

보도시점 2026. 9. 15.(화) (회의 종료 후 별도 공지) 배포 2026. 9. 14.(월)

Transmission Network Construction to Minimize Impacts on Residents... More Support for Residents, More Dialogue with Local Communities

- MCEE reports “Measures to improve public acceptance of transmission network construction” to the State Council
- Integrating transmission lines to reduce new towers by up to 40% and expand undergrounding in densely populated areas
- Establishing “grid solar income villages” near national backbone networks to support residents’ income

The Ministry of Climate, Energy and Environment (MCEE, Minister Kim Sungwhan) announced that Minister Kim Sungwhan will report the “Measures to Improve Public Acceptance of Transmission Grid Construction” to the State Council meeting on the morning of September 15.

As electricity demand rapidly increases, driven primarily by advanced industries such as semiconductors and data centers, while the deployment of renewable energy also expands, expanding the power grid in a timely manner has become a key national priority. To this end, it is particularly urgent to enhance public acceptance among residents living near transmission networks.

Residents have long raised concerns that the site selection process needs to provide sufficient information, gather residents’ opinions, and offer adequate compensation. The MCEE developed the “Measures to Improve Public

Acceptance of Transmission Grid Construction” to minimize impacts on residents, ensure tangible benefits for residents and local communities, and select sites based on residents’ views through greater communication with them.

In particular, Minister Kim has held three meetings with representatives of residents living near transmission networks (April 10, May 8, and August 5) and visited sites in Daejeon, Geumsan, and Anseong to hear the concerns and difficulties raised by local communities. The measures to enhance public acceptance were developed by actively reflecting the views expressed by residents during these field visits.

First, the government plans to minimize the number of new transmission towers constructed. This will be achieved by integrating a new line (two circuits) with an existing line (two circuits) into a single tower carrying four circuits, as well as by installing separately planned new lines on a single tower. If transmission lines are consolidated as much as possible in the national backbone grid projects currently underway, the number of new towers is expected to be reduced by approximately 40% (2,214 towers) compared with plans to construct them separately. Going forward, this approach will be institutionalized, with the feasibility of integrating new transmission lines with existing lines to be reviewed as a priority whenever new transmission lines are planned.

Second, undergrounding will be expanded in densely populated residential areas. The government and Korea Electric Power Corporation (KEPCO) plan to actively consider undergrounding in densely populated areas by utilizing government financial support for undergrounding national backbone transmission networks. Undergrounding options will be prioritized in several areas, including densely populated areas in Jangseong-gun, Yuseong-gu in Daejeon, Gunsan and Cheongyang, and Sejong and Cheongju. In addition, the

sections extending approximately 2 km from newly constructed 345 kV substations, where multiple transmission lines converge, will be prioritized for undergrounding.

Third, “Grid Solar Income Villages” will be established in communities near transmission networks to support income generation for local residents. Using the support funds provided to local governments in areas traversed by transmission lines (KRW 2 billion per km) under the Special Act on the Expansion of National Key Power Grids, the government will provide full support for the installation of community solar power systems in villages near power grids and establish “Grid Solar Income Villages.” To this end, the government plans to revise the Enforcement Decree of the Special Act on the Expansion of National Key Power Grids within this year so that two-thirds of the support funds provided to local governments can be prioritized for installing village solar power systems in areas near power grids. Through this initiative, households in areas surrounding national backbone power grids are expected to generate income of up to KRW 3 million per household per year.

Fourth, projects will be carried out by fully incorporating residents’ views throughout the project development process. In particular, the site selection process, which has often been criticized for failing to adequately reflect residents’ opinions, will be substantially improved. First, project briefings for residents will be made mandatory from the initial stage of site selection, and the number of project briefings held during the operation of the Site Selection Committee will be increased from two to three. In addition, to ensure transparency in the meetings, residents will, in principle, be allowed to observe committee meetings, while the MCEE will also participate in Site Selection Committee meetings to monitor the meeting process and ensure democratic procedures. Meanwhile, in principle, at least two candidate transmission corridors will be identified to expand local residents’ representatives’ ability to choose the site.

In addition, starting from the stages of establishing the “Basic Plan for Electricity Supply and Demand” and the “Long-Term Transmission and Substation Facilities Plan,” which are part of the national transmission network planning process, the government plans to thoroughly assess the need for transmission network construction through discussions and public hearings, while gathering the opinions of experts and residents.

Minister Kim said, “The power grid is essential national infrastructure that supports the energy transition and the growth of advanced industries. We must reduce social conflict by engaging in sufficient communication with residents and sharing tangible benefits, while expanding the necessary power grid in a timely manner.” He added, “The recent case in which residents of Gochang independently decided to host a substation for the future of their community demonstrates the importance of genuine communication and tangible local benefits. We will strengthen cooperation with residents so that the expansion of the power grid can lead to regional development.”