

Distribution Task Team (DisTT) Break-Out Session Minutes & Action Items

Spring '24 NASPI Work Group Meeting

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Thanks for
organizing
PNNL!



Agenda Items

- Searching a Co-Lead for the Distribution Task Team
- “Train the Trainer/Champion” project for Utilities
- Distribution Phasor Measurement Unit (PMU) Standard
- PMU requirements for monitoring of Inverter Based Resources

DisTT Co-Lead Search

- Dan Dietmeyer (Project Manager, SDG&E) served as Co-Lead since 2021 alongside Sascha von Meier and then Panos Moutis
- Dan had to step down, but will keep contributing as thought leader
- The DisTT for the past 5 years has had a balanced co-leadership of an academic and an industry expert
- Panos (& NASPI) aspire to assign the industry co-lead role to a (preferably) Utility Engineer/Manager. Please, come forward!
- If no volunteers from Utility space, next consideration OEMs, vendors, developers with long record in distribution projects

“Train the Trainer/Champion”

- NASPI has previously trained senior engineers (trainers) in TSOs/RTOs with the aim to diffuse that training within the organizations
- After surveying cases of PMU adoption by utilities we concluded that engineers have not been the driver of said adoption
- PMU adoption in distribution stakeholders came from management or decision maker roles (“champions”)
- In Fall ‘23 NASPI WG meeting SRP, V&R and ComEd presented their experiences of PMU adoption
- ***We will gather the experiences and develop pre-recorded webinars or promotional shorts on the value (cases) of PMUs in distribution***
 - Thank you Mariana & Farrokh (Aminifar)!

Distribution PMU standard

- “First came the black-outs, then came the PMUs, then came the standards, last came the revisions & next to last more revisions...” – PM
- Several utilities deploy PMUs with no standardization
- Ken Martin has been leading a 3yr IEEE TF on whether a new standard or a new class within the existing PMU standard C37.118.1 is needed
 - Certain conclusions have been drawn
 - There is consensus for a new class within C37.118.1 > report soon
- Value/use propositions/cases unclear and scarce
 - Thank you Daniel, Nick, Michael, Marianna!

PMU requirements from IBR cases

- Severe disturbances induced by or involving IBRs have warranted almost a dozen NERC reports > IBRs change our understanding of grid operation
- Protection behavior, failures, parametrization, etc. interacting with IBRs
- PMUs cannot serve the purpose for insightful post-mortem or control
- Maybe a W(avelet)MU value proposition...
- Data collection:
 - Plant owners from 5' SCADA > 2'' SCADA > DFR > 30/s PMU > inverter oscillography
 - Contingency analysis suffering from 2'' SCADA monitoring of IBRs
 - Ramping rates induced by IBRs of concern to utilities
 - 0.5Hz PV-battery power oscillation in SPR footprint between -50MW to 200MW

Thanks for your attention!

Questions, please?

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