Tech Forum, via e-mail CC: Rich Gillman

Please accept these comments in response to BPA's November 12th workshop on Available Transfer Capability (ATC). We would like to continue to work with BPA to better understand the processes and ensure reliable service to our customers.

City Light thanks BPA for the recent information and trainings about its processes related to short term and long term ATC. At City Light, we seek to better understand the processes and the interactions with other BPAT processes such as outage management. Better understanding will help City Light manage our efforts to use the transmission system to serve load in the near term and the future.

Recently, BPA has changed the offering of Hourly Firm, made more conservative assumptions for the 2019, 2020 and 2021 NOEL and South of Custer Seasonal TTCs, and made more frequent use of TLR Avoidance (sets calculated ATC to 0 MW). As a result. we are seeing new constraints on our ability to use the transmission system we had not previously seen or expected.

City Light requests more explanation of the inputs, methodology, and outputs to long term ATC. For example, providing some of the intermediate information about how the scenarios, and how the scenarios are further analyzed to develop the single Base Case would be helpful. We do not seek to create more work for BPAT staff, but rather request some insights into the documentation that is part of BPA performing these processes.

City Light asks that BPA provide an ATC 101 on Short-Term. The session on November 12th was very informative although most of the discussion was on the long term. Some of the questions we have relate to timing of when information is available and used in the calculations.

If BPA would explain the timeline of upload of Base Cases and all adjustments that are applied as BPA rolls through the 13 month horizon, we could better understand how and when the short term ATC changes. This affects our ability to use the system. Some specific questions as follows:

- 1. Please explain how and when outages are incorporated into the PTDF factors and TTC adjustments.
- 2. Please explain why BPA is using TTCs to account for load and generation uncertainty rather than TRM?
- 3. Why does BPA think adjusting TTCs is a better approach?
- 4. Has BPA considered alternatives?
- 5. Please describe BPA's process to ensure that the posted Total Transfer Capability for 1 to 12 months in the future is equal to or less than the seasonally studied System Operating Limit for the expected conditions and outages.
- 6. How does BPAT translate the 13 LTF flowgates to the over 18 flowgates considered in the short-term horizon when considering Redirects to from LTF to Short-Term Firm.

City Light is interested in learning more about how BPA adjusts future month Total Transfer Capability values to reflect planned BPA outages on major equipment.

For the long term cases, can BPA provide additional background and information about how the various scenarios are considered. Some specific questions as follows:

- 7. What additional analytics are applied to reduce the multiple scenarios to a single case?
- 8. How does BPA consider counterflows, if at all?
- 9. Some flowgates are limited in a single direction. Do BPA's processes differentiate between bidirectional flowgates and unidirectional flowgates?
- 10. Can BPA provide additional information regarding ETCs including how they affect each flowgate?
- 11. If BPA could provide information about changes to the Canadian Entitlement Return that resulted in changes to the North of Echo Lake flowgate, City Light would find that helpful.

Please discuss the technical justification for using PTDF values for POD-POR combinations that do not reflect the physical transmission system. Has BPA considered what changes would be required for BPA to develop a methodology that more closely resembles system use?

Please describe the BPA process for aligning long term Total Transfer Capability studies with 1, 5 and 10 year Transmission Planning studies.

BPA's presentation on Transmission Integrated Planning contains many intriguing and potentially helpful changes. City Light would like to know more about the process including any planned deliverables beyond the ATC Metrics and Inventory Map. Continual improvement in how long term TSRs get evaluated is a goal we share, and we'd like to know more about how and when we will see changes. This informs our own plans for making TSRs.

At City Light, we look forward to continuing to work with BPA. If you have any questions about these comments or we can provide clarification to help BPA better respond, please contact Robin Cross.

Thank you.

Robin Cross

ATC 101 Customer Comments

- A. Seattle requests that BPA provide more explanation and its rationale for the reasonableness of the differences between BPA's 2019 Long-term Base Case announced on November 12, 2019 and its BPA's Short-term Seasonal Default announcement on October 10, 2019 for the NOEL flowgate?
 - 1. For example:
 - a. The Seasonal Default TTC announced on October 10, 2019 is 2103 MW for <u>Winter</u> <u>2021</u>.

i. During this announcement BPA communicated that

there were facility rating changes at Portal Way (Puget Sound Energy facility) that reduced the results from the WECC base case.

ii. Can BPA provide the facility rating changes to Portal Way and why this resulted in a TTC reduction for <u>Winter 2021</u>?

b. The 2019 Long-Term ATC Base case NOEL flowgate TTC posting is <u>2800 MW</u> with an ATC of 165 MW for 2021. (Over the horizon of 2021-2029 ATC ranges from 165 MW to 92MW)

i. Can BPA explain how facility rating changes to Portal

Way did <u>NOT</u> result in a change to the 2800 MW Long-Term TTC?

- B. What other assumptions are informing these differences that BPA may not have not planned to address with customers at the November 12, 2019 workshop?
- C. Seattle is sending in this request *immediately* to enable BPA to begin gathering the information rather than delay while Seattle gathered the remainder of its comments and questions.

See the Following 2 Screenshots

Screenshot 1 - NOEL Seasonal TTC - 2103 MW for Winter 2021

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a part of Bonneville's continued effort inculations. Specifically, as part of its y	to improve Short- Winter 2020 seaso	nal update o	tonneville has id of Total Transfer	capability (TTC), BP/	y to better a will be usin	g TTCs that bet	erm and Short-I ter reflect the ur	nerrainty in	
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hort-Term seasonal TTC on a couple o	f its internal netwo	ork flowgate	s. South of Cust	er (SOC) and North o	f Echo Lake	(NOEL). Both of	these internal n	etwork flowga	tes
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	North of Echo L	the		South of Custer					
		Current	Updated		Current	Updated			
		TTC	TTC		TTC	TTC			
	Long-Term	2800	2102	Long-Term	1880	122.2			
	Summer 2020	2306	2105	Winter 2020	3267	1476			
	Winter 2021	2506	2103	Winter 2021	3567	1357			
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Screenshot 2 - NOEL 2021-2029 Long-Term TTC – 2800 MW (ATC ranging from 165 MW to 92 MW)

В	0	Ν	Ν	E	V	1	L	L	E	P	0	W	E	R	Α	D	M	1	Ν	1	S	т	R	A	т	1	0	N

Path Name	TTC	2021	2022	2023	2024	2025	2026	2027	2028	2029
South of Allston N>S BPA	2,115	253	268	284	298	312	328	344	359	373
Cross Cascades North E>W	10,250	571	547	596	582	582	591	634	643	652
West of Lower Monumental E>W	4,200	175	112	107	0	0	0	0	0	Q
Cross Cascades South E>W	7,500	1128	1143	1094	1039	1001	962	939	900	861
North of Hanford N>S	4,450	1549	1589	1617	1643	1669	1698	1726	1752	1778
North of John Day N>S	\$,800	1241	1243	1250	1220	1227	1234	1254	1261	1268
Paul-Allston N>S	2,400	1069	1069	1069	1070	1070	1071	1072	1073	1074
Raver-Paul N>S	1,450	355	353	352	340	339	337	345	343	341
West of McNary E>W	5,230	2788	2769	2701	2634	2585	2542	2509	2463	2416
West of Slatt E>W	4,670	1320	1307	1283	1242	1217	1194	1170	1147	1123
West of John Day E>W	4,530	1239	1277	1261	1248	1245	1242	1247	1244	1241
South of Custer N>S	900	31	18	16	13	11	8	6	3	1
North of Echo Lake S>N	2,800	165	131	138	130	123	115	107	100	92

New Long Term ATC Values

