Summary of the 12th Meeting of the Energy Resiliency Task Force

21 June 2021 Canada (Virtual) (EWG61)

1. Welcome/Introductions

The Energy Resiliency Task Force met June 21, from 10:30 to 11:30 am, hosted by hosted by Brunei Darussalam and co-chaired by Mr. Ron Cherry, US Acting EWG representative and Senior Policy Advisor at U.S. DOE, and Undersecretary Alexander Lopez of the Department of Energy Philippines.

Undersecretary Lopez in his opening statement thanked Brunei Darussalam for hosting the meeting and shared information on actions taken by the Philippines since the onset of the pandemic, including a COVID-19 Response protocol for the energy sector. He also noted how the pandemic has highlighted the importance of a more resilient energy system, for which the ERTF can serve as a valuable platform for sharing experience and best practices.

2. APEC Energy Resiliency Response since ERTF 11

Representative were asked to report on significant weather/national electricity disruption events since ERTF 11 and their energy resilience response including potential lessons learned for APEC.

United States: Dr. Cary Bloyd for the U.S. noted the dramatic increase in severe weather events in the United States, from an annual average of 6.6 events costing at least US\$ 1 billion each between 1980 and 2016, to an average of 16.2 events per year since 2016, with twenty-two (22) weather and climate disaster events in 2020 alone, resulting in more than \$1 billion in losses for each event and a total of 262 fatalities.

3. Completed APEC Energy Resiliency Projects

Australia: Prof. Jamie Pittock of the Australian National University reported on the APEC Workshop on the Use of Pumped Storage Hydropwer (EWG 09 2019A) held last 2-5 February 2021. The workshop was attended by 85 participants from 13 APEC economies plus 4 non-APEC economies. Twenty-one of the 24 economies (which included 3 non-APEC economies) profiled in the Workshop background report have significant untapped potential for pumped storage hydropower, while the other three economies — Brunei Darussalam, Hong Kong China, and Singapore — have transmission links to economies with PSH potential. The final workshop report is under review by the APEC Secretariat and should soon be available on the APEC website.

APSEC: Prof. Steivan Defilla of the APEC Sustainable Energy Center presented their project, Research on the Role of Urban Planning for Addressing Climate Change and Disasters (EWG 09 2019S). He highlighted research showing that among APEC cities, in terms of GDP, Manila was at greatest risk due to natural disasters, with 9.68 percent of GDP at risk. The project has been completed and the final report is available on the APEC website.

4. APEC Energy Resiliency Project Updates

China: China reported that the project on Demonstration and Promotion of Energy Resilience Tool based on Solar-Powered Emergency Shelter Solutions (SPESS) for Natural Disaster in APEC (EWG 13 2019A) had been delayed due to COVID and an extension has been granted.

Unites States: Dr. Bloyd of the USA reported that the APEC Workshop on Grid Resiliency through Energy Storage (EWG 01 2020A) is expected to be held early in the 4th quarter of 2021. The workshop will focus on the Energy Storage at grid, commercial, and residential scales that can help mitigate severe man-made and natural threats to resilience of energy infrastructure in the APEC region.

United States: Dr. Bloyd reported on a second US project, on the role of Integrated Distribution System Planning in Maximizing the Use of Distributed Energy Resources and Resiliency in the APEC Region (EWG 02 2020S), which will be completed by November 2021. It has six focus

areas: (i) distribution system planning; (ii) electric vehicles; (iii) leveraging distributed energy resources for reliability and resilience; (iv) increasing situational awareness; (v) allowing for microgrids; and (vi) equitable recovery strategies.

Japan: For Japan, Mr. Hayamizu reported on the progress of the project, Workshop on Energy Resiliency Principle (EWG 07 2020A), which aims to conduct 3 virtual workshops later this year to share importance on energy resiliency and to develop APEC Energy Resiliency Guidelines based on inputs gathered through the workshops.

New//Planned APEC Energy Resiliency Project Proposals

United States: The US has submitted a Project proposal entitled "Lessons Learned on Resiliency and uptake of variable energy resources from islanded grids that support APEC Clean Energy Goals." If approved, the project is expected to run from August 2021 to December 2022.

Japan: Japan has proposed a new project on "APEC Energy Resiliency Enhancement." The project is expected to run from January 2022 to January 2023.

5. Next Steps/Wrap Up

The chairs invited all members to provide updates on the workshops and efforts discussed at the meeting. The ERTF endorsed its Terms of Reference including modifications addressing both quorum requirements and the review mechanism. The TOR, as endorsed by the ERTF, was subsequently submitted to the APEC Secretariat.

The task force members thanked Canada for hosting the meeting. The co-chairs asked if there was any other business. There being none, the co-chairs closed the 12th meeting of the Energy Resiliency Task Force. Meeting minutes will be distributed out of session and approved at ERTF13.