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**Presentation Title:** New Horizons: How Energy Efficiency is Laying the Foundation for Grid Services

**Abstract:** With the highest electricity rates in the country, Hawaii took a big leap in 2015 by passing a law mandating 100% renewable energy by 2045. To accommodate 100% renewable generation, the state's utilities are looking to modernize their grids to integrate new technologies, such as PV-plus-storage, demand response (DR), and electric vehicles (EV), while also providing reliable service to their customers. To support the state's clean energy goals, Hawaii Energy serves as the third-party Public Benefits Fee Administrator for three of Hawaii's four counties. For the past ten years, Hawaii Energy's role has been to provide EE incentives to commercial and residential customers, along with EE education and awareness. As the industry sharpens its focus on both the clean energy mandate and mitigating climate change, Hawaii Energy has been adjusting program offerings rapidly, incorporating new priorities to support the transition from centralized fossil fuel-based generation to renewable energy and distributed technology. With pilot programs targeting grid edge technologies coupled with traditional energy efficiency, we expect new programs will increase distributed energy resources, reduce dependence on fossil fuel-based power generation and carbon emissions, and accelerate of the adoption of clean energy. Hawaii Energy will highlight how it is utilizing incentives to reach new customers and prime the field for the integration of emerging grid technology services, especially in light of the demand and supply side disruptions resulting from COVID-19. From grid interactive water heaters and EV charging to customer-sited energy storage systems, Hawaii Energy will share about incentive program design in an evolving landscape. The discussion will outline how to increase accessibility and improve equity for hard to reach markets while also laying the foundation for the anticipated deployment of new and future services.