

December 2013

Workshop on the European Energy Infrastructure Package and Nordic cross border investments

Stockholm, 9.10.2013

The NordREG Network regulation Work Group (WG) held a workshop on the European Energy Infrastructure Package and Nordic cross border investments on October 9th 2013 in the premises of the Swedish Energy Markets Inspectorate (EI) in Stockholm. Participants of the workshop included representatives of National Regulatory Authorities (NRA) and Transmission System Operators (TSO) from Denmark, Finland, Norway and Sweden. The purpose of the workshop was to find out if there are any difficulties related to cross border cost allocation (CBCA) and cost and benefit analysis (CBA) of cross-border investments in Nordic countries with regard to the economic regulation of power networks. **The workshop concluded that no major obstacles were found in the Nordic economic regulations.**

In the following are short descriptions of the presentations in the Workshop:

Matti Ilonen, EMV – Introduction

The presentation gave an overview of NordREG and the work done in NordREG Network Regulation WG. The conclusions of internal NordREG memorandum (NordREG note on common Nordic transmission investments and economic regulation of Nordic TSOs, 2011) were presented. The memorandum discussed different possible scenarios related to cross-border transmission investments in the Nordic countries.

Conclusion was that in each country the framework of economic regulation allows for the TSO to participate in investments in assets built in another country. In each Nordic country the framework of economic regulation allows also for the TSO to participate in investments in network assets built in with purpose to accommodate the power system in another country.

All TSOs can be allowed to recover costs related to investments in another country as long as the investment is deemed necessary for the national power system. The way this is done varies due to differences in the regulatory models. As such, there does not seem to be any major obstacles related to common Nordic investments in the framework of the economic regulation in any of the Nordic countries.

Potential further work could be related to handling possible situations where an asset is subject to economic regulation in two countries. The TSO representatives were interested if the NordREG had plans to do further work related to the issue. The Network Regulation WG had currently no plans on further work but will decide on this later according to the legislative development and the implementation of the European Infrastructure Package.

Arne Egil Pettersen, Statnett – Cost Benefit Analysis, Grid Development Projects

The presentation gave an overview of the CBA-method that the Entso-E will propose to the European Commission.

The CBA method should make sure that the most important projects are lifted up at the European level. Objectives: 20-20-20, guaranteeing security of supply and completing the internal energy market. The CBA methodology should be harmonized system-wide and demonstrate overall costs and benefits from a European perspective.

If there are cases where the countries agree on cost allocation, these projects shouldn't need CBA. The CBA should only be used if the countries don't agree. The Nordic TSOs are not very comfortable with this. They trust the CBA, but the input will always be subjective. Continental Europe is desperate – and it is beneficial for them if all TSOs pay for these projects.

The CBA should keep a European focus. The difficult part of the work was to get the balance right: Real costs are easy to monetize, but the socio-economic welfare and the environmental impact is more difficult. The TSOs intend to include security of supply in the calculations. It is not so easy to find a standard European methodology for CO2.

The Nordic countries have used CBA for several years. A flaw is that security of supply usually ends up at zero (0) in the analysis.

The project assessment is transformed into color codes, where green is very beneficial, and red is costly.

Morten Pindstrup, Energinet.dk - Status of Nordic Cross border project

The presentation gave an overview of the status of Nordic Cross border projects. By 2030, the Nordic TSOs expect major changes in the production of electricity in the Nordic region, i.e. development of more wind and hydropower and also a desired increase in security of supply. These changes require expansion of the overall Nordic electricity transmission network.

The Nordic TSOs have prepared a Nordic Grid Development Plan 2012 with a number of projects of interest for the entire Nordic networks listed and prioritized. There has subsequently been a few reprioritization of the plan.

Table 1. Nordic Grid Development plan 2012 contains 61 Nordic projects

Status	Number of projects
Cancelled	3
Commissioned	1
Expecting earlier commi.	2
Investment on Time	29
Rescheduled	12
Delayed	14

In October 2014, the Nordic TSOs expect to publish a new Nordic Grid development plan 2014.

A final decision on cost-sharing of project costs between the TSOs/countries, who build/own facilities, and TSOs/countries, who benefit from these facilities, is expected.

Jarno Lamponen, EMV – Work in ACER infrastructure TF

The presentation gave an overview of the work in ACER Infrastructure Task Force (TF). The goal of ACER and NRA work regarding European transmission infrastructure as well as cornerstones of regulatory involvement on EU level were discussed.

Main part of the Infrastructure TF work includes giving opinions concerning Ten-Year Network Development Plan (TYNDP), CBA-methodology and Project of Common Interest (PCI) – projects. The TF solves potential problems on financing by sharing best practices on incentives schemes and on evaluation of higher risks. Here the commission may issue guidelines. Solving potential problems on tariffs include giving advice to the European Commission concerning tariff structure. Solving the potential problem of unequal cost allocation between TSOs / member states includes developing guidance / methodology for cross border cost allocation (CBCA) for projects with cross border nature and developing a new compensation scheme based in line with the Agency recommendation on a new regulatory framework for ITC.

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, Member States and NRAs shall ensure that appropriate incentives are granted to that project. It is important for the regulator to ensure that TSOs have incentives to make necessary projects that the market consider beneficial. Potential incentives were discussed by participants of the workshop.

Göran Ek, EI – CBCA – ITC ex ante mechanism

The presentation tried to describe and explain the process for a new ITC-mechanism. This new mechanism covers the part of compensation for infrastructure, the other part covers costs for losses and loop flows. In a meshed and well interconnected national electricity systems, building new transmission lines (cross-border or within national borders) may affect neighboring systems.

A CBCA (based on benefits and costs accrued) is necessary in order to appropriately account for positive/negative effects in different TSO systems. CBCA is expected to alleviate disincentives for development of new transmission infrastructure such as free-riding. The guidance on CBCA are delivered by end of October 2013.

The current ITC infrastructure compensation mechanism should be limited to existing infrastructures and the corresponding ITC- infrastructure fund shall be phased-out.

The goal for a future mechanism for compensating cross-border flows must give the right incentives both in the short run flows of electricity and long run investments in capacity. The compensation has two parts:

- ex ante mechanism for enabling investments to cope with cross-border flows
- ex post mechanism for losses and loop-flows

Investments in a certain capacity increase in a TSO-area (country) may not be profitable on national level, but can have a positive net benefit in total when other countries (TSO - areas) are included in the calculation. These CBCA agreements would allow for an ex-ante, and a priori definitive, contribution of third countries in the financing of new infrastructures of EU relevance. The CBA methodology, currently under development by ENTSO-E will be used.

An ex-post compensation mechanism should be implemented to compensate for both the costs induced by the loop flows phenomenon and the losses induced by cross-border flows.

Maarit Uusitalo, Fingrid – TYNDP 2014 process

The presentation gave an overview of the TYNDP 2014 process. First discussed was the TYNDP 2012 package and how TYNDP will contribute to the European Union 2020 plan. TYNDP 2014 will be published by the end of 2014 and it will have a longer, 2030 horizon based on the ENTSO-E 2030 visions.

The process will include a creation of A Long Term Network Development - stakeholder group. CBA-methodology for the future TYDNP will be developed as well as improved guidelines for the 3rd party projects integration in the TYNDP.

A pan-European expert group consisting TSOs experts will be set up to perform pan-European market studies. The group will improve consistency and by utilizing different tools it will increase confidence in the results. Outputs from the pan-European studies will be used as inputs in the regional studies.

There will be an optimized projects and investments data collection process for increasing consistency, flexibility and efficiency. TYNDP is the main base for the PCI selection.

The continuous process is split in four phases: exploration phase (September 2012 to March 2013), assessment phase (March 2013 to March 2014), reports drafting phase (October 2013 to May 2014) and consultation & finalization phase (June 2014 – September 2014). Entso-E will organize workshops during the process.

Concerning TYNDP 2014 - 3rd party projects, the process described in a public procedure was released at the end of 2012 and updated with storage projects in September 2013. Public procedure is elaborated with ACER/European Commission and there is equal treatment regarding TSO projects.

ENTSO-E's market analysis consist different scenarios regarding the development of European energy infrastructure. Preliminary results of these visions were presented.

Göran Ek, EI– G-factor issue. On the harmonization of g-charges

The presentation reviewed the work on harmonization of generation charges on transmission level. Economic analysis showed that the market impact of transmission charges paid by producers is decisively impacted by the payment setup of the charges. Different levels of G-Charges on energy basis may harm European Electricity Market harmonization. The Agency (ACER) therefore recommends setting appropriate ranges of transmission charges paid by producers on energy basis.

Different levels of G-Charges on Power Basis may impact investment decisions of producers but are an important tool for internalizing costs of the transmission system. The Agency therefore recommends not setting ranges of transmission charges paid by producers on power basis. The principle for the new interpretation of regulation 838/2010 will be: harmonize energy based and liberalize power based grid charges. The harmonization work is based on Commission regulation No 838/2010. Variations in charges faced by producers of electricity for access to the transmission system should not undermine the internal market.

In the current harmonization rule (based on 838/2010) the value of the annual average transmission charges paid by producers shall be within a range of 0 to 0,5 EUR/MWh, except those applying in Denmark, Sweden, Finland, Romania Ireland, Great Britain and Northern Ireland. The value of the annual average transmission charges paid by producers in Denmark, Sweden and Finland shall be within a range of 0 to 1,2 EUR/MWh.

Annual average transmission charges paid by producers in Ireland, Great Britain and Northern Ireland shall be within a range of 0 to 2,5 EUR/MWh, and in Romania within a range of 0 to 2,0 EUR/MWh.

The work on the opinion has further developed since the workshop in the beginning of October and a proposal was published in November 25th 2013.

The proposal concerning all member states will be a restriction to zero on energy based charges with exemptions (as before) for losses, ancillary services and connection charges. New exemptions for intermittent renewables and hydro reservoir plants are proposed. For G-Charges on power basis there will be no restriction. The proposal will be working for the period from 2015-2018.

This memorandum has been written by representatives from the regulators in the Nordic countries:

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