Generation Inputs

Should Customers Who Benefit from a Product or Service Contribute to the Costs?

Henry Tilghman June 8, 2022

- Generation Inputs Process establishes a quantity of capacity and allocates its costs to Ancillary Service Customers
- BPA Power uses the non-regulating reserve component of that capacity to pass the EIM resource sufficiency test.
- Passing the resource sufficiency test allows BPA Power to export imbalance energy and generate EIM Transfer Revenues
- BPA Power does not contribute to the cost of the non-regulating reserve capacity

Prerequisites for BPA Power Bilateral Sale

Prerequisite	Source	What is the Benefit	Who Pays Costs	Who Benefits
Capability	Operational costs (IT systems, staff, etc.)	Power Transaction	Power	Power
Energy	Federal Generation	Power Transaction	Power	Power
Capacity	Federal Generation	Power Transaction	Power	Power
Transmission	BPA Transmission	Power Transaction	Power	Power
Customer	N/A			

ACS Rates Pre-EIM

Prerequisite	Source	What is the Benefit	Who Pays Costs	Who Benefits
Capability	Operational costs (IT systems, staff, etc.)	ACS Revenues	Power	Power
Imbalance Energy	Federal Generation	ACS Revenues	Power	Power
Gen Inputs Capacity	Federal Generation	ACS Revenues	Power	Power
Transmission Service	N/A	N/A	N/A	N/A

Prerequisites for EIM Settlement of Imbalance/No EIM Transfers

Prerequisite	Source	What is the Benefit	Who Pays Costs	Who Benefits
Capability	Operational costs (IT systems, staff, etc.)	Imbalance Revenues	Power	Power
Imbalance Energy	Federal Generation	Imbalance Revenues	Power	Power
Capacity	Federal Generation	Imbalance Revenues	Power	Power
Transmission Service	N/A	N/A	N/A	N/A
Market	N/A	N/A	N/A	N/A
EIM Participation	Power/Transmission/Customers	Efficient Energy Deployment	Power/Transmission/ACS Customers	Power/Transmission/ACS Customers

Prerequisites for EIM Transfer Export Revenues

Prerequisite	Source	What is the Benefit	Who Pays Costs	Who Benefits
Capability	Operational costs (IT systems, staff, etc.)	EIM Transfer Revenues	Power	Power
Imbalance Energy	Federal Generation	EIM Transfer Revenues	Power	Power
Capacity	Federal Generation	EIM Transfer Revenues	Power	Power
Transmission Service	BPA Transmission	EIM Transfer Revenues	Transmission Donator	Power (Participating Generators)
Market	N/A	N/A	N/A	N/A
EIM Participation	Power/Transmission/Customers	EIM Transfer Revenues	Power/Transmission/ACS Customers	Power (Participating Generators)
Resource Sufficiency Test	Gen Inputs Capacity	EIM Transfer Revenues	ACS Customers	Power (Participating Generators)

Prerequisites for EIM Transfer Imports

Prerequisite	Source	What is the Benefit	Who Pays Costs	Who Benefits
Power Capability	Operational costs (IT systems, staff, etc.)	EIM Imports	Gen Inputs Customers	Gen Inputs Customers
Imbalance Energy	Federal Generation	EIM Imports	Gen Inputs Customers	Gen Inputs Customers
Capacity	Federal Generation	EIM Imports	Gen Inputs Customers	Gen Inputs Customers
Transmission Service	BPA Transmission	EIM Imports	Transmission Donator	Gen Inputs Customers
Market	N/A	N/A	N/A	N/A
EIM Participation	Power/Transmission/Customers	EIM Imports	Power/Transmission/ACS Customers	Power (Participating Generators)
Resource Sufficiency Test	Gen Inputs Capacity	EIM Imports	Gen Inputs Customers	Gen Inputs Customers

Operational Control for Balancing Services

Does EIM participation allow BPA to reduce the quantity of capacity needed to meet the 99.5% standard

Henry Tilghman June 8, 2022

If the EIM is available as a source of balancing reserves during some of the extreme events when BPA's supply of balancing reserves is stressed, then BPA could maintain the same quality of service (99.5%) with a smaller quantity of balancing reserves

Oversupply Management Protocol

What actions should BPA take in the EIM to mitigate the need for OMP displacement?

Henry Tilghman June 8, 2022

Before displacing generation under this attachment, Transmission Provider will take the following actions when available and Transmission Provider determines they will reduce or avoid the need for displacement:

a) sales through bilateral marketing, including offering to sell power at zero cost;

b) waiving real power loss return obligations;

c) cutting prescheduled Pacific Northwest Coordination Agreement storage;

d) deferring scheduled generation maintenance activities;

e) deferring scheduled transmission maintenance activities;

f) increasing pumping into Banks Lake at Grand Coulee;

g) seeking flow reductions with BC Hydro;

h) seeking additional load via spill exchange agreements, such as those under hourly coordination with Mid-Columbia Hydro Projects;

i) seeking access to additional reservoir storage space at Federal Projects;

j) reducing available balancing reserves to maximize turbine flows;

k) selling Capacity Recallable Energy products; and reducing TDG levels at one Federal Project by transferring spill to another Federal Project consistent with the spill priority list.

Potential Additions

- Purchasing and donating transmission to the EIM
- Designating additional generating capacity for EIM dispatch
- Submitting energy bids of $0.00 into the EIM

Questions?

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