



Slice Contract

Sept. 17, 2024

PROVIDER OF CHOICE

**POST
2028**



Slice Contract Sections and Exhibits

- Slice % limited to 50% of Tier 1 Net Requirement
- Changes to align product attributes and obligations with day-ahead timeframe
- CGS Displacement participation
- Obsolete items removed
 - Ex I AART1SC; Ex J Preliminary Slice %, ISP; Ex K SPAR; Ex L RHWM Augmentation; Ex Q Determination of ISP
- Slice % and Firm Slice Amount in Exhibit K

Fixed System

- The CHWM System 3 parts
- How CHWM modeled augmentation works as Tier 1 System Resources change each rate period
- How Slice output is affected by changes to Tier 1 System Resources
- Is the CHWM System amount an annual number or a rate period number
- Eliminating AART1SC

Annual Net Requirement

- Slice % calculated in annual Net Requirement first year of Rate Period
- Slice % first year capped at 50% of Tier 1 Net Requirement
- Same Slice % used in second year of Rate Period in most cases
- Block amounts may vary between years in Rate Period due to TRL forecast changes in second year

Annual Net Requirement – Example

Reference	Item	2029	2030	2031	2032	2033	2034
A	TRL Fx	250	255	260	265	250	245
B	Existing Resources	85	85	85	85	85	85
C	Gross Requirement	165	170	175	180	165	160
D	CHWM	170	170	170	170	170	170
E	Above CHWM Load	0	0	5	10	0	0
F	headroom	5	0	0	0	5	10
G	Tier 1 Net Requirement	165	170	170	170	165	160
H	Slice % of 7250 system	0.011379	0.011379	0.011724	0.011724	0.011379	0.011379
I	Slice aMW	82.5	82.5	85	85	82.5	82.5
J	Block aMW	82.5	87.5	85	85	82.5	77.5
K	Tier 1 Total aMW	165	170	170	170	165	160

Looking Ahead

October

- Exhibits M – Slice Computer Application
- Exhibit N – Slice Implementation Procedures
- Exhibit P – SCA Development Schedule
 - Workplan & Cost Estimates
- CGS/Bond Status

November/December

- Follow up on outstanding issues



Appendix: Slice Product Design Summary

Slice Product Design Summary

The following slides provide a summary of Slice/Block finalized features and decisions. Slides are copied directly from the following workshops:

- 7/8/2024
- 8/26/2024

Slice/Block Finalized Features

Feature	Description
Product Framework	<p>The product will provide a planned annual amount of power to meet net requirements load.</p> <p>The block portion will provide a flat annual or flat monthly block. The slice portion will include a sale of firm requirements power and an advanced sale of surplus. The slice portion of the Slice/Block product will be a system sale and not a sale of operational rights, resources or resource capability.</p>
Planning Obligations	<p>A utility selecting the Slice/Block product is the Load Responsible Entity for their Total Retail Load, inclusive of all planning obligations. The Slice/Block product contributes towards those planning obligations. The Slice/Block product provides a planned annual amount based on forecasted net requirements load. Bonneville ensures availability of the planned annual amounts and Bonneville will plan to WRAP requirements to meet those load amounts.</p>

Finalized Features (Cont'd)

Feature	Description
Western Resource Adequacy Program (WRAP)	Bonneville has not identified any product constraints to date based on implementation of WRAP (e.g., daily holdback implementation).
Slice Right to Power (RTP) determination	Slice/Block customers would leverage the SCA and their balance of system amount to determine their maximum Slice RTP. The Slice RTP amounts are based off a modeled system and may not reflect actual operations or all constraints on the federal system.
Fixed System	Under a fixed system, the resources cost allocated to the PF Tier 1 rate could change rate period to rate period. The rate period cost allocation would apply to the resources attributed to the Slice RTP calculation.

Finalized Features (Cont'd)

Feature	Description
Slice RTP at day-ahead market submittal	Customers will determine their Slice RTP on a day-ahead time horizon. Those 24-hourly values will be communicated to Bonneville ahead of the day-ahead market run.
Slice RTP in real time	Customer-elected Slice RTP in the day-ahead remains the hourly value going into the real-time market.
Block portion in day-ahead market (day-ahead and real time)	The block portion of the product will be defined during the annual net requirements process and block amounts will be set for the year. Bonneville will ensure availability of the block portion in the day-ahead and real-time time frames.

Finalized Features (Cont'd)

Feature	Description
Surplus Value (MW or \$)	Bonneville will provide the MWs elected by a Slice/Block customer as requested. Customers will be responsible for determining the surplus value whether the MWs are serving load, non-federal resources are dispatched to get market benefits, or if completing other trades to derive value.
Settlement	The Slice/Block customer and Bonneville will settle based on the Slice RTP amount communicated by the customer, whether Bonneville was dispatched to serve the full RTP amount or if the market dispatched other sources to fulfill the RTP. This should be agnostic, as generation would clear at the same price. The block portion would settle on whatever construct is designed for standalone Block and Load Following.
Slice/Block Percentage	Slice/Block will be set at 50% Slice and 50% Block.

Finalized Features (Cont'd)

Feature	Description
Slice Computer Application (SCA)	<p>Staff's assessment is that the current application can be upgraded to enable day ahead features for the product.</p> <p>Staff will provide additional detail at future workshops.</p>
Cooperatives and Bonds	<p>Bonneville meets the debt service costs of about \$4.5 billion in tax-exempt bonds. If a non-governmental entity, such as an electric cooperative, is considered to have direct use of Columbia Generating Station (CGS), Bonneville would not be able to preserve the tax-exempt status of the bonds. The Slice/Block product is considered to be a direct use of CGS. New IRS rules would limit a non-governmental entity to no more than 0.5% of a slice portion before remediation would be required.</p> <p>Staff will provide additional detail at future workshops.</p>

Threshold for Offer

Threshold for offer:

- No minimum threshold of participation required to offer a Slice product contract.
- Maximum threshold remains 25% of power sold at a Tier 1 rate.

Cost Assignment

Cost assignment:

- With no minimum threshold, BPA cannot be assured that offering the Slice product benefits all customers. Therefore, BPA intends to recover Slice-related costs from Slice customers.
- Assignment of SCA development costs (BP-26) and Slice operations costs post-2028 will be applied to the Slice-only cost pool unless public power requests an alternate application of costs in future rate cases.



Changing Purchase Obligation

Changing purchase obligation (product switch):

- BPA will consider costs associated with product switches; the goal is to insulate customers from cost exposure as a result of others' choices.
- If participation goes to zero, then BPA will retire product.

Day-Ahead Market Settlement Methodology

Day-ahead market settlement methodology:

- BPA will develop contract language committing to revisit day-ahead market financial settlement methodology.

