

**PTSA Reform:
Returned Available Flowgate
Capability (AFC) Methodology**

December 5, 2012

Returned AFC Methodology Development

- BPA began its estimate of valuation of AFC methodology by taking a snapshot of the long-term pending queue in March of 2012. Based on the numbers extracted from that snapshot, BPA;
 - Identified the minimum AFC value posted for sale for each flowgate during the 10-year period;
 - Determined the maximum amount of AFC needed on each flowgates by all of the relevant requests over the 10 year period (i.e., including new and redirect requests for service, excluding rollover and transfer requests).
 - BPA then divided the minimum value available for sale by the maximum impact for the flowgate.
 - That number was subtracted from 1.00 to determine the estimated value for returned AFC to be assigned to each flowgate.

Returned AFC Methodology Application

- As a result of the above-described methodology, flowgates that have a greater disparity between the minimum available AFC and the maximum AFC impacts needed by queued requests are determined to have a higher value (e.g. South of Allston and Cross Cascades North) than flowgates with less disparity (e.g. West of McNary).
- For each request being considered in PTSA reform, the above-determined multipliers were applied to the amount of flowgate capacity held at each flowgate.
- The resultant values for each flowgate were then summed to obtain an estimated value for each TSR.

Returned AFC Methodology by Network Flowgate

- Below is a summary of aggregate demand based on a snapshot of the status of the Long Term Firm Pending Queue for transmission requests on BPA's network.

	SOA	CCN	CCS	MEL	NOH	NOJD	PA	RP	WOM	WOS	WOJ D
Min LT ATC Value	0	59	355	197	286	1087	357	156	1522	834	555
Max Pending Impact	844	1582	965	449	895	1547	497	392	1850	1524	1818
Min/Max	0.00	0.04	0.37	0.44	0.32	0.70	0.72	0.40	0.82	0.55	0.31
% Value * (March '12)	1.00	0.96	0.63	0.56	0.68	0.30	0.28	0.60	0.18	0.45	0.69
% Value ** (December '12)	1.00	1.00	0.61	0.56	0.64	0.31	0.33	0.57	0.17	0.43	0.69

* Value for PTSA Reform proposals used March '12 results.

** Updated values reflect approximately 90 additional requests plus changes in AFC due to queue management actions.

Example of Returned AFC Methodology

- Following is an example of how the Returned AFC Methodology developed in PTSA Reform would be applied to a sample 50 MW TSR.
 - As a reminder, the MW of PTDF impact aren't supposed to equal the MW of contract demand
 - PTDF – Power Transfer Distribution Factor

50 MW TSR	Original TSR's PTDF Impact by Flowgate (MW)	Returned AFC Ratio by Flowgate <i>See Previous Slide</i>	Returned AFC Resulting by Flowgate
South of Allston	10	1.0	10
North of John Day	10	0.30	3
Raver-Paul	20	0.60	12
Total	N/A		25 MW