

**BPA'S INTERPRETATION OF THE
PUBLIC GENERATING POOL SLICE PROPOSAL**
*ANNOTATED BY KRISTI WALLIS TO
SEEK CLARIFICATION
AND TO IDENTIFY SPECIFIC CONCERNS RAISED
BY PARTIES TO THE PUBLIC PROCESS¹*

General

- Right to receive a percentage share of FCRPS capability, including actual energy generation (firm and secondary) and storage
- Right to modify the rate at which such energy is produced within hour, day, week, month, year, within the bounds of then-existing minimum and maximum operating constraints of the System (for example, operational and non-power requirements)
- Obligation to pay a corresponding percentage share of BPA revenue requirement without credit for secondary sales
- Assumption of a proportionate share of the risks of the FCRPS

POSSIBLE CONCERNS:

- *When is the snapshot taken? In other words, Slicers would get a piece of the system, but when is the system measured? At the 8/27 Public Meeting, the Slice proponents stated that they would be part of a "subscription settlement process" and would not be asking for special or different treatment. It follows that the snapshot would be taken post rate-case, doesn't it?*
- *Is payment of a corresponding percentage of BPA's revenue requirement (plus the assumption of risk, plus relieving BPA of its obligation to serve increased net requirements loads of Slicer during time of shortfall) sufficient consideration for the product purchased?*

Term

- 5-20 years
- No offramps.

POSSIBLE CONCERNS:

- *The term of the contact is significant when evaluating whether Slicers have truly assumed their proportionate share of the risk associated with the FCRPS. BPA is currently considering whether to plan for risks over a ten-year period rather than the traditional 5 year period. Depending upon how BPA implements its future risk-avoidance strategy, it may be necessary to have longer-term Slice contracts.*

¹ This is an extremely rough draft. The contents of this document will be discussed at the 9/3 Slice Public Meeting and revised to comport with the discussion. The draft will also be cleaned up with respect to formatting and other editing issues.

Eligibility to Purchase

- Any Subscriber, subject to statutory priorities and preferences
- Use same rules as for other Subscription rights regarding phasing or sequencing, prorating reductions, recall, etc.
- Slices sold in early phases of Subscription would be to serve preference load and limited to net load (total retail load minus customer resources)
- Preference rights could be mapped to a percent of FELCC, yielding a Slice percentage; firm portion of Slice would count against preference eligibility
- If resources remain after early Subscription phases, then potentially more Slice purchases

POSSIBLE CONCERNS:

- *[Does using the same rule as for other subscription rights translate into the snapshot being taken post rate case?]*
- *When determining a “net requirements Slicer’s” percentage, is it appropriate to limit mapping to a comparison of a net requirements customer’s firm requirements load and the firm component of the FCRPS, or should a comparison of more of the net requirements’ customer’s resource characteristics be made (e.g., peaking capability, shaping capability)*
- *Once a Slicer’s percentage is mapped at the beginning of the contract term are there any subsequent adjustments? (I would anticipate that planned percentages could vary between year based upon planned variations in the Slicer’s load and declared resources? Slicers’ percentages would not be adjusted for purposes of load growth; presumably they would not be adjusted to take into account decreases of FELCC. Would there be any permissible reasons to remap (and could they be structured so as not to take away from the intention of the proposal that Slicer’s absolutely assume certain risks?)*
- *Is there a way that mapping should be structured so that a net requirements Slicer cannot use it to increase the amount of requirements power it is entitled to? (This possibility is contrary to the intent of the proposal -- is there a potential for gaming in the proposal that must be limited or are we OK?).*
- *Slice as a requirements product would provide greater deviation between load shape and delivered energy (or energy entitlements) than previously provided by BPA. If the Slicers obtain more than their strict requirements entitlement at a time when BPA needs the overage to serve other requirements loads, given that the slice proposal is not intended to take requirements power away from other requirements customers, wouldn’t it be appropriate for the slicer’s overage to be subject to recall or purchase by BPA to the extent needed to serve other requirements load?*
- *Given that Slice as a requirements product would provide greater deviation between load shape and delivered energy (or energy entitlements) and that represents a different treatment from current requirements products (other partial requirements customers pay overage penalty when their scheduled energy delivery exceeds their net entitlement), is there sufficient consideration being paid by the Slicers so that even if there is different treatment it is not preferential treatment and there is parity between requirements customers?*
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Product Received

- Proportionate share of the capability of the FCRPS, including both primary and secondary energy
- Proportionate share of the flexibilities of the FCRPS between the minimum and maximum operating requirements; the Slicers would be kept informed of the minimum and maximum operating requirements by BPA
- Ability to schedule deliver of energy in real-time via traditional prescheduling procedures or via a 4-second dynamic signal to BPA; if a Slicer opts for the 4-second dynamic signal, BPA would have the ability to override the signal if it signals an energy delivery that is outside of the permissible operating flexibilities; the dynamic signal option would allow Slicers to use Slice for automatic generation control or reserves)
- Proportionate share of the storage and shaping rights, such as the ability to vary energy delivered during a day, or between days, weeks, or months within the minimum and maximum operating constraints
- Daily deviations of actual take from right to actual generation would be posted to storage account *[we need more details about what to do when a Slicer goes outside of the permissible operating boundaries -- would probably be more of a problem when prescheduling Slice deliveries]*
- Storage account forced to be zeroed out when FCRPS reaches physical limits (storage is non-guaranteed)
- Hour-ahead changes in amount taken and within-hour ability to adjust signal
- Slicers would not be entitled to purchasing or marketing services from BPA, in particular, BPA would be relieved of its obligation to serve a net requirements Slicer's loads in times of deficiencies
- No protection against required spill; but purchaser does not share in lack-of-market spill *[is this still part of the proposal? I don't think it appeared in the latest PGP write-up, although I could be wrong]]*

POSSIBLE CONCERNS

- *A deliberate redundancy -- given the list of products purchased by a Slicer -- Is payment of a corresponding percentage of BPA's revenue requirement (plus the assumption of risk, plus relieving BPA of its obligation to serve increased net requirements loads of Slicer during time of shortfall) sufficient consideration for the product purchased?*
- *The proposal asks that there not be unnecessary restrictions placed on the use of the product. There are some concerns about what would constitute permissible pooling of requirements products, an issue that transcends Slice. (There is a legal group working on this with respect to partial requirements products). One concern is that requirements power must be used to serve requirements load -- although this is part of the proposal what do we need to satisfy statutory requirements (demonstration that Slicer's requirements load is being served by Slice?) There is also a prohibition on resale of requirements. Although we need to let the lawyers work through this one, I do have a suggestion. Although a Slicer's entitlement to energy in real-time is not tied to load shape, its obligation to use its Slice to serve its requirements load would be evaluated in real-time. Slicers would be required to demonstrate what their requirements load was at a given point in time and that they used the Slice to serve such load. All energy received in excess of the load would be considered for purposes of pooling/resale as surplus products and within the right of the Slicer to pool or resale.*

Linkages

- Cannot be purchased in combination with Full Service or Declared Resource Products

POSSIBLE CONCERNS:

- *PNGC would like this to be amended so that a partial requirements customer could buy a mix of partial requirements products to serve its requirements load.*

Costs to Purchasers

- Slicers would pay a corresponding percentage of BPA's costs, measured as BPA's revenue requirement which has not been adjusted to take into account projected secondary sales, and which excludes:
 1. Transmission costs (purchase "at the bus-bar")
 2. Short-term power purchases
 3. Financial reserves (net revenues for risk)
 4. Resource Acquisitions made for other than public purposes after the snapshot of the FCRPS has been taken to establish the Slicer's percentage
 5. Spill caused by lack of market *[is this still part of the proposal? I'm not sure that it is. Presumably it is not necessary as the Slicers would have control over their percentage of the system's capability and would be making independent decisions regarding whether their share would be spilled]*
- Responsibilities of the Slicers would include their percentage share of FCRPS generation costs and PBL costs including:
 1. generation integration
 2. Treasury and WPPSS bonds
 3. residential/small farm exchange costs if they are a continuing federal system obligation
 4. all personnel and overhead costs for PBL (including marketing power, ratemaking, billing, contract administration)
 5. General Transfer Agreement costs
 6. Service and Exchange agreements
 7. long-term power purchases
 8. environmental investments (some conservation and renewable resource costs)
 9. stranded costs (same treatment as other Subscription purchasers)
 10. other public purposes

[We had clarification at the 8/27 meeting that during the term of the Slice contract, if risks are realized (fish operations, for example), and BPA chose to maintain the level of generation through the application of flexibilities or the payment of reserves, then the cost to BPA should be quantified and added to the revenue requirement. Slicers would then have to pay their proportionate share of the costs through the true up of the revenue requirement. If, however, the result of the fish operation is to lower the generation of the FCRPS, Slicers would not be obligated to make a payment as they have borne their proportionate share of the costs of such operations by getting a reduction in the amount of generation they receive.

- Budget, investment, cost allocations, marketing decisions as normally done by BPA
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POSSIBLE CONCERNS:

- *The intention of the proposal is that Slicer's pay for all costs related to the product that it receives. The exceptions to the revenue requirement reflect costs that are already being borne by the Slicers, so to have them be responsible for such costs would mean that they*

double-pay. There are some concerns, however, that within those categories that there might be some costs that can not be separated from the Slice product. For example, while transmission is the obligation of the Slicer, there may be some transmission expenses that BPA pays that go to supporting the FCRPS and not individual transmission transactions. On this particular question do we need to wait for the results of the transmission rate case? Is it a question of what transmission costs are tagged back to the FCRPS as a power cost rather than pass on to transmission customers? Wouldn't the interests of BPA's PBL and Slicers be aligned?

- *With respect to net revenues for risk, if properly structured Slicers will relieve BPA from risk for their percentage of the system. Does there need to be some showing that a Slicer can cover that risk? Should a Slicer be required to maintain reserves on their own, or demonstrate how they would cover risks should they be realized? (Security/creditworthiness?)*
- *Need to have a clear understanding of what is meant by public purposes.*

Risks Purchasers Accept

- *[This list should be expanded to include all risks identified by the parties, in particular in the last PGP write-up]*
- *In general, in exchange for a Slice of the system, Slicers receive the risks attendant to the capability of the FCRPS for its percentage over the term of the contract. This assumption of risk does not just include unforeseen circumstances, but planned variations in FCRPS capability due to multi-purpose operations, maintenance and other factors that influence the capability of the system.*
- *Unforeseen fish and wildlife costs, including changes in Biological opinion, drawdowns*
- *Unforeseen maintenance costs of the generation system*
- *Equipment replacements, betterments, and additions (other than resource acquisitions, with exception of acquisitions for public purposes) including those for efficiency improvements and environmental purposes*
- *Within-year changes in operations*
- *No notice and termination rights for fish costs for term of contract (a preferred principle for application to all products; PGP's intent is to bear same costs others would bear)*
- *All risks generally accepted in contracts by other requirements customers, except a cost recovery adjustment clause as that is already inherent in the Slice product*

POSSIBLE CONCERNS:

- *There is a need to properly value the assumption of the risks and the group is not there yet.*
- *The proposal is designed to have Slicer's assume risk in a meaningful way. Some parties are concerned that in actual implementation there may be ways where risk could be passed by to BPA. Perhaps that is not the case -- we need to explore to see whether further provisions need to be added to the proposal to avoid this possibility.*
- *If a Slicer's percentage can be modified within the term of the contract, its modification should be limited so that the modification does not result in passing risk back to BPA.*

Basis for Payment

- Based on a percentage share of a contractually determined embedded cost revenue requirement for a 5-year rate period, not including financial reserves or other risk adjustments
- Slicers are responsible for their proportionate share of BPA's actual costs -- there will be an annual true-up to reflect actual BPA cost overruns or underruns (including risks that have been realized in real-time *[are there any exceptions?]*), or extraordinary costs of generating units ("acts of God")
- Ultimate cost of product may vary given water conditions, operating requirements, and other risk factors • No credits from BPA's marketing revenues
- Possible different cost treatment for preference and non-preference Slice purchases, because of statutory rate directives

POSSIBLE CONCERNS:

- *Is this adequate compensation for the product received? Does this provide too much payment, too little?*
- *Not designed or anticipated to cause cost shifts -- although difficult will have to be analyzed. The challenge will be to determine a causal link between the Slice and cost shifts v. other products and rate case decisions. It may not be possible to analyze this in isolation.*

Resources Included/Excluded

- Includes FCRPS hydro and thermal committed prior to 1/97 (less Canadian Entitlement obligations)
- Includes long-term BPA power purchases committed prior to 1/97
- Includes public purpose resource acquisitions
- Excludes resources acquired for specific customers under other agreements
- Excludes short-term purchases
- May include long-term purchases committed after 12/96, by separate agreement?
- Unresolved whether purchases to firm nonfirm energy would or would not be included?

Transmission

- Not included; purchaser obtains own

Reserves

- Customer responsible for generation reserves to meet reliability standards

Scheduling and Accounting

- Use of flexibility rights accounted for daily in a "storage account"
- Scheduling and accounting provisions established by contract
- BPA may adjust the rate of power deliveries to reflect actual operating constraints on the FCRPS

Operations/Management Influence

- Federal agencies make decisions on non-power requirements and operations of the FCRPS
- Purchaser would have no authority in river management, investment, or other management decisions

Forecast and Data Needs (Draft of May 13, 1998)

- Constraints on Operation of the Slice
 1. Maximum rate of delivery (in MW) for either schedule or signal
 2. Minimum rate of delivery (in MW) for either schedule or signal
 3. Maximum daily HLH-energy deviation, for sustained peaking adjustment (in MWH)
 4. Maximum upward storage deviation (in MWH)
 5. Maximum downward storage deviation (in MWH)
 - items 1-3 apply in real time
 - items 4-5 apply on a daily basis (i.e., cumulative over 24 hours)
 - additional constraints would be expected on being “out of bounds” on the storage account: deadlines for getting “in bounds”

- Information Traditionally Available from BPA
 1. Means
 - Northwest Power Pool (NWPP)
 - Pacific Northwest Coordination Agreement (PNCA)
 - Columbia Basin telecommunications network
 2. Data
 - on a weekly basis, the 10-day and 30-day forecast of system generation
 - periodically, a matrix of forecasted energy above FELCC for remainder of OY
 - frequently: updates of scheduled preventive maintenance outages, for hydro, thermal, and transmission
 - as soon as available: anticipated operations and restrictions for fish, construction, or special events

- Forecasted Constraints and Data Supplied by BPA to the Slice Purchaser

Item	Within Day	Next Day	Next Week	Next Month	Rest of OY
1. Actual FCRPS generation (MWH)	after-the-fact each hour	x	x	x	x
2. Maximum rate of delivery (MW)	next hour	x	x	x	
3. Minimum rate of delivery (MW)	next hour	x	x	x	
4. Maximum daily HLH-energy deviation, for sustained peaking adjustment (MWH)	forecasted HLH generation for the day	x	x		
5. Maximum upward storage deviation (MWH)		x	x	x	
6. Maximum downward storage deviation (MWH)		x	x	x	
7. Expected storage content (MWH)		x	x	x	x

Dispute Resolution

- Note: Language redrafting in process.

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