IEEE JTCM 2021

T&D Com – Dist. SC - Dist. Resiliency Working Group

January 14, 2021 4 PM – 5:30 PM Eastern

Webex Virtual meeting

Chair: Brett Efaw, Vice Chair: Gary Huffman, Secretary: Masoud Davoudi, Webmaster: Tyler Jones

*Web site:* <https://sagroups.ieee.org/distreswg/>

**Attendance:**

Taken via chat feature. Record updated on “123 signup” platform.

Quorum met, 44 attending.

**Agenda:**

* Intro / Quorum / Agenda / Minutes
* IEEE Resiliency Liaison
* Resiliency Metrics @ ComEd
* P2856 Chair/Vice Chair
* TF – Powerline Wildfire Mitigation and Resilience
* Close / Adjourn

**Approval of minutes and agenda**

Chair Brett Efaw started the meeting at 4:03 ET.

Minutes of last meeting, 2020 GM, was discussed. Gary Huffman motion to accept, John McDaniel second.

Agenda of 2021 JTCM (current meeting) was presented. John McDaniel motion to approve, John Lauletta second.

**Liaison report**

Gary Huffman presented his Liaison report.

* + IEEE PES PSDP Resilience TF:
		- Alex, astankov@ece.tufts.edu
	+ IEEE PES PSOPE Tools for Resiliency:
		- Anurag, anurag.k.srivastava@wsu.edu
* Additional Resiliency Measures
	+ Dominion Strategic Undergrounding Program
	+ Other?

He has been in Contact with other IEEE teams on defining resilience metrics.

– IEEE PES PSDP Resilience TF: Alex, astankov@ece.tufts.edu

– IEEE PES PSOPE Tools for Resiliency: Anurag, anurag.k.srivastava@wsu.edu

Gary will continue reaching out to international teams, including:

– CIGRE 4.47: Malcolm Van Harte, vHarteM@eskom.co.za

– CIGRE 2.25: Jen Jacobs, Jens.Jacobs@amprion.net

He also asked if the working group members and guests know other efforts on similar activities. None heard. Please report back to Gary if you had more info.

Gary mentioned that Dominion uses strategic undergrounding program and Gary is approaching Dominion to present their approach to the WG.

**Other related efforts on resilience**

* Jason Lombardo mentioned a [webinar](https://resourcecenter.ieee-pes.org/education/webinars/PES_Ed_Web_TR83_021021.html) in February, presented by Bill Chiu as the lead author of IEEE PES Technical Report TR83. John McDaniel suggests that TR83 is more transmission oriented.
* Anurag mentioned another group started this year under CAMS in PES.
* Gary asked Brett to comment on the needs for metrics that can be used in toolboxes. Brett mentioned that his focus in on using the widely available data.
* Sal mentioned that we need to tie our effort closely with Joe's work on ICE. Joe mentioned that their survey-based method focused on the shorter duration. They are now focusing on regional economic models to include longer term durations. The WG will stay in contact with Joe's effort.
* Joe mentioned that they are working with ComEd to include longer time duration and they may present the results later. Daniel Kushner.
* Anurag asked if we agreed on Resilience definition, and what we currently use as the definition. Brett mentioned that we have the definition on the website. Brett mentions that we have adopted the definition in “Berkeley, A. R., & Wallace, M. (2010). *A Framework for Establishing Critical Infrastructure Resilience Goals.* National Infrastructure Advisory Council.”
* Aaron Snyder mentioned that NEMA will be publishing a resilience guidebook in Q1 this year.

**ComEd Resilience Definition by Yasmin**

ComEd Resilience Definition by Yasmin was presented in the meeting. Yasmin covered the idea and the keywords used in ComEd are “Withstand” and “recover”. She discussed Storm Resilience and Gray Sky Day Resilience (robustness and ability to withstand weather events).

Anurag asked about the metrics and that one is a performance based and the other is based on the stability (system characteristic based). Yasmin mentioned that they are focusing on the performance side of the work.

Heide asked where do these metrics fall compared to MED? And mentioned that a resilient system should be resilient to all causes not just weather. So, she likes to know where the reliability results would be for a GSD day on the curve.

Jonathan Sykes asked: Is there any relation between what you are doing for reliability metrics (2.5 beta) and the metrics on resilience. Yasmin mentioned that while every GSD will have its own SAIDI CAIDI, GSD is calculated for resilience.

Gary mentioned that we do not want to double count reliability and resilience. Sometimes resilience efforts are reducing reliability. Example is the WF resilience efforts that reduce reliability on the other hand.

Gary mentioned the criteria for temperature effect and discussed that for instance, transformer failures will accumulate over several days in case of a heat wave. Yasmin mentions that resilience is to them more of a low probability and high impact effect.

Kwami asked if an event in Orange happens in the same day as of an event of yellow, which one will be considered? Yasmin: It should be either or. The categories cannot happen at the same time.

**New Task Force**

New task force with officers established for P2856. Yasmin and Gary nominated themselves for the Chair and Vice Chair positions, respectively. John McDaniel motion to accept, Sal second.

* Chair: Yasmin El-Tigani, ComEd
* Vice-Chair: Gary Huffman, Burns & McDonnell

**Wildfire topic**

Masoud went over the paper that was submitted and accepted in the special issue of power delivery. John Lauletta briefly discussed their research with University of Akron and that he is interested to collaborate.

Masoud presented his suggested scope for the TF on Wildfire Resilience. Comments received were as below:

* Tyler Jones: change “Cost benefit” to “Cost effectiveness”. Identifying locations that are most cost-effective.
* Bryan Glenn mentioned that they use “Risk spend efficiency” in SCE.
* Joseph Viglietta mentioned that “cost-benefit” is used for planning and project prioritization, and “cost-effectiveness” for after-the-fact assessments of whether our investments delivered the benefits we estimated.
* Jonathan Sykes mentioned that in PSRC they are working in a WG on methods to help mitigate fire risks and they will investigate cost benefit in another new TF. Scott Hayes from PG&E mentioned that in PSRC they are studying what we can do on the protection side to mitigate WF?
* Gary mentioned that we need to keep timing and sequencing the proposed TF work in coordination with the PAR 2856.

Brett mentioned that we can have an e-ballot on this effort before GM.

**Other business**

Michael Kipness from IEEE mentioned that membership is assigned after attending 2 out of last 4 meetings. Voting rights would be effective at the next meeting. The T&D WG policies and procedures can be found at <https://cmte.ieee.org/pes-td/wp-content/uploads/sites/83/sites/83/2020/08/IEEE-TD-PP-WG-2020-05-20.pdf>

Michael also mentioned that Chair, VC, and Secretary need to be SA members.

**Meeting Adjourned**

Motion by John Lauletta., 2nd by Gary H. at 5:38 PM Eastern

**Future panels and tutorials**

No panels planned. Next meeting is 2021 General Meeting, 25-29 July.