

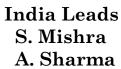
### Summary Outline

UI-ASSIST: <u>US-India collA</u>borative for smart di<u>S</u>tribution <u>S</u>ystem w<u>I</u>th <u>S</u>torage is a 6 year, \$30M project that is finishing on October 1, 2023.

- WSU is US lead with 15 organizations across US.
- Project involved R&D to lab demonstrations to field demonstrations as well as policy and social impact research
- Many collaborations including India-India partners, US-US partners and India-US partners.
- US Field Demonstrations and Industry Interactions
  - AVISTA University District, Spokane, WA
  - WSU Pullman Battery Backup, Pullman, WA
  - Snohomish PUD, Everett, WA
    - Collaboration with Tulalip Tribes <u>Student microgrid project brings</u> sustainability, resilience to Tulalip Tribes WSU Insider
  - Orcas Power & Light Co-op, San Juan Islands, WA
- India team helped electrify two hamlets for first time.

# PROJECT TEAM





Red Indicates Team in USA

US Leads N. Schulz

A. Srivastava

 Blue Indicates Team in India

















































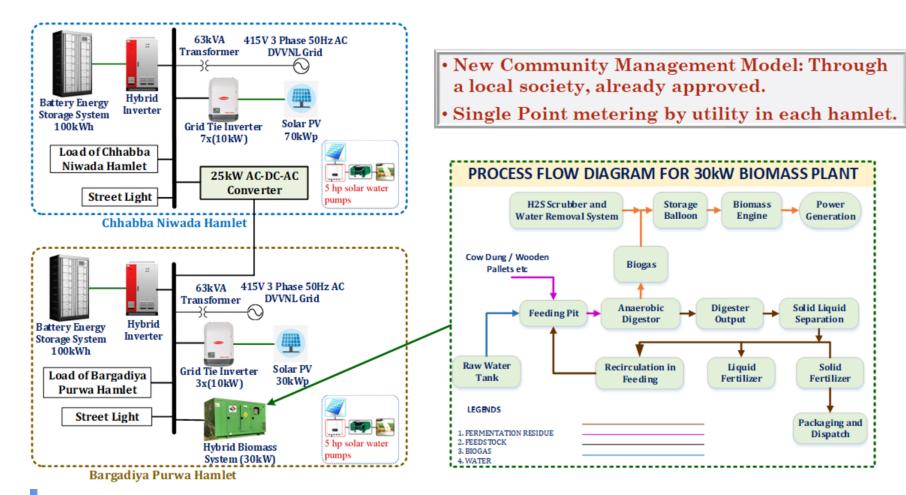






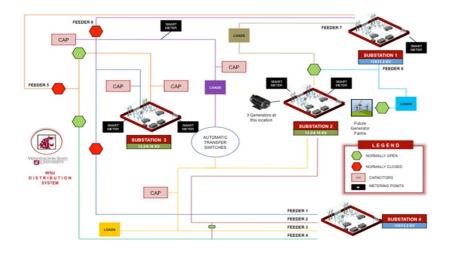
#### RURAL PILOT-SCHEMATIC AND RECENT ACTIVITIES





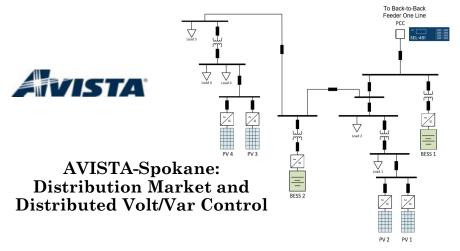
# **US Pilot Demonstration Projects 2022-2023**







#### WSU: Microgrid and Battery integration





#### **BEYOND UI-ASSIST PROJECT**



Synergy between UI-ASSIST and other funded projects across all India and US partners for leveraging advances as well as additional testing and validation opportunities.

**Testbeds across multiple institutions** provide foundation for continued collaborations.

Field demonstration relationships enhanced *university-research lab-technology* and service provider-utility-end user relationships and built trust and communication channels for dialog in future.

Solutions from UI-ASSIST partners included *modifying existing systems as well as developing new solutions for advanced distribution systems and microgrids* providing alternatives for a variety of situations worldwide.

Identification of gaps and challenges in *policy, market structures and interactions, technical standards and practices, and societal understanding* in two countries helps develop priorities and roadmap for next steps.

Unique framework for *transforming R&D activities to the field demonstrations* including lessons learned for team dynamics and interactions especially during worldwide pandemic.