

Panel 10: New Construction

In an era of transformation, the electric grid faces rising loads for the first time in a generation. This highlights the importance of advancing energy technologies within the context of dynamic, holistic objectives, including the development of inherently grid-friendly buildings with low peak loads. At the same time, innovations must be designed to address rising construction costs and resistance to extreme weather events. This panel invites papers that showcase efforts to advance new construction and major rehabilitation projects within the context of grid friendliness and reliability—all largely determined by design decisions made at the project outset. Arguably, the existing model energy codes are not equipped to tackle these growing challenges.

For example, proposals that address the following will be highly valued:

- Codes and policies that accelerate building innovations in new construction and building retrofits in ways that mitigate increased costs, site vulnerabilities, or user limitations
- Programs and policies that utilize life-cycle material assessment to promote low operational costs and improved construction.
- Advancing passive envelope design that reduces peak loads and increases reliability
- Incorporating demand flexibility, energy storage, or managed EV charging in ways that serve the needs and limitations of a specific sector or community.
- Advancing stretch/reach codes and innovative approaches to code adoption in the current social context