



UI-ASSIST: FOURTH PROGRESS MEETING

Theme-10: US Updates

9:00-9:30 A.M (Pacific Time) July 23, 2020

9:30-10:00 P.M (India time) July 23, 2020

Speaker: Anjan Bose (WSU)

Venue: Virtual Meeting

Host: Washington State University



U.S. INDIA COLLABORATIVE FOR SMART
DISTRIBUTION SYSTEM WITH STORAGE

Evolving future energy distribution grids
www.uiassist.org

Theme 10: Impact Analysis And Policy Recommendations



Review and Identify Policy and Standard Barriers for DER adoptions

Qualitative data collection and analysis

Quantitative data collection and analysis

WASHINGTON STATE
UNIVERSITY

VCS

MIT

ATM

BURNS & MCDONNELL

Theme 10: Impact Analysis And Policy Recommendations

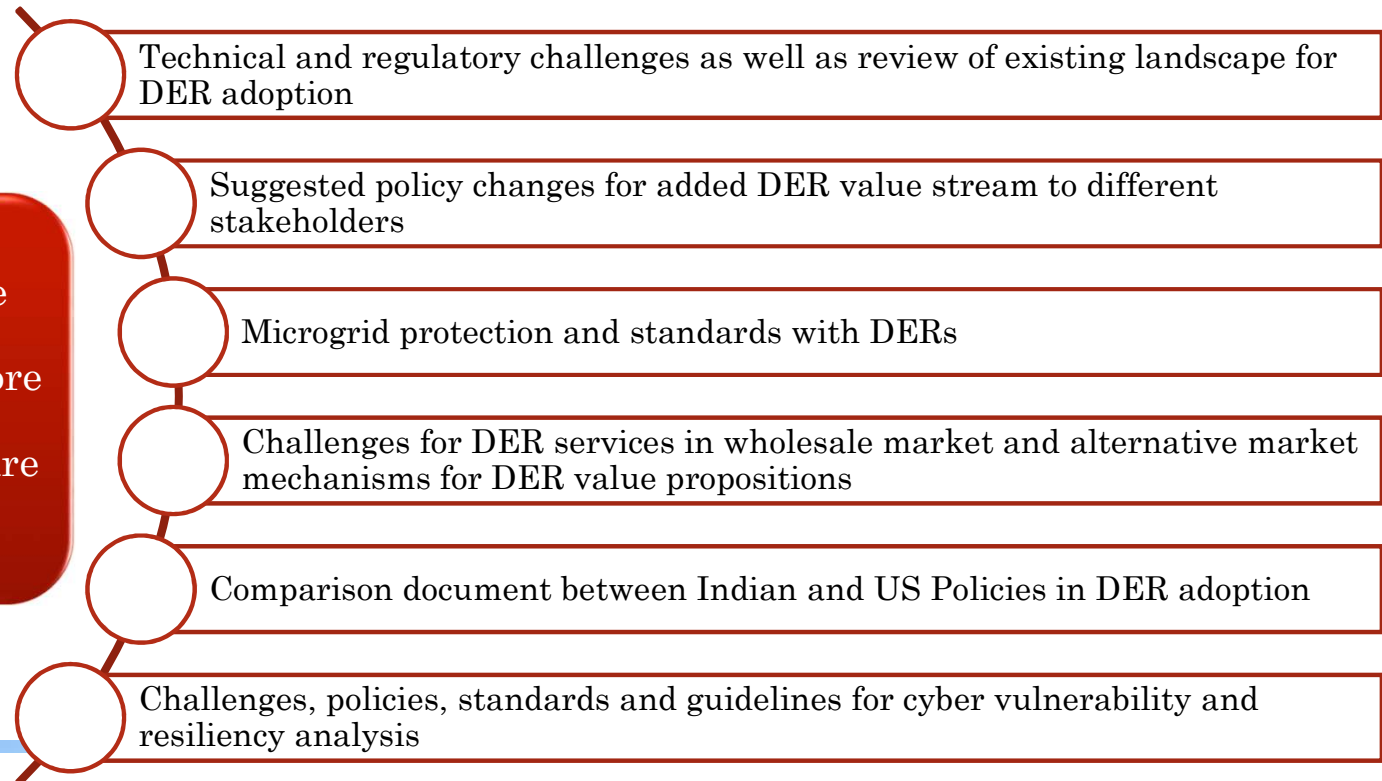


Summary of Progress towards Deliverables and Next Steps



5.1.1. Review and Identify Policy and Standard Barriers for DER adoptions

Multiple white papers are in progress and more discussion/brainstorming are required



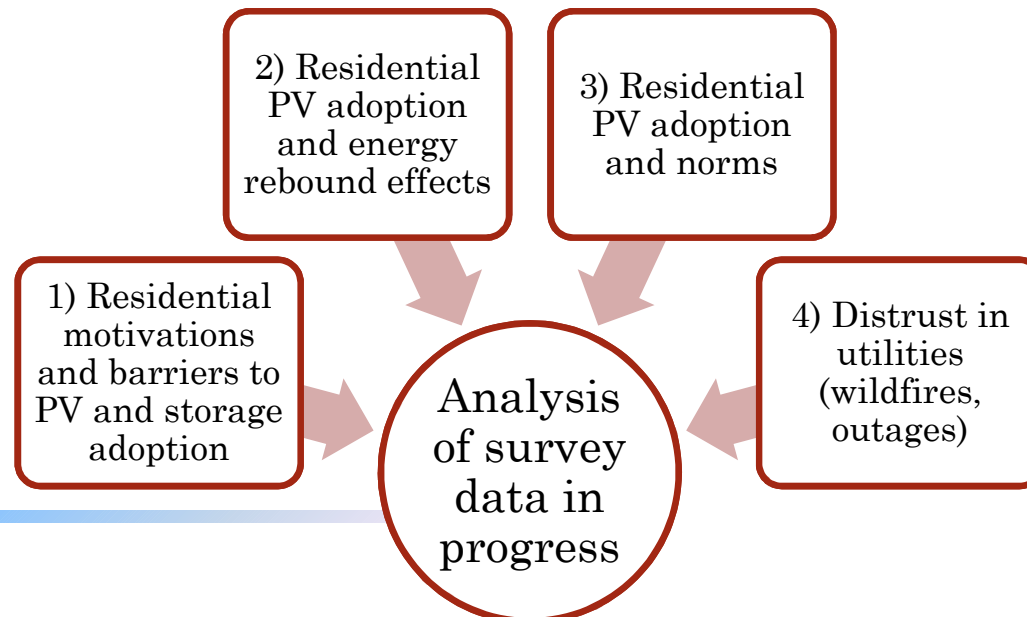
Theme 10: Impact Analysis And Policy Recommendations



Summary of Progress towards Deliverables and Next Steps

5.2.1 Qualitative data collection and analysis
and 5.2.2. Quantitative data collection and analysis

- Data collection and analysis in southern California has been completed and in progress in northern California
- Analysis is focused on adopters and non-adopters of storage in California



Theme 10: Impact Analysis And Policy Recommendations



Gaps, overlaps, collaborations, technical challenges, inter-theme interactions

- Input from Theme 4, Theme 5, Theme 6 and Theme 7 as well as other themes will be important
- Comparing US/India – Where we are and where we need to be?
 - Standards and policies are important pieces and interrelated with other factors (political, technical, social issues)
 - Social Impact Analysis may be quite different between India and US
 - Market development may be quite different between India and US
- Technical issues includes -
 - Markets
 - Protection
 - Services from grid following and grid forming inverter-interfaced resources
 - Voltage control, frequency control
 - Compensation related to services from DER specially for ancillary services need to be investigated





Publications List

- R. Haider, S. Baros, Y. Wasa, J. Romvary, K. Uchida and A. M. Annaswamy, "Towards a Retail Market for Distribution Grids," in *IEEE Transactions on Smart Grid*, doi: 10.1109/TSG.2020.2996565.
- R. Haider, A.M. Annaswamy, D. D'Achiardi, A. Srivastava, A. Bose, "A Proposal for a DSO-Centric Retail Electricity Market," Whitepaper, 2019
- M. B. Bah, R. Haider, A. M. Annaswamy, "Towards a Service-Oriented Broker Architecture for the Distribution Grid," in *IEEE International Conference on Communications, Control, and Computing Technologies for Smart Grids*, 2020 (submitted)

Acknowledgement



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Thank you !