



energiavirasto



Energimarknadsinspektionen
Swedish Energy Markets Inspectorate

Energy Authority's and Energy Markets Inspectorates statement / opinion on additional externalities relating to Aurora Line

Background

The Aurora Line is a project for a transmission line between Finland and Sweden. Once completed it will be the third AC interconnector between the countries. The interconnection project has PCI status and is on the European Commission's PCI list since 2017 (project cluster 4.10). The project is comprised of an interconnector between Finland and Sweden (PCI 4.10.1) and an internal line in Finland (PCI 4.10.2).

In September 2019 Fingrid Oyj and Affärsverket svenska kraftnät (project promoters) submitted an investment request to the Finnish Energy Authority and the Swedish Energy Markets Inspectorate (concerned NRAs) in accordance with the PCI-procedure set out in the TEN-E Regulation.

The investment request included a cost-benefit analysis (CBA) which was part of a study ("Cross-border capacity study between Finland and Sweden") conducted by the project promoters in 2016. The investment request also contained a proposal for the project's cross-border cost allocation (CBCA) agreed by the project promoters. In March 2020 each of the concerned NRAs took a favorable CBCA decision in line with the project promoters proposal.

After the CBCA-decisions the project promoters submitted a proposal in the 2020 CEF Energy call to co-finance the project with CEF-funding. This proposal was rejected, mainly due to insufficient demonstration of positive externalities relating to the project. The project promoters have referred to externalities to some extent in the CBA and investment request although concentrating to illustrate the market benefits of the project and rationalizing the cross-border cost allocation proposition. As most of the market benefits in the hosting countries arise in Finland, Fingrid Oyj is committed to cover 80% of the investment costs accruing in Sweden alongside all the investment costs accruing in Finland.

The project promoters demonstrate that as the PCI project cluster supports the energy political goals of European Union by increasing EU internal market integration, improving security of supply, and having positive impact on sustainability by supporting integration of more renewables, the project is also associated with positive externalities. To demonstrate that the project will have effects also outside the hosting countries, the project promoters have prepared a report focusing on externalities. The project promoters specify that the externalities report is a complementary document and that the information and calculations are based on the same analysis used in the original cost-benefit analysis. The report also refers to ENTSO-E's TYNDP indicators values.

Externalities

In the complementary document, the project promoters have provided information concerning the existence of positive externalities relating to the project. This has been achieved by giving numerical estimates relating to security of supply, solidarity, and innovation.

The project promoters present that PCI-project will improve security of supply not only in the Nordic region but also in the Baltic countries. The interconnection together with Finland's internal line and Fingrid's Forest Line -project will enable transmission capacity from Northern Sweden through the Finnish main grid to consumption centers not only in Southern Finland and Sweden, but also in the Baltic countries. Strengthened connection increases the nominal capacity and peak load -ratio, thus securing peak demand capacities. While at the same time the strengthened connection between Finland and Sweden will reduce the whole Baltic Sea Region's dependency from Russia in regard to peak demand. Currently a significant part of Finland's and the Baltic countries peak demand is imported from Russia. Thus, the project contributes to the Baltic Sea Region's energy integration and consequently to EU's internal market integration.

With reference to solidarity, the project promoters have raised issues relating to differences in wholesale energy market prices, impact to grid tariffs and capacities for renewable energy sources generation. Firstly, Sweden, Norway and Denmark have considerably lower electricity price than Finland, Estonia, Latvia and Lithuania and corresponding to the project promoters market model simulations the proposed interconnection will reduce these differences substantially.

The project promoters demonstrate that the price reduction in Finland and in the Baltic countries will lead to positive total consumer benefit even though there will be minor electricity price increases in Sweden, Norway, and Denmark. As already mentioned, when considering only the hosting countries of the project, the cost-benefit analysis illustrates that most of the market benefits are seen in Finland. This is the reason why Fingrid Oyj will cover most of the project costs. This will clearly cause significant pressure to increase grid tariffs in Finland but with CEF-funding this can significantly be mitigated.

The project promoters also highlight that as the Nordic countries have a very high level of RES generation, and during recent years there have been increases in wind power, thus there is a need to reinforce the nominal capacity to meet the current and future RES generation capacity.

NRA's opinion about the provided complementary information

Fingrid and Svenska kraftnät have submitted the supplementary document to the Finnish and Swedish regulatory authorities and requested an opinion on how the regulators, in addition to what has been stated in the authorities' previous decision on cross-border cost allocation, view the issue of the positive externalities related to the project by relating to security of supply, solidarity and innovation. Energy Authority and Energy Markets Inspectorate give the following opinion on the complementary information.

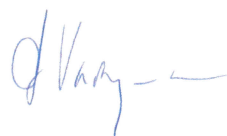
The Energy Authority and the Energy Markets Inspectorate have reviewed the submitted complementary externalities report. The NRAs recognize that the project's cost division and financing between the project promoters has been agreed on already before submitting the investment request, details highlighted from the cost-benefit analysis have concerned mainly the market benefits and justification of cost sharing, and the externalities have been illustrated in a more simplified manner.

The NRAs agree that the externalities presented in the complementary report represent benefits relating to the PCI-project. The complementary report presents positive externalities in line with the TEN-E Regulation and that the interconnection will not only benefit the Nordic region, but it will also contribute to Baltic energy market integration by improving security of supply, reducing price differentials between member states, and enabling increase to new RES generation. The proposed interconnection will also reduce import dependency from non-member state, thus strengthening EU's internal market integration.

Considering the complementary report, the NRA's shares the conclusion of the TSOs that the project will have positive externalities both in the Nordic and in the Baltic Member States in terms of enhanced competition, market integration, security of electricity supply and sustainable development, thus contributing to the objectives of European energy policy.



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