On Ramps and Off Ramps: Additional Information Regarding the November 30, 2017 ICAPWG Presentation

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Background

- The NYISO recently received a request for additional information/data pertaining to the presentation at the November 30, 2017 ICAPWG meeting regarding the proposed framework for creating and eliminating capacity zones.
- The following slides provide responses to certain of the requested information.

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Item 1a: ***"Zach Smith's November 30th ICAP working group presentation on the Locality Assessment Methodology presents post ICAP retirement analyses of the G-J Locality Elimination Test on pages 25 and 26. Please provide the same information that is presented on page 13 of the presentation for these two examples."***

- Elimination Test Example: Excluding AC Transmission & Indian Point; Including CPV, Cricket Valley,& BEC II

	Formula	G-J	J	K
Load Forecast	[A] = Given	16010	11742	5136
Transmission Security Limit	[B] = Calculated	3225	3200	350
Total Resources Modeled	[C] = Given	14761	10017	6054
Total Resources + Transmission	[D] = [B]+[C]	17986	13217	6404
Transmission Security Balance	**[E] = [D]-[A]**	**1976**	**1475**	**1268**
Generator Contingency #1	[F] = Given	973	973	396
Generator Contingency #2	[G] = Given	677	568	395
Generator Contingency #3	[H] = Given	600	558	390
Generator Contingency #4	[I] = Given	590	513	385
Eliminate Test Balance	**[J] = [E]-[F]-[G]-[H]-[I]**	**-864**	**-1137**	**-298**

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Item 1b: ***"Zach Smith's November 30th ICAP working group presentation on the Locality Assessment Methodology presents post ICAP retirement analyses of the G-J Locality Elimination Test on pages 25 and 26. Please provide the same information that is presented on page 13 of the presentation for these two examples."***

- Elimination Test Example: Excluding Indian Point; Including AC Transmission, CPV, Cricket Valley, and BEC II

	Formula	G-J	J	K
Load Forecast	[A] = Given	16010	11742	5136
Transmission Security Limit	[B] = Calculated	4225	3200	350
Total Resources Modeled	[C] = Given	14761	10017	6054
Total Resources + Transmission	[D] = [B]+[C]	18986	13217	6404
Transmission Security Balance	**[E] = [D]-[A]**	**2976**	**1475**	**1268**
Generator Contingency #1	[F] = Given	973	973	396
Generator Contingency #2	[G] = Given	677	568	395
Generator Contingency #3	[H] = Given	600	558	390
Generator Contingency #4	[I] = Given	590	513	385
Eliminate Test Balance	**[J] = [E]-[F]-[G]-[H]-[I]**	**136**	**-1137**	**-298**

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Item 2: ***"Please provide the information that NYISO has presented on page 13 of Zach Smith's November 30th presentation assuming the following: 1) Indian Point is retired and CPV and Cricket Valley are operating; 2) The two largest steam generators that are contingencies in each locality test have been replaced by a roughly equivalent amount of 300 MW to 350 MW combined cycles."***

- Elimination Test Example: Excluding Indian Point & AC transmission; Including CPV, Cricket Valley, and BEC II; Replacing the two largest steam generators in each locality with equivalent amounts of 300MW to 350MW combined cycles

	Formula	G-J	J	K
Load Forecast	[A] = Given	16010	11742	5136
Transmission Security Limit	[B] = Calculated	3225	3200	350
Total Resources Modeled	[C] = Given	14761	10017	6054
Total Resources + Transmission	[D] = [B]+[C]	17986	13217	6404
Transmission Security Balance	**[E] = [D]-[A]**	**1976**	**1475**	**1268**
Generator Contingency #1	[F] = Given	600	558	390
Generator Contingency #2	[G] = Given	590	513	385
Generator Contingency #3	[H] = Given	565	467	350
Generator Contingency #4	[I] = Given	561	376	350
Eliminate Test Balance	**[J] = [E]-[F]-[G]-[H]-[I]**	**-340**	**-439**	**-207**

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Item 3: ***"Please explain why none of the three 500+ MW combined cycle units in NYC are listed as generator contingencies on page 8 of Zach Smith's November 30th presentation. Please explain the capacity that would be represented as a generator contingency for CPV Valley."***

- All applicable generator contingencies were correctly included in the transmission security power flow analysis used to evaluate system Reliability Needs. Due to an oversight, the combined cycle units referred to in the request were inadvertently omitted from the elimination test example spreadsheet calculations presented on November 30, 2017. This omission only impacted the tables included in the presentation.
- CPV Valley is represented as 677MW of capacity in the contingency list for Zone G.

	Largest Generator Contingencies (MW)				
Zone	#1	#2	#3	#4	#5
A	685	203	187	187	187
B	579	62	49	17	12
C	1247	838	823	815	825
D	246	187	187	187	187
E	80	56	50	33	23
F	760	316	316	313	293
G	677	600	590	565	561
H	51	0	0	0	0
I	0	0	0	0	0
J	973	568	558	513	467
K	396	395	390	385	310

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