



System Restoration Strategy Sr. Task Force Final Proposal Report

January 30, 2014

System Restoration Strategy – Black Start Generation Compensation

1. Main Proposal – Minimum Incentive Compensation Proposal

This proposal received 65.85% support from the SRSTF. This significant change in this proposal would be to replace the incentive factor in the Black Start Base Formula Rate from 10% to the greater of 10% or \$25,000. The existing Capital Recovery Rate and NERC CIP Capital Recovery Rates would not change. Other more minor changes included in this proposal include:

- The MW amount would be based on the offered Black Start MW for energy only units and the ICAP for capacity units
- ALR units would be permitted to recover NERC Compliance costs as documented to the IMM
- Would allow for compensation for fuel storage for fuels other than oil
- Would provide for a 5 year PJM internal review of formula

2. Alternate Proposal – Proxy for Formula Replacement

This proposal received 63.41% support from the SRSTF. The significant change in this proposal would be to replace the Black Start Base Formula Rate and it's components with a Proxy formulation. This proxy was developed based on the average of the responses received from the RTO-wide and Incremental RFP submittals. The Proxy rate would replace the Base Formula Rate, Variable O&M Costs, Fuel Storage and Training Costs. The existing Capital Recovery Rate and NERC CIP Capital Recovery Rates would not change. The Proxy rates are shown in the table below:

Black Start Resource Size	Initial Capital Payment to add Black Start (from RFP Responses)	Additional Black Start Resource Capital Payment (From RFP Responses)	Annual Black Start Capital Payment (using 0.125 CRF)	Additional Resource Annual Black Start Capital Payment	Annual Black Start O&M Payment (from RFP Responses)	Annual Black Start Fuel Storage Payment (from RFP Responses)	Unit Total Annual Black Start Payment (including Training)
MW <= 10*	\$275,798	\$105,871	\$34,475	\$13,234	\$3,351	\$6,280	\$47,855
10 > MW <= 60	\$1,930,588	\$741,097	\$241,323	\$92,637	\$23,456	\$43,957	\$312,486
60 > MW <= 90	\$5,069,227	\$1,258,927	\$633,653	\$157,366	\$37,572	\$64,152	\$739,127
90 > MW <=300 Small							
Starting requirement	\$6,861,848	\$1,953,800	\$857,731	\$244,225	\$182,896	\$87,700	\$1,132,077
90 > MW <=300 Medium							
Starting Requirement	\$16,918,852	\$1,953,800	\$2,114,856	\$244,225	\$182,896	\$87,700	\$2,389,202
90 > MW <=300 Large							
Starting Requirement	\$24,552,399	\$1,953,800	\$3,069,050	\$244,225	\$182,896	\$87,700	\$3,343,395

* No Data from RFP Responses. Assumed 5/35 of 10 > MW<= 60 MW Values



The proposal would also provide for a 5 year PJM internal review of this formulation.

3. Comparative Summary

The objective of both proposals is to provide more incentive for the existing Black Start resources (which are currently on the Base Formula Rate) to continue to provide this service. This provides for continuity and flexibility in Restoration Planning and provides more assurance of an adequate supply of Black Start generation to meet critical load needs.

Neither proposal changes the Capital Recovery Rates which are used for new capital investments for Black Start units as there was general agreement on the task force that the Capital Recovery Rate provides sufficient incentive to attract new Black Start resources.

Both proposals would increase the cost of Black Start Service in the RTO. The Proxy for Formula Replacement would increase costs more significantly than the Minimum Incentive proposal. Estimated cost impact for each proposal over existing rates is shown below:

Transmission Zone	Revenue Requirement 9/1/2011	Revenue Requirement 9/1/2012	Revenue Requirement 9/1/2013	Minimum Incentive	RTO & Incremental RFP Proxy Cost
AECO	\$587,375.76	\$612,749.80	\$659,039.18	\$849,126.54	\$2,210,244.00
AEP	\$641,304.41	\$1,065,072.31	\$713,841.68	\$1,100,196.98	\$1,955,964.00
APS	\$163,108.11	\$263,640.01	\$293,618.98	\$391,926.34	\$885,337.00
ATSI	\$110,933.66	\$170,352.21	\$121,530.86	\$160,482.60	\$624,972.00
BGE	\$3,258,715.57	\$8,220,357.01	\$5,212,388.17	\$5,299,327.26	\$6,894,242.76
COMED	\$3,607,130.48	\$5,175,988.79	\$4,394,846.18	\$4,558,736.61	\$5,233,355.84
DAY	\$166,374.93	\$245,123.31	\$259,735.15	\$436,122.86	\$1,061,523.00
DEOK		\$331,699.42	\$1,211,017.72	\$1,216,925.45	\$1,674,002.69
DOM			\$1,069,397.17	\$1,069,397.17	\$1,069,397.17
DPL	\$534,124.05	\$543,207.62	\$587,724.57	\$1,009,295.07	\$2,938,570.00
DUQ	\$40,729.08	\$53,404.09	\$61,788.81	\$61,788.81	\$61,788.81
EKPC			\$387,247.88	\$402,043.52	\$869,913.00
JCPL	\$541,191.23	\$328,467.96	\$608,508.56	\$626,403.28	\$1,726,848.68
METED	\$541,937.33	\$478,493.70	\$897,429.93	\$897,617.32	\$897,617.32
PECO	\$1,266,963.40	\$1,379,460.78	\$1,548,942.76	\$2,108,129.78	\$7,316,155.00
PENELEC	\$367,061.09	\$573,457.48	\$525,051.98	\$535,152.14	\$1,557,651.75
PEPCO	\$462,700.00	\$212,074.47	\$325,972.27	\$325,972.27	\$325,972.27
PPL	\$157,515.64	\$152,847.12	\$251,989.60	\$569,078.44	\$1,814,081.00
PSEG	\$3,858,641.94	\$2,673,261.66	\$1,867,588.19	\$2,806,728.73	\$3,533,143.00
PJM TOTAL	\$16,305,806.68	\$22,479,657.74	\$20,997,659.64	\$24,424,451.18	\$42,650,779.31

Note – Values in the table above applied the 2 proposals to the existing Black Start costs as of 9/1/2013. These costs will vary in the future as some existing Black Start units retire and new Black Start units are selected through the RTO-wide Black Start RFP process.

4. Appendix I: Supplemental Documents

- [2013 Fixed Black Start Service Cost - All Rates](#)



- [2013 Fixed Black Start Service Cost - Base Formula Rate](#)
- [Charter](#)
- [Compensation Matrix](#)
- [Compensation Vote Results](#)
- [Minimum Incentive Proposal](#)
- [Preliminary Interests - Compensation](#)
- [Proxy Cost Data](#)
- [Proxy for Formula Replacement Proposal](#)
- [SRSTF Compensation Milestones and Schedule](#)

5. Appendix II: Stakeholder Participation

Last Name	First Name	Company Name	Sector
Anders	David	PJM Interconnection, LLC	Not Applicable
Baznik	Ed	FirstEnergy Solutions Corp.	Transmission Owner
Benckek	James	FirstEnergy Solutions Corp.	Transmission Owner
Boggs	Kenneth	AEP	Transmission Owner
Bolan	Martin	FirstEnergy Solutions Corp.	Transmission Owner
Boltz	Jeff	FirstEnergy Solutions Corp.	Transmission Owner
Boyle	Glen	PJM Interconnection, LLC	Not Applicable
Brodbeck	John	Potomac Electric Power Company	Electric Distributor
Bryson	Mike	PJM Interconnection, LLC	Not Applicable
Calore	James	PSEG Energy Resources and Trade LLC	Transmission Owner
Campbell	Gregory	Commonwealth Edison Company	Transmission Owner
Carmean	Gregory	OPSI	Not Applicable
Carretta	Ken	PSEG Energy Resources and Trade LLC	Transmission Owner
Citrolo	John	PSEG Energy Resources and Trade LLC	Transmission Owner
Currier	Jeff	Dominion Virginia Power	Not Applicable
De Geeter	Ralph	Maryland Public Service Commission	Not Applicable
Dean	Kevin	McNees Wallace & Nurick LLC	Not Applicable
Dugan	Bill	Customized Energy Solutions, Ltd.*	Not Applicable
Dugan	Chuck	East Kentucky Power Cooperative, Inc.	Transmission Owner
Egan	Amanda	PJM Interconnection, LLC	Not Applicable
Fabiano	Janell	PJM Interconnection, LLC	Not Applicable
Farber	John	Delaware Public Service Commission	Not Applicable



Fecho	Thomas	Indiana Michigan Power Company	Transmission Owner
Feliks	Kent	American Electric Power	Transmission Owner
Filomena	Guy	Customized Energy Solutions, Ltd.*	Not Applicable
Fitch	Neal	NRG Power Marketing, LLC	Generation Owner
Forcum	David	Duke Energy Ohio, Inc.	Transmission Owner
Freeman	Al	Michigan Public Service Commission	Not Applicable
Fulmer	Marc	Monitoring Analytics, LLC	Not Applicable
Garbini	Marj	Potomac Electric Power Company	Electric Distributor
Gibellino	Dana	Allegheny Power	Transmission Owner
Gil	David	NextEra Energy Power Marketing, LLC	Generation Owner
Gooden	Mark	Appalachain Power Company	Transmission Owner
Hall II	Walter	Maryland Public Service Commission	Not Applicable
Hauske	Thomas	PJM Interconnection, LLC	Not Applicable
Heidorn	Richard	RTO Insider	Not Applicable
Heizer	Fred	Ohio PUC	Not Applicable
Hendrzak	Chantal	PJM Interconnection, LLC	Not Applicable
Hoatson	Tom	Riverside Generating, LLC	Other Supplier
Hopkins	Sandra	Dominion Virginia Power	Not Applicable
Horstmann	John	Dayton Power & Light Company (The)	Transmission Owner
Jennings	Kenneth	Duke Energy Business Services LLC	Generation Owner
Johnson	Carl	Customized Energy Solutions, Ltd.*	Not Applicable
Karcher	James	Duquesne Light Company	Transmission Owner
Kerecman	Joe	Calpine Energy Services, L.P.	Generation Owner
Kerr	Jack	Virginia Electric & Power Company	Transmission Owner
Kogut	George	New York Power Authority	Other Supplier
Koster	Joanne	FirstEnergy Solutions Corp.	Transmission Owner
Laios	Takis	American Electric Power	Transmission Owner
LaRocque	Matthew	PJM Interconnection, LLC	Not Applicable
Lavan	Ron	PJM Interconnection, LLC	Not Applicable
LeFevre	Donna	Virginia Electric & Power Company	Transmission Owner
Lieberman	Steven	Old Dominion Electric Cooperative	Electric Distributor
Manning	James	North Carolina Electric Membership Corporation	Electric Distributor
Marshall	Shona	Delaware Public Service Commission	Not Applicable
Marton	David	FirstEnergy Solutions Corp.	Transmission Owner
Maucher	Andrea	Division of the Public Advocate of the State of Delaware	End User Customer
McAlister	Lisa	American Municipal Power, Inc.	Electric Distributor
Miller	Don	FirstEnergy Solutions Corp.	Transmission Owner
Norton	Chris	American Municipal Power, Inc.	Electric Distributor
Ondayko	Brock	Appalachain Power Company	Transmission Owner
Pratzon	David	GT Power Group	Not Applicable

Riley	Tunisia	Commonwealth Edison Company	Transmission Owner
Roettker	Joe	Duke Energy Ohio, Inc.	Transmission Owner
Rohrbach	John	Southern Maryland Electric Cooperative	Electric Distributor
Schofield	William	Customized Energy Solutions, Ltd.*	Not Applicable
Schweizer	David	PJM Interconnection, LLC	Not Applicable
Slade Jr.	Louis	Virginia Electric & Power Company	Transmission Owner
Spidle	William	American Transmission Systems, Inc.	Transmission Owner
Stadelmeyer	Rebecca	Exelon Business Services Company, LLC	Transmission Owner
Sudhakara	Raghu	Rockland Electric Company	Transmission Owner
Summers	Ted	PSEG Energy Resources and Trade LLC	Transmission Owner
Taylor	Robert	Exelon Business Services Company, LLC	Transmission Owner
Tribulski	Jennifer	PJM Interconnection, LLC	Not Applicable
Walter	Laura	PJM Interconnection, LLC	Not Applicable
Weghorst	Brad	PPL Energy Plus, LLC	Transmission Owner
Wisersky	Megan	Madison Gas & Electric Co	Other Supplier

6. Appendix III: Proposals Not Meeting The Threshold

Modified Status Quo with Revised Incentives Proposal

- Provided additional compensation to Black Start units meeting certain performance incentives

Cost Allocation Proposal

- Provided additional compensation to Black Start units meeting certain performance incentives and allocated Black Start charges to non-Black Start generation, transmission customers and load

7. Standing Committee Results

SRSTF Voting Results

Minimum Incentive proposal – 65.85% Favorable

Proxy for Formula Replacement proposal – 63.41% Favorable

Modified Status Quo with Revised Incentives proposal – 23.17% Favorable

Cost Allocation proposal – 20.12 % Favorable