

System Restoration Strategy Senior Task Force Final Proposal Report

June 26, 2014

Issue Summary

System Restoration Strategy
Problem Statement/Issue Charge
Problem Statement brought forward by PJM
Problem Statement/Issue Charge approved at April 25, 2013; Markets and Reliability Committee
Number of Meetings covering this topic: 25

1. Recommended Proposal – Compensation (Minor Compensation Changes with Limited Fuel Storage Package)

The SRSTF looked at several minor changes to Black Start unit compensation. These changes impact a small number of Black Start units and are seen more as "clean-up" or "equity" issues as opposed to any major changes to the method of compensation for Black Start units. The task force also looked at potential changes to cost allocation, but is not recommending any changes to the existing Black Start cost allocation methodology.

The Compensation proposal described here received 58% support at the SRSTF. No other compensation proposal received the required 50% approval at the SRSTF to move it forward to the MRC for consideration.

The changes being recommended include:

- Allowing non-ICAP Black Start units to be compensated using the offered Black Start MW.
 - Justification: Currently Black Start units on the base formula rate are compensated based on ICAP values. There is no mechanism to compensate Energy Only Black Start units on the base formula rate for providing this service.
- Allow Automatic Load Rejection (ALR) units to recover NERC Compliance costs as documented to the IMM.
 - Justification: This would allow ALR units to recover NERC Compliance costs and be comparable with traditional Black Start units in the ability to recover these costs.
- Allow for fuel storage compensation for LNG, propane and oil per the existing formula for fuel storage.
 - Justification: Currently only oil storage is specified in the tariff. This would allow units that use LNG or propane to comparably recover fuel storage costs associated with providing Black Start.
- In the case where Black Start units share a common fuel tank, only one Black Start unit will be eligible for recovery of minimum tank suction level (MTSL).



- Justification: This is to close a loophole in the current fuel storage compensation which allows for multiple Black Start units using the same fuel tank to recover the fuel storage costs related to the minimum tank suction level.
- Provide for a 5 year PJM internal review of compensation formula.
 - Justification: This would align the formula review with the RTO-wide RFP process and reduce PJM staff administrative burden. Currently this review is performed every 2 years. Results of the review will be reviewed with PJM Stakeholders (either MRC or MC Webinar).

1A. Recommended Proposal – Reliability Backstop

The SRSTF also looked at the separate issue of Reliability Backstop. Under the current process, if there is inadequate response to the incremental RFP process to address a Black Start shortage, there is little recourse that can be taken. These Black Start shortages can lead to delayed restoration times and/or other reliability issues such as delayed restoration of critical load.

This Reliability Backstop Proposal received 100% support at the SRSTF. No other proposals were developed by the task force.

The Reliability Backstop is triggered if PJM has a shortage of Black Start generation in a zone or zones following the RTO-wide RFP and/or two failed incremental RFPs for Black Start resources. In addition there must be no cross-zonal solution available and no RTEP transmission solutions available (e.g. operational performance baseline upgrade). PJM would trigger the Reliability Backstop as needed after discussions with the TO, affected State(s) and the SOS-T.

The Reliability Backstop would be a third incremental RFP in which the TO would provide a proposal which may be owned by the TO, by a generation-owning affiliate or by contracting with a generation-owning company. The Reliability Backstop asset may only be used for Black Start. The length of commitment would be per the FERC approved recovery period.

Cost recovery for a TO owned or contracted solution would be through a TO 205 Filing with FERC for OATT recovery capability to recover capital costs, ongoing O&M costs, depreciation and fuel as transmission assets (examples are Attachment H of the OATT or other FERC approved recovery rate). For GO owned assets, cost recovery would be through OATT Schedule 6A or FERC filing.

Any Black Start unit built through the Reliability Backstop process must meet all PJM Black Start testing requirements and all NERC standards for Black Start generation.



2. Standing Committee Results

Compensation Proposals:

Minor Compensation Changes with Limited Fuel Storage (Recommended proposal) – 58% in favor

Reliability Backstop:

Tier 1 Consensus Proposal (TO Solution) – 100% in favor

Appendix I: Proposals Not Meeting the Threshold

Compensation Proposals:

Minor Compensation Changes with Fuel Storage (on-site and hydro) proposal – 45% in favor

Minor Compensation Changes with Limited Fuel Storage – replaced 12 month forward strip – 44% in favor

Minor Compensation Changes with Fuel Storage (on-site and hydro) – replaced 12 month forward strip – 33% in favor

Appendix II: Supplemental Documents

Options and Solution Matrix

M-14D Changes for Reliability Backstop

M-36 Changes for Reliability Backstop

M-27 Changes for Compensation

OATT Revisions for Compensation and Reliability Backstop

Appendix III: Stakeholder Participation

Last Name	First Name	Company Name	Sector
Anders	David	PJM Interconnection, LLC	Not Applicable
Bainbridge	Thomas	FirstEnergy Solutions Corporation	Transmission Owner
Bolan	Martin	FirstEnergy Solutions Corporation	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	Public Service Electric & Gas Company	Transmission Owner
Carmean	Greg	OPSI	Not Applicable



Carretta	Kenneth	PSEG Energy Resources and Trade LLC	Transmission Owner
Citrolo	John	PSEG Energy Resources and Trade LLC	Transmission Owner
Czigler	Frank	Public Service Electric & Gas Company	Transmission Owner
De Geeter	Ralph	Maryland Public Service Commission	Not Applicable
Dean	Kevin	McNees Wallace & Nurick LLC	Not Applicable
DeNavas	Joe	Potomac Electric Power Company	Electric Distributor
Dugan	Bill	Customized Energy Solutions, Ltd.*	Not Applicable
Dugan	Chuck	East Kentucky Power Cooperative, Inc.	Transmission Owner
Egan	Amanda	PJM Interconnection, LLC	Not Applicable
Farber	John	DE 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	GenOn Energy Management, LLC	Generation Owner
Forcum	David	Duke Energy Ohio, Inc.	Transmission Owner
Fulmer	Marc	Monitoring Analytics, LLC	Not Applicable
Garbini	Marj	Potomac Electric Power Company	Electric Distributor
Gardner	Michelle	NextEra Energy Power Marketing, LLC	Generation Owner
Gardner	Michelle	NextEra Energy Power Marketing, LLC	Generation Owner
Gibellino	Dana	Allegheny Power	Transmission Owner
Gooden	Mark	AEP Energy Partners, Inc.	Transmission Owner
Hagaman	Derek	Calpine Bethlehem, LLC	Electric Distributor
Hauske	Thomas	PJM Interconnection, LLC	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
Hyzinski	Tom	PPL EnergyPlus, L.L.C.	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	Dominion Virginia Power	Transmission Owner



Kormos	Mike	PJM Interconnection, LLC	Not Applicable
Koster	Joanne	FirstEnergy Solutions Corporation	Transmission Owner
Laios	Takis	American Electric Power	Transmission Owner
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
Marton	David	FirstEnergy Solutions Corporation	Transmission Owner
Maucher	Andrea	Division of the Public Advocate of the State of Delaware	End User Customer
Mazari	Shailabh	Duke Energy Ohio, Inc.	Transmission Owner
McAlister	Lisa	American Municipal Power, Inc.	Electric Distributor
Norton	Chris	American Municipal Power, Inc.	Electric Distributor
Ondayko	Brock	Appalachain Power Company	Transmission Owner
Pratzon	Dave	GT Power Group	Not Applicable
Pratzon	David	GT Power Group	Not Applicable
Riley	Tunisia	Commonwealth Edison Company	Transmission Owner
Roettker	Joe	Duke Energy Ohio, Inc.	Transmission Owner
Schweizer	David	PJM Interconnection, LLC	Not Applicable
Shamash	Hertzel	Dayton Power & Light Company (The)	Transmission Owner
Slade Jr.	Louis	Virginia Electric & Power Company	Transmission Owner
Spidle	Bill	FirstEnergy Solutions Corporation	Transmission Owner
Spidle	William	American Transmission Systems, Inc.	Transmission Owner
Stadelmeyer	Rebeca	Exelon Business Services Company, LLC	Transmission Owner
Stadelmeyer	Rebecca	Exelon Business Services Company, LLC	Transmission Owner
Summers	Theodore	PSEG Energy Resources and Trade LLC	Transmission Owner
Taylor	Robert	Exelon Business Services Company, LLC	Transmission Owner
Tribulski	Jen	PJM Interconnection, LLC	Not Applicable
Tribulski	Jennifer	PJM Interconnection, LLC	Not Applicable
Weghorst	Bradley	PPL EnergyPlus, L.L.C.	Transmission Owner
Wisersky	Megan	Madison Gas & Electric Co.	Other Supplier