

MEET OUR RESEARCHER

STUDENT HIGHLIGHT



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Hollis Belnap's journey in engineering began with a love for math, challenges, and a desire to make a meaningful impact.

After finishing her undergraduate studies in engineering, Hollis started working as an engineer at a defense contracting firm where she realized her true passion lay in community-focused energy solutions. This led her to specialize in distribution system and distributed energy resource modeling, with a focus on integrating renewables to enhance grid and community resilience.

Her most significant work, “Resilience Hubs: Bolstering the Grid and Empowering Communities,” published in IEEE Power and Energy Magazine, August 2024, explores how resilience hubs—community shelters equipped with energy resources—can support both grid and community needs during emergencies. The article outlines their design, operational roles, and potential to improve preparedness and recovery during outages caused by extreme events.

Looking ahead for her next research, Hollis plans to develop a design framework and operational protocol for resilience hubs tailored to the Western Interconnection, with a pilot deployment in Salt Lake City. Her goal is to enhance resilience to heatwaves and wildfires through community-integrated energy solutions.

After graduation, Hollis hopes to continue solving community energy challenges—whether in a national lab, regulatory agency, or as a consultant. She envisions working at the intersection of energy and policy, contributing to legislation, standards, and permitting that strengthen grid reliability and resilience.



Outside the lab, Hollis enjoys biking, hiking, reading, playing guitar, and spending time with her dog, sisters, and friends. She also serves as the president of the Grid Resilience Student Group (GRSG) at the WIRED Global Center. One of her most memorable experiences was GRSG's interdisciplinary kickoff meeting, which showcased diverse perspectives on grid resilience from engineering to social science.

