

## TRANSMISSION & DISTRIBUTION (T&D) SYSTEM AND POWER MARKET OPERATOR TECHNICAL EXPERT

Technical Assistance package for the Sustainable Energy Support Programme in Tajikistan

Terms of Reference for Short Term Expert	
Expert position	Transmission and Distribution (T&D) System and Power Market Operator Technical Expert
Expert Category	Senior Non-Key Expert
Mission start-end date	01.03.2024 – 13.11.2027
Minimum requirements	<p><i>Skills and qualifications:</i></p> <ul style="list-style-type: none"> <li>▪ A University degree in electrical engineering, power systems engineering, or a related technical field is required.</li> <li>▪ Minimum of 12 years of professional experience in power sector</li> <li>▪ Minimum of 7 years of hands-on experience in T&amp;D system management and power market operations, preferably in roles of increasing responsibility.</li> <li>▪ Profound knowledge of electricity grid operations, T&amp;D systems, and power market dynamics, with a track record of successful projects or initiatives in these areas.</li> <li>▪ Familiarity with grid integration challenges and opportunities, including renewable energy sources such as solar and wind.</li> <li>▪ Strong technical expertise in grid optimization, infrastructure planning, and power market design.</li> <li>▪ Excellent analytical and problem-solving skills, with the ability to make data-driven decisions.</li> <li>▪ Effective communication skills, including the ability to convey technical information to non-technical stakeholders.</li> <li>▪ Fluency in English, both written and spoken. Knowledge of Tajik or Russian languages is advantageous.</li> <li>▪ Commitment to promoting the efficient and sustainable operation of Tajikistan's electricity grid and power market, in line with the goals of the Technical Assistance Programme.</li> </ul>
Duration/working days	Up to 270 working days
Task(s) assigned	<ul style="list-style-type: none"> <li>▪ <b>T&amp;D System Analysis:</b> Conduct comprehensive assessments of Tajikistan's Transmission and Distribution (T&amp;D) system, identifying weaknesses, bottlenecks, and areas for improvement.</li> <li>▪ <b>Technical Solutions:</b> Propose and develop technical solutions to address T&amp;D system issues, with a focus on grid optimization, infrastructure upgrades, and integration of renewable energy sources.</li> <li>▪ <b>Power Market Operations:</b> Assist in the design and development of effective power market operations, including market rules, mechanisms, and trading platforms.</li> <li>▪ <b>Grid Integration:</b> Collaborate with stakeholders to ensure seamless integration of renewable energy sources into the grid, considering technical challenges and regulatory requirements.</li> <li>▪ <b>Capacity Building:</b> Provide training and capacity-building support to the Ministry of Energy and Water Resources (MoEWR) and relevant utilities personnel in T&amp;D system management and power market operations.</li> <li>▪ <b>Regulatory Compliance:</b> Stay updated with international best practices and regulatory standards in T&amp;D systems and power markets, ensuring alignment with EU guidelines.</li> <li>▪ <b>Data Analysis:</b> Analyse data related to T&amp;D system performance and power market dynamics to make informed recommendations for improvements.</li> <li>▪ <b>Stakeholder Engagement:</b> Engage with relevant government agencies, utilities, and international organizations to facilitate cooperation and knowledge exchange in the T&amp;D and power market domains.</li> </ul>
Output(s)	Inception, mission and progress reporting, etc. as requested