

**Proposed 2019 ISGT Panel Session:** Planning and Operating a Flexible and Resilient Grid: Lessons Learned and Vision for the Future

**Proposed duration:** Session – 90 minutes

**Date/Time:** Tuesday, February 19, 2019 from 1:30 PM – 3:00 PM

**Chairs:** Marianna Vaiman and Tom Pierpoint

Electric industry has been working extensively on innovative technologies that can help ensure the resilience of the grid and policies that support resilient system operation. To address the need to provide strategic vision and coordinate multiple efforts directed to improving resilience, reliability, security, and stability of the transmission and distribution grids, IEEE PES formed Industry Technical Support Task Force (ITS TF). The Task Force works closely with IEEE Standards Association, IEEE-USA, DOE, FERC, NERC, NATF, and other industry, government and regulatory agencies on complex issues impacting the energy sector. The Round Table discussion with industry leaders from IEEE PES, IEEE USA, ComEd, National Grid, PJM, TVA, DOE, FERC, NATF, NERC and other organizations focuses on lessons learned and effective strategies for planning and operating a flexible and resilient grid.

The proposed panel will consist of two parts:

1. Brief presentation of four reports that ITS TF published in 2018, which became the top most widely viewed IEEE PES reports.
2. Round table discussion with industry leaders from IEEE PES, IEEE USA, ComEd, National Grid, PJM, TVA, DOE, FERC, NATF, NERC and other organizations on lessons learned and effective strategies for planning and operating a flexible and resilient grid.

**Panel structure and schedule:**

Panel structure:

- Introduction 5 minutes
- Overview: Presentations on ITS TF 2018 technical reports 25 minutes
- Round table discussion: IEEE and partner organizations 60 minutes

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TOTAL:	90 minutes
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Panel schedule:

1. Introduction 5 minutes  
Marianna Vaiman and Tom Pierpoint
2. Managing the New Grid 5 minutes  
Damir Novosel, Quanta Technology
3. Definition and Quantification of Resilience 5 minutes  
Emanuel Bernabeu, PJM

4. Impact of IEEE 1547 Standard on Smart Inverters 5 minutes  
Babak Enayati, National Grid
5. Impact of Inverter Based Generation Dynamics and Short-Circuit Performance 5 minutes  
Gary Kobet, TVA
6. Supporting Global Community: DERs, Microgrids and Related Technologies 5 minutes  
Dagmar Niebur, Drexel University
7. Roundtable discussion with industry experts: 60 minutes

Shay Bahramirad, IEEE PES, ComEd; Emanuel Bernabeu, ITS TF, PJM;  
Babak Enayati, National Grid; Tom Galloway, NATF; Gary Kobet, TVA;  
Mark Lauby, NERC; Jay Liu, ITS TF, PJM; Dagmar Niebur, ITS TF, Drexel;  
Damir Novosel, ITS TF, Quanta Technology; David Ortiz, FERC;  
Michael Pesin, DOE; Veronika Rabl, IEEE USA