Final Report on Modifications to December 1999 Complex Partial Product (and Dedicated Resource Product)

BPA Power Business Line

April 26, 2000
Proposed Modifications and Product Additions
Complex Partial Product
(and Dedicated Resource Product)

Background

This report describes proposals of the BPA Power Business Line (PBL) to modify the power products described in the December 1999 BPA Power Products Catalog. Some of the proposals are clarifications to the core product, and some are proposed features to be offered under the Firm Power Products and Services (FPS) Rate Schedule.

One issue regarding the Dedicated Resource Product is addressed at the end of this report.

Objective; Why BPA is proposing modifications/additions to the Complex Partial Product

Customers who own and operate hydroelectric facilities, and who potentially would purchase a net requirements product from the PBL, state that the proposed Complex Partial Product (Product) described in the December 1999 BPA Power Products Catalog does not provide a reasonable service alternative to meet their net requirements. Although the Product is intended to provide service comparable to service provided a full requirements customer, the PBL recognizes that it would be very difficult for any customer to operate its resources in a manner that would allow it to completely avoid incurring penalty charges under the Product.

In this context PBL staff reviewed the concerns of potential customers and evaluated potential modifications and additions to various features of the Product. The goal of the Product evaluation was to identify modifications and additions that would make the Product a reasonably attractive service alternative. Primarily, the staff focused on modifications and additions that recognize customer uncertainty and susceptibility to uncontrollable influences such as fuel (water) supply, weather, and unforeseeable load outages. At the same time staff strove to assure that the product continues to adhere to the previously adopted business test that the product should not involve greater cost or risk than Full Service. Therefore, staff did not attempt to accommodate factors such as adverse market conditions, uncertainty in unpredictable large consumer loads, or resource outages.

Constraints on potential modifications

In addressing potential product modifications, PBL staff worked within guidelines established by PBL management. Those guidelines were:

1. Product modifications cannot delay Subscription, and modifications therefore must be completed by the end of January 2000.
2. Product modifications cannot expose BPA and its other customers to substantially increased risk or cost, and cannot require BPA to carry additional financial reserves.
3. Product features resulting from the modifications should be provided to the purchaser either at no charge or at a cost-based charge.
4. Adoption and implementation of the product modifications must not require supplementing or otherwise delaying the 2002 rate case.
5. Modifications must address the existing product, not require a major product re-design.

Proposed Product Revisions

The PBL proposes four product modifications, and one clarification of the core product. The proposed modifications are: (1) a grace margin for Within-Day Factoring; (2) a grace margin for Within-Month Factoring; (3) a choice of factoring checks for Sundays; and (4) relief from factoring checks for unforeseeable load outages. The clarification concerned redistribution of declared Pacific Northwest Coordination Agreement (PNCA) hydro resources.

1. Within-Day Factoring Grace Margins

**Factoring/Excess Factoring/Benchmarks**

Factoring is the service of shaping a given quantity of energy within a period to follow load. The measurement of actual variation in the customer’s total retail load establishes the factoring Benchmarks. Excess Within-Day Factoring occurs when the PBL serves more variation in hour-to-hour loads than the factoring Benchmarks.

Within-Day Factoring is measured for both Heavy Load Hour (HLH) and Light Load Hour (LLH) periods of each day. The quantity measured is the amount by which the customer’s total retail load on each hour exceeds the customer’s average total retail load for that day’s HLH or LLH period. The Benchmark for each day’s HLH or LLH period is the sum of these hourly quantities.

The customer’s purchases from the PBL are measured each hour in the same manner. That is, hourly purchases are compared to the average purchase for the HLH or LLH period. The sum of hourly purchase amounts in excess of the average for the period is the amount of Within-Day Factoring provided by the PBL. If the amount of factoring provided by the PBL during the HLH or LLH period is greater than the amount of factoring measured in the customer’s total retail load (the Benchmark), there is excess factoring.

**Grace Margin**

The PBL proposes a grace margin for excess Within-Day Factoring. The grace margin would be a product priced at the FPS rate schedule. The grace margin product would be available to all purchasers of the Complex Partial Product and the Block with Factoring product. Grace margins would be calculated separately for each HLH and LLH period of each day.

The grace margin would be 20 percent of the factoring Benchmark for the HLH or LLH period. That is, the grace margin would be an additional 20 percent on top of the factoring Benchmark. Factoring within the grace margin would not incur excess factoring charges. However, if the actual factoring were to exceed the grace margin by any amount, all excess factoring for that daily period, including the amount otherwise within the grace margin, would be charged excess factoring charges.
Grace Margin Rationale

The 20 percent level was judged to be reasonable based on the PBL’s expectations of how closely customers could schedule their resources to match their load shapes. The PBL expects that customers will view the grace margins as encouraging operation of resources to follow customer loads, with a cushion for unforeseeable load fluctuations. The PBL does not expect customers to view grace margins as punitive, since they are based on reasonable costs a customer would encounter in PNW power markets. A 20 percent margin should allow customers to follow loads within the day without concern that excess factoring charges would be triggered.

Grace Margin Charges

Excess factoring within the grace margin would be charged the FPS charge. The charge would be the absolute value of the difference between 110 percent of the daily Mid-C Firm Power HLH or LLH price, and the applicable PF HLH or LLH Energy Charge. Use of the absolute value is appropriate because any differential, positive or negative, presents an opportunity for a customer to optimize PF purchases against available market prices. Such optimization would be costly to the PBL. The PBL has assumed, however, that the more frequent scenario would be Mid-C prices higher than the PF energy charge.

The within-grace margin charge for purchases of New Resources Rate (NR) power would be equivalent to the charge for PF purchasers. The charge would be the absolute value of the difference between 110 percent of the daily Mid-C Firm Power HLH or LLH price, and a mills per kWh number equal to the PF diurnal Energy Charge for the diurnal monthly period when the factoring occurred. Use of an equivalent price for customers purchasing at the PF and NR rates is appropriate in order to provide the same incentive (encouraging factoring within the Benchmarks) to both purchasers.

If the daily Mid-C firm power index should at any time prove no longer to be a viable index for this purpose, another index would be substituted by the PBL upon notice and opportunity to comment by all affected parties.

Pricing Rationale

Use of the grace margin by a customer means that the load the PBL serves has greater variation than the underlying total retail load. Although factoring checks only measure excess factoring as a sum for a daily period and not as hour by hour excess amounts, it is reasonable to expect that the load being served with excess factoring is “peakier” than the customer’s total retail load. This being the case, the PBL probably is being called upon to serve more “super-peak” load (in HLH) or less graveyard load (in LLH) than the overall average for HLHs or LLHs. Using 110 percent of the Mid-C price recognizes the expected higher value that BPA is providing.

Excess Factoring Charges

Factoring beyond the Benchmark, but within the grace margin, would not be defined as “Excess Factoring” for application of the 2002 Wholesale Power Rate Schedules. However, if the grace margin were to be exceeded for any day’s HLHs or LLHs, all excess factoring, including that within the grace margins, would be charged the Excess Within-Day Factoring Charge in the 2002 General Rate Schedule Provisions. In other words, if excess factoring in
a diurnal period of a day exceeds the grace margin, the grace margin ceases to be in effect for that diurnal period of that day and all kWhs of excess factoring would be charged the Excess Within-Day Factoring Charge.

2. Within-Month Factoring Grace Margins

Factoring/Excess Factoring/Benchmarks

Within-Month Factoring is calculated for both HLH and LLH periods of each day. The calculations are performed after the end of the month. The measure of allowable Within-Month Factoring is a comparison of daily HLH or LLH energy use to average HLH or LLH energy use for the month. This comparison establishes the Within-Month Factoring Benchmarks. Within the factoring Benchmarks a customer may purchase requirements power without incurring Excess Within-Month Factoring Charges.

The Benchmarks are calculated from the customer’s daily and average monthly HLH or LLH total retail load and the customer’s average monthly HLH or LLH purchase from the PBL. One Benchmark limit always is the customer’s monthly average HLH or LLH energy purchases from the PBL. The other Benchmark limit is the monthly average HLH or LLH energy purchase, plus or minus the amount that the HLH or LLH total retail loads for a day differ from monthly average HLH or LLH total retail loads.

A conceptual way of describing the Benchmarks is the range of purchases from the PBL in any shape from, flat over all hours of the diurnal period of the month, to following all variation in the customer’s total retail load. The customer strongly affects the shape of its purchase from the PBL by how it applies its resources to its retail loads.

Excess Within-Month Factoring is described as energy purchased in the HLHs or LLHs of a day that either exceeds or is less than the Benchmarks. That is, excess Within-Month Factoring is power purchased in a shape that requires more day to day factoring than the actual measured day to day variation in the customer’s total retail load.

Grace Margin

The PBL proposes grace margins for excess Within-Month Factoring. The FPS grace margin feature would be available to all purchasers of the Complex Partial Product and the Block with Factoring product. The proposed grace margins are a limited amount of daily energy purchases greater than or less than the Benchmarks. Above the Benchmarks, a customer would take more PF power than it otherwise would be entitled to in a day. Below the Benchmarks, a customer would take less PF power than it otherwise would be entitled to in a day. HLHs and LLHs of the month would have separate factoring checks and grace margins.

The proposed grace margins would be plus or minus 20 percent of the customer’s retail residential load. The grace margins would not be measured directly but would be calculated by applying a residential percentage to the measured total retail load for the HLH or LLH period of each day. Therefore, residential load would be an estimated portion of the measured total retail load. The residential percentage would be agreed to in the Subscription contract.
Grace Margin Rationale

This grace margin feature is intended to account for variation in load that cannot be predicted. Weather uncertainties within a month likely would be a major factor causing customers to incur excess Within-Month Factoring. Residential load would be used for calculating these grace margins because estimates for residential loads reasonably could be obtained. While other types of loads may exhibit weather-related variation, the definition of such loads is not readily available, and consistent identification of such loads is unlikely, across utilities. Hence, residential load would serve as a proxy for weather-dependent load and would be used for calculating Within-Month Factoring grace margins.

The 20 percent level was perceived to be reasonable based on the PBL’s expectations of the level of weather unpredictability for a month. A 20 percent margin should allow customers to account for the error in weather forecasts for a month while using their resources to follow within-month variation in loads. Analysis of actual customer data demonstrated that a grace margin of 20 percent of retail load provided substantial relief from excess factoring charges and the resulting grace margin charges are not expected to be punitive.

Grace Margin Charges

Excess factoring within the grace margin would be assessed the grace margin factoring charge, a feature offered under the FPS rate schedule. The charge would be the absolute value of the difference between 100 percent of the daily Mid-C Firm Power HLH or LLH price and the applicable PF diurnal Energy Charge. Use of the absolute value is appropriate because any differential, positive or negative, presents an opportunity for a customer to optimize PF purchases against available market prices. Such optimization would be costly to the PBL. The PBL assumed, however, that the more frequent scenario would be Mid-C prices higher than the PF energy charge.

The grace margin factoring charges would be calculated for daily amounts of factoring above or below the Benchmarks, but within the grace margin. The grace margin factoring charges would be calculated separately for HLHs and LLHs of each day. Charges for factoring above the Benchmarks would be positive and charges for factoring below the Benchmarks would be negative. Positive and negative dollar charges would be net against each other for the HLH or LLH periods of each month. The absolute value of the net dollars for the HLH or LLH period of the month would be the within-grace margin charge.

The within-grace margin charge for New Resources Rate (NR) power would be the absolute value of the difference between the daily Mid-C Firm Power HLH or LLH price, and a mills per kWh number equal to the PF Energy Charge for the diurnal monthly period during which the factoring occurs. This price would be equivalent to the within-grace margin price paid by PF purchasers. Use of an equivalent price for customers purchasing at the PF and NR rates is appropriate in order to provide the same incentive (encouraging factoring within the Benchmarks) to both purchasers.

If the daily Mid-C firm power index should at any time prove no longer to be a viable index for this purpose, another index would be substituted by the PBL upon notice and opportunity to comment by all affected parties.

Excess Factoring Charges
Factoring beyond the Benchmarks within the grace margins would not be defined as using “Excess Factoring” for application of the 2002 Wholesale Power Rate Schedules and could be made without incurring Excess Within-Month Factoring Charges. However, daily energy purchases greater or less than the grace margins would trigger Excess Within-Month Factoring Charges. Once the Excess Within-Month Factoring Charges trigger for a HLH or LLH period of a day, the grace margin no longer would apply to that day’s HLH or LLH period. All excess factoring for that day’s HLH or LLH period would incur the Excess Within-Month Factoring charges in the 2002 General Rate Schedule Provisions.

There would be no monthly netting of positive and negative amounts of excess factoring for calculating Excess Within-Month Factoring Charges. However, as noted in the General Rate Schedule Provisions, the HLH and LLH Excess Within-Month Factoring Charges would apply only to the greater of the monthly sum of positive or negative amounts.

3. Factoring Checks for Sundays

The PBL is aware that some customers schedule their resources on Sundays in the same manner that they schedule resources for other days of the week that have both HLH and LLH periods. For instance, customers may shape their resources more heavily into the hours ending 0700 through 2200. Although the Within-Day and Within-Month Factoring checks could penalize such a resource shape, the PBL does not want to discourage that application of resources. Therefore, BPA would allow the customer to choose one of two ways for testing Within-Day and Within-Month Factoring for Sundays. For Within-Day and Within-Month Factoring Sundays may be tested as if they were comprised of a combination of HLHs and LLHs, or as if they were comprised solely of LLHs. The customer would make that election in its Subscription contract.

4. Factoring Relief for Outages

The PBL proposes relief for unforeseeable outages for Within-Day and Within-Month Factoring. The relief for unforeseeable outages described in this section would be available to customers within the BPA control area purchasing the Complex Partial Product and the Block with Factoring product.

Customers within the BPA control area would be relieved from Within-Day Factoring charges for instances of, and only for the amount and duration of, unforeseeable load outages that occur after customer resources are prescheduled. Relief would be provided for outages reducing hourly demand by 5 megawatts or more. Such occurrences may result from equipment failure either in the transmission or utility distribution system, or failure of machinery or equipment of large end-use consumers. Load losses resulting from economic factors such as market electricity prices, prices or other market conditions for industrial products, customer or consumer resource outages, or other factors affecting customer or consumer resources would not qualify for relief from factoring charges. Relief from factoring charges would not be provided for consumer loads subject to frequent outages or for otherwise unpredictable consumer loads of a customer.

To receive relief from factoring charges, the customer would have to document the cause of the outage, the amount, and the timing of the load loss to the PBL’s satisfaction. The
Subscription contract would specify how outages would be reported to the PBL to qualify for relief from factoring charges. The customer would be responsible for reflecting the effects of the change in load profile due to the outage in any resources scheduled subsequent to the initial occurrence of the outage. If the outage were to occur during a period prescheduled for more than one day (such as a weekend), the customer would be required to adjust prescheduled resources to account for the outage. Such adjustment would be required by the next preschedule deadline following the outage, even if not on a normal preschedule day. Consequently, relief from factoring charges only would be provided until the next preschedule took effect.

If the outage were 50 megawatts or more, and would have a duration of 24 hours or more, it would have to be reported to the PBL within 2 hours of the outage in order to receive relief from factoring charges.

During the diurnal period of relief from factoring charges, the PBL would ignore excess Within-Day and Within-Month Factoring, both within and outside applicable grace margins.

5. Annual Resource Declaration Reshaping

The PBL proposes to allow some annual redistribution of a customer's diurnal resource declarations. This redistribution would be only for hydro resources, and only for those hydro resources declared for Pacific Northwest Coordination Agreement (PNCA) planning. This provision would be applicable only to customers that purchase the Complex Partial Product from the BPA PBL.

Prior to August 1 of each operating year (OY), a series of PNCA planning hydro-regulation studies are performed that compute monthly energy production from each of the hydro projects included in PNCA planning. The monthly energy production may differ from operating year to operating year depending on: (1) estimated firm loads of the PNCA members, (2) firm resources (hydro, thermal, and miscellaneous) included in PNCA planning, and (3) non-power constraints on the coordinated resources.

For purposes of allowing some annual redistribution of a customer's diurnal resource declarations, customers' resource declarations, in Subscription contracts, would be expected to have relied on the results of the final PNCA planning regulation for OY 2001. If the final PNCA planning regulation for a subsequent OY resulted in different monthly energy production from a customer's hydro projects, the customer would be able to reflect those differences in its declared resources. The customer could apply the monthly difference to declared HLH or LLH energy resources, or to a combination of both HLH and LLH resources. However, the customer would not be able to decrease one diurnal capability while increasing the other diurnal capability of the same month.

The PBL recognizes that customer resource declarations are not likely to precisely track any direct result from PNCA planning regulations. Therefore, in order to implement this proposal, BPA and other PNCA parties that expect to reshape their hydro resource declarations must work out a method for translating changes in the results of hydro-regulations into numbers applicable to customer resource declarations. That method must protect the PBL from incurring additional costs caused by economic choices of customers.
Consistent with BPA’s Section 5(b) Policy, customers may be allowed to redistribute diurnal resource declarations of non-PNCA hydro resources in a manner similar to changes of PNCA hydro resources if a state or federal agency directs changes in the operation of the resource. This provision is not assured to non-PNCA resources, however, and the burden will be on the customer to demonstrate that such an adjustment is appropriate and that the adjustment will benefit BPA. The customer would be required to demonstrate, to the PBL’s satisfaction, the required change of capability of its resource, on a case by case basis.

These described changes to customer resource declarations would be a clarification of the posted product and would be at no additional charge.

Other Factors Considered but not Recommended

1. Elimination of Monthly Diurnal Declarations

In 1996, BPA changed its wholesale power rate structure to reflect changes in the wholesale power market. The market had begun to reflect the fact that the value of electrical power was not the same for all hours of the day or week and BPA incorporated HLH and LLH energy charges in its 1996 Wholesale Power Rate Schedules. As BPA relies more and more on the market for energy to balance Federal Columbia River Power System (FCRPS) resources and its customer load obligations, BPA must impart recognition of the cost differential to its customers. In order for BPA to manage its resource costs, customers must bear the responsibility for their own resource costs and provide to BPA the information necessary for resource planning.

Monthly diurnal resource declarations are important to protecting the PBL from risks of acquiring and selling resources in adverse power markets. Attachment 1 contains a discussion of the importance of those declarations.

2. Allow Month-to-Month Resource Flexibility

The current and expected operating requirements for the FCRPS allow for no month-to-month shifting of capabilities in most months. Only a very small amount of shifting is possible in only two or three months of the year. The PBL does not expect that FCRPS flexibilities will increase in the next five to ten years. Consequently, it would be imprudent for the PBL to offer such flexibilities to customers as a component of cost-based power sales. To do so would place added risk on BPA and its other customers.

3. Replacing Within-Month Factoring with Scheduling Rules

Customers have proposed that BPA eliminate the Within-Month Factoring checks and replace them with scheduling limits similar to, and possibly more restrictive than, the limits in the 1981 Power Sales Contracts. Effecting such a change would require extensive redesign of power products that have been in development for more than a year. A major re-design would be certain to delay Subscription and is impractical at this time.

4. Displacement in the Posted Product

The PBL is not proposing to include displacement as a feature of products that would be sold at a posted price under the Priority Firm Power Rate.
The PBL is offering a Displacement Product to customers for the October 2001 – September 2006 period that can be added to any PBL power sales contract through bilateral negotiations. It would be priced under the FPS rate schedule. The Displacement Product is designed to allow the customer to purchase less power from the PBL than its commitment to purchase, for any reason. This type of contract right usually is referred to as a “put” option. The customer pays the PBL an up-front negotiated option fee to be able to “put” a specified amount of energy back to PBL, without having to pay the PBL for the energy that was to be provided under the power sales contract.

The PBL believes that the establishment of active wholesale power markets in the Pacific Northwest allows the PBL and its customers to move to an option approach to displacement. Customers with generation no longer have to displace planned purchases from the PBL because the opportunities to sell surplus generation in the daily and hourly wholesale power markets are available to them. The PBL believes the option approach to displacement reflects the true cost of the service requested by each individual customer and therefore can be tailored to that individual customer’s needs.

5. Real-Time Schedule Change Rights

Some customers requested rights to change from preschedules, similar to the rights they had under the 1981 Power Sales Contracts.

The product description allows resource changes up to 30 minutes prior to the hour for resources of customers whose loads are in the BPA control area. BPA has chosen to not allow other real-time change rights for any of the core Subscription products. BPA recognizes that real-time changes could either benefit or harm BPA’s costs. However, schedule changes beneficial to BPA may occur too late for the PBL to take advantage of the benefit, while changes harmful to BPA would be very costly for BPA to respond to, and could shift costs to other customers.

Revisiting the decision to not allow additional changes to preschedules would represent a major redesign to the product, and would be outside the scope of current product modification proposals. An ad hoc decision to allow change rights in specific situations, or for specific customers, would raise concerns about equitable treatment of different customers.

6. Monthly Resource Redistribution

The PBL considered allowing customers to shift a portion of their declared LLH resource capabilities into HLHs of the same month. An intended benefit of this provision would have been to enable customers to support their declared peaking capability in the event of unexpectedly high loads.

Initial customer reaction was not supportive of this proposal and PBL staff found its potential implementation extraordinarily complex. Consequently, the PBL decided not to propose this feature.

7. Apply Load Variance Charge only to Variable Portion of Load
Some customers proposed applying Load Variance Charges only to the portion of load subject to variation, and not to underlying base load. The Load Variance Charges are being developed in the 2002 Wholesale Power Rate Case and re-examination of those charges was not possible within the guidelines established for this product review.

**Issue Regarding Actual Partial Service with Dedicated Resources**

**Demand Credit for Secondary Resources**

Customers have asserted that the Mid C Firm Power HLH index contains no demand component in its prices, and that the PBL should separately credit demand for the application of customer secondary resources to the customer loads. The application of this proposal would reduce the demand purchase from BPA when secondary energy is applied at the time of the customer’s peak total retail load. BPA has countered that the Mid C Firm Power HLH price includes a demand component and therefore no separate demand credit is justified.

One customer proposes, alternatively, that if BPA insists that the Mid C Firm Power HLH price includes a demand component, BPA should credit the customer for its secondary energy resources in another manner. The proposal is that the PBL should separate out the demand and energy components of the index and credit each component separately to the customer when the customer’s resources displace purchases of PF power.

The PBL incurs the cost of standing ready to serve the customer's peak demand component. Customer displacement of PF purchases at the time of the customer's system peak load does not result in a commensurate reduction of the PBL's demand-related costs, and the PBL cannot remarket the displaced demand purchase. Consequently, a demand credit is not justified for any standard product application and the PBL will not propose one for the Dedicated Resource product.
Attachment 1

Resource Declarations
for Complex Partial Product
Product Clarification and Potential Revision

Summary

BPA’s Complex Partial Product will require monthly declarations of customer resources by Heavy Load Hour (HLH) energy, Light Load Hour (LLH) energy, and Peak for the term of the contract the customer signs with the BPA. Such declarations are necessary to protect BPA from costs that would be incurred if customers had discretion to re-declare those resources at more frequent intervals.

The resource declarations will be required to comport with reasonable and prudent utility practices and will be consistent with resource data the customer uses for other purposes.

An exception to the requirement for fixed declarations is for hydro resources submitted for the Pacific Northwest Coordination Agreement (PNCA). The resource amounts for such resources may be revised annually to comport with the results of the regulation runs for PNCA planning. This exception also may be applied to non-PNCA hydro resources.

Importance of Monthly Diurnal declarations for the contract term

In the current BPA Power Business Line (PBL) Wholesale Power Rate Case, the PBL is establishing rates that will be in effect for a 5-year period, starting in October 2001. Those rates are based on forecasts and assumptions for resource capabilities, customer power requirements, and market prices that will occur over the FY 2002 through FY 2006 period. The PBL’s actual power sales and purchases during that period will depend highly on the actual net requirements of customers. The cost to the PBL of those transactions will depend not only on the customer net requirements, but also on prices in the markets where the PBL will sell its surplus resources and acquire resources to meet its obligations.

One of the principles used in developing core Subscription products is that BPA will assume no more risk on the behalf of partial requirements customers than BPA assumes on behalf of full requirements customers. That is, BPA will assume the risk of load uncertainty, but not the risk of customer resource uncertainty. By requiring monthly customer resource declarations, the PBL minimizes its acceptance of customer resource uncertainty.

The complex partial product provides a one-time opportunity for customers to declare their resources in a shape that best suits their power needs, given BPA’s five-year power rates. These resource declarations will, in large part, determine the net requirements that customers will place on BPA during the term of their contracts (from three to 10 years). The PBL expects that the net requirements of these and other customers will exceed the capability of the Federal Columbia River Power System (FCRPS) and that customers will subscribe to more power than the FCRPS is able to produce in certain periods. Accordingly, the PBL is expecting, at times, to acquire additional resources to supplement the current FCRPS inventory. The fixed resource declarations will enable BPA to manage its purchases and sales of power to most economically serve its obligations. The fixed declarations also will allow the PBL to plan for and acquire the transmission needed to deliver power to its obligations.
If the relative relationships of market prices in various monthly diurnal periods change during the 2002 – 2006 period, customers may perceive incentives to change their monthly diurnal period resource declarations to take advantage of the optimal combination of resources and purchases from BPA. In this situation annual or other more frequent declarations of customer resources could prove costly to BPA. The PBL could be required to purchase in a more costly manner, or sell in a less compensatory manner than planned, and the PBL may be required to adjust its required transmission. This would impose a financial burden on BPA and on its other customers.

Customer Discretion in the Resource Declarations

Although the customer has little or no significant ability to change diurnal monthly resource declarations, once made, the customer does have some discretion in its initial declarations. The December 1999 Power Products Catalog states,

*the declared amounts . . . (of customer resources) . . . will be based on reasonable and prudent utility practices and will be consistent with resource data used by the customer historically for purposes of its BPA contracts and for other purposes. Customer declared amounts may take into account change of condition(s) reasonably affecting resource capability. Prudent utility practices for establishing firm hydro resource capabilities may include criteria other than critical period planning.*

(December 1999 Power Products Catalog, p. 11)

The extent of the discretion this provides the customer is yet to be determined. Of course, if the resource declaration matches the manner the customer applied its resources prior to 2001, BPA will not challenge the declaration.

Declaration Exception for PNCA Resources

All mainstem hydro above Bonneville Dam is included in Pacific Northwest Coordination Agreement (PNCA) planning. The entire resource is included. Other hydro, non-hydro, and contract resources may be included in PNCA Planning if the party so-desires.

If the customer has declared hydro resource capability per PNCA critical period planning criteria, those resource capabilities may be revised annually, with capabilities changing as a result of the coordinated planning processes. Discussions among the PBL and PNCA parties expecting to use this exception will determine precisely how the declarations will tie to the coordinated planning process results. These resources include hydro, whether or not it is mainstem hydro above Bonneville Dam.

PNCA regulations do not separate monthly resource values into HLHs and LLHs. Therefore, to the extent annual or monthly capabilities of PNCA hydro resources change from the capabilities established by the OY 2001 final regulation, customers have some ability to re-designate hydro resources declared under the PNCA. The customer may apply the amount of monthly resource change to either HLHs or LLHs, or to a combination of both. For example, assume the October 2003 resource declaration originally was 100 Megawatthours (MWh), based on the OY 2001 final regulation, and the customer declared that as 75 MWh in HLH and 25 MWh in LLH. If the OY 2003 regulation changed the October value to 90 MWh, the customer could choose to
reduce the HLH declaration to 65 MWh, or the LLH declaration to 15 MWh, or to reduce both HLH and LLH in some combination that totaled 10 MWh.

**Non-PNCA Hydro Resources**

BPA will consider providing a similar declaration exception for other, non-PNCA, hydro resources. That is, if the customer demonstrates that the monthly operation of non-PNCA hydro resources is required to change because of a state or federal agency mandate, the customer may re-designate the monthly resource capability and also may increase or decrease HLH and LLH declarations to the extent of the change. The burden will be on the customer to demonstrate the mandated change to the PBL’s satisfaction.

**Resource Declaration Summary**

This table summarizes the results of the foregoing discussion of resource declarations, and the allowable exceptions.

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<tr>
<th>Resource Type</th>
<th>Resource Declaration Required</th>
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<tr>
<td>Contract Resources</td>
<td>Term of Contract; Monthly HLH, LLH, and Peak.</td>
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<tr>
<td>Thermal and other</td>
<td>Term of Contract; Monthly HLH, LLH, and Peak.</td>
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<tr>
<td>Non-Hydro</td>
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<tr>
<td>PNCA Hydro</td>
<td>Term of Contract with annual modification of Monthly HLH, LLH, and Peak by PNCA regulations; (change from first year monthly regulation may be added to or subtracted from HLH, LLH, or Peak declarations as desired by customer).</td>
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<tr>
<td>Non-PNCA Hydro</td>
<td>Term of Contract with annual modification of Monthly HLH, LLH, and Peak by state or federal mandated operation; (change from first year operating capability may be added to or subtracted from HLH, LLH, or Peak declarations as desired by customer).</td>
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<tr>
<td>Market Purchases</td>
<td>Term of Contract; Monthly HLH, LLH, and Peak.</td>
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