

Methodology and criteria for evaluating investments in energy network projects (Article 17(6) TEN-E Regulation¹)

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¹ Regulation (EU) 2022/869 of the European Parliament and of the Council of 30 May 2022 on guidelines for trans-European energy infrastructure, amending Regulations (EC) No 715/2009, (EU) 2019/942 and (EU) 2019/943 and Directives 2009/73/EC and (EU) 2019/944, and repealing Regulation (EU) No 347/2013 on guidelines for trans-European energy infrastructure (TEN-E Regulation)

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Introduction

The TEN-E Regulation facilitates timely implementation of projects of common interest (PCIs) in the European Union. They are cross-border projects or projects with considerable cross-border impacts selected according to a process enshrined in the Regulation. PCIs can benefit from

- quicker permit granting procedures;
- cross-border cost allocation (if applied for);
- additional incentives (if necessary); and
- under certain conditions, financing by the Connecting Europe Facility (CEF).²

According to Article 17(6) of the TEN-E Regulation, each national regulatory authority must publish its methodology and the criteria used to evaluate investments in energy infrastructure projects and the higher risks incurred by them. The present document explains the investment evaluation methodology that is part of the process to establish the electricity and gas network development plans (NDP; in gas: CNDP³); projects of common interest are evaluated in this way, too.

Evaluation of investments in transmission grids

Sections 37 through 39 *Elektrizitätswirtschafts- und -organisationsgesetz* (Electricity Act) 2010 and sections 63 through 66 *Gaswirtschaftsgesetz* (Gas Act) 2011 deal with the regulatory approval of the NDPs.⁴ Every other year, the transmission system operators (TSOs) must submit a gas and an electricity NDP for the transmission system with a time horizon of ten years to the regulator for approval. The NDP must be based on existing and forecast supply and demand.

The current legislation in Austria does not provide any rules for the regulation of H₂ networks. As soon as respective legislation is enacted, this document will be adapted accordingly.

² Regulation (EU 2021/1153 establishing the Connecting Europe Facility

³ For gas: the coordinated network development plan (CNDP) for gas is established by the market area manager in coordination with the transmission system operators (section 63 Gas Act 2011).

⁴ These stipulations serve to transpose Article 51 of Directive (EU) 2019/944 concerning common rules for the internal market in electricity and of Directive 2009/73/EC concerning common rules for the internal market in natural gas into national Austrian law.

The NDP generally aims to

- indicate to market participants the main electricity and gas transmission infrastructure that needs to be built or upgraded over the next ten years;
- list all the investments already decided and identify new transmission-level investments which have to be commissioned in the next years (three years for electricity, ten years for gas); and
- set a schedule for all investment projects.

This serves to attain the following targets:

- meeting the demand for transmission capacity to supply customers while considering emergency scenarios;
- ensuring a high degree of availability of transmission capacity (security of supply of the infrastructure); and
- meeting the demand for transmission capacity to achieve a European internal market e.g. achieving the minimum capacity of 70 % of the transmission capacity for borders using a coordinated net transmission capacity approach according to Article 16 (8) of the Regulation (EU) 2019/943
- In gas, additional targets are:
 - enabling necessary transports;
 - ensuring compliance with the infrastructure standard according to Article 5 Regulation (EU) 2017/1938 concerning measures to safeguard the security of gas supply; and
 - integrating the energy sector by linking the energy carriers and sectors with each other, considering that gases are high-quality energy carriers.

Methodology

The NDP shall be prepared on the basis of reasonable assumptions about the development of production, supply, consumption and exchanges with other countries, taking into account the integrated network plan pursuant to section 94 *Erneuerbaren-Ausbau-Gesetz* (Renewable Energy Expansion Act) and investment plans for regional networks⁵ (and in gas also investment plans for storage facilities). The NDP must contain efficient measures to guarantee the adequacy of the system and ensure a high degree of availability of transmission capacity (security of supply of the infrastructure).

⁵ For electricity, s. Article 34(1) Regulation (EU) 2019/943 on the internal market for electricity and Article 8(3)(b) Regulation (EU) 2019/943 for community-wide networks; for gas, s. Article 12(1) Regulation 715/2009/EC and Article 8(3)(b) Regulation 715/2009/EC for community-wide networks.

When putting together the NDP, the **technical and economic expediency**, the interests of all market participants, and the coherence with the integrated network plan under section 94 Renewable Energy Expansion Act and the Union-wide network development plan must be taken into consideration; in gas, the target of achieving climate neutrality by 2040 must be taken into account in addition. Prior to submitting the NDP for approval, the TSOs (in gas: the market area manager, MAM) must consult all relevant market participants.

A substantiated application for approval of the NDP, especially in the case of competing projects for the construction, expansion, modification or operation of transmission systems, must state the **technical and economic reasons for including or excluding individual projects** and aim at eliminating system congestions.

Upon written request by the TSO (in gas: MAM) all market participants must make available within an appropriate period of time any data necessary for preparing the NDP; this includes fundamental data, consumption forecasts, changes in the system configuration, meter readings and technical and other project documents on systems planned to be constructed, expanded, modified or operated. In addition to such data, the TSO (in gas: MAM) may use other data that are useful for the NDP.

Approval (criteria)

The regulatory authority approves the NDP according to section 38(1) and (4) Electricity Act 2010.⁶ As a condition for approval, the investments must be proven to be:

- necessary for technical reasons;
- adequate;
- economically efficient; and
- Gas projects must additionally be in line with the targets of the integrated national energy and climate plans pursuant to Article 3 Regulation (EU) No 2018/1999.

Furthermore, for projects of common interest benefits according to Article 11 and Annex 5 Regulation (EU) 2022/869 on guidelines for trans-European energy infrastructure are taken into consideration.

⁶ Taking into account the integrated network plan pursuant to section 94 Erneuerbaren-Ausbau-Gesetz (Renewable Energy Expansion Act)

Approval may be granted subject to additional stipulations and conditions, if this is necessary for meeting statutory objectives.

Prior to issuing the relating official decision, the regulatory authority consults the NDP with the organisations representative of system users. Then, the regulatory authority publishes the result of the consultation process, highlighting needs for investment.

In particular, the regulator verifies **whether the (coordinated) NDP satisfies the investment needs identified in the consultation to their full extent** and whether it is consistent with the Union-wide NDP.

Risk mitigation measures in the regulatory framework for electricity

Projects approved as part of the NDP are eligible for the following risk mitigation measures:

- Under section 38(4) Electricity Act 2010, any appropriate expenses associated with the implementation of measures included in the network development plan are considered in the allowed costs (OPEX and CAPEX).
- prefinancing costs can be acknowledged.
- Costs arising in connection with measures included in the NDP are considered uncontrollable costs (section 59(6)(1) Electricity Act 2010).

Electricity TSOs are currently subject to cost-plus regulation. Each regulatory period is one year long. There are annual checks to verify whether the costs reported are reasonable in terms of their origin and amount; they are then projected to the year in question in accordance with the regulatory rules and an official decision that states the allowed costs is issued. The costs are made up of CAPEX and OPEX, with CAPEX including the cost of capital, depreciation, and cost of capital for prefinancing NDP projects. By allowing prefinancing costs, the law eliminates the time lag otherwise inherent in the system and reduces the liquidity risk. If the actual revenues deviate from forecasted ones because more or less energy than projected was transported through the grid, the law provides for the deviations to be recorded in the regulatory account and to be adjusted for ex post. This mechanism fully protects system operators from quantity risk.

Thanks to the above measures, the investment risk for NDP projects is lower than that for other investments. These mitigation measures also apply to any PCI projects that are approved as part of the NDP.

Risk mitigation measures in the regulatory framework for gas

Gas transmission system operators are subject to incentive regulation (revenue cap). The current regulatory period started on 1 January 2021 and ends on 31 December 2024. The system differs from electricity: gas TSOs devise the methodology for defining the allowed cost themselves, but it must be approved by E-Control. The allowed costs are made up of OPEX and CAPEX. At the beginning of the regulatory period, both OPEX and CAPEX are projected forward, based on values of the past four years. The costs planned for CNEP projects are considered as part of the CAPEX. A weighted average cost of capital (WACC) rate applies to the investment costs; after the end of the four-year regulatory period, they are evaluated and any deviations are accounted for. For details about the gas method (some may be German only), please visit the websites of the TSOs and E-Control's website.⁷ The major difference in risk management between electricity and gas is that for the latter, TSOs bear the quantity risk, in exchange for which they are granted an elevated WACC and individual risk assessments. Capacity expansion projects are preceded by a market test to verify whether the costs can fully or partially be offset by market participants through advance long-term bookings. Where bookings are insufficient, projects are not realised.

The above measures cover the main risks project promoters face. In addition, the assessment of individual project applications involves evaluating legal, implementation and social acceptance risks. Should a PCI be faced with higher risks than comparable projects, project promoters must provide proof of such elevated risks in connection with the individual project.

The text above refers only to the methodology ending on 31 December 2024. As soon as the respective methodology is updated and published, this document will be adapted accordingly.

Evaluation of project-specific risks of investments in energy PCIs

Where a project promoter incurs **higher risks** for the development, construction, operation or maintenance of a **project of common interest**, compared to the risks normally incurred by a comparable infrastructure project, Article 17(1) TEN-E Regulation stipulates that appropriate incentives are to be granted. When considering whether to grant Article 17 incentives, the relevant risks are those that could significantly reduce a project's economic feasibility, thereby delaying or preventing a PCI from being carried out.

⁷ S. <https://www.e-control.at/en/marktteilnehmer/gas/netzentgelte/methodenbeschreibung>

To take this into account, the following criteria, and the following method for evaluating project-specific risks, apply to PCIs in addition to the methods explained above.

Criteria for evaluating risk⁸

1. Eligibility of the project according to Article 17(1) TEN-E Regulation

This method only applies to projects of common interest that fall under the categories set out in Annex II.1(a), (b) and (d) and Annex II.2 of the TEN-E Regulation and that are not covered by any of the exemptions from Article 17(1) TEN-E Regulation.

2. Availability of information about project risks

E-Control can only evaluate risks if and when the project promoter has submitted any and all relevant information, ensured verifiability and quantified it. The project promoter must prove the degree to which a risk actually increases cost or decreases revenue, and that it is the applicant (and not the customer) that bears this risk. The documents that must be submitted include, but are not limited to:

- proof that the project has been granted PCI status;
- proof that the project is sufficiently mature;
- a cost-benefit analysis in accordance with Article 11 TEN-E Regulation;
- a description of the risk, including a quantitative estimate of the monetary consequences and probabilities; and
- an explanation arguing why this risk is higher than that faced by comparable projects, and why it cannot be covered by operational measures or is not covered by regulatory measures (in particular with reference to the party that bears the risk, i.e. why this must be the applicant or its owner).

Risk evaluation method

The regulatory authority checks whether project risks are addressed by operational or regulatory measures. Risk evaluation of investments in the regulatory asset base thus includes the following steps:

1. Identifying the risk connected to the specific project

⁸ Taking into account the integrated network plan pursuant to section 94 Erneuerbaren-Ausbau-Gesetz (Renewable Energy Expansion Act)

Based on the information provided by the project promoter, the regulatory authority evaluates the promoter's project-specific risk and how it differs from regular investment projects that are part of the regulatory asset base, in particular assessing whether it is higher than the risks involved in a comparable project.

2. Examining the risk mitigation measures taken by the project promoter

The regulator evaluates whether there are alternative risk mitigation measures that the project promoter could employ, such as general or economic instruments that limit potential negative impacts (e.g. contractual agreements on penalties, insurance contracts, hedging). Where this is the case, projects do not qualify for additional incentives.

3. Verifying the application of risk mitigation measures provided by the regulatory framework

Risks that are already addressed by risk mitigation measures in the applicable regulatory framework do not qualify for additional incentives. Details on the risk mitigation measures that are available as part of the regulatory framework have been provided in the chapters above.

4. Checking risk mitigation through risk components in cost of capital

The potential impact of a risk on a project promoter must be evaluated as part of the overall regulatory framework. The regulator therefore checks whether or not the project-specific risk has already been accounted for when fixing the cost of capital granted.

5. Quantifying and monetising the risk

Where a risk has not already been accounted for by operational or regulatory measures and where it will not be borne by the future users of a facility, the regulatory authority assesses whether the monetary impact and probability of the risk materialising are such that additional incentives should be granted. This will only be the case where the risk is considered unacceptably large without such incentives. This step includes the project promoter providing a monetary estimate of the risk, taking into consideration all effects of the existing regulatory framework.

6. Justification of the risk profile

In a final step, the regulator analyses whether the risk profile is justified when compared to an alternative comparable project with a lower-risk. This analysis also takes the outcome of the cost-benefit analysis into account. Where necessary, the regulator will consider mitigating the residual risk by taking adequate steps which address the particular nature of the risk.