Power Grid and SOC
Joint Construction Promotion Service

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CHAPTER

I

Service Overview

02

Service Background and Purpose

Service Background

As power-intensive future industries such as semiconductors, AI, and data centers emerge as key national growth drivers, the urgency of expanding power grid infrastructure has intensified. The sole construction system by Korea Electric Power Corporation reveals structural limitations including financial burden, rising construction costs, and project delays, necessitating a transition to a nationally-led joint planning and implementation system.

With expanding national-level commitment to improve power grid infrastructure such as energy highways, there is growing momentum to fundamentally address these challenges through integrated approaches.

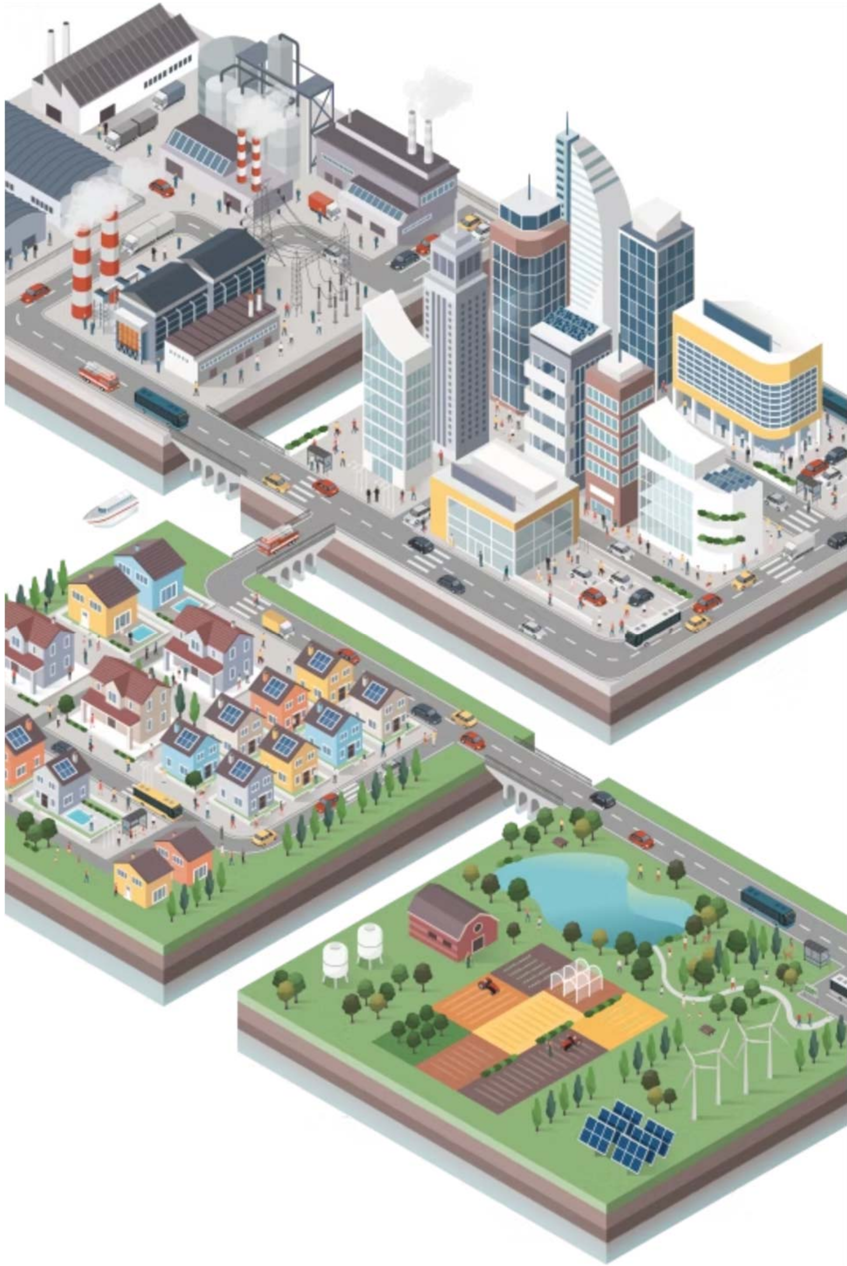
Service Purpose

As power grid expansion demand increases rapidly, there is a critical need to clearly examine whether joint construction with SOC infrastructure is practically feasible. This service objectively analyzes whether joint construction is realistically viable and economically rational, identifies legal, institutional, and technical improvements needed, and proposes solutions including establishing joint construction councils.

CHAPTER

II

Service Implementation



01

Domestic Power Supply and Demand Status and Outlook

Ⅱ. Service Implementation

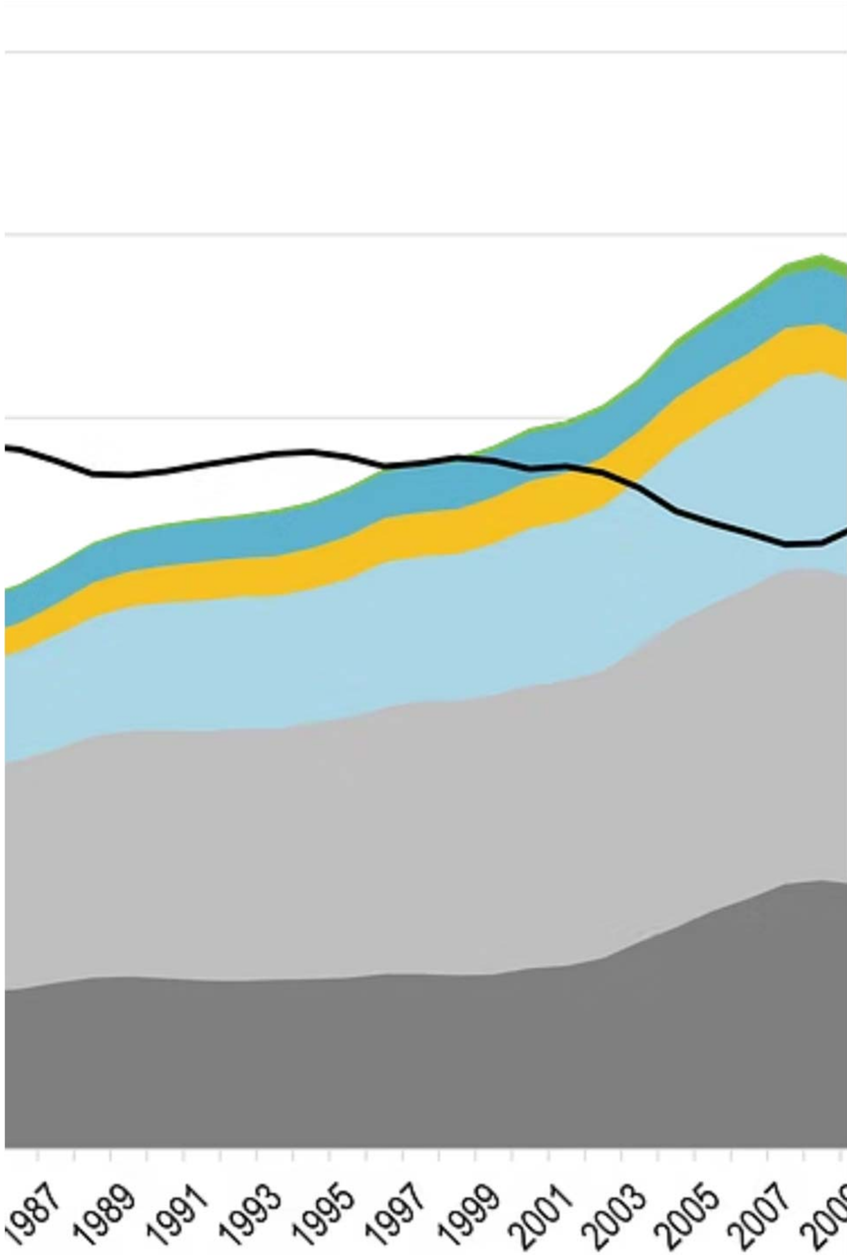
546.0	98.3	144
TWh	GW	GW
2023 Power Consumption	*2023 Peak Demand*	*2023 Total Generation Capacity*

1.5

%

Annual Average Growth Rate (10 years)

In 2023, power consumption reached 546.0 TWh, recording an average annual growth rate of 1.5% over the past decade. Peak demand reached 98.3 GW, with both summer and winter peak demands showing overall increases. The total generation capacity stands at 144 GW, reflecting the continuous expansion of power infrastructure to meet growing demand.



01

Power Supply and Demand Outlook

Ⅱ. *Service Implementation*

Power Demand Forecast

- *2038 baseline: 735.1 TWh consump tion*
- *Planning period (2024-2038): 2.0% annual growth*
- *Peak demand: 145.6 GW (2.4% ann ual growth)*

Advanced Industry Power Demand: *110. 2 TWh, 15.4 GW peak by 2038*

Data Center Power Demand: *30.0 TWh, 6.2 GW peak by 2038*

Electrification Demand: *63.0 TWh, 11.0 GW peak by 2038*

Generation Capacity Plan

- *2038 target capacity: 157.8 GW (su mmer basis)*
- *Continued utilization of nuclear po wer as carbon-free source*
- *Systematic expansion of renewabl e energy*

Coal: *31.7 GW (21.4%)*

LNG: *21.8 GW (14.7%)*

Renewable Energy: *67.0 GW (45.3%)*

Nuclear: *13.5 GW (9.1%)*

01

Regional Concentration of Power Demand and Generation

Demand Concentration Regions

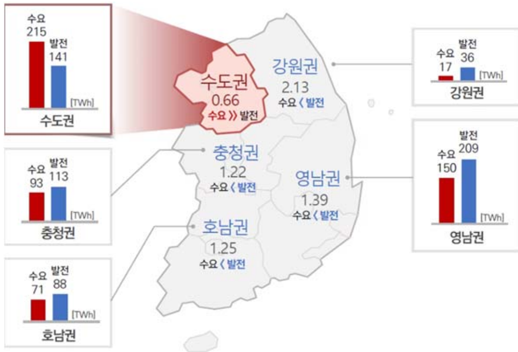
Power demand is concentrated in the metropolitan area with large-scale consumption facilities such as data center s, creating difficulties in supplying power to national strategic industries like semiconductors. Out of 1,508 power rec eption notices totaling 96 GW, 69% are located in the metropolitan area.

This geographical imbalance poses significant challenges for grid planning and requires strategic infrastructure dev elopment to support industrial growth while maintaining system stability.

Generation Regional Concentration

Generation facilities are concentrated in specific regions due to business-oriented licensing based on weather condit ions and site availability. Out of 28 GW of renewable energy generation capacity, 10 GW is located in the Honam regi on, intensifying concerns about grid instability.

This concentration creates transmission bottlenecks and increases the need for robust inter-regional transmission in frastructure to ensure reliable power delivery.



02

Joint Construction Overview

Ⅱ. *Service Implementation*

Power Grid-SOC Joint Construction Initiative

Promoting joint construction of power grids with roads, railways, and other national infrastructure plans to achieve efficient utilization of land and resources, fundamentally resolve public acceptance issues, and create public benefits through integrated planning approaches.

1

01

Target Identification

Conduct preliminary review of joint construction when establishing power grid facility plans (2-year cycle, 15-year period) in coordination with medium to long-term railway and road plans (5-year cycle, 10-year period)

2

02

Joint Development Review

Review joint construction plans for transmission and substation facilities with roads and railways in collaboration with SOC ministries, and promote institutionalization

3

03

Opinion Collection & Planning

Development committee and Ministry of Trade, Industry and Energy cooperate to collect joint development opinions and establish integrated plans

4

04

Site Selection

Development committee reflects joint construction status in final site selection decisions

02

Joint Construction Alternatives

Alternative 1: Utilizing Existing Power Grid

A method to increase transmission capacity by replacing existing tr ansmission lines with capacity-enhanced conductors while utilizing existing transmission towers, maximizing use of existing infrastruct ure to reduce costs.

Alternative 2: Utilizing Existing Road Areas

A method to construct underground conduits or overhead lines wit hin existing road areas (adjacent road zones), linking with road infr astructure to reduce land acquisition costs.

Alternative 3: Utilizing Existing Railway Areas

A method to construct underground conduits or overhead lines wit hin existing railway areas (railway protection districts), utilizing rail way linearity for efficient transmission line construction.

Alternative 4: New SOC Integration

A method to simultaneously construct power grids during new SOC (road and railway) construction, establishing integrated plans fro m the initial design stage to achieve optimal efficiency.

02

Pilot Project Performance

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932	99	306	17
Hundred Million KRW	Hundred Million KRW	Hundred Million KRW	Months
Gunbuk-Gaya Project Cost Reduction	*Yongin Cheoin Project Cost Reduction*	*Jinryang Branch Project Cost Reductio n*	*Gunbuk-Gaya Period Reduction*

Gyeongnam Haman Gunbuk-Gaya	*Transmission 6.8km / National Road 8.3km*	*Tunnel → Tunnel 1.0km + Conduit 5.8 km*	*93.2 billion KRW reduction*
Gyeongbuk Gyeongsan Namsan-Ha yang	*Transmission 0.7km / National Road 9.9km*	*Tunnel → Open-cut Conduit 0.7km*	*12 months reduction*
Gyeonggi Yongin Cheoin-Namdong	*Transmission 8.67km / National Roa d 12.53km*	*Tunnel → Open-cut 3.9km + Dedicate d Bridge 396m*	*30.6 billion KRW reduction*

Pilot projects were promoted through individual consultations and coordination, but establishing a cooperative system is necessary by preparing institutional foundati ons. When reflected from the SOC planning stage, parallel construction is efficient with minimal design changes and additional costs.

Legal Framework and International Case Review

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Legal Analysis Implications

Power Grid Related Laws

- ***Electric Power Development Promotion Act:*** *Includes prior consultation with relevant administrative agencies and grounds for supporting power project s such as priority installation of public facilities*
- ***Special Act on Expansion of National Core Power Grid:*** *Includes special provi sions for expediting large-scale transmission networks, integrated prior con sultation, and requirements for omitting site selection committees*

SOC Related Laws

- ***Road Act:*** *Includes grounds for designation of adjacent road zones and occu pancy permit systems*
- ***Railway Construction Act:*** *Includes public facility projects within the scope o f railway construction projects*
- ***Railway Safety Act:*** *Act restriction and permit systems within railway protec tion districts*
- ***Framework Act on Railway Industry Development:*** *Grounds for ancillary proj ects utilizing railway sites and facilities*

Key Finding: *It is reasonable to include power grid-SOC joint construction regulations in the "Special Act on Expansion of National Core Power Grid" and its e nforcement decree. This special law functions as a "higher-level framework" for comprehensively determining connectivity with roads, railways, and other S OC at the national strategic level for expanding national core power grids.*

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International Case Review Implications

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Need for Policy and Institutional Integration

The United States and Europe have established 'national-level long-term strategies' that integrate power grid and transportation infrastructure planning, improving project predictability.

→ Need to establish integrated master plan based on "One-Infra Plan" concept

Strategic Value of SOC Corridor Utilization

Like Canada's CHPE, US SOO Green, and Europe's Frejus Tunnel cases, placing underground transmission networks along existing highway and railway corridors reduces land compensation and resident conflicts.

→ Need to institutionalize 'public corridor (co-location)' principle

Balance Between Construction Costs and Acceptability

Underground installation is effective for landscape and environmental conservation but has high cost burden, and full undergrounding is difficult in Korea due to topographical characteristics.

→ Need for mixed strategy considering section characteristics (terrain, resident complaints, etc.)

Scalability of Railway-Highway Integrated Transmission

Simultaneously constructing SOC and power grids achieves dual effects of regional power stabilization and national grid connection.

→ Need for prior integrated design of power grids when constructing new SOC

04

Opinion Collection - FGI Results

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Nine rounds of Focus Group Interviews (FGI) were conducted with experts in power, SOC (roads and railways), and civil engineering to examine the feasibility of joint construction a lternatives.

Power Grid-Road Related

- *Space utilization options include road sides, ad jacent road zones, and ventilation spaces withi n tunnels*
- *Power conduits cannot be placed under lanes, so installation on shoulders or outside adjacen t road zones is a realistic alternative*
- *Existing roads have various constraints making parallel construction virtually difficult, but new roads can incorporate transmission networks t hrough early-stage consultation*

Power Grid-Railway Related

- *Railways have high linearity rates and are cons idered useful for implementation, but numerou s constraints exist*
- *Railway facilities have complex auxiliary equip ment such as catenary systems, electric poles, and signal/communication cables*
- *Under the Railway Safety Act, space constraint s and safety regulations result in very low acce ptability*
- *Railways also require substations, so consultati on is possible for new railway projects*

Other Matters

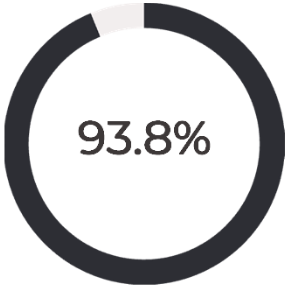
- *Due to Korea's mountainous terrain characteri stics, urban areas are expected to use open-cut methods while outskirts use shoulder/side inst allation methods in mixed construction*
- *Under the Road Act, power conduits are not def ined as road auxiliary facilities, causing issues with occupancy permits*
- *Railway Safety Act also has many constraints o n parallel installation, so legal and institutiona l improvements must precede implementation*

04

Expert Survey Results

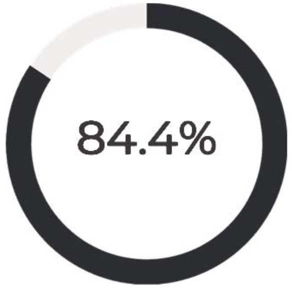
Ⅱ. *Service Implementation*

A survey was conducted with 32 experts in power and SOC (roads and railways) regarding the necessity of introducing joint construction and the feasibility of alternatives.



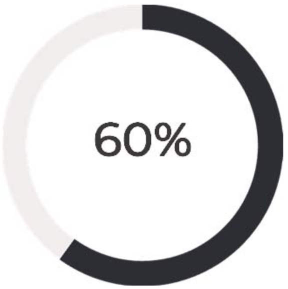
Joint Construction Necessity

93.8% responded that power grid-SOC joint construction is necessary, confirming established policy consensus



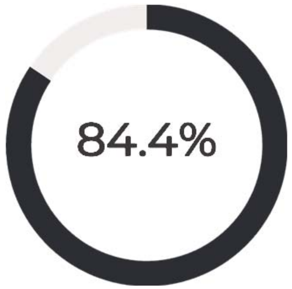
Existing Power Grid Alternative

Feasibility of existing power grid alternative rated at 84.4%, with 'technical maturity' as main rationale



Existing Road/Railway Areas

About 60% responded that both existing road and railway alternatives are not feasible, citing lack of inter-agency councils and awar eness as main reasons



New SOC Alternative

84.4% rated new SOC alternative as feasible, with 'expansion of joint construction necessity awareness' as main rationale

> *"The survey results clearly indicate that while stakeholders recognize the value of joint construction, existing infrastructure presents significant barriers. The path forward lies in integrating power grid planning with new SOC projects from inception."*

04

Inter-Agency Opinion Collection Results

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Busan Regional Land Mana gement Office	*Difficulty utilizing existing national roads*	*Utilize for new national road construction/expansion*
Korea Expressway Corporat ion	*Concerns about electromagnetic waves and complaints*	*Need for third-party credible agency review of separation distances, safety an d environmental standards*
Korea National Railway Age ncy	*Approach centered on new railways*	*Recommend installing power conduits in new railways, utilizing abandoned li nes/idle sites*
Ministry of Trade, Industry a nd Energy	*Emphasis on institutional improvement*	*Special law, individual law, preliminary feasibility guideline amendments, par allel pilot projects*
Ministry of Economy and Fin ance	*Need for phased amendments*	*Priority application to nationally managed SOC*

Conclusion: *Utilizing existing SOC has many constraints making implementation impossible. Joint construction needs to be reviewed at the new SOC project stage, requiring technical and standard supplements to resolve safety and complaint issues.*

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Alternative Review - Existing Power Grid

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Conductor Capacity Comparison

When replacing existing power grids with capacity-enhanced conductors, approximately 1.8 times increase in conductor capacity is possible. However, overhead lines still have low public acceptance, requiring resolution of complaint and electromagnetic wave issues.

Standard	ACSR (100%)	HSTACIR/AW (186%)
Core Material	Galvanized steel	Invar / Carbon composite / Manganese steel
Capacity	848A	1,581A - 1,616A
Weight	100%	93-100%

Landscape-Considered Transmission Lines

Source: Transmission Construction (Overhead) Field Training Materials, KEPCO

05

Alternative Review - Existing Road Areas

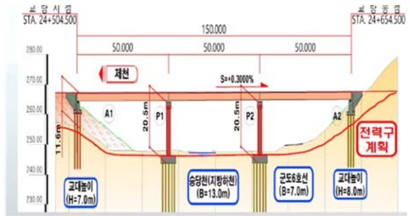
Ⅱ. Service Implementation

When existing road slopes cannot be excavated, adjacent road zones must be utilized, but these correspond to private land requiring rights acquisition. Implementation is somewhat difficult due to numerous constraints including traffic control needs during construction, traffic safety concerns when installing manholes for maintenance, and existing expressways consisting of over 50% bridges and tunnels.

Road Area Utilization Review

The diagram shows potential installation zones within road areas, including shoulder areas and adjacent zones. Technical feasibility varies significantly based on road geometry, existing utilities, and traffic management requirements.

Bridge Section Utilization Review



Bridge sections present unique challenges requiring specialized attachment systems and consideration of structural loading, maintenance access, and safety clearances.

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Alternative Review - Existing Railway Areas

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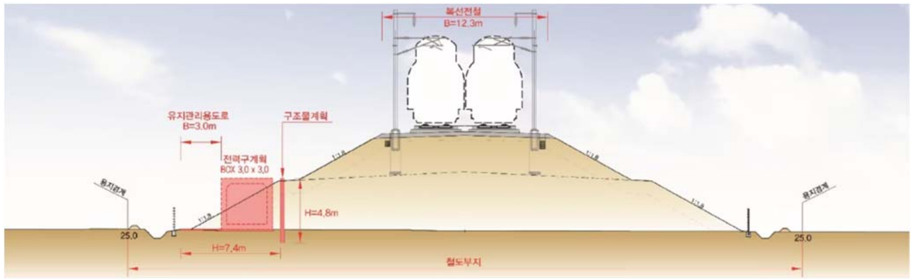
Under railway-related laws, excavation activities are strictly restricted, necessitating use of railway protection districts which is not practical. Construction is only possible during nighttime hours (12 AM to 5 AM), and railways pass through mountainous areas with numerous bridges and tunnels due to linear operat ion, with additional constraints such as curve radius, making implementation somewhat difficult.

Railway Area Utilization Review



Railway corridors offer linear routing advantages but face significant regul atory and operational constraints. Safety clearances, electrification system s, and signaling infrastructure limit available installation space.

Tunnel Section Utilization Review

Power Conduit Installation (No internal tunnel space available)

Railway tunnels typically lack spare internal space for power conduit instal lation. External burial or alternative routing may be required, increasing co mplexity and costs.

05

Alternative Review - New SOC Utilization

Phased Implementation Approach

Stage 1: SOC Plan Investigation and Preliminary Route Selection

Review expressway construction plans, national railway network construction plans, private expressway proposal routes, and other project routes, then select preliminary candidate routes for joint development consideration.

Stage 2: Target Area Selection and Route Confirmation

Review passing sections including embankment sections, river crossing sections (bridge sections), and mountainous sections (tunnel and cut sections), then finalize candidate routes based on technical feasibility analysis.

Stage 3: Legal Review and Inter-Agency Consultation

Review Special Act on Power Grid, Road Act, Railway Construction Act, and Preliminary Feasibility Guidelines, then conduct business consultations with related agencies (mandatory establishment of consultative body).

Stage 4: Optimal Route Selection

Consider power grid continuity including conduit specifications, manhole size, installation location and spacing, joint construction feasibility, economic efficiency, safety, and maintenance plans to select optimal routes.

Examination of optimal expressways, general national roads, high-speed railways, and general railway routes where power grid and SOC passing areas overlap is necessary. To ensure power grid continuity, the premise is that various SOC options can be flexibly utilized.

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Benefits and Cost Review

Ⅱ. Service Implementation

Benefit Categories Review

Tangible Benefits

- ***Construction Cost Reduction:*** *20-30% cost reduction effect compared to individual construc tion through prevention of duplicate excavation and parallel construction*
- ***Construction Period Reduction:*** *Shortening of construction period through reduced permit p eriods and increased public acceptance, with resulting additional construction cost savings*
- ***Land Compensation Cost Reduction:*** *When promoting joint construction, 50% reduction in l and compensation costs expected through transition from individual to joint land acquisitio n*

Intangible Benefits

- ***Social Conflict Mitigation:*** *Minimize resident conflicts through integrated processing of over lapping complaints, enhancing social acceptability*
- ***Environmental Impact Minimization:*** *Minimize environmental damage and ecosystem impa ct through prevention of duplicate excavation, realizing sustainable development*
- ***Administrative Efficiency Enhancement:*** *Enhance administrative efficiency by simplifying in ter-agency consultations through integrated permit procedures and institutional establish ment*

Important Note: *Benefit categories are currently difficult to quantify, so identification through follow-up projects is essential. Since costs are fixed as national funds, new benefit discoveries c an serve as incentives for SOC participation in projects.*

06

Cost Comparison Analysis

Ⅱ. *Service Implementation*

Alternative review results indicate that new SOC implementation is advantageous, and a cost reduction effect comparison was performed. Case 1 assumes transmission network construction using existing SOC, while Case 2 assumes transmission network construction using new SOC.

100%

Conventional Method

Separate construction of power grid and SOC using conventional methods set as 100% baseline for comparison purposes

85%

Existing Power Grid Utilization

Approximately 15% cost reduction effect when utilizing existing transmission towers with enhanced conductor replacement

90%

Existing SOC Utilization

Additional costs incurred due to constraints when utilizing existing roads and railways, resulting in higher total costs

70%

New SOC Alternative

Highest cost reduction achieved through integrated planning and parallel construction from project inception

> ***Analysis Conclusion:*** *Review results indicate that joint construction linked with new SOC is more economical than utilizing existing SOC, suggesting that promoting joint construction using new SOC is effective from a cost perspective as well.*

07

Legal and Institutional Improvements

Ⅱ. Service Implementation

Review Timing Comparison

Responsible Party	*Korea Expressway Corporation, Korea National Railway Agen cy self-review*	*Ministry of Trade, Industry and Energy, KEPCO led, SOC const ruction entity consultation*
Advantages	*Easy to adjust construction method and site from early route planning considering power grid*	*Secure institutional grounds, objective evaluation, distribute d responsibility*
Limitations	*Expertise/responsibility transfer, high uncertainty, concentra ted complaint risk*	*Possibility of excessive evaluation including unnecessary proj ects*
Acceptability	*Very low acceptability by SOC construction entities*	*Relatively high acceptability by SOC construction entities*
Suitability	*Individual consultation method → Inefficient*	*Institutionalization, preliminary feasibility linkage → Sustaina ble and systematic*

Optimal Solution and Rationale

Institutionalization within the preliminary feasibility study stage is the most rational approac h, enabling construction of a sustainable joint construction system through securing institutio nal grounds, ensuring expertise, distributing responsibility, and achieving high acceptability.

Expected Effects

Maximize public benefits through comprehensive national infrastructure planning and efficie nt resource allocation at the national level, establishing a foundation for long-term sustainab le infrastructure development.

07

Need for Integrated Assessment

Since power grid joint construction is not currently being implemented, national losses continue due to lack of information sharing, transmission and substation facility construction delays, and lost infrastructure construction opportunities. Legal and institutional improvements are needed to implement joint construction, and among these, introducing integrated suitability assessment for power grids and SOC can resolve most power grid problems.

Lack of Information Sharing

SOC project route information is not shared with Korea Electric Power Corporation in advance, making it difficult to reflect in medium to long-term power grid plans. Due to information shortage, direct consultation is needed for each individual project on a case-by-case basis, causing inefficiency through project-specific task force formation.

Transmission and Substation Facility Construction Delays

Power grid expansion cannot keep up with generation facility expansion speed, causing delays in power infrastructure construction for AI, data centers, etc. Permit delays due to public acceptance issues make it difficult to resolve local community opposition.

Lost Infrastructure Construction Opportunities

When constructing SOC projects and power grids separately, mismatches occur in construction schedules and space utilization. Additional land compensation and excavation work are required, and increased time and costs cause not only national power grid construction delays but also financial losses.

07

Power Grid-SOC Integrated Suitability Assessment (Proposal)

Ⅱ. *Service Implementation*

Definition: Power Grid-SOC Integration Assessment

A procedural review system that analyzes in advance the usability potential of large-scale SOC development projects such as roads and railways for power grid construction required by the "Basic Plan for Electricity Supply and Demand," and based on the results, prepares response measures for transmission and substation network construction, power facility sites, power supply changes, and infrastructure connectivity.

Information Sharing & Consultation	*SOC project plans not shared with KEPCO in advance; KEPCO must seek out operators for individual project consultations. TF-based response causes administrative and time inefficiency*	*SOC project information automatically shared through integrated assessment at preliminary feasibility stage. Official consultation procedures between KEPCO and related ministries from project inception*
Plan Connectivity	*Lack of linkage between SOC development plans and power grid expansion plans; completion timing mismatches*	*Review linkage with Basic Plan for Electricity Supply and Demand based on SOC routes, locations, and scales; synchronize power grid construction schedule with SOC schedule*
Construction Efficiency	*Separate power grid installation after SOC completion causes additional land compensation and excavation work; increased costs and duration*	*Secure power facility installation space at SOC design stage; parallel transmission network construction along road/railway routes reduces construction costs and shortens duration*
Resident & Environmental Impact	*Separate power grid installation after SOC causes resident opposition; intensified NIMBY conflicts*	*Simultaneous SOC and power grid construction reduces resident burden; minimizes environmental impact and landscape damage*
Power Supply Stability	*When power facilities are delayed after SOC completion, concerns about power supply disruptions at national power grid level*	*Power grid completed in sync with SOC completion timing; stable power supply possible*

Legislation of Integrated Suitability Assessment

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Stage 1: Special Act Amendment

Simultaneously amend "Special Act on Expansion of National Core Power Grid" and "Electric Power Development Promotion Act" to establish legal grounds for not only 345kV voltage but also 154kV voltage

02

Stage 2: Reflection in Individual SOC Laws

Add integrated suitability assessment clauses at preliminary feasibility stage in "Road Act" and "Railway Construction Act," and insert Ministry of Trade, Industry and Energy - Ministry of Land, Infrastructure and Transport consultation provisions

03

Stage 3: Administrative Guideline and System Linkage

Add 'power grid-SOC impact items' to Ministry of Economy and Finance preliminary feasibility guidelines, and establish permanent consultative body under Office for Government Policy Coordination

Expected Outcome: *Power grid-SOC joint construction can reduce project costs and prevent construction delays, while securing simultaneity and consistency between electricity supply and demand plans and SOC development plans.*

07

Appropriateness of Introduction at Preliminary Feasibility Stage

Ⅱ. Service Implementation

Need for Introduction

At the initial planning stage of SOC projects, power grid installation costs and benefits can be reflected, securing budget establishment grounds and establishing inter-ministerial responsibility sharing structure.

Introduction Effects

Facilitates Ministry of Economy and Finance budget acquisition by reflecting power conduit installation costs in total project costs. Enhances project implementation stability by minimizing complaint and delay factors.

Comparison by Project Stage

Total Project Cost Reflection	*Possible (reflected in government budget)*	*Difficult after budget finalized*
Benefit (B/C) Reflection	*Possible (undergrounding, complaint resolution, etc.)*	*Difficult after economic evaluation completed*
Design Reflection Flexibility	*Easy to reflect as routes/scales are flexible*	*Changes may increase costs/duration*

07

Key Assessment Items and Expected Effects

Transmission Network Connectivity Potential

- *Whether project routes overlap with major transmission axes from c oastal generation areas to metropolitan region*
- *Feasibility of utilizing adjacent road zones, railway protection distri cts, or structures*

Technical Applicability

- *Applicability and installation conditions for 154kV, 345kV, HVDC, etc.*
- *Physical feasibility of parallel construction including road crossings , bridges, tunnel sections, etc.*

Permit and Complaint Factors

- *Expected social conflict factors when installing transmission lines*
- *Applicability of joint permit procedures*

Public Facility Plan Integration

Enhance space efficiency by paralleling transmission networks with roads and railways

Fiscal and Administrative Efficiency

Reduce duplicate costs and duration in design, construction, and per mitting

Enhanced Energy Policy Linkage

Coordinate transmission plans with national land plans necessary fo r carbon neutrality and renewable energy expansion

07

Future Implementation Tasks and Incentive Measures

Ⅱ. Service Implementation

Institutionalization Measures

Introduce power grid-SOC integrated suitability assessment system within preliminary feasibility studies. Prepare joint guidelines between Ministry of Trade, Industry and Energy and Ministry of Land, Infrastructure and Transport, and promote pilot projects.

Assessment Manual Development

Develop guidelines including assessment targets, items, procedures, responsible entities, and checklists. Establish foundation for system settlement securing practical applicability.

SOC Operator Incentives

Secure project feasibility by reflecting joint construction benefits in preliminary feasibility (B/C analysis). Design indirect incentive structure rather than direct compensation.

> ***Core Achievement:*** *Through institutionalization of power grid-SOC integrated suitability assessment, enhance efficiency of national infrastructure investment, prevent environmental and social conflicts, and position as a leading nation in integrated national infrastructure strategy by presenting global standard models.*

07

Key Policy Recommendations

Ⅱ. *Service Implementation*

Establish Institutional Foundation

- *Prepare grounds for joint construction with SOC through amendments to Special Act on Expansion of National Core Power Grid*
- *Complete legal foundation through related individual law amendments*
- *Establish systematic review system by introducing power grid-SOC integrated suitab ility assessment system*

Acknowledge Limitations of Existing Infrastructure Utilization

- *Acknowledge that utilizing existing road and railway infrastructure is realistically dif ficult due to technical and institutional constraints*
- *Policy shift needed toward pre-integrating power grids when constructing new SOC*

New Infrastructure-Centered Approach

- *Mandatory review of power grid linkage measures from basic plan establishment st age of new SOC projects*
- *Provide incentives for joint construction to induce voluntary participation*
- *Expand pilot projects to accumulate successful models*

Strengthen Cooperation System

- *Form standing consultative bodies among related ministries including Ministry of Tr ade, Industry and Energy, Ministry of Land, Infrastructure and Transport, and Ministr y of Economy and Finance*
- *Institutionalize cooperation systems among public institutions such as KEPCO, Kore a Expressway Corporation, and Korea National Railway Agency*
- *Expand investment for professional workforce training and technology development*