USA Project update

EGNRET -56

United States (Virtual)

April 6-7, 2022

EWG 06 2019A: APEC Workshop on University Collaboration to Support Data Gathering and Analysis in Energy Efficiency and Renewable Energy

Proposing APEC economy: USA
Co-sponsoring economies: Thailand, Philippines, Chinese Taipei, Australia
APEC forum: EWG/EGEEC & EGNRET
Expected start date: August 2019
End date: December 2021
Expected project cost(USD): 140,000 APEC (USD): 100,000 ASF/EE
Project Overseer:

Kathleen Purvis-Roberts
Professor of Chemistry & Environmental Science
Claremont McKenna College
Claremont, California

The three key objectives promote information sharing and capacity building across APEC universities

- Project Objectives
  1. Build the capacity of workshop participants by developing a network between the EWG, APERC, and University faculty in APEC economies.
  2. Share examples of collaborative projects by Universities in APEC economies that address the APEC energy efficiency and renewable energy goals.
  3. Develop project ideas, between the policymakers and University faculty in APEC economies, as project-based courses that will help inform energy efficiency and renewable energy goals.
- Virtual Workshop 8-9 June 2021, was organized by Claremont McKenna College, California, United States, and King Mongkut's University of Technology Thonburi, Thailand
- There were 36 participants from 18 economies
- Status: Completed, awaiting APEC publication number

EWG 03 2020S: The Role of Integrated Distribution System Planning in Maximizing the Use of Distributed Energy Resources and Resiliency in the APEC Region

Proposing APEC economy: USA
APEC forum: EWG/ERTF & EGNRET
Co-sponsoring economies: Australia, Canada, Hong Kong China, Thailand, Philippines, Chinese Taipei,
Expected start date: August 17, 2020
End date: December 15, 2021
Self-Funded- Total project cost(USD): 150,000
Project Overseer:

Cary Bloyd
Senior Advisor
Pacific Northwest National Laboratory
Richland, Washington

Electrical distribution systems have a critical linkage to energy resiliency in that 80%-90% of customer outages originate in the distribution system and are critical to implementing distributed energy resources

The report concentrated on six themes:

- Transparent Distribution System Planning Regulation & Architecture
- Planning for Electric Vehicles & Their Potential
- Leveraging Distributed Energy Resource for Reliability & Resilience
- Increasing Situational Awareness
- Allowing for Microgrids
- Equitable Recovery Strategies

Status: Completed, report available at:

https://www.apec.org/publications/2022/03/the-role-of-integrated-distribution-system-planning-in-maximizing-resiliency-in-the-apec-region

USA 2021 Session 1 Project: Lessons learned on resiliency and uptake of variable energy resources from islanded grids that support APEC clean energy goals (EWG 04 2021A)

APEC forum: EWG/ERTF & EGNRET

Co-sponsoring economies: Australia, Canada, Hong Kong China, Thailand, Philippines, Chinese Taipei,

Start date: January 3,2022

End date: May 31, 2023 (a project extension has been received)

Expected project cost(USD): 120,ooo

APEC (USD): 100,000 ASF/EELCER

Project Overseer:

Cary Bloyd
Senior Advisor
Pacific Northwest National Laboratory
Richland, Washington

Status: Consultant RFP issued

Project Outputs

- The project report will provide a summary of the costs and operational experiences of providing reliable electricity while utilizing maximum variable energy resources from islanded grids in the APEC region
- A secondary output will be a one-day virtual meeting held midway through the project which will enable the feedback from the participants to be incorporated into the research and then the final report

USA 2021 Session 2 Project: APEC Workshop Furthering University Collaboration to Support Data Gathering and Analysis in Energy Efficiency, Renewable Energy, and Energy Resiliency (EWG 12 2021A)

APEC forum: EWG/EGEEC & EGNRET

Co-sponsoring economies: Thailand, Philippines, Chinese Taipei, Australia
APEC forum: EWG/EGEEC & EGNRET
Start date: March 2022
End date: June 2023
Expected project cost(USD): 140,000
APEC (USD): 100,000 ASF/EELCER
Project Overseer:
Kathleen Purvis-Roberts
Professor of Chemistry & Environmental Science
Claremont McKenna College
Claremont, California
Status: Project in implementation

Project Objectives

1. Build the capacity of workshop participants by continuing to develop collaborations between the EWG, APERC, and University faculty in APEC economies.
2. Continue discussion of data gaps and needs in Energy Efficiency, Renewable Energy, and Energy Resiliency and develop policy recommendations for the EWG in these areas
3. Share examples of collaborative projects that began at the June 2021 online workshop by policymakers and Universities in APEC economies that address APEC energy efficiency, renewable energy, and energy resiliency goals.
4. Identify other methods of analysis to be included in projects, such as economic analysis
5. Discuss potential ideas for new collaborative projects