CRPP Cost Allocation

National Grid Concerns and Proposed Alternatives

Presented to ESPWG
March 4, 2008

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Introduction

- **Specific cost allocation formulas for projects needed to maintain Statewide reliability are currently being considered by DPS Staff in the ERP proceeding and by the NYISO in Attachment Y.**

- **National Grid would like to revise these formulas so that they:**
  - do not excessively allocate the costs of a regulated reliability solution to Zones that don't contribute to a Statewide reliability need.
  - do not disproportionately allocate the costs of a regulated reliability solution to ROS Zones **if/after** a Locational Capacity Requirement ("LCR") deficiency has been addressed.

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Outline of the Proposed Cost Allocation Process (From August 15, 2007 ESPWG Presentation)

The RNA has identified a Statewide reliability need (i.e. projects are needed in order to satisfy NYCA LOLE criteria at or below 0.1).

Step 1 – Any zone with insufficient resources to satisfy an applicable LCR is considered a Zone with an LCR deficiency ("LCRdef"). Cost responsibility for solutions, or portions of solutions, addressing LCR deficiencies will be borne by each LCR deficient Zone to the extent each is individually deficient.

Step 2 – If/after any LCR deficiencies is resolved, the cost of a Statewide regulated reliability project gets allocated to Zones based on each Zone's share of the coincident peak load multiplied by a factor of "1-LCR." The "1-LCR" adjustment would result in the removal of a significant amount of load from Zones J and K (e.g. 80% and 99% respectively) in the cost allocation formula for a regulated solution that addresses a Statewide resource deficiency.

Step 3 – If Zones are import constrained and transfer is based on a *voltage limit,* the "Bounded Area" will be allocated the cost to restore transfer up to the thermal limit. The cost of a Statewide regulated reliability solution goes through the process described in Step 2.

Step 4 – If the reliability criteria is still not met after step 3, the cost for the remaining "general resource deficiency" will be allocated to each zone based on its pro-rata share of contribution to the coincident peak load of the system.

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Cost Allocation Results

- **Starting with Step 2 – Assume $500 million project implemented for a Statewide deficiency subsequent to any LCRdef being addressed.**

Zone	2012 Study Case Reliability Index (LOLE)	2012 Coincident Peak Load Forecast	Peak Load (%)	$500 million Cost Allocation: Load Ratio Share ($ in millions)	(1- LCR) Adjusted Peak Load	(1-LCR) Adjusted Peak Load (%)	$500 million Cost Allocation: (1-LCR) Adjusted Peak Load ($ in millions)
A		2,734	7.7%	$38	2,734	13.8%	$69
B	0.08	2,251	6.3%	$32	2,251	11.3%	$57
C		3,036	8.5%	$43	3,036	15.3%	$76
D		876	2.5%	$12	876	4.4%	$22
E	0.03	1,442	4.1%	$20	1,442	7.3%	$36
F		2,280	6.4%	$32	2,280	11.5%	$57
G		2,411	6.8%	$34	2,411	12.1%	$61
H		655	1.8%	$9	655	3.3%	$16
I	0.18	1,612	4.5%	$23	1,612	8.1%	$41
J	0.18	12,645	35.6%	$178	2,529	12.7%	$64
K	0.03	5,624	15.8%	$79	56	0.3%	$1
NYCA	0.19	35,566	100.0%	$500	19,882	100.0%	$500

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National Grid's Concerns With the Proposed Cost Allocation Formula.

- **If Zones J and K have sufficient internal resources to satisfy their respective LCRs, this does not mean that they are more reliable than Zones without LCRs or that Zones J and K no longer contribute to a Statewide reliability need.**

- **Simply having an LCR is not a basis for avoiding the cost responsibility for a Statewide deficiency solution.**
  - Many of the ROS Zones do not contribute to a Statewide reliability need (i.e. 0.00 LOLE) and will have sufficient resources throughout the 10 year planning horizon.
  - Consumers in ROS Zones pay for their applicable LSE/TOs capacity requirements including PPAs.
  - A non-LCR zone may have access to a greater amount of deliverable capacity and contribute less to a statewide reliability need than an LCR zone - even after the LCR zone has addressed any LCR deficiencies

- **In fact, on the basis of Contribution to the Statewide reliability violation/Zonal LOLEs, it's not clear why many of the effected Zones should have any cost responsibilities for a Statewide regulated reliability solution.**

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National Grid's Suggested Cost Allocation Alternatives for Statewide Reliability Solutions.

1. **LOLE Ratio Share - Develop a method of cost allocation based on each Zone's contribution to the NYCA LOLE. Unlike the Binding Interface Test, this method will bring Zones that are resource deficient but not import constrained into the cost sharing processes for a Statewide solution.**

2. **Binding Interface Test - Import constrained Zones or "Bounded Areas" that contribute (TBD) to the NYCA LOLE violation should indicate the responsible TO(s), the likely location of a generation/DSM solution, where additional transmission capability is needed, and be appropriately allocated costs for a Statewide solution.**

3. **Revise the current proposal.**
   - Eliminate the "1-LCR" adjustment (in Step 2 of the proposal presented to the ESPWG on August 15, 2007) for the allocation of costs for regulated reliability solutions to any statewide resource deficiencies remaining after any LCR deficiencies have been addressed.
   - Replace the "1-LCR" adjustment with "1-LCRdef" for the allocation of costs for regulated reliability solutions to any Statewide resource deficiencies remaining after any LCR deficiencies have been addressed.
   - Specify that the cost of any project - regardless of its location - that is used to address an LCR deficiency is Step 1. For example, if a Zone is LCR deficient by a 750 MW but a 1,000 MW regulated reliability project in a ROS Zone provides a similar LOLE benefit, then the cost of the 1,000 MW plant in ROS Zone would be allocated to Zone J.

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Appendix A

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Table 3.3: NYCA Load and Resource Margins 2008 to 2017

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Peak Load										
NYCA	33,871	34,300	34,734	35,141	35,566	35,962	36,366	36,749	37,141	37,631
Zone J	11,975	12,150	12,325	12,480	12,645	12,780	12,915	13,030	13,140	13,360
Zone k	5,485	5,541	5,607	5,664	5,730	5,791	5,855	5,919	6,002	6,076
Resources										
NYCA										
"- Capacity"	38,917	39,257	38,396	38,396	38,396	38,284	38,284	38,284	38,284	38,284
"- SCR"	1323	1323	1323	1323	1323	1323	1323	1323	1323	1323
Total	40,240	40,580	39,719	39,719	39,719	39,607	39,607	39,607	39,607	39,607
Zone J										
"- Capacity"	10,019	10,019	9,128	9,128	9,128	9,015	9,015	9,015	9,015	9,015
"- SCR"	468.7	468.7	468.7	468.7	468.7	468.7	468.7	468.7	468.7	468.7
Total	10,487	10,487	9,596	9,596	9,596	9,484	9,484	9,484	9,484	9,484
Zone K										
"- Capacity"	5,612	5,922	5,922	5,922	5,922	5,922	5,922	5,922	5,922	5,922
"- SCR"	159.5	159.5	159.5	159.5	159.5	159.5	159.5	159.5	159.5	159.5
Total	5,772	6,082	6,082	6,082	6,082	6,082	6,082	6,082	6,082	6,082
NYCA Resource Margin % (1)	118.8%	118.3%	114.4%	113.0%	111.7%	110.1%	108.9%	107.8%	106.6%	105.3%
Zons J Res./Load/ Ratio	87.6%	86.3%	77.9%	76.9%	75.9%	74.2%	73.4%	72.8%	72.2%	71.0%
Zons K Res./Load Ratio	105.2%	109.8%	108.5%	107.4%	106.1%	105.0%	103.9%	102.7%	101.3%	100.1%

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Appendix B

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Table 4.4: LOLE for the RNA Study Case Transfer Limits

Area/Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
AREA-A										
AREA-B			0.03	0.04	0.08	0.13	0.20	0.30	0.41	0.48
AREA-C										
AREA-D										
AREA-E			0.01	0.01	0.03	0.05	0.09	0.16	0.23	0.25
AREA-F										
AREA-G						0.01	0.02	0.03	0.04	0.04
AREA-H										
AREA-I	0.01	0.01	0.06	0.08	0.18	0.30	0.42	0.59	0.76	0.82
AREA-J		0.01	0.06	0.08	0.18	0.32	0.46	0.65	0.81	0.85
AREA-K			0.01	0.01	0.03	0.06	0.07	0.13	0.23	0.26
NYCA	0.01	0.01	0.07	0.09	0.19	0.34	0.47	0.67	0.85	0.90

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