Products</i>	<i>Preschedule Change Rights– (Under discussion)</i>
General	This product provides the customer with the right to make changes to scheduled amounts previously set in the preschedule process, i.e., the workday prior to the day of delivery. It is assumed to be attached to an umbrella agreement or power sales contract specifying the limitations on preschedule change rights.
Term	Up to the term of the underlying agreement.
Transmission	Transmission and ancillary services are not included, but BPA can secure these services and package them with this product.
Amount & Frequency	The maximum MW/hr magnitude of the schedule change and the number of changes per hour will be specified in the underlying agreement.
Deadline	Changes from preschedules for the “Hour Ahead” would be accepted until a specified time prior to the beginning of that clock hour.
Linkages	This product is offered in conjunction with an underlying BPA purchase agreement.
Basis for Payment	Payment is based on rights: amount (in MW) and frequency (in hours/month).

Note: Standard power products can be the basis for negotiating products that meet the needs of individual customers.

<i>Bilateral Products</i>	<i>Displacement</i>
General	This product is designed to allow the customer to purchase less power from BPA, for any reason, than their commitment to purchase. Customer can use this product in addition to the Block Flexibility product to supplement the ability to reduce BPA purchases. This product enables the customer to exercise economic choice in large amounts for limited periods.
Term	One-calendar-month increments, not to exceed the term of the underlying agreement.
Transmission	Transmission and ancillary services are not necessary.
Amount & Shape	The product provides for displacement up to 100% of the BPA purchase.
Linkages	This product is offered in conjunction with a BPA power sale to the customer. The displacement product does not relieve the purchaser from a demand charge in the underlying purchase.
Basis for Payment	Payment is based on amount of displacement right and amount of use.

Note: Standard power products can be the basis for negotiating products that meet the needs of individual customers.

<i>Complements to Core Products</i>	<i>Scheduling Services</i>
General	BPA can provide scheduling services for customers that purchase non-Federal power. (Scheduling fees will not be charged for power purchased by the customer from BPA.)
Term	Up to the term of the purchase.
Types of Scheduling Services	<p>Scheduling services are customized, tailored to the type of agreement or resource, and to the specifications of individual customers.</p> <p>BPA can provide the following Scheduling services, if requested:</p> <ul style="list-style-type: none"> • <i>Daily prescheduling:</i> Daily prescheduling of transactions between utilities within the Western Systems Power Pool (WSPP). • <i>Real-Time Activities:</i> Verification and coordination of the necessary interchange schedules with all parties involved, and coordination of all real-time changes in preschedules with all affected parties. • <i>After-the-Fact Activities:</i> After-the-fact verification and reconciliation of transactions. Bonneville will provide records of hourly schedules each day and cumulative total schedules at the end of each calendar month.
Conditions	<p>Customer will submit preschedule information (including hourly schedules, transmission arrangements, control area contacts) by a specified time, each preschedule day.</p> <p>Customer will provide the name of the utility providing load regulation and reserves, for each schedule.</p> <p>BPA is not responsible for reserves or mitigating losses if no reasonable alternatives are provided.</p>
Linkages	This product is tied to a non-Federal purchase.
Basis for Payment	Payment is based on fee for services and actual number of preschedules and real-time changes.

Note: Standard power products can be the basis for negotiating products that meet the needs of individual customers.

<i>Reserves, Resource Support</i>	<i>Supplemental AGC</i>
General	<p>This product makes capacity available to either deliver or receive energy as needed on an instantaneous basis to cover a utility's load and resource variations.</p> <p>Since the Transmission Business Line will offer this product to customers within BPA's Control Area, this product is intended for customers outside BPA's Control Area.</p>
Term	Up to 5 years, beginning October 1, 2001.
Transmission	Transmission is not included, but BPA can secure transmission and package it with this product.
Amount & Shape	Hourly capacity is pre-determined by customer. Net amount of energy provided by BPA on any hour is determined by integrating the signal between BPA and the customer each hour.
Firmness	This standard product is sold on a firm basis.
Direction	Standard product is bi-directional
Accounting	Amounts of energy will be integrated on an hourly basis.
Equipment	Customer is responsible for acquiring and purchasing the telemetry and communications channel that are required between the customer's control center and the BPA control center.
Linkages	None
Basis for Payment	Payment is based on amount of capacity available on an instantaneous basis and amount of hourly or monthly net energy delivered or received.

Note: Standard power products can be the basis for negotiating products that meet the needs of individual customers.

<i>Reserves, Resource Support</i>	<i>Operating Reserves</i>
General	<p>This product can be used to meet the customer's NWPP, WSCC, NERC or other reserve obligations within an hour. We offer Spinning and Non-spinning reserves that can be called upon in the event of a resource failure. Spinning reserves are provided from on-line generation that is responsive to changes in system frequency and are available within 10 minutes upon notification of a resource failure. Non-spinning reserves are provided from generation that can be on-line within 10 minutes or load that can be interrupted within 10 minutes.</p> <p>This product could also be negotiated to meet a customer's import loss obligations.</p> <p>Since the Transmission Business Line will offer this product to customers within BPA's Control Area, this product is intended for customers outside BPA's Control Area.</p>
Term	Up to 5 years, beginning October 1, 2001.
Transmission	Transmission is not included, but BPA can secure transmission and package it with this product.
Amount	Up to the contracted amounts within 10 minutes of notification.
Energy Delivery	BPA will provide energy for up to 60 minutes.
Ramp Rate	
Linkages	None.
Basis for Payment	Payment is based on amount of operating reserve capacity provided by BPA and amount of energy delivered.

Note: Standard power products can be the basis for negotiating products that meet the needs of individual customers.

<i>Reserves, Resource Support</i>	<i>Forced Outage Reserves</i>
General	This product provides Forced Outage Reserves that can be called upon at the start of an hour in the event of a resource or transmission line failure.
Term	Up to 5 years, beginning October 1, 2001.
Transmission	Transmission is not included, but BPA can secure transmission and package it with this product.
Amount	Size of resource or transmission line (MW), specified by customer, to be backed for the duration specified
Resource being supported	Back-up provided for forced outages on specific resources or transmission lines identified by the customer.
Duration of Energy Delivery	BPA will provide energy for the duration specified by the customer, normally up to 48 consecutive hours per occurrence and up to 6 occurrences in a year.
Linkages	This service can be packaged with Operating Reserves and be available immediately upon notice of a resource or transmission line failure. This service can also be sold in such a way that it picks up after your Operating Reserves have been exhausted.
Basis for Payment	Payment is based on amount of forced outage reserves (MW) held by BPA and amount of energy provided.

Note: Standard power products can be the basis for negotiating products that meet the needs of individual customers.

<i>Complements to Core Products</i>	<i>Block Flexibility– (Under discussion)</i>
General	This product will meet variations in customer’s purchase(s) from BPA, regardless of the reason for the variations. The reasons will be identified at the time of negotiation and will be factored into the price of the product. This product is associated with a separate take-or-pay power purchase.
Term	The term will be the same as the term of the underlying power purchase.
Transmission	Transmission and ancillary services are not included, but BPA can secure these services and package them with this product.
Amount & Shape	Customer will specify the hourly amount of flexibility above and below the take-or-pay amount. These variance limits do not have to be symmetrical around the take-or-pay amount.
Load Variations	All variations in load (e.g., load growth, economic or retail access load loss) can be covered in this product, up to the variance limits.
Resource Fluctuations	All fluctuations in resources (e.g., purchases or generating resource output) can be covered in this product, up to the variance limits.
Linkages	This product is offered in conjunction with a take-or-pay purchase from BPA.
Basis for Payment	<p>Payment is based on amount of variance.</p> <p>There is no energy delivery associated with this product. For net energy deliveries, within the variance limits, in excess of the underlying power purchase(s), the basis for payment will be the same as for the underlying power sale; There will be no charge for energy not taken, within the variance limits.</p>

Note: Standard power products can be the basis for negotiating products that meet the needs of individual customers.

<i>Complements to Core Products</i>	<i>Retail Access - Insurance</i>
General	This product allows the customer to reduce its purchases from BPA if load is lost because retail customers gain access to other suppliers of electricity. It relieves the customer of the market risk associated with BPA remarketing customer's take-or-pay power associated with retail access load loss.
Term	5 years, beginning October 1, 2001 (or another term consistent with the Rate Schedules).
Transmission	Transmission and ancillary services are not included, but BPA can secure these services and package them with this product.
Amount & Shape	BPA will assume the retail access load loss risk up to a specified amount of the customer's load in a shape consistent with the type of load lost.
Retail Access Load Loss	For loads lost by the customer due to retail access, BPA will adjust take-or-pay amounts under the customer's power sale.
Linkages	This product is offered in conjunction with a BPA power sale to the customer. It would not protect the customer from load loss beyond the amount of protection being purchased from BPA.
Basis for Payment	Payment is based on amount of retail load insured.

Note: Standard power products can be the basis for negotiating products that meet the needs of individual customers.

<i>Complements to Core Products</i>	<i>Retail Access - Remarketing</i>
General	<p>This product is designed to provide relief from take or pay purchase requirements.</p> <p>This product serves to remarket a customer's excess power resulting from of retail load(s) lost by the customer due to retail competition or de-regulation.</p>
Term	Limited to the term(s) of the underlying purchase agreement(s).
Transmission	Transmission and ancillary services are not included, but BPA can secure these services and package them with this product.
Amount & Shape	The amount of excess firm energy to be remarketed will identified in advance and will be limited to the customer's load loss. The shape of the power to be returned to BPA for remarketing will match the shape of the lost load.
Limitations	Under certain market or system conditions, BPA may have a limited ability to remarket.
Load Variations	None: Amount is fixed. BPA and customer can agree on the amount to be remarketed.
Linkages	This product is offered in conjunction with a BPA sale to the customer. It would not protect the customer from a take-or-pay obligation associated with load loss beyond the amount being remarketed by BPA.
Basis for Crediting	The customer's power bill will be credited for the sale amount less any fees.
Basis for Payment	<p>Take or Pay: Payment is based on the monthly contract amount.</p> <p>Fees will be charged, as necessary, to off-set the cost of providing this service.</p>

Note: Standard power products can be the basis for negotiating products that meet the needs of individual customers.

<i>Complements to Core Products</i>	<i>Option for Follow-on Subscription Rights</i>
General	Any regional customer who buys firm power from BPA under a commercial or umbrella contract for a negotiated period of time can include a provision in its contract that will secure ongoing rights to purchase BPA power in the future at the lowest cost-based rate.
Term	Consistent with the term of the underlying agreement
Pricing Construct; Duration and Amount of Power	The “lowest cost-based rate” will be determined through BPA’s rate process. BPA and the customer will negotiate the duration of the rate protection and the amount of power covered by the rate, and the price for this option.
Linkages	This product is offered in conjunction with a purchase of subscription power from BPA.
Basis for Payment	Payment is based on a negotiated fee

Note: Standard power products can be the basis for negotiating products that meet the needs of individual customers.