EPR

Distribution Operations & Planning Supplemental Offerings

Supplemental projects are focused on accelerating the application of the latest research advancements, providing member specific results, and increasing the pace and breadth of research. Projects can be either multi-funder where a subset of members collaborate to advance specific capabilities or be 1-on-1 application projects to support individual utility needs. Regardless of approach, these efforts can be funded leveraging the self-directed funds set aside for each utility. These projects enable:

- Results specific to your needs
- Implementation of new processes with utility SMEs •
- Proving out technology and integration

Evolving Distribution Planning Criteria for a Modern Grid



Intelligent Grid Modeling to Expedite Studies

Objective	Provide guidance on processes to enhance the development and maintenance of distribution grid models as well as a grid model validation and verification tool to enable the automation of manual processes.							
Value	Action plan to enhance grid modeling practices and implementation of grid model verification and validation tool.							
	18 months (Q2 2026 completion)	\$	\$125K per member	C.	Matt Rylander, <u>mrylander@epri.com</u> , 512.731.9780 Supp Project Notification, <u>3002031056</u>			

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Wide Area Distribution Assessments for Reliability Planning

Objective	Develop, test, and demonstrate a new planning and evaluation method that enables more holistic and integrated distribution planning and informs no-regrets, prioritized decision making for reliability investments.					
Value	Flexible and comprehensive reliability planning process as well as implementation of a prototype tool and case study					
	24 months (Q4 2026 completion)	\$	\$125K per member	C.	Nick Heine, <u>nheine@epri.com</u> , 865.218.8165 Supp Project Notification, <u>3002031146</u>	

Adapting Response of Distribution Operations Towards Community Resilience in Extreme Weather

Objective	Develop a new approach to community-centric restoration by identifying & classifying critical and essential customers providing services to the community and formulating a restoration strategy based on the classification.						
Value	Methodology to categorize essential customers, demonstration of approach in operational environment, comparison of metrics.						
	24 months (Q1 2027 completion)	\$	\$75k per member	C.	Jared Green, <u>jgreen@epri.com</u> , 865.360.7967 Supp Project Notification, <u>3002031145</u>		

Control Center of the Future Roadmap - Distribution

Objective	Develop and implement a standard industry framework for the Distribution Control Center of the Future, covering technology, facilities, people, and processes.						
Value	Framework, roadmap, and decision support tools to enable implementation of future operational capabilities based on your system.						
	16 months (Q4 2025 completion)	\$	\$45K (Opt I) \$95k (Opt II) per member	L D	Brian Deaver, <u>bdeaver@epri.com</u> , 443.910.2553 Supp Project Notification, <u>3002030216</u>		

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Measurement Data Cleaning and Utilization

Objective	Support utilities in processing SCADA/AMI measurement data for better utilization for grid modeling by enhancing a tool that automatically detects measurement data problems and remediates based on intended applications.						
Value	Increase efficiency of processing, understanding, and correcting measurement data and improve utilization of data for planning/operational studies.						
	12 months (Q4 2025 completion)	\$	\$70K per member	C.	Matthew Rylander, <u>mrylander@epri.com</u> , 512.731.9780 Supp Project Notification, <u>3002028746</u>		

Adapting AMI and OMS to Identify Downed Energized Conductors

Objective	Work with utilities to design, develop, and demonstrate approaches for automating AMI data integration and utilization for the use case of identifying down energized conductors which pose a significant public safety risk.							
Value	Implement processes and code to identify downed conductors leveraging AMI and OMS system and improve identification of down energized conductors.							
	24 months (ongoing)	\$	\$50k per member	C.	Van Holsomback, <u>vholsomback@epri.com</u> , 980.312.4671			

Distribution Protection Analysis Toolkit Application

Objective	Support utilities in implementing the DPAT tool to monitor protection performance over time and automatically identify changes in protection as well as settings changes to solve identified coordination issues.					
Value	Perform wide area fault and coordination studies in an efficient manner and identify potential mis-operation/safety issues.					
	12 months (ongoing)	\$	Tailored based on needs	C.	Aadityaa Padmanabhan, 865.218.8045, <u>apadmanabhan@epri.com</u>	

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Residential Secondary Design for Electrification

Objective	Develop guidance on how to account for electrification loads in residential service design					
Value	Increase understanding of electrification impacts on residential load characteristics and associated secondary impacts. Guidance on integrating electrification impacts in secondary design practices.					
	24 months (Q4 2025 completion)	\$	\$50k (opt 1) or \$140K (opt 2) per member	C	Jouni Peppanen, jpeppanen@epri.com, 650.855.8941 Supp Project Notification, <u>3002028367</u>	

DRIVE User Group Cycle 3

Objective	User Group to support the implementation of DRIVE hosting capacity analytics to understand Load/Gen impacts to the distribution system.						
Value	Enable time-saving system-wide analytics, consistent methods, and member knowledge exchange.						
	36 months (Q4 2026 completion)	\$	\$10k/yr (with 3-yr commitment)	Ċ	Matthew Rylander, <u>mrylander@epri.com</u> , 512.731.9780 Supp Project Notification, <u>3002028273</u>		

Grid Modernization Strategic Roadmapping

Objective	Assist utilities develop a detailed strategic roadmap for grid modernization, or review an existing modernization plan, to help accomplish desired objectives.								
Value	Define what a modern grid is for your company and how it is realized. Leverage a framework for structured discussion and engagement with regulators.								
	12 months (ongoing)	\$	Tailored based on needs	Ċ	Bruce Rogers, <u>brogers@epri.com</u> Don Von Dollen, <u>dvondoll@epri.com</u>				

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Implementing Alarm Management Philosophy in DCC

Objective	Implement alarm management philosophy guide to create a consistent and optimum basis for alarm definition, alarm system performance, alarm rationalization, alarm prioritization, and alarm annunciation						
Value	Dramatically improve situational awareness for distribution operator while reducing nuisance alarms and operating errors and improve safety.						
Ē	12 months (ongoing)	\$	\$125k per utility	C)	Brian Deaver, <u>bdeaver@epri.com</u> , 443.910.2553 Supp Project Notification, <u>3002017636</u>		

Distribution System State Estimation Test

Objective	Leverage DSSE Test Plan to evaluate utility-deployed DMS solutions to validate the DSSE functionality and test the sensitivity to critical operational inputs.					
Value	Quantify accuracy of DSSE results across operating, loading, and weather conditions, evaluate sensitivity of DSSE results to system modelling variations, and provide data to establish critical settings / configurations of DSSE					
	18 months (ongoing)	\$91k to \$137k per utility	C.	Brian Deaver, <u>bdeaver@epri.com</u> , 443.910.2553 Supp Project Notification, <u>3002017789</u>		

Distribution System Operator Capabilities to Enable DER Services

Objective	Support Distribution entities in enabling DERs to provide services to the grid through strategic roadmap development, coordination framework assessments, and tactical implementation plans.						
Value	Identify gaps in present capabilities, processes, tools, and data required to accommodate greater DER integration and market participation.						
	6-12 months (ongoing)	\$	Tailored based on needs	C.	Nick Heine, <u>nheine@epri.com</u> , 865.218.8157 Supp Project Notification, <u>3002024914</u>		

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Surgical Load Shedding to Support Energy Supply and Demand Balancing

Objective	Evaluate new options to strategically shed load using smart meters, document requirements to implement, and quantify achievable results on the distribution system.					
Value	Expand smart metering and distribution automation (DA) infrastructure use to address supply and demand imbalance during load shedding scenarios.					
	24 months (ongoing)	\$	Tailored based on needs	C.	Jared Green, j <u>green@epri.com</u> , 865.360.7967	

Protection Considerations for Increasing DER Penetration

Objective	Assist members in evaluating protection screening and studies associated with increasing DER penetration and evaluating novel protection strategies/schemes and the effects of DER.						
Value	Increase knowledge and experience with DER and protection considerations and identify potential challenges in existing protection planning practices.						
	18 months (ongoing)	\$	\$75K per member	C D	Michael McConnell, <u>mmcconnell@epri.com</u> Aadityaa Padmanabhan,		

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