

## GRID-EDGE CUSTOMER TECHNOLOGIES NEWSLETTER

Dear Grid-Edge Customer Technologies Program Advisors,

We look forward to seeing many of you on our End of Year webcast on December 14. We will be recording the webcast and posting the materials to our EPRI.com Program Page for those unable to attend. Our team is eager to share the final 2023 Base deliverables with you in the coming weeks, with several deliverables already available for download today! If you would like to be notified as our deliverables become available for download, be sure you subscribe to EPRI's [TIPs notifications](#)! If you need assistance doing so, please reach out to [Kelsey Palko](#).

For the remainder of 2023, the P170 team is submitting proposals for our 2024 Base efforts. If you would like to propose a base project, please reach out to any member of the team to assist you in submitting your idea/s. Proposals received from our advisors take top priority.

Happy holidays from the P170 team!



**Ron Domitrovic**

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**Program  
170**

### RECENTLY PUBLISHED PRODUCTS

To view content your organization has access to, please make sure to log into your account in the upper right hand corner of EPRI.com.

- U.S. Residential Electrical Panels: How Many Need to Be Upgraded? – [3002026736](#)
- Induction Cooking Current State Report – [3002026649](#)
- Evaluation of Efficiency and Control of Agricultural Lighting – [3002026524](#)
- Laboratory Evaluation of Smart Electric Panels – [3002026651](#)
- High Lift Air-to-Water Heat Pumps for Large Buildings: State of the Market – [3002028199](#)
- Agile Mobile Robot Capacity and Capability Testing – [3002028423](#)
- Evaluation and Comparison of Novel Heat Exchanger Coatings for Improved Defrost Cycles – [3002026526](#)
- Evaluation of Membrane Technologies for Efficient Dehumidification – [3002026647](#)

### ELECTRIFICATION 2024 INTERNATIONAL CONFERENCE & EXPOSITION

March 12–14, 2024 | Savannah, GA

EPRI is hosting the [Electrification 2024 International Conference & Exposition](#), featuring immersive pre-conference workshops, compelling agenda sessions, a collaborative Exposition Hall and multiple networking functions. Electrification 2024 will bring together thought leaders and innovators from across the electrification spectrum, providing you with a wide range of opportunities for education and collaboration to help advance your organization's initiatives. Reunite with business, policy, government and academic stakeholders, as well as vendors and other partners, for an in-depth exploration of how we can work together to meet deep decarbonization targets through a customer-focused clean energy transition. [Register today!](#)

We look forward to Accelerating Together for an Electrified Future!  
#ElectricTogether



### PRODUCT IN DEVELOPMENT

**New SPN Coming Soon! Heat Pump Electrification Planning, Prioritization, and Analysis using AMI**

STAY TUNED

This study leverages EPRI's Load Disaggregation Model to develop decision-making, planning and prioritization analysis for heat pump electrification for the residential and small commercial sectors. The model uses historical AMI for each customer to estimate space heating and cooling load profiles (8760) enabling applications such as discovery, usage characterization and forecasting of impacts under extreme weather. It supports determination of coincident system peak contribution by individual customer/aggregate criterion, suitability and cost-effectiveness of DR, energy/demand costs for program design considerations and ROI for customers for replacing with advanced systems such as VSHPs (variable speed HPs). The SPN will be available for download in the near future!

## EPRI STAFF PROFILE

Have you met **Scott Goedeke**? Scott joined EPRI in May 2020 and moved to Program 170 in January 2021.

Scott's primary areas of expertise include building and maintaining the test equipment in the lab areas that belong to Program 170 in the Knoxville, TN office.



**Fun Facts:** Scott says that most of the things he enjoys doing are like puzzles where you have to make your own pieces. He enjoys working on older cars and trucks and spending time with his family. He also is in a perpetual state of home remodeling, though he doesn't know if he necessarily enjoys it, or just isn't willing to pay someone to do things that he has the ability to do.

## TECHNOLOGY TIDBIT

### Did you know...?

Did you know that of all the elemental metals, only gold and copper have colors other than silver/gray. Some, like cobalt and bismuth can exhibit colored hues, but copper and gold are in a class by themselves. Copper is one of the most recycled materials we use, with greater than 80% of all copper ever mined still in use today\*. (\*From a reliable internet source)

## SUPPLEMENTAL PROJECT HIGHLIGHT

### Program Advisory Chairs – Irina Rasputnis, SCL and Clay Hoover, TVA

We would like to thank Clay Hoover of Tennessee Valley Authority (TVA) and Irina Rasputnis of Seattle City Light (SCL) for serving as the P170 Advisory Chairs.

Clay and Irina will help review proposals submitted by P170 staff and utility advisors and provide guidance in selecting our 2024 ARP research. If you would like to submit a project proposal, please reach out to a P170 team member. Proposals from our advisors take priority over those submitted by the P170 team.

The P170 staff looks to our chairs to help voice our membership's needs. Please reach out to Clay, Irina, or any member of the P170 staff at any point to voice needs, concerns, etc.



## INDUSTRY INSIGHTS

### Decarbonization Policy Drivers

Program designs focusing on overcoming market barriers can be some of the most successful when considering all constituents' perspectives (participants, non-participants, utilities, regulators, and third-party suppliers). EPRI has used a market barrier assessment in its past potential studies. These market barriers consist of financial, informational, transactional, and behavioral aspects. An in-development 2024 U.S. Energy Efficiency (EE) Potential Study focuses on market barriers to achieve the efficiency potential identified.

Another significant effort in overcoming market barriers in program design is the City of Austin's Energy Conservation and Disclosure Ordinance (ECAD) program. Here, the split incentives between renters and owners can decrease the effectiveness of programs. In Austin's case, that split incentive between renters (billpayers) and owners (investors) has been lessened through the use of market forces to overcome market barriers. This has been done by requiring older multi-family dwellings to conduct energy audits. The results are posted in rental offices to allow potential renters to see what they should expect to pay for utilities. Owners have an incentive to invest in EE and renters have an incentive to comparison shop.

This model improves financial payback to both owners and renters, overcomes informational gaps as to renters' utility cost expectations, makes finding that information easier, and may actually move the entire multi-family market to improve EE. This model aids in environmental improvement and potentially reduces resident turnover resulting in improving the desirability of a property, and ultimately improving the interests of both renters and owners.

Market barrier assessment in program design may be a cost-effective method that benefits all of a utility's constituents.

## UPCOMING WEBCASTS & EVENTS

**PLMA** – November 6–8, 2023, Charlotte, NC

**P170 End of Year Webcasts** – December 14, 2023, Virtual

**Consumer Electronic Show (CES) 2024** – January 9–12, 2024, Las Vegas, NV

**ASHRAE Winter Conference 2024** – January 22–24, 2024, Chicago, IL

**Winter Advisory (Joint with P170, P182, & P204)** – February 20–21, 2024, Westminster, CO

**Electrification 2024** – March 12–14, 2024, Savannah, GA