

METHODOLOGY AND CRITERIA FOR THE EVALUATION OF INVESTMENTS IN ELECTRICITY AND GAS INFRASTRUCTURE PROJECTS (ARTICLE 13(6) OF REGULATION (EU) No. 347/2013)

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1. Introduction

In accordance with article 13(6) of the Infrastructure Regulation (EU) No 347/2013 of the European Parliament and of the Council of 17 April 2013, 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 provides a high level summary of CERAs' **regulatory principles**, **existing regulatory regimes** that can be related to the evaluation of projects of common interest and application procedures for incentives provided under article 13.

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.

It should be noted that pursuant to the provisions of Article 13 (1) of Regulation (EU) No 347/2013 (the Regulation), this Annex does not apply for projects of common interest (PCI) that have obtained one of the following exemptions:

- a. an exemption from Articles 32, 33, 34 and from Article 41 (6), (8) and (10) of Directive 2009/73/EC pursuant to Article 36 of Directive 2009/73/EC:
- b. an exemption from Article 16(6) of Regulation (EC) No 714/2009 or a derogation from Article 32 and Article 37(6) and (10) of Directive 2009/72/EC pursuant to Article 17 of Regulation (EC) No 714/2009;
- c. an exemption under Article 22 of Directive 2003/55/EC;
- d. an exemption under Article 7 of Regulation (EC) No 1128/2003.

On June 27, 2014 ACER published its recommendation on incentives for projects of common interest and on a common methodology for risk evaluation in allowance with the provision of the article 13(5) of the Regulation.

2. Basic Regulatory Principles

2.1 Electricity Market

The electricity market in Cyprus in accordance with the Law Regulating the Electricity Market and relevant Regulations and Regulatory Decisions has been organised into separate licensed activities as follows:

- a) The activity of electricity generation, which is a competitive activity with freedom of entry, subject to CERA granting the relevant license. Electricity generation by a dominant firm shall be regulated in order to protect consumers and facilitate entry until such time as CERA decides that regulation is no longer appropriate.
- b) The activity of transmission system ownership shall be a regulated monopoly activity.
- c) The activity of transmission system operation shall be a regulated monopoly activity.
- d) The activity of distribution system ownership shall be a regulated monopoly activity.
- e) The activity of distribution system operation shall be a regulated monopoly activity.
- f) The activity of supply of electricity is a competitive activity. All customers shall be eligible to choose their supplier and there shall be freedom of entry into supply, subject to CERA granting the relevant license. Supply by a dominant firm shall be regulated in order to protect the interests of consumers and facilitate entry into the market until such time as CERA decides that regulation is no longer appropriate. Supply by any supplier is regulated regarding the way in which certain charges levied on the supplier are passed through to consumers and the way in which information is presented on an end consumer bill.

Licences

Criteria and procedures followed in order to issue a Licence for any electricity undertaking for the activities of generation, transmission, distribution and supply of electricity.

The criteria, which have been set by CERA through relevant published Regulations (http://www.cera.org.cy/main/data/kdp538-2004.pdf) for obtaining a Construction and Operation Licence for an electricity undertaking are the following:

- Economic study incorporating provisions and income allocated to the main categories with regard to cash inflows and outflows.
- Environmental Impact Assessment Study by an independent Specialist
- General layout Plan.
- The nature of the primary sources
- Details of Applicant, Partners and Subcontractors.
- Project Funding Sources.
- Balance Sheets for the last three financial years, if the Company is not newly incorporated.

- Characteristics particular to the applicant, such as technical, economic and financial capabilities; Feasibility Study / The programme of the enterprise for the next 5 years.
- Details of the level of the energy efficiency
- Timetable of Construction.
- The Company's Articles of Association (Company Registration Number and Certificate of Registration and of Shareholders by the Registrar of Companies).

In particular for projects that fall under PCI as soon as such a project has reached sufficient maturity, the project promoters, after having consulted the Cyprus TSO and the TSO of other related Member States to which the project provides a significant net positive impact, shall submit an investment request. That investment request shall include a request for a cross-border cost allocation and shall be submitted to all the national regulatory authorities concerned, accompanied by the following:

- a) a project-specific cost-benefit analysis consistent with the methodology drawn up pursuant to Article 11 and taking into account benefits beyond the borders of the Member State concerned;
- b) a business plan evaluating the financial viability of the project, including the chosen financing solution, and, for a project of common interest falling under the category referred to in Annex II.2, the results of market testing; and
- c) if the project promoters agree, a substantiated proposal for a cross-border cost allocation.

If a project is promoted by several project promoters, they shall submit their investment request jointly.

National Ten-Year Network Development Plan (NTYNDP)

The NTYNDP generally aims to indicate to market participants the main transmission infrastructure that needs to be built or extended over the next ten years and provide a time frame for all investment projects.

In accordance with the Law regulating the electricity market, the Transmission System Operator shall prepare a development plan for the development of the transmission system in order to guarantee security of supply of electricity. The transmission system development plan shall cover a period of ten calendar years. The transmission system development plan shall be submitted by the Transmission System Operator to CERA for approval. The plan shall enter into force from the date of it being approved by CERA. The Transmission System Operator shall, at least once each year, revise the aforementioned transmission system development plan, and submit the revised development plan to CERA for approval.

The development plan shall take account of:

- a) Existing and planned generation, transmission, distribution and supply on a regional basis in the Republic;
- b) Forecast statement
- c) interconnections or opportunities for interconnections with other transmission and distribution systems which have been examined following the instructions of the Minister
- d) complete and regional development objectives in the Republic.

The development plan shall indicate the manner in which the Transmission System Operator shall discharge its functions.

The Transmission System Operator shall:

- a) engage in a public consultation process, including any other form of consultation require as a result of a decision by CERA, before submitting the transmission system development plan to CERA for approval, and
- b) report in writing to CERA on the results of such consultations made on the basis of paragraph (a) when submitting the development plan to CERA for approval.

As the interconnections are likely to severely impact the 10year plan as regards:

- (i) the generation availability risks assessment,
- (ii) the infrastructure of the internal transmission network,

it is of paramount importance to provide an assessment of the evaluation of avoiding risks due to volatility of interconnections with other countries. In simple terms as an example, an interconnection of 500MW capacity does not necessarily result in avoiding planning for sizable local generation expansion plan.

The assessment on the other hand should include benefits for the facilitated capability of anticipated large deployment of renewable energy sources and more specifically of the photovoltaic technologies.

CERA approves the NTYNDP by decision. As a condition for approval, the investments must be proven to be necessary for technical reasons; adequate and economically efficient. Following the approval of NTYNDP, the recovery of investment costs through the access tariffs is ensured by CERA in accordance with the law, whereas the activity is efficiently managed.

Tariffs

The approach adopted by CERA for tariff regulation of infrastructure projects is aimed, consistently with the European and national legislative provisions, at pursuing the objectives of adequacy, efficiency and security of infrastructures, balancing these objectives with the protection of final customers. In particular, CERA adopts a consistent methodology for tariff regulation of electricity market, reflecting the specific features of each regulated activity and particularly the different levels of systematic risk. Infrastructure projects are not expected to have a strong impact on the price paid by the final customer.

CERA exercising the powers provided by Articles 24, 25, 26(1), 31, 32, 34 and 108 of the Law on Regulating the Electricity Market of 2003 and the subsequent amendments (the 'Law') and Regulations 2 and 4 of the Regulating the Electricity Market (Procedures for Charging Electricity Tariffs) Regulations of 2004, Regulations 472/2004, has issued a Decision on the "Regulatory Practice and Methodology of Electricity Tariffs" (http://www.cera.org.cy/main/data/articles/srpmet.pdf) which abolishes the Statement on Regulatory Practice and Methodology of Electricity Tariffs, Regulations REG 177/2006, 404/2006, 105/2007, 227/2007, 537/2010.

The overarching objectives of tariff regulation are to maximise the long term competitiveness of the Cypriot economy, protect the interests of consumers in the short and long term against prices established on a monopoly basis, meet public service obligations, safeguard the security of electricity supply and promote energy efficient and quality of the services provided by the licencees. The tariffs are determined on the basis of a methodical and consistent application of the principles set out in the methodology; and the proposals and decisions about tariffs are evidence-based and are formulated after thorough consultation with the parties concerned.

More specific objectives of regulated tariffs are that they:

- a) reflect the cost of service so as to enhance economic efficiency;
- b) allow the reasonable prospect of recovery of efficient costs;
- c) be fair and non-discriminatory unless justified on the grounds of other tariff objectives such as enhancing economic efficiency;
- d) avoid cross subsidies between different electricity sector activities (i.e. generation, transmission system ownership, transmission system operation, distribution system ownership, distribution system operation and supply);
- e) be simple, transparent and predictable;
- f) encourage efficient consumption decisions by consumers;
- g) be compatible with the clear environmental objectives set by the Republic of Cyprus;
- h) allow the recovery of efficiently incurred costs related to public service obligations and the promotion of generation of electricity from renewable energy sources and high-efficiency cogeneration;
- i) encourage security of electricity supply;
- j) provide incentives to regulated firms to operate efficiently; and
- k) promote efficiency and quality of the service provided by licencees.

CERA shall determine the allowed revenue, in accordance with the periodic regulatory review and in accordance with the objectives set out in paragraphs above, for each of the activities.

Prior to the start of each regulatory control period, CERA shall conduct a periodic regulatory review to determine the allowed revenues for each activity for the regulatory control period.

The objective of the periodic regulatory review shall be to incentivise the provider of each regulated activity to reduce controllable costs while allowing the provider of the activity the reasonable prospect of recovering its reasonable costs so as to maintain a viable efficient business. The provider of a regulated activity shall bear the difference between its allowed revenues for a regulatory control period and its actual costs for the regulatory control period, where the difference may be positive or negative, and the difference shall not be carried forward as an adjustment to the allowed revenues of a future regulatory control period except as allowed for in accordance with the K factor adjustment. The Allowed Revenues arising from non-controllable operational costs shall be adjusted when there are deviations in the forecasted energy or when factors change.

The allowed revenues for each activity with the exception of the supply by a dominant supplier, shall comprise of a capital related component and an operating component, as follows:

- a) The capital related component of allowed revenue shall include the depreciation
 of the average Regulated Asset Value Base (RAVB) and the allowed return on
 the average RAVB. The RAVB shall be determined in accordance with Appendix
 1. The allowed rate of return on RAVB shall be the Weighted Average Cost of
 Capital (WACC).
- b) The operating component of allowed revenues.

The allowed WACC for an activity shall be determined as part of the periodic regulatory review in accordance with the said Regulatory Statement based on observed data and shall be a nominal rate of return. During the periodic regulatory review, CERA may decide to index the WACC or elements used to determine the WACC such that the WACC varies during the regulatory control period. The objective of such indexation is to protect the firm undertaking the regulated activity from uncontrollable changes to its cost of financing.

The RAVB for an activity shall also be calculated ex-post at the end of each year and there shall be an ex-post readjustment of the capital part of the allowed revenues based on the year's actual capital expenditures which were included in the RAVB. If the capital expenditures are higher than budgeted, the difference shall be transferred to tariffs only to the extent that CERA considers the increase to be reasonable. The evidence-based readjustment shall be applied to the tariffs of the following year of the regulatory control period and shall readjust the projected capital part of the allowed revenues for the remainder of the regulatory control period.

CERA reserves the right, when in its opinion there are significant changes in the electricity market during the regulatory control period, to intervene with adjustments and to request changes to the allowed revenues and electricity tariffs (including the tariff structure), with the aim of ensuring the smooth operation of the electricity market under conditions of healthy competition benefiting the consumers as stipulated in the Law.

2.2 Gas Market

Today, the natural gas market in Cyprus is non-existent due to factors such as geographical isolation, small size of the market and lack of interconnections with other gas networks. This has adverse effects on the cost of electricity generation, as well as lack of energy source diversity for the industry in general. Moreover, the environmental cost associated with the extensive use of heavy fuel oil for power generation is significant, as it affects emission targets required by EU legislation.

A political decision has been taken to investigate the introduction of natural gas in Cyprus' energy market, as an interim solution and until Cyprus gets its own gas, for the following principal reasons:

- The reduction of electricity generation cost and as a result the decrease of electricity prices to the end consumer; and
- The introduction of competition in the electricity generation market.

The Gas Directive (2009/73/EC) allows derogations for a limited duration from certain provisions, in the case of isolated and emergent natural gas markets, which are provided for assisting such markets in their transition in becoming functional and competitive. Since natural gas will be introduced in the Cyprus market for the first time, it is at the Governments' discretion to decide whether to invoke these derogations, fully or partially.

The long term goal is the establishment of a functioning, competitive gas market in Cyprus with a level playing field and absence of conflicts of interest. This strategy is heavily fuelled by the strong interrelation between the gas and electricity markets and the decisive effects that a mature gas market will have on the introduction of competition in the electricity sector. Therefore, all necessary measures will be taken in order to ensure equal access to gas for potential IPPs, as well as other gas consumers.

Licences

The same criteria and procedures followed in order to issue a Licence for any electricity undertaking apply for gas undertakings. A risk analysis assessment study is also required for gas undertakings cases.

In accordance with the Law regulating natural gas market, CERA is granting licences for the construction and operation of natural gas facilities, pipelines and associated equipment on Cyprus' territory as well as for the supply of natural gas. Objective and non-discriminatory criteria are publicly available as a Regulation (http://www.cera.org.cy/main/data/articles/kdp298-2006.pdf).

In particular for projects that fall under PCI as soon as such a project has reached sufficient maturity, the project promoters, after having consulted the TSOs of the related Member States to which the project provide a significant net positive impact, shall submit an investment request. It should be noted that in case of Cyprus there is no

TSO appointed as yet. That investment request shall include a request for a crossborder cost allocation and shall be submitted to all the national regulatory authorities concerned, accompanied by the following:

- a) a project-specific cost-benefit analysis consistent with the methodology drawn up pursuant to Article 11 and taking into account benefits beyond the borders of the Member State concerned;
- b) a business plan evaluating the financial viability of the project, including the chosen financing solution, and, for a project of common interest falling under the category referred to in Annex II.2, the results of market testing; and
- c) if the project promoters agree, a substantiated proposal for a cross-border cost allocation.

If a project is promoted by several project promoters, they shall submit their investment request jointly.

National Ten-Year Network Development Plan (NTYNDP)

The NTYNDP generally aims to indicate to market participants the main transmission infrastructure that needs to be built or extended over the next ten years and provide a time frame for all investment projects.

In accordance with the Law regulating the gas market, CERA is monitoring investment plans of the transmission system operators, and providing in its annual report an assessment of the investment plans of the transmission system operators as regards their consistency with the Community-wide network development plan referred to in Article 8(3)(b) of Regulation (EC) No 715/2009; such assessment may include recommendations to amend those investment plans.

The Transmission System Operator once is appointed by the Council of Ministers and licenced by CERA shall prepare a development plan for the development of the transmission system in order to guarantee security of supply. The transmission system development plan shall cover a period of ten calendar years. The transmission system development plan shall be submitted by the Transmission System Operator to CERA for approval. The plan shall enter into force from the date of it being approved by CERA.

Each transmission system operator shall build sufficient cross-border capacity to integrate European transmission infrastructure accommodating all economically reasonable and technically feasible demands for capacity and taking into account security of gas supply.

CERA may require transmission system operators to comply with minimum standards for the maintenance and development of the transmission system, including interconnection capacity.

Tariffs

In accordance with the Law Regulating the Natural Gas Market the principles of tariffs structure are mainly the same with 'electricity tariffs principles' and are based in costs in order to assure investment recovery and a reasonable profit.

The main objective of the gas tariff regulatory system is to offer stability and certainty for investors, ensuring transparency of allowed cost calculation procedures and of periodical review criteria, not only within each regulatory period but also in the transition from one period to another, thus reducing the so-called "regulatory risk" for network operators, with positive effects on the cost of capital and on the willingness to invest of network operators.

3. Application Procedures for Incentives provided under Article 13 of Regulation (EU) No 347/2013

CERASs' decision for granting the incentives referred to in Article 13(1) shall consider the results of the cost-benefit analysis on the basis of the methodology drawn up pursuant to Article 11 and in particular the regional or Union-wide positive externalities generated by the project. CERA shall further analyse the specific risks incurred by the project promoters, the risk mitigation measures taken and the justification of this risk profile in view of the net positive impact provided by the project, when compared to a lower-risk alternative. Eligible risks shall notably include risks related to new transmission technologies, both onshore and offshore, risks related to under-recovery of costs and development risks.

Project promoters who deem their PCIs present higher risks, with regard to their development, implementation, operation and maintenance, compared to risks normally associated with infrastructural projects can submit an application to CERA for the acknowledgement of the incentives according to Article 13 (1), first subparagraph, of Regulation (EU) No 347/2013.

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.

Criteria for risk evaluation

1. <u>Eligibility of the project according to Article 13 (1) of the Infrastructure Regulation</u>
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

CERA 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)

For each application submitted by Project Promoters pursuant to the provisions of Article 13 of Reg.347/2013, CERA will start a proceeding in order to:

- a) verify the results of the cost-benefit analysis undertaken in accordance with the provisions of Article 11 of Regulation (EU) No 347/2013 and in particular the quantification of the net socio-economic benefit of the project;
- b) assess the consistency of the information and data submitted for the evaluation of the specific risk of the project with the data used to carry out the cost-benefit analysis submitted according to the provisions of Annex III.2(1) of Regulation (EU) No 347/2013, in particular risk assessment should rely on the same data and on the same assumptions used to assess the financial sustainability and to quantify the socioeconomic net benefit;
- c) evaluate the adequacy of risk mitigation measures adopted by the project promoter;
- d) evaluate the justification of the specific risk profile of the project in relation to the net positive impact of the project, assessed in coherence with the CBA methodology, according to Article 11 of Regulation (EU) No 347/2013;
- e) assess to what extent the risk is higher than the risk of a comparable project;
- f) assess the nature and the magnitude of the project risks and evaluate, on the basis of an economic quantification, the probability of an economic impact in terms of higher costs or lower revenue;
- g) assess to what extent the project-specific risk that constitutes a systematic risk is already reflected in the allowed cost of capital, taking into account that a non-

- systematic risk should not be rewarded, as it can be diversified away by the project promoter;
- h) assess if full or partial risk mitigation measures are already provided by the current regulation;
- i) assess whether the monetary impact and probability of occurrence of the risk are such that additional incentives should be granted.
- yerify if and to what extent a project already benefits from subsidies, grants or from cross-border cost allocation contribution, in order to avoid overcompensations of project promoters.

Cases of exclusion from incentives

The following cases are excluded from admission to incentives established under Article 13 of Regulation (EU) No 347/2013:

- a) projects where the promoters do not disclose to the Authority the information necessary to apply the common risk assessment methodology and, in particular, do not substantiate the existence of higher risks regarding the project, along with the provision of reliable estimates on the net positive impact and the cost-benefit ratio of the project;
- b) projects where the risks are already reflected in the allowed cost of capital or where appropriate risk mitigation measures are already in force; a risk already accounted for by corresponding regulatory mitigation measures is not eligible for additional incentives. Speculative projections for added benefits should be as conservative as possible and they should be backed by real cases analysis in detail all assumed parallels.
- c) projects where the promoters have not adopted, where possible, appropriate mitigation measures; CERA 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. Where such measures are available or applicable, projects do not qualify for additional incentives;
- d) projects that already benefit from subsidies, grants or from cross-border cost allocation contribution, which already compensate the higher risk incurred in comparison to a comparable project;
- e) projects where the ordinary tariff regulation already adequately compensate the risks and uncertainties related to the project;
- f) Access the financial impact on the NTYNDP and determine the real net avoided costs resulting from the project.