

Security and Resilience Advisory Committee
PJM Conference and Training Center
March 17th, 2017
10:00 a.m. – 2:00 p.m. EPT

Administration (10:00am)

Mr. Jonathon Monken, PJM, opened the meeting and reviewed the agenda.

Mr. Andrew Ott, president and CEO, PJM, kicked off the first meeting of the Security and Resilience Advisory Committee (SRAC). He noted that there are things that can be done to bolster both physical and operational security and that this committee will play a meaningful role in initiatives related to physical security, cyber security and resilience. Additionally, Mr. Ott discussed how projects such as the Fuel Security Study will be part of a larger emphasis on resilience at PJM going forward.

Mr. Monken reviewed and discussed the draft Charter, as well as the committee scope and deliverables. He noted that this committee is the only dedicated forums for our stakeholders to exclusively discuss security and resilience at the policy and planning level, and that this group will serve as a medium to collectively address and build out resiliency programs for the RTO. No updates to the Charter were suggested by committee participants.

Working Issue (10:45am)

Mr. Michael Bryson, PJM, provided an overview of the PJM Fuel Security Study. He noted the impetus behind the study is the mindset that reliability could be in danger due to fuel diversity. Mr. Bryson stated that the study avoids policy and economics; instead it is intended to identify and describe the factors affecting this topic. The study looks at how the current resources in our footprint provide reliability and to raise questions to serve as a launching pad for further discussion. The paper will be published and made available by the end of March. Additionally, Mr. Bryson noted that a Grid 20/20 is scheduled for April 19 in Philadelphia to facilitate a discussion that will explore fuel mix diversity and security issues and their intersection with resilience.

Mr. Ed Ernst, NATF, presented an overview of the North American Transmission Forum (NATF) Spare Tire Project. He stated that this project began in an effort to better understand how the existing primary and backup systems work to operate the grid during a loss of Energy Management System (EMS) due to a communication outage caused by a cyber or physical attack on the Bulk Electric System. He identified areas for future work which include the development of additional redundancies to existing communications systems, improvements to voice and data communications to support emergencies, development of new reliability tools for suboptimal operation, the formalization of strategies and plans for dealing with such a loss, a formal plan for sharing data, and finally, identifying a process to streamline EMS recovery.

Mr. David Gladey, PP&L, provided information on the PP&L Resilience Program. He discussed the goals of the resilience strategy at PP&L which included the development of a risk-based approach to identify and tier potential high risks and to develop strategies to mitigate those risks, to ensure system resiliency and

reduce security risks to transmission substations. He also discussed specific concerns regarding improving black start plans and the need to build additional infrastructure to diversify power flows.

Mr. LeRoy Bunyon, PJM, provided an update on GridEx IV, which is an exercise designed to simulate a coordinated cyber/physical attack with operational impacts on electric and other critical infrastructures across North America to improve security, resilience and reliability. He noted that the dates of this exercise are scheduled for November 15 and 16, 2017. Additional materials related to GridEx can be found [here](#). Mr. Monken noted that the SRAC will continue to receive updates on the GridEx planning process in order to identify any training activities or policy lessons that have a resilience nexus for consideration in future meetings. The fourth-quarter SRAC meeting will be scheduled to fall shortly after the exercise in order to capture the relevant lessons learned.

Mr. Monken presented an introduction to EarthEx which is a table top exercise designed to improve community resilience to long-duration power outage events through cross-sector coordination between critical infrastructure industries. He informed everyone that PJM intends to activate their corporate incident response team (IRT) to address policy issues and prepare for participation in GridEx. He noted the exercise will take place on August 23, 2017. Registration for participation opens in May and is seeking additional companies to play. Mr. Monken noted that a SRAC meeting on August 23rd will be scheduled to coincide with this exercise

Future Meeting Dates

May or June XX, 2017	TBD	Member Location
August 23, 2017	TBD	PJM Conference & Training Center/ WebEx
November XX, 2017	TBD	PJM Conference & Training Center/ WebEx
Author: Amanda Egan		

In-Person Attendees

Last Name	First Name	Company	Sector
Bernabeu	Emanuel	PJM Interconnection, LLC	Not Applicable
Bransky	Jonathan	PSEG Energy Resources and Trade LLC	Other Supplier
Bryson	Mike	PJM Interconnection, LLC	Not Applicable
Bunyon	LeRoy	PJM Interconnection, LLC	Not Applicable
Callis	Joe	PJM Interconnection, LLC	Not Applicable
Egan	Amanda	PJM Interconnection, LLC	Not Applicable
Foladare	Kenneth	Tangibl	Not Applicable
Gladey	David	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Godson	Gloria	Exelon Business Services Company, LLC	Transmission Owner
Hagaman	Derek	GT Power Group	Not Applicable
Hendrzak	Chantal	PJM Interconnection, LLC	Not Applicable
Kogut	George	New York Power Authority	Other Supplier
Letterio	Frank	PJM Interconnection, LLC	Not Applicable
McElwee	Steven	PJM Interconnection, LLC	Not Applicable
Monken	Jonathon	PJM Interconnection, LLC	Not Applicable
Monzon	Stephanie	PJM Interconnection, LLC	Not Applicable
Morton	Leslie	Public Service Electric & Gas Company	Transmission Owner
O'Brien	Tom	PJM Interconnection, LLC	Not Applicable

O'Connell	Robert	Main Line Electricity Market Consultants	Not Applicable
Ott	Andrew L.	PJM Interconnection, LLC	Not Applicable
Pilong	Christopher	PJM Interconnection, LLC	Not Applicable
Pratzon	David	GT Power Group	Not Applicable
Richardson	Frank	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Scarpignato	David	Calpine Energy Services, L.P.	Generation Owner
Schreim	Morris	Maryland Public Service Commission	Not Applicable
Schwenk	Melissa	PJM Interconnection, LLC	Not Applicable
Sidella	Desiree	PJM Interconnection, LLC	Not Applicable
Simendinger	Kent	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Stern	Alexander	Public Service Electric & Gas Company	Transmission Owner
Stubbe	Judy	Duke Energy Ohio, Inc.	Transmission Owner
Vallace	Jennifer	Rockland Electric Company	Transmission Owner
Volkel	Barry	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Walker	Jennifer	Exelon Business Services Company, LLC	Transmission Owner
Webber	Scott	Duquesne Light Company	Transmission Owner

Teleconference Attendees

Last Name	First Name	Company	Sector
Anders	David	PJM Interconnection, LLC	Not Applicable
Bainbridge	Thomas	FirstEnergy Solutions Corp.	Transmission Owner
Barth	Bob	Duke Energy Ohio, Inc.	Transmission Owner
Benckek	Jim	FirstEnergy Solutions Corp.	Transmission Owner
Bodkin	Sean	Dominion Virginia Power	Not Applicable
Bolan	Martin	FirstEnergy Solutions Corp.	Transmission Owner
Borgatti	Michael	Gabel and Associates	Not Applicable
Bransky	Jonathan	PSEG Energy Resources and Trade LLC	Other Supplier
Brown	Michael	Baltimore Gas and Electric Company	Transmission Owner
Callis	Joe	PJM Interconnection, LLC	Not Applicable
Carmean	Gregory	OPSI	Not Applicable
Carrado	Regina	PECO Energy Company	Transmission Owner
DeLosa	Joseph	DE Public Service Commission	Not Applicable
DiNicola	Laura	FirstEnergy Solutions Corp.	Transmission Owner
Domian	Christin	Mitsubishi Electric Power Products Inc.	Not Applicable
Fink	Sari	Office of the Ohio Consumers' Counsel	End User Customer
Fitch	Neal	NRG Power Marketing LLC	Generation Owner
Fluty	Wesley	East Kentucky Power Cooperative, Inc.	Transmission Owner
Greening	Michele	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Griffiths	Dan	Consumer Advocates of PJM States	Not Applicable
Harchick	Jason	Duquesne Light Company	Transmission Owner
Horton	Dana	Appalachian Power Company	Transmission Owner
Jardot	Gina	Essential Power Rock Springs, LLC	Transmission Owner
Johnson	Carl	Customized Energy Solutions, Ltd.*	Not Applicable
Kopinski	John	ITC Mid-Atlantic Development LLC	Other Supplier
Laios	Takis	Appalachian Power Company	Transmission Owner

LaRocque	Matthew	PJM Interconnection, LLC	Not Applicable
Lewis	Cara	Public Service Electric & Gas Company	Transmission Owner
Mabry	David	McNees Wallace & Nurick LLC	Not Applicable
Midgley	Sharon	Exelon Business Services Company, LLC	Transmission Owner
Murphy	Lori Lee	PJM Interconnection, LLC	Not Applicable
Owens	George	Downes Associates, Inc.	Other Supplier
Pourmand	Ramtin	Public Service Electric & Gas Company	Transmission Owner
Schneider	Jonathan	FirstEnergy Solutions Corp.	Transmission Owner
Shah	Pulin	PECO Energy Company	Transmission Owner
Smith	Jacque	ReliabilityFirst Corporation	Not Applicable
Thomas	Kyle	Innovari Market Solutions LLC	Other Supplier
Weiss	Glenn	PJM Interconnection, LLC	Not Applicable