Predictive Reliability Task Force

Chair: Julio Romero Aguero
Co-chair: Le Xu

IEEE Working Group on Distribution Reliability
2014 IEEE PES General Meeting
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Scope

• To gain a better understanding about current practices among utilities regarding predictive distribution reliability studies and how they are preparing to evaluate the potential impact of emerging technologies.

• Provide recommendations or guidance on predictive reliability study methodologies and their adaptation to emerging trends.
Update

• Panel session at 2014 IEEE PES General Meeting, National Harbor, MD, Wednesday, July 30, 2014 1:00 PM-3:00 PM, room Chesapeake 4

• **Utility Current Practices and Challenges of Predictive Distribution Reliability**


• Moderator: Le Xu, Quanta Technology
Update (1)

• Summary:
  – The Predictive Reliability Task Force of the IEEE Working Group on Distribution Reliability has conducted a comprehensive survey to gain better understanding about current practices among utilities in North America regarding predictive reliability modeling and analysis. Topics covered by the survey include how utilities are preparing to consider in these studies emerging technologies such as distributed energy resources and areas of concern like aging infrastructures. This panel session will present the main findings from the survey and provide a platform for participant utilities to share experiences and discuss analytically methodologies and technical requirements for conducting predictive reliability studies for distribution systems.
Update (2)

• Presentations:
  – Reliability management approach at SCE (14PESGM2741), Shan (Sam) Chien, Southern California Edison
  – URD cable fault prediction model (14PESGM2742), Christopher Gubala, Commonwealth Edison
  – Pepco's Reliability Forecasting Model (14PESGM2744), Bryan Clark, Pepco Holdings, Inc
  – Predictive Reliability Analysis Tools Utilizing OMS Data (14PESGM2743), Ian Hoogendam, PacifiCorp
Next steps

• Potential activities include:
  – Prepare paper to summarize survey results for presentation in 2015 IEEE PES GM or publication in IEEE Power and Energy Magazine
  – Organize special issue on predictive distribution reliability (IEEE Power and Energy Magazine)
  – Prepare task force report (need to identify contributors)
Thank You!