BPA Post-2028 Provider of Choice Contract

Product Choice Analysis



Presentation Overview

1 2 3

_ _

Background

Summary of findings

Next steps

Continue to purchase Slice for next 20-year BPA contract

Decision

Section 1

BPA product selection & contract execution timeline



BPA facts

- ✓ BPA is a Federal Power Marketing Agency
- ✓ Tacoma Power has been a BPA preference customer since 1940 and is BPA's 4th largest customer (~5.5% of BPA's total load)
- Low carbon: Primarily hydro and very low carbon (90%-95% carbon-free)
- Low cost: Power is sold at cost (Currently ~ \$32/MWh)
- ✓ High impact: BPA power accounts for ~60% of Tacoma Power's generating portfolio, and BPA power bill accounts for ~30% of our revenue requirement
- ✓ Delivery of power under new contract spans Oct 1, 2028 Sep 30, 2044

Overview of Provider of Choice product options evaluated by Tacoma Power

Slice/Block (a.k.a. Slice)

- Slice component: Percentage share of federal system
- Block component: Monthly "block" of power (same amount in all hours)
- Mostly the same product as today, with some key changes

Block with Shaping Capacity

- ✓ Monthly "block" of power
- More provided in "heavy load" hours
- Some flexibility to further
 "shape" when energy comes

Load Following

- BPA takes responsibility for meeting peak load
- Designed for customers that are not balancing authorities and without significant resources of their own
- Significant uncertainty around implementation for Tacoma Power

Adequacy

Cost

Other

Standard IRP framework used to evaluate product options Resource Adaminant

- Energy
 - Cost of BPA purchase
 - Cost of transmission
- Cost of additional resources needed to maintain resource adequacy
 - Incremental marketing cost and risk
 - Compliance position (WRAP* and CETA**)
 - Future product choice flexibility
 - Certainty over implementation

Scenarios

Baseline runs	Impacts of climate change	Accelerated load growth	Load decline/slow growth	Riffe Lake restoration delay
 Anticipated Electrification load growth Historical weather (1981- 2023), Riffe Lake elevation restored in 2030 	 Anticipated Electrification load growth, Climate change- adjusted historical weather (1981- 2023), Riffe Lake elevation restore in 2030 	 Expansive Policy electrification load growth, Historical weather (1981- 2023), Riffe Lake elevation restore in 2030 	 Policy Regression electrification load growth, Historical weather (1981- 2023), Riffe Lake elevation restore in 2030 	 Anticipated Electrification load growth, Historical weather (1981- 2023), Riffe Lake not restored during contract

Summary of findings

Section 2

Summary of findings: Preview

Slice remains the best product option for Tacoma Power

	Slice	Block with Shaping Capacity	Load Following
Resource Adequacy			
Cost			
Compliance	CETA WRAP	CETA WRAP	CETA WRAP
Future product choice			
Implementation certainty			

Summary of findings: Resource Adequacy

How do we measure our resource adequacy?



Summary of findings: Resource Adequacy

Resource adequacy position summary

	Slice	Block with Shaping Capacity	Load Following
Peaking Capacity	2035 2043	2035 2043	2035 2043
Sustained Capacity	2035 2043	2035 2043	2035 2043
Winter energy	2035 2043	2035 2043	2035 2043
Summer energy	2035 2043	2035 2043	2035 2043

- Significant peaking capacity risk in an extreme event under Block with Shaping
- Significant summer energy risk under Block with Shaping and Load Following would require a new generating resource towards the beginning of the contract
- More extreme event peaking capacity risk and more sustained capacity risk with Slice/Block under some scenarios *may* require a new resource towards the end of the contract

Summary of findings: Product Cost

Product cost

Slice/Block

- ✓ \$1.20 to \$1.45 billion over life of contract
- ✓ Slightly higher year-to-year revenue variability than alternatives, with more upside potential than downside risk

Block with Shaping Capacity

- ✓ \$1.39 to \$1.64 billion over life of contract, including cost of new summer resource
- Lowest year-to-year revenue variability, though differences are small

Load Following

 ✓ \$1.31 to \$1.80 billion over life of contract, including cost of new summer resource

Summary of findings: Other

Other considerations

	Slice	Block with Shaping Capacity	Load Following
CETA compliance	Well-positioned to meet 2030 standard, challenges for 2045 standard need to be addressed	Well-positioned to meet 2030 standard, challenges for 2045 standard need to be addressed	Well-positioned to meet 2030 standard, challenges for 2045 standard need to be addressed
WRAP compliance	Expect to meet program obligation, but with increasingly tighter margins	Will typically meet program obligation, but more risk of failing in some years	Always expect to meet program obligation
Future product choice	Lowest barrier to switching in the future	Some barriers to switching in the future	Very difficult to switch in the future
Implementation certainty	High level of certainty	High level of certainty	Significant uncertainty

Summary of findings: Review

Slice remains the best product option for Tacoma Power

	Slice	Block with Shaping Capacity	Load Following
Resource Adequacy			
Cost			
Compliance	CETA WRAP	CETA WRAP	CETA WRAP
Future product choice			
Implementation certainty			

WRAP: Western Resource Adequacy Program

CETA: Clean Energy Transformation Act

Next steps

Section 3

Next steps

BPA product selection & contract execution timeline

