

Call of the Bureau of the Group of Experts on Cleaner Electricity Systems

Via Teams – 15:00 CET, 15 March 2024

MINUTES

I. ATTENDANCE:

- **Bureau Members in attendance:** Jim Robb (Chair), Jon Gibbins (United Kingdom of Great Britain and Northern Ireland), Vladimir Budinsky (ZSDNP), Sylvain Clermont (DigiTransfo Expertise), Antoine Herzog (Électricité de France)
- **Invited experts in attendance:** Tatiana Vedeneva (Center for Renewable Energy and Energy Efficiency Development)
- **UNECE Secretariat staff in attendance:** Nadejda Khamrakulova (Secretary), Dario Liguti (Division Director)
- **Unable to attend:** Furugzod Usmonov (Tajikistan), Andrew Minchener (International Centre for Sustainable Carbon), King Lee (World Nuclear Association)

II. PROPOSED AGENDA:

1. Adoption of agenda
2. Update on the recent activities
3. Update on the upcoming activities
4. Focus of the 20th session of the Group of Experts, 16-17 September 2024
5. Preparations to the 20th session of the Group of Experts:
 - Focused discussions of the Group of Experts
 - Joint sessions with the Groups of Experts on Energy Efficiency and Renewable Energy
 - Preparation of the session documents
 - Timeline of activities
 - Coordination of work
6. Proposed dates of the next Bureau meeting
7. AoB

III. SUMMARY OF DISCUSSIONS AND DECISIONS

Agenda Item 1. Opening and agenda approval

The Chair, Jim Robb, welcomed all the Bureau Members and the agenda was approved as drafted

The Director of the Sustainable Energy Division, Dario Liguti, explained the focus of the Sustainable Energy Week in 2024, including on the sessions of the Group of Experts on Cleaner Electricity Systems, the Group of Experts on Energy Efficiency, the Group of Experts on Renewable Energy (16-17 September 2024) and the session of the Committee on Sustainable Energy (18-20 September 2024).

Agenda Item 2. Update on the recent activities

The Bureau was informed about recent events organized by the Secretariat and the UNECE expert community:

- Launch of ESCAP-UNECE Programme on Energy Connectivity in Central Asia and the Caucasus, online, 24 January 2024
- Hard Talk in Turkmenistan: presenting Technology Options for Achieving Zero Growth in GHG Emissions by 2030, Ashgabat, 12-14 February 2024
- Stakeholder consultation on scenario modelling for energy connectivity in Central Asia, online, 22 February 2024
- Participation of the GECES in coordination Meeting of the Task Force on Digitalization in Energy, online, 8 February 2024
- Introduction of GECES at the Smart E-Mobility Conference, Wels, 8 March 2024

Discussion on:

- Additions on the research paper focusing on artificial intelligence (AI) and case studies on the use of AI in power system
- Presenting the ongoing work on digitalization in energy at the AI for Good Global Summit in Geneva
- Presenting and discussing work on digitalization at the High-Level Political Forum on Sustainable Development in New York

Agenda Item 3. Update on the upcoming activities

The Bureau was informed about upcoming events organized by the Secretariat and the UNECE expert community:

- Workshop to gather data and enhance understanding of local conditions, barriers and opportunities for regional energy system, online, 17 April 2024 (TBC)
- Second stakeholder consultation on scenario modelling for energy connectivity in Central Asia, online, mid-May 2024 (TBD)
- Regional workshop on building policy design capacity for resilient and connected energy systems, Astana, 12 June 2024
- Meeting of the Task Force on Digitalization in Energy, online, 9 May 2024 (TBC)
- Workshop on integration of E-mobility into energy system, Geneva and online, 11 April 2024
- First Meeting of the Informal Task Force on Electric Mobility, online, May (TBD)

Agenda Item 4. Focus of the 20th session of the Group of Experts

Secretariat presented the proposed topics for the 20th session of GECES, including:

- Overview of the two-day session to be jointly conducted with the Group of Experts on Energy Efficiency (GEEE) and the Group of Experts on Renewable Energy (GERE)
- Joint work of the Groups of Experts on cross cutting themes and Chairs presentations, 16 September (AM session)
- Administrative matters, election of officers, 16 September (AM session)
- Focused GECES discussions, 16 September (PM session)
- Joint session with GEEE and GERE on integrating energy efficiency and renewable energy in distributed power systems, 17 September (AM session)
- Joint session with GEEE and GERE on electrification of mobility: development of infrastructure, integration with grid, resource planning, 17 September (AM session)
- Joint session with GEEE and GERE on digitalization in energy, 17 September (PM session)
- Administrative matters and adoption of session report, 17 September (PM session)

Agenda Item 5. Preparations to the 20th session of the Group of Experts

The discussion was based on the following aspects:

- Focused discussions of the Group of Experts
- Joint sessions with the Groups of Experts on Energy Efficiency and Renewable Energy
- Preparation of the session documents
- Timeline of activities
- Coordination of work

Key takeaways:

- Day 1, PM session: the focused discussions of GECES session can concentrate on the impacts of various sources of generation on electric grid and ways of how can they be dispatched to contribute to the electricity system reliability.
- Day 1, PM session: the focused discussions will continue with touching upon the creating of favourable conditions for the transformation of electricity systems and managing the growing demand for electricity.
- Day 2, AM session: the first joint discussion with GEEE and GERE will be focused on diversification of the energy mix with more renewables while reducing the carbon footprint of fossil fuel usage and requirements to maintain the reliability of energy supply and mitigate energy price fluctuations for end-users. The three Groups of Experts will also look at the impact of decentralization on the future energy system and the roles of prosumers, energy communities, demand-side management, and energy storage technologies in shaping the vision of the future energy system.
- Day 2, AM session: the second joint discussion with GEEE and GERE will look at the electrification of mobility and requirements for development of infrastructure, integration with grid, resource planning. In particular, the Groups of Experts will touch upon the readiness of energy infrastructure for the on-going increase of electrical vehicles (EV) fleet. It will focus on the opportunities and constraints of turning EVs into energy system assets and the interaction modalities between EVs, charging infrastructure, and the broader electricity grid, including cybersecurity threats.
- Day 2, PM session: the third joint discussion with GEEE and GERE will be dedicated to digitalization in energy and how the advancements in digital technologies such as AI (artificial intelligence), IoT (Internet of Things), and blockchain improve energy efficiency, support grid management, and facilitate renewable energy integration. GECES and GEEE can present the results of the ongoing work on development of national case studies on digitalization in energy, feeding into a compendium of case studies (publication).
- Bureau members agreed on the documents required to support the discussions of the 20th GECES session as follows:
 - Document on scenarios for regionally interconnected energy system in Central Asia;
 - Document on creating favourable conditions for the transformation of electricity systems and managing the growing demand for electricity;
 - Document on AI and related challenges and opportunities in the power sector (jointly with GEEE);
 - Document on the degree of integration of e-mobility into electricity system, and on the impact that it has on the latter's design and operations (jointly with GEEE and GERE).
- Bureau members agreed to initiate work on the preparation of session documents, as follows:
 - Create thematical sub-groups within GECES dedicated to the preparation of session document;
 - Agree on the draft document outlines by mid-April;

- Prepare the first draft documents for peer review by end-May;
 - Conduct peer review and prepare final draft documents by end-June;
 - Request Secretariat to submit the final documents for translation by 8 July (at the latest).
- Bureau members also agreed to assess the status in preparation of documents by mid-May.

Agenda Item 6. Proposed dates of the next Bureau meeting

The next Bureau call is proposed for Tuesday, 21 May 2024 (TBC)

Agenda Item 7. AOB

Bureau members discussed other topics of interest for future GECES session, including on heat pumps and demand for electricity grid. Heat pumps have become increasingly popular for heating and cooling, as they are energy efficient and environmentally friendly. However, the demand for electricity grid can be affected by the widespread adoption of heat pumps. Since heat pumps rely on electricity to operate, the increased use of heat pumps can lead to higher demand for electricity on the grid.