Delineation of the incremental tariff issues

ACER explanatory note / Public consultation document

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18 July 2013
This explanatory note / consultation document is issued to invite views and comments on tariff related incremental capacity issues, such as the proposed economic test and the tariff setting for incremental capacity, in the context of the development of the Framework Guidelines on Harmonised Tariff Structures.

The consultation shall allow stakeholders to assess the current policy proposals outlined in this note by answering to the relevant questions of the online questionnaire and/or provide any other comment, which they find relevant.

The online questionnaire combines the questions on cost allocation methodologies (Part I) and the questions on tariff related incremental capacity issues (Part II) with a general Part III and thereby forms the public consultation on the Draft Framework Guidelines on rules regarding harmonised transmission tariff structures for gas.

This consultation is open to all interested stakeholders.

Comments shall be submitted via on-line form by:

17 September 2013
23.59 hrs (CET)
Delineation of the tariff incremental issues

1. Introduction: tariff incremental issues

The aim of the work on incremental and new capacity\(^1\) is to propose harmonised and market-based approaches throughout Europe to allocate and price both existing and incremental/new capacity.

ACER continues the work taking over the results of the CEER Blueprint paper\(^2\). This paper has identified possible options on when and how incremental and new capacity could be identified and offered to the market. These approaches were transposed in five technical design options: two integrate incremental capacity into the CAM auctions (single bidding ladder/parallel bidding ladders), while the three others are open season procedures with different allocation rules for situations where the capacity requests are above one project size but not adequate for the next bigger project size (open seasons with ex-post allocation in CAM auction/pro-rating/full demand curves).

Each design option follows the same principles to pass the economic test. The current note presents the tariff implications for incremental and new capacity and in particular discusses the economic test, the determination of the reference price and payable price for incremental and new capacity.

ACER proposes to address the tariff related incremental issues in the context of the development of the Framework Guidelines on Harmonised Tariff Structures, and puts forward a set of questions to stakeholders to answer.

2. Economic test: Validation to release new or incremental capacity

Market-driven procedures release new or incremental capacity conditional on the validation of an economic test. The economic test is showing that the investment project is financially viable considering network users’ binding commitments to purchase the new and incremental capacity on a long-term basis.

2.1 Economic test: the formula

The economic test shall be a financially based test: the value of expected future payments from shippers’ commitments shall be equal to or exceed an appropriate proportion of the forecasted investment costs.

\(^1\) Incremental capacity is defined as capacity above technically available capacity at an existing IP. New capacity refers to the creation of a new IP or creation of physical reverse flow at an existing IP where gas could previously flow in one direction only.

The economic test is formulated as follows and is passed if:

\[ PV \geq f \cdot DIC \]

Where:

\( PV \) is the Present Value of expected shipper payments (incoming cash flow)\(^3\), which is the estimated projected tariff times the capacity volume commitment, for each year where such commitment is obtained, discounted with the cost of capital to its present value.

\( DIC \) is the Deemed Investment Cost to provide the level of new capacity (outgoing cash flow). The DIC refers to the present value of the potential increase of the TSOs’ (yearly) allowed revenue, which is attributable to the investment, during the economic life of the new asset.

\( f \) is the fraction of deemed investment costs that needs to be underwritten by user commitments to pass the economic test.

Transparency should be provided to network users with regards to the economic test design and tariff setting and tariff projections in order for them to make informed bids.

### 2.2 Criteria to be considered when setting the \( f \) parameter

The fraction underwritten by the shippers “\( f \)” is a central parameter of the economic test. The level of cost-coverage to be achieved shall take into account several criteria:

- Duration of shippers’ commitment period compared to the economic life of the asset; (The longer the commitment period relative to the asset life is, the more can be underwritten by shippers, which means that a higher \( f \) parameter can be set.)

- Capacity set aside for short term bookings, which is at least 10% according to the Network Code on Capacity Allocation Mechanisms; (This results in a lower \( f \) parameter, considering that the 10% or part of it will be booked only short term.)

- Reliability of the investment costs forecasts; (Issues arise in case of underestimated investment costs, which have to be compensated with a higher \( f \)).\(^4\)

- Positive externalities can translate into a coverage of the costs of the project by other means than direct user commitments (e.g. all users of a system by RAB roll-in) leading to a lower \( f \) parameter, in particular in the following cases:
  - Improvement of competition, in terms of increase of new agents participating in the market;
  - Improvement of security of supply, in terms of diversification of supplies and routes;

\(^3\) In the GB system this is usually referred to as Net Present Value.

\(^4\) NRAs shall verify the reliability of the investment costs forecasts.
Investment useful for other points in the network and not just for the one where new capacity is developed.

In such cases NRAs shall prove the existence of these positive externalities, as part of the cost-benefit analysis performed for the project.

- Negative externalities⁵ could be included in the test either by adjusting f or DIC (negative externalities internalized included in DIC), provided that the associated costs could be covered by the expected revenues from capacity selling (incoming cash flows).

If externalities are included in the test, they have to be monetized. This could be based on the specific cost-benefit analysis as proposed by the TEN-E Regulation in its Annex V.

2.3 Handling of cost-sharing agreements and external financial support

A single economic test applies for a cross-border project, which delivers bundled capacities.

When NRAs/TSOs consider that costs, on the one hand, and benefits, on the other hand, of an investment project are disproportionate in the different systems and the deemed investment costs in one system cannot be expected to be covered by the revenues from capacity bookings, NRAs/TSOs may decide to conclude a cost-sharing agreement. This may change the cash flows expected, based on the agreement that is signed.

In case of external financial support (e.g. subsidies from the EU), the deemed investment costs should be lowered according to the financial envelope received.

3. Interaction between the economic test and the price for incremental capacity

The cost allocation methodology determines the share of the TSO’s (allowed) revenues which is to be collected from the expected sale of transmission services at entry and exit points.

The reference price for existing capacity at a given point derives from the application of the cost allocation methodology. The starting point is that this reference price also applies to incremental capacity⁶.

⁵ Examples: change in gas flow patterns potentially damaging capacity available at other points; change in gas quality, which may require investments outside the scope of the project; environmental costs (e.g. taxes, compensation measures).

⁶ In a few cases, the investment cost of incremental capacity could generate economies of scale. In such a situation, it would result in a reduction in the average cost of a unit of capacity at the IP, which could allow for a lower reference price according to certain cost allocation methodologies.
The principle of market-based investment procedures is to release new capacity only if the economic test is passed. This requires that the price to be paid is sufficient to ensure that commitments to purchase new capacity can exceed the required level of cost-coverage. In some cases, it may well be that selling all the incremental capacity at the reference price determined by the cost allocation methodology does not generate sufficient revenues to pass the economic test. These specific cases need to be addressed in a way that is compatible with the technical design used for securing network users' commitments:

3.1 Single bidding ladder

If capacity increments are offered together with existing capacity using the CAM Network Code auction algorithm (single bidding ladder), an adjustment to the reserve price of the auction is not possible. Under this technical design, the reserve price shall be the reference price as derived from the cost allocation methodology because it is uncertain whether beyond the existing capacity incremental capacity is also triggered. As a consequence, the economic test is passed only if participants bid for a sufficiently high volume of capacity at the reserve price and then maintain these high volume requests during the next auction rounds, when new price steps are introduced. This process could be successful, only if participants have a clear view on the different scenarios that validate the economic test.

3.2 Other design options (parallel bidding ladders and open season procedures)

The constraint that the reserve price shall be the reference price does not apply to parallel bidding ladders and open season procedures, because the allocation of the existing capacity follows the regular CAM NC algorithm if the economic test is not passed. For all these technical design options, it is sensible that the minimum price at which participants can request capacity should be sufficient to pass the economic test if all the incremental capacity offered is subscribed. The reasons are the following:

- For parallel bidding ladders and open seasons with demand curves, premia are unlikely to appear considering that the offer of increments will relieve the congestion.
- For open season with pro-rata or open seasons with ex-post allocation through the CAM algorithm, the outcome would be unsatisfactory if all incremental capacity offered is requested by the market but the investment is not triggered because the price for capacity was not high enough.

This means that setting an adjusted tariff level for incremental capacity may be necessary. The adjusted bidding price will follow the deemed investment costs. (the “incremental” cost of releasing capacity).

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7 The volume requests cannot be increased from one auction round to another according to the CAM algorithm.
## 4. Options for setting an adjusted tariff level for incremental capacity

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<tr>
<th>Options</th>
<th>PROS</th>
<th>CONS</th>
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<tbody>
<tr>
<td>Increasing the reference price for all capacity users at the IP</td>
<td>• Simplicity of the approach</td>
<td>• Unexpected tariff increase for users having booked LT capacity before the investment was triggered</td>
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<td>Increasing the reference price except for users who booked capacity before the investment decision</td>
<td>• “Existing” users protected from unexpected tariff increase</td>
<td>• Complexity linked to the coexistence of two reference prices (up to 14 years ahead)</td>
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<tr>
<td>Introducing a minimum premium for users participating to the incremental process</td>
<td>• “Existing” users protected from unexpected tariff increase • Simplicity as there is a single reference price</td>
<td>• Reduces the incentives to commit long-term since the reference price for future bookings will be lower than the incremental tariff</td>
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