

# **Methodology and criteria for evaluating investments in electricity and gas infrastructure projects (Article 13(6) Infrastructure Regulation<sup>1</sup>)**

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<sup>1</sup> Regulation (EU) No 347/2013 on guidelines for trans-European energy infrastructure (Infrastructure Regulation).

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## Introduction

The Infrastructure Regulation facilitates timely realisation 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

- accelerated 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<sup>2</sup>).

According to Article 13 (6) of the Infrastructure Regulation, each national regulatory authority shall publish its methodology and the criteria used to evaluate investments in electricity and gas infrastructure projects and the higher risks incurred by them. The present document displays how projects are evaluated by E-Control, using the investment evaluation that is part of the process to establish the electricity and gas network development plans (NDP; in gas: CNDP<sup>3</sup>) as all projects of greater interest are evaluated in this way.

## Evaluation of investments in transmission grids

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

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<sup>2</sup> Regulation (EU) No 1316/2013 establishing the Connecting Europe Facility.

<sup>3</sup> The coordinated network development plan (CNDP) for natural gas is established by the market area manager in coordination with the transmission system operators; this is laid down in section 63 *Gaswirtschaftsgesetz* (Natural Gas Act) 2011.

<sup>4</sup> These stipulations serve to transpose particularly Article 22 of Directive 2009/72/EC 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 transmission infrastructure that needs to be built or extended over the next ten years;
- list all the investments already decided and identify new investments which have to be executed in the next years (three years for electricity, ten years for gas); and
- provide for a time frame for all investment projects.

This serves to attain the following targets:

- meeting the demand for line capacity to supply consumers while considering emergency scenarios;
- ensuring a high degree of availability of line capacity (security of supply of the infrastructure); and
- meeting the demand for line capacity to achieve a European internal market.
- In gas, an additional target is: ensuring compliance with the infrastructure standard according to Article 6 of Regulation (EU) No 994/2010.

## Methodology

When elaborating the NDP, reasonable assumptions about the evolution of the production, supply, consumption and exchanges with other countries must be made, taking into account investment plans for regional networks<sup>5</sup> (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 capacity (security of supply of the infrastructure).

In drawing up the NDPs, **technical and economic expediency**, the interests of all market participants and consistency with the Community-wide network development plan are to be taken into account. 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, alteration or operation of systems, must state **the**

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<sup>5</sup> For electricity, cf. Art. 12(1) of Regulation (EC) No 714/2009, and Article 8(3)(b) of Regulation (EC) No 714/2009 for Community-wide networks; for gas, cf. Article 12(1) of Regulation (EC) No 715/2009, and Article 8(3)(b) of Regulation (EC) No 715/2009 for Community-wide networks.

**technical and economic reasons for approving or rejecting individual projects** and aim at eliminating system congestions.

If the TSO (in gas: MAM) submits a written request to this end, all market participants must make available within an appropriate period of time any data necessary for drawing up 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, altered or operated. In addition to such data, the TSO (in gas: MAM) may draw on other data that are useful for the NDP.

### **Approval (criteria)**

The regulatory authority approves the NDP by official decision. As a condition for approval, the investments must be proven to be:

- necessary for technical reasons;
- adequate; and
- economically efficient.

Approval may be granted subject to additional stipulations and conditions, if this is necessary for meeting legal 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 possible needs for investments.

In particular, the regulator verifies whether the NDP **covers the investment needs identified in the consultation to their full extent** and whether it is consistent with the Community-wide NDP.

### **Risk-mitigating measures in the regulatory framework for electricity**

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

- any appropriate expenses associated with the realisation of measures included in the NDP are allowed as part of the system charges (section 38(4) Electricity Act 2010);
- this also includes cost of capital for prefinancing (section 38(4) Electricity Act 2010);

- costs arising in connection with realising measures included in the NDP are considered costs beyond the control of the system operator (section 59(6)(1) Electricity Act 2010). This means that neither markups nor offsets apply to these costs.

Electricity TSOs are currently subject to a cost plus regulatory regime with a one-year regulatory period. There are annual evaluations 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 of volume differences, 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 volume risk.

Thanks to the above measures, the investment risk for NDP projects is lower than that for other investments. These risk-reducing 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 is 2013-2016. While in electricity, the regulator checks whether the costs reported by the TSOs are reasonable, the regulator's role in gas is to approve the methodology for determining the allowed cost. 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](#) (in German), please visit the websites of the TSOs and E-Control's website.<sup>6</sup> The major difference in risk mitigation between electricity and in gas is that for the latter, TSOs are granted an elevated WACC and individual risk assessments to compensate for the general volume risk.

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<sup>6</sup> See <http://www.e-control.at/de/marktteilnehmer/gas/netzentgelte/methodenbeschreibung> (in German).

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

## Evaluation of project-specific risks of investments in electricity and gas projects of common risk

Where a project promoter incurs **higher risks** for the development, construction, operation or maintenance of a **project of common interest (PCI)**, compared to the risks normally incurred by a comparable infrastructure project, Article 13 (1) of the Infrastructure Regulation stipulates that appropriate incentives are to be granted. When considering whether to grant incentives according to Article 13, the relevant risks are those that could significantly reduce a project's profitability and thereby potentially delay or prevent a PCI from being carried out.

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 risk evaluation

#### 1. Eligibility of the project according to Article 13 (1) of the Infrastructure Regulation

This method only applies to PCIs that fall under the categories set out in Annex II.1 (a), (b) and (d) and Annex II.2 of the Infrastructure Regulation and that are not covered by any of the exemptions from Article 13 (1) of the Infrastructure 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 in a comprehensible and quantified way. The project promoter must prove the degree to which a potential risk may actually increase cost or revenue risk, and that it is the project promoter (and not the customer) who 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 project-specific cost-benefit analysis in accordance with Article 11 of the Infrastructure Regulation

- A description of the risk, including a quantitative estimate of the monetary consequences and probability of occurrence
- 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 is the project promoter or its owner)

### **Risk evaluation method**

#### 1. Identifying risks from a regulatory perspective

The information provided by the project promoter is used to assess the nature of the project-specific risk that the promoter faces and whether this is different than for other comparable investment projects.

#### 3. Risk mitigation measures taken by the project promoter

The regulator evaluates whether there are existing or applicable 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 such measures are available or applicable, projects do not qualify for additional incentives.

#### 4. Risk coverage through risk components in rate of return on capital invested

The potential impact of a risk on a project promoter must be evaluated as part of the overall regulatory framework. E-Control therefore checks whether or not the project-specific risk has already been accounted for when determining the allowed rate of return on capital invested.

#### 5. Risk mitigation measures provided by the regulatory system

A risk already accounted for by corresponding regulatory mitigation measures is not eligible for additional incentives. This has already been explained above, cf. the chapters on risk-mitigating measures in the regulatory framework (for electricity and gas).

#### 6. Quantifying 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, E-Control assesses whether the monetary impact and probability of occurrence of the risk are such that additional incentives should be granted. This will only be the case where otherwise, the risk is considered unacceptably high. This step includes the project promoter providing a monetary estimate of the risk that accounts for the existing regulatory framework.



7. Comparable infrastructure projects

E-Control evaluates whether the risk the project promoter is exposed to is higher than for comparable projects.

8. Justification of the risk profile

In a final step, E-Control analyses whether the risk profile is justified when compared to a lower-risk alternative. This analysis also considers the results of the cost-benefit analysis. Where necessary, E-Control will consider mitigating the residual risk by taking adequate steps which address the particular nature of the risk.