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

Via Teams - 15:00 CET, 28 May 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), King Lee (World Nuclear Association)
- Invited experts in attendance: Tatiana Vedeneva (Center for Renewable Energy and Energy Efficiency Development)
- UNECE Secretariat staff in attendance: Nadejda Khamrakulova (Secretary), Iva Brkic (Secretary, Committee on Sustainable Energy), Gianluca Sambucini (Secretary, Group of Experts on Renewable Energy), Igor Litvinyuk (Secretary, Group of Experts on Energy Efficiency)
- **Unable to attend:** Furugzod Usmonov (Tajikistan), Andrew Minchener (International Centre for Sustainable Carbon)

II. PROPOSED AGENDA:

- 1. Adoption of agenda
- 2. Update on the recent activities
- 3. Update on the upcoming activities
- 4. Preparations to the 20th session of the Group of Experts:
 - Administrative matters: Bureau nominations, elections
 - Focused discussions of the Group of Experts
 - Joint sessions with the Groups of Experts on Energy Efficiency (GEEE) and Renewable Energy (GERE)
 - Preparation of the session documents
- 5. Proposed dates of the next Bureau meeting
- 6. 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.

Agenda Item 2. Update on the recent activities

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

- Stakeholder consultation to gather data and enhance understanding of local conditions as well as barriers and opportunities for regional energy system integration in Central Asia, 29 April, Tashkent
- Preparation of the project proposal "Electricity system resilience and reliability in the net-zero energy system" (possible partners: WNA, EPRI, EDF, Newcleo)
- Authors' meeting on preparations of AI Case Study: Use of Artificial Intelligence in the energy system, 17 March, online

- GECES participation in the UNECE Task Force on Digitalization in Energy
- · Workshop: Integration of E-Mobility into Energy System, 11 April, Geneva and online
- Preparation and submission of the project proposal "Supporting electric mobility as enabler
 of the digital and green transformations in the UNECE region" (in partnership with UNECE
 Transport Division)

Agenda Item 3. Update on the upcoming activities

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

- Regional Stakeholder Consultations on Energy Connectivity and Sustainable Energy, 12-13
 June, Astana (in partnership with UNESCAP)
- Preparation of the Roadmap for a Regionally Interconnected Energy System in Central Asia,
 July-September
- Implementation of the project "Supporting electric mobility as enabler of the digital and green transformations in the UNECE region," including:
 - Development of the compendium of best practices on adoption of e-mobility and its integration into energy system (July-October)
 - Workshop on supporting e-mobility adoption and enhancing EV expertise of policymakers, October, Istanbul (TBC)
 - Workshop on supporting e-mobility adoption in the UNECE and ESCAP regions, December,
 Bangkok (TBC) in partnership with ESCAP

Agenda Item 4. Preparations to 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)
- Administrative matters, election of officers, 16 September (AM session)
- Joint work of the Groups of Experts on cross cutting themes and Chairs presentations, 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)

Administrative matters: Bureau nominations, elections

Secretariat informed about the upcoming elections of the Bureau. In particular, during its 20th session GECES will be invited to elect Bureau members whose term ends at the conclusion of the 20th session and who stand for re-election, as well as any new nominations to serve until the end of the 22nd GECES session in 2026.

During its 19th session in 2023, GECES elected representatives of Tajikistan and the United Kingdom of Great Britain and Northern Ireland as Vice-Chairs and invited representatives from DigiTransfo Expertise and ZSDNP to continue their service on the Bureau as Vice-Chairs until 21st session in 2025.

At its 18th in 2022, GECES elected the representative of the United States of America as its Chair and representatives of the World Nuclear Association, International Centre for Sustainable Carbon, and Électricité de France to serve as Vice-Chairs for two years.

The election of officers for GECES will take place simultaneously with that of GEEE and GERE.

Joint work of the Groups of Experts on cross cutting themes and Chairs presentations, 16 September (AM session)

Secretariat informed on the proposed format for the session organization. In particular, the three Groups of Experts (GECES, GERE, GEEE) can hold an open discussion on common issues, including on youth engagement.

Key takeaways:

- The Bureau had discussion on engagement of youth in the activities of the Groups of Experts and possible establishment of a mentorship programme to support young professionals in the energy sector.
- The Bureau agreed that administrative matters can be continued during this period if needed.

Focused discussions of the Group of Experts

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.

Key takeaways:

- The Bureau discussed how to maintain future electricity supply reliability for ensuring that the electric grid consistently delivers power without interruption, supporting daily activities, business operations, and enhancing the overall quality of life.
- Different energy resources, including RE, fossil fuels, and nuclear power, have varying impacts on electricity supply reliability.
- Energy storage technologies and smart grid solutions play an important role in managing the variability of RES. Batteries and pumped hydro storage can store surplus energy, balance supply and demand, and enhance grid resilience.
- Demand-side management can enhance electricity supply reliability by promoting efficient use, reducing peak demand, and integrating distributed energy resources.
- The Bureau agreed to change the title of the session to "Maintaining future electricity supply reliability" and add discussion on demand-side management.

Day 1, PM session: the focused discussions will continue with touching upon the creation of favourable conditions for the transformation of electricity systems and managing the growing demand for electricity.

Key takeaways:

- The Bureau discussed the aspects for transitioning to a greater use of electricity in the energy mix and ensuring a resilient network.
- The Bureau agreed to add "effective" transformation of electricity systems to the title of the session.

 The Bureau proposed including the aspects of technology maturity to the discussions of this session. The session will discuss how collaborative stakeholder engagement and the integration of innovative technologies can facilitate achieving the effective transformation of electricity systems.

Joint sessions with the Groups of Experts on Energy Efficiency and Renewable Energy

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.

Key takeaways:

- The Bureau discussed that the three Groups of Experts should 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.
- The Bureau discussed a possibility to keep wider scope of the session and not focusing only on the distributed power systems.

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.

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.

Preparation of the session documents

Secretariat informed on the progress in preparation of the session documents. In particular:

- Draft agenda will be prepared and distributed to Bureau for comments by 31 May;
- Draft document with outline for a roadmap for regionally interconnected energy system in Central Asia will be prepared and shared with Bureau for comments by 7 June;
- Draft document on AI and related challenges and opportunities in the power sector is being prepared by the UNECE Task Force on Digitalization in Energy;
- Draft document on creating favourable conditions for the effective transformation of electricity systems and managing the growing demand for electricity will be prepared and shared with Bureau for comments by 10 June;
- Informal 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 will be drafted jointly with GEEE and GERE by 30 July.

Agenda Item 5. Proposed dates of the next Bureau meeting

The next Bureau call is proposed for the end of June-beginning of July (TBC).

Agenda Item 6. AOB

No other business were proposed for discussion at this meeting.