

Case No: 68427
Event No: 582802 (former 577704)
Dec. No: 488/10/COL

[non confidential version]

EFTA SURVEILLANCE AUTHORITY DECISION
of 15 December 2010
on aid to Jæren Energi AS for Høg- Jæren wind park
(Norway)

The EFTA Surveillance Authority (“the Authority”)

HAVING REGARD to the Agreement on the European Economic Area (“the EEA Agreement”), in particular to Article 61 (3) c),

HAVING REGARD to the Agreement between the EFTA States on the Establishment of a Surveillance Authority and a Court of Justice (“the Surveillance and Court Agreement”), in particular to Article 24,

HAVING REGARD to Protocol 3 to the Surveillance and Court Agreement (“Protocol 3”), in particular to Article 1(3) of Part I and Article 4(3) of Part II,

HAVING REGARD to the Authority’s guidelines on state aid for environmental protection (“the EAG”)¹,

Whereas:

I. FACTS

1 Procedure

The Norwegian authorities notified the aid to Jæren Energi AS (“Jæren”), for the establishment of the Høg- Jæren wind park, pursuant to Article 1(3) of Part I of Protocol 3 by letter of 10 June 2010 (Event No 559860).

By letter dated 29 July 2010 (Event No 560067), the Authority requested additional information from the Norwegian authorities, who replied to the information request. By letter dated 30 August 2010 (Event No 567865). On 8 October 2010 the Norwegian Authorities provided additional information concerning a change in the ownership structure of the project (Event No 572607 with further attachments).

¹ OJ L 144, 10.6.2010, p.1 and EEA Supplement No 29, 10.6.2010, p. 1, also available at: <http://www.eftasurv.int/state-aid/legal-framework/state-aid-guidelines/>.

2 Description of the notified measure

2.1 The notified project

The measure is notified as aid for renewable energy production. The aid is granted to Jæren for the establishment and operation of Høg- Jæren wind park. The wind park will be located at the west coast of Norway, south of Stavanger in the county of Rogaland. The wind park will have an installed capacity of 73.6 MW based on a total number of 32 wind turbines. The estimated annual production is 231.9 GWh.² The Høg- Jæren wind park is expected to generate a total of approximately 4 638 GWh in the course of its lifetime. Jæren intends to sell [...] % of the produced electricity on the Nord Pool spot market and [...] % via bilateral contracts to one of its shareholders, the ewz (Deutschland) GmbH.

2.2 The recipient - Jæren Energi AS (“Jæren”)

The recipient of the aid, Jæren, is a limited liability company. It is a single purpose company for the establishment of the Høg- Jæren wind park.

Originally, the company was owned by the following companies:

- 66% Eurus Energy Europe,
- 17% Norsk Vind Energi AS, and
- 17% Norsk VindPro AS.

Eurus Energy Europe is a daughter company of the Eurus Energy holdings Corporation, a Japanese company with extensive experience in the field of building and operating wind-power stations. The company is owned by Tokyo Electric Power Company (60%) and by the Toyota Tsusho Corporation (40%). It has approximately 1500 MW of installed capacity of wind-power stations worldwide.

Norsk Vind Energi AS is a Norwegian renewable energy company located in Rogaland, which has 3 employees. It is active in the field of developing wind power projects. The company identifies wind power sites and develops projects, and participates in the building and operation of wind parks. In addition the company is involved in the development of 9 other wind power projects, both domestic and internationally, with a total installed capacity of 550 MW.

Norsk VindPro is a company located in Rogaland, Norway, which is active in the field of wind energy, and which has one employee.

In April 2010, each of the two latter shareholders sold 10 percent of shares to ewz (Deutschland) GmbH, a fully-owned subsidiary of the Swiss company ewz, which is the energy provider of the city of Zürich. ewz thus now holds 20% of the shares in Jæren, whereas Norsk Vind Energi and Norsk VindPro now hold 7% each.

3 Energy production in Norway

Norwegian power companies supply electricity to the transmission or distribution network. Once delivery has been made, it is no longer possible to distinguish between supplies from different producers. In December 2008 the overall installed power capacity (including hydro, wind and thermal power) in Norway was about 30 807 MW of which 430 MW was wind power capacity based on 200 turbines.³ The wind power capacity

² In a normal operational year.

³ 95.7 % of this installed effect is hydropower.

corresponds to the electricity consumption of about 66 000 households in Norway. In 2008 the volume of overall power produced in Norway was 142 667 GWh of which 98.5% was hydro power and less than 1% wind power.

4 The Energy Fund scheme

The notified funding to Jæren is granted on the basis of the Norwegian Energy Fund scheme which was approved by the Authority Decision No 125/06/COL on 3 May 2006 on the basis of Article 61(3) c of the EEA Agreement. The Energy Fund scheme is a financing mechanism with the objective of encouraging energy saving measures and the production of environmentally sound energy.⁴ Enova SF (“Enova”) is the body established to administer the Energy Fund scheme.

Grants under the Energy Fund scheme are disbursed under programmes. The funding in the present case is granted on the basis of the Renewable Energy Programme and more specifically under the Wind Power Chapter. Enova makes calls for project proposals, at least biannually, which are announced in major national and regional newspapers in Norway.

4.1 The NPV method within the framework of the Authority’s guidelines on state aid for environmental protection (“EAG”)

In its Decision No 125/06/COL the Authority set out its interpretation of the relevant provisions in the EAG as well as its considerations underlying the approval of the Energy Fund scheme.

The EAG contains separate provisions on renewable energy production for

- (i) “investment aid” which covers investments in assets (e.g., machinery, land and equipment) and is based on identifying the investment eligible costs (either directly or on the basis of a counterfactual);⁵ and
- (ii) “operating aid” which covers operating costs such as salary, taxes, water/energy use etc.⁶

Investment aid must be deducted from operating aid.⁷ The Authority therefore reasoned that the maximum amount of aid which can be granted for renewable energy is fixed in the operating aid provision, namely section 54 of the previous EAG.⁸ On the basis of section 54 of the EAG the Authority approved the grant of state aid covering “*the difference between the production costs [initial investment costs and operating costs] and the market price [operating income].*” The requirement that operating aid may be granted until the plant has been “*fully depreciated*” was considered to be equivalent to the life time of the plant. Account was also taken of the fact that section 54 states that “*The aid may cover a fair return on capital*”.⁹

⁴ Decision of Parliament 5 April 2001: Odelstingets vedtak til lov om endringer i lov 29. juni 1990 nr. 50 om produksjon, omforming, overføring, omsetning og fordeling av energi m.m (energilova). (Besl.O.75 (2000-2001), jf. Innst.O.nr 59 (2000-2001) og Ot.prp.nr.35 (2000-2001).

⁵ A counterfactual means a conventional power plant with the same capacity in terms of the effective production of energy. Point 32 of the previous EAG and point 105 of the new EAG.

⁶ Point 54 of the previous EAG and point 109 of the new EAG.

⁷ Point 54 of the previous EAG and point 109 of the new EAG provides that “*Where aid is granted in accordance with point (a) any investment aid granted to the undertaking in question in respect of the new plant must be deducted from production costs when determining the amount of operating aid.*”

⁸ Point 54 of the previous EAG corresponds to point 109 of the new EAG.

⁹ Extracts from points 54 of the previous EAG and 109(1) of the new EAG.

The Authority considered that the provision on operating aid does, in fact, indirectly include investment costs due to the fact that operating costs can include depreciation costs for the life time of the plant.¹⁰

On the basis of those premises, the Authority accepted in its decision to calculate the maximum amount of aid on the basis of a Net Present Value (“NPV”) calculation based on a discount rate which provides a fair return on capital. Funding would then only be granted for investments in renewable energy production which would otherwise not take place, due to the fact that the energy price obtainable in the market does not cover the costs and thus makes the net present value of a renewable investment project negative.

Applicants shall calculate and submit to Enova an NPV based on a discount rate which provides a fair return. The maximum aid amount is then determined by the result of the NPV. If the NPV is negative, state aid may be granted up to the amount which is necessary to bring the NPV to zero. In order to ensure that the return on capital would be fair, the discount rate is established by external, independent experts, the Professors Gjøølberg and Johnsen. The report (recently updated in 2009) is based on the Capital Asset Pricing Model and best practice financial methodologies. The report establishes that a fair rate of return for renewable energy investments is 8%.¹¹ Enova has explained that, in practice, a discount rate lower than 8% can be accepted where the overall economic strength and capacity of the bidder ensures that there are realistic prospects that the bidder’s project is viable.

Finally, the use of the NPV method is coupled to a requirement that the discounted cash flow must remain positive which means that projects with a negative discounted cash flow are not eligible for any aid.¹² This requirement also implies that the aid amount will not exceed the total investment costs. In other words, the maximum amount of aid is limited to the total investment costs.

A project has to comply with the following criteria under the NPV method:

- The amount of aid is based on the difference between the production costs and the market price. The production costs include construction costs and operating costs.¹³ The market price is based on the six month average of three year forward contracts on Nord Pool.
- The discount rate cannot exceed the rate of return established by independent experts.
- No aid in excess of the amount necessary to trigger the project will be given. In other words, state support is only offered to the extent it brings a negative net present value to zero. A project with a net present value of zero, without aid, will not be eligible for support.
- The maximum amount of aid is limited to the total investment costs.

¹⁰ Both point 54 of the previous EAG and point 109 of the new EAG explicitly states that operating costs includes “*depreciation*” costs.

¹¹ The report further concludes that wind projects in general require a higher rate of return in comparison to investments in energy production from other renewable sources such as hydro.

¹² In addition the project generating a negative EBITDA under normal operating conditions, at the time of the investment, will not be in a position to receive aid. EBITDA is Earnings Before Interest, Taxes, Depreciation and Amortization. This comprises net cash inflow from operating activities, before working capital movements.

¹³ Financial costs, indemnity costs and other miscellaneous costs are not eligible. In this context, see eligible investment costs listed in the Commission Decision in case N 75/2002 (Finland).

- Projects generating a negative discounted cash flow under normal operating conditions (as expected at the time of the investment), will not be eligible to receive aid.

The NPV method is coupled to a tender to ensure that the amount of aid is limited to the minimum necessary.

4.2 The tender procedure

4.2.1 General explanation

In order to ensure that aid is granted only to the most efficient projects, the acceptance of the NPV method is coupled to a public tender where bidders compete on being in the least need of aid (in relation to production volume). The aid amount is determined by the result of the NPV and hence the parameters for calculating the NPV are important for winning the tender.

An important input in the NPV is the discount rate. The maximum level of the discount rate is established on the basis of independent experts' assessments.¹⁴ On this basis Enova determines and announces the maximum discount rate to be used in each tender. The lower level of the discount rate is determined by Enova depending on whether the overall financial and production capacity of the bidders ensures that the projects are still viable.¹⁵

Apart from the discount rate, important inputs in the NPV method are the price of electricity (which determines the level of the income) and the costs. The price of electricity is collected by Enova from Nord Pool, based on the six month average of three year forward contracts,¹⁶ and announced publicly a couple of weeks in advance of the time limit for submission of bids in tenders. The electricity price is therefore the same for all bidders. The project's potential of electricity production has to be verified by an independent expert and is hence independently confirmed. Finally, the construction costs are estimates based on the available market price when the bids are submitted. Enova announces what the expected lifetime of the project should be.

The winner is the bidder(s) with the highest volume of electricity produced per NOK requested as aid.¹⁷

The payment and monitoring of the funding is the responsibility of Enova on the basis of the rules laid down in the General Conditions for grants from the Energy Fund.¹⁸ Payments are made in instalments based on the actual costs of the investments. 20% of the total award is withheld until Enova has received and approved a final report on the project, which must be submitted two or three months following production start.¹⁹ The aid amount may be reduced if, on the basis of the report, it appears that actual investment costs are lower than first assumed. However, if the investment turns out to be more costly than assumed the risk is on the bidder as no additional grants are awarded by Enova.

¹⁴ See Gjølberg and Johnsen report.

¹⁵ Enova has refused discount rates as low as 1%.

¹⁶ In accordance with the NPV method approved by the Authority in Decision No 125/06/COL, see further explanations below.

¹⁷ The expected volume of electricity produced in a normal production year is divided with the amount requested as aid. This shows how many NOK of aid are spent per kWh of electricity produced.

¹⁸ The present General Conditions for the Energy Fund grants are in line with the Norwegian Government's Economic Regulations and stipulates the rights and obligations of Enova and the recipient of funding. In addition a letter of award to each recipient of funding specifies further conditions.

¹⁹ The time limit for submission of the report is stated in the letter of award.

4.2.2 *The 1st 2009 Wind Power Tender – aid to Jæren*

In 2009, Enova launched 2 tenders for wind power projects, the first of which was published on 27 February 2009. This tender resulted in the submission of ten bids of which Jæren was one (bid of 15 May 2009).

As all tenders under the Wind Power Chapter, the 1st 2009 Wind Power Tender was based on the submission by each bidder of an NPV calculation and the requested aid amount. The NPV calculation in the 1st 2009 Wind Power Tender had to be based on the following predetermined conditions:

- The price of electricity is the six month average of three year forward contracts on Nord Pool. Enova announced this to be NOK 0.34.
- The lifetime of the project is 20 years plus the construction phase.
- The discount rate in the NPV should be 8% at the maximum.

4.2.3 *The bid submitted by Jæren*

The following tables show the total investment cost of the Høg-Jæren wind park, based on estimates of the market prices at the time of the application:

Investment costs, (in million NOK)

Turbine cost	[...]
Foundation costs	[...]
Roads	[...]
Internal network	[...]
External network	[...]
Project management	[...]
Sum	[...]

Operating cost, (in NOK pr. KWh produced)

Operation and maintenance	[...]
Salary and social costs	[...]
Feed-in cost	[...]
Property tax	[...]
Rent expenditure	[...]
Other operational cost	[...]
Sum	[...]

The lifetime of the Høg-Jæren wind park is 23 years. The construction phase will last for 3 years and the Høg-Jæren wind park is expected to be fully operational producing electricity from 2012 through 2031.

In the NPV calculation, Jæren used a discount rate of 8 %. On this basis, the project had a negative net present value (NOK -435.45 million) and a negative rate of return (-0.2%) without aid. Jæren requested aid for an amount of NOK 511.6 million, which was later adjusted to NOK 511 million. Enova verified whether the requested aid amount was limited to the amount necessary to ensure a profitable project, i.e. that the NPV, based on

an internal rate of return of 8 %, resulted in zero. Enova found that the requested aid of NOK 511 million was indeed the amount necessary to ensure that an, otherwise negative, NPV based on 8 % discount rate, would come close to zero (NOK -68 823).²⁰

Enova also verified the cash flow and annual production. The Høg-Jæren wind park is set to generate a positive cash flow starting in 2012. The annual production is estimated to be 231.9 GWh for the period 2012 through 2030.²¹ The sale of electricity is expected to generate NOK 78.85 million in sales annually based on a sales price of NOK 0.34/KWh.

In June 2009 Enova selected the most cost-efficient projects measured by the NOK granted per volume of electricity produced (in KWh) (referred to as “NOK aid/efficiency ratio”) as winners of the tender.²² Of the ten projects, Enova selected the following four most efficient:

Rank	Project	Applicant	GWh ²³	Aid ²⁴	Efficiency ratio ²⁵	
1	Hundhammerfjellet	NTE		9.7	16.43	1.70
2	Høg-Jæren	Jæren Energi	231.9	511.60		2.21
3	Fakken	Troms Kraft	138.0	346.40		2.51
4	Nygårdsfjellet	Nordkraft Vind		76.1	200.10	2.63

The Høg-Jæren wind park submitted by Jæren was considered to be second efficient based on an annual production of 231.9 GWh and assuming an aid amount of NOK 511.6 million which is equivalent to NOK 2.21 of aid per KWh.

II. ASSESSMENT

1 The presence of state aid

State aid within the meaning of Article 61(1) EEA

Agreement Article 61(1) of the EEA Agreement reads as follows:

“Save as otherwise provided in this Agreement, any aid granted by EC Member States, EFTA States or through State resources in any form whatsoever which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods shall, in so far as it affects trade between Contracting Parties, be incompatible with the functioning of this Agreement.”

In its Decision No 125/06/COL, the Authority concluded that disbursements to undertakings under the Energy Fund scheme constitute state aid within the meaning of Article 61(1) of the EEA Agreement. There is nothing in the current notification to alter that conclusion:

²⁰ The calculated aid amount does not directly reflect the NPV without aid, for a given discount rate, because the aid (dispersed in several different instalments) and the cash flow of the project are discounted over different time spans.

²¹ The project is expected to generate less electricity in the start-up year (2011) and in the year of shut-down (2031).

²² The number of winners is dependent on the amount available under the tender.

²³ Expected production verified by an independent third party.

²⁴ The aid amount applied for in NOK million.

²⁵ As mentioned above, this shows how many NOK of aid are spent per KWh of electricity produced.

It is recalled that Jæren has received aid under the Wind Power Chapter of the Energy Fund. First, the funding under the Wind Power Chapter is coming from various sources controlled by the State and therefore constitutes state resources. Secondly, financial grants are awarded to undertakings which thus receive an economic advantage they would not have received in their normal course of business. Thirdly, under the Wind Power Chapter, grants are awarded to undertakings in the wind power sector and favour therefore only undertakings within this sector to the exclusion of other sectors. They are hence selective.²⁶ Finally, the grant of financial support to undertakings under this Chapter distorts competition and affects trade: The Norwegian energy producers sell electricity (i) at Nord Pool - which implies that some of the energy is exported to other EEA countries; and (ii) on the basis of bilateral contracts to customers in Norway and other EEA countries, such as Sweden or Finland.²⁷ It affects trade between the Contracting Parties to the EEA Agreement and distorts competition in the EEA because the beneficiary is active in a sector where trade between Contracting Parties takes place.

For these reasons, the funding to Jæren constitutes state aid within the meaning of Article 61(1) of the EEA Agreement.

2 Procedural requirements

Pursuant to Article 1(3) of Part I of Protocol 3, “the EFTA Surveillance Authority shall be informed, in sufficient time to enable it to submit its comments, of any plans to grant or alter aid (...). The State concerned shall not put its proposed measures into effect until the procedure has resulted in a final decision”.

The aid to Jæren is granted under the Energy Fund scheme, which was approved on the basis of the previous EAG. On 16 July 2008 the Authority adopted the new EAG. According to the new EAG, investment grants which exceed the threshold set out in 160(b)(i) of EUR 7.5 million must be individually notified.²⁸ The aid of NOK 511 million (EUR 52.7 million) to Jæren was therefore notified on the basis of Section 160(b)(i) EAG.

On 8 July 2010, the Norwegian authorities notified the aid to Jæren. The Norwegian authorities have not paid out any aid before the Authority has adopted a final decision. The Authority can therefore conclude that the obligations pursuant to Article 1(3) of Part I of Protocol 3 have been respected.

3 Compatibility of the aid

The Authority has examined the aid to Jæren under the EAG and the Energy Fund scheme. As set out above, the Authority approved in its Decision No 125/06/COL the NPV method which limits the maximum aid to the amount necessary to bring an, otherwise negative, NPV up to zero. The NPV method is coupled to a public tender where bidders compete on being the most efficient wind power project (i.e. with the lowest NOK/KWh ratio) to ensure that aid is granted only to efficient projects.

²⁶ The Energy Fund Scheme also funds other renewable energy production and energy saving measures. The EFTA Court has held that a measure may be selective even if it covers (undertakings in) an entire sector: Joined Cases E-5/04, E-6/04 and E-7/04 *Fesil and Finnffjord* [2005] EFTA Court Report p. 117, paragraph 77. This judgment confirms the case law of the European Court of Justice as laid down in Case C-75/97 *Belgium v Commission* [1999] ECR I-3671, paragraph 33. See also Case C-66/02 *Italy v Commission* [2005] ECR I-10901, paragraph 95.

²⁷ See in this respect Case 730/79 *Philip Morris v Commission* [1989] ECR p. 2671, paragraph 11, where it is stated that “When State financial aid strengthens the position of an undertaking compared with other undertakings competing in intra-Community trade the latter must be regarded as affected by that aid.”

²⁸ Point 200(ii) EAG provides that the thresholds set out in Point 160 apply as of the first day following the adoption of the EAG.

As explained above, since the grant of aid to Jæren exceeds the threshold set out in Section 160(b)(i) EAG, the project must be individually notified. Section 160(b)(i) EAG provides that the Authority has to carry out a detailed assessment under Chapter 5 of the EAG for purposes of verifying compatibility with the EEA Agreement. The detailed assessment requires a balancing of the positive and negative elements of the aid measure. As regards the positive elements, the Authority must assess whether the aid addresses a market failure, it is the appropriate instrument to achieve this objective, gives an incentive to the beneficiary and is proportionate. Secondly, the negative elements, that is, the impact of the aid on trade and competition, must be limited. Finally, it must be verified that the overall balance is positive.

The Authority notes that the detailed assessment is a “proportionate assessment”, that is, it should be proportionate to the extent to which competition is distorted in individual cases.²⁹ As will be clear from Section II.3.2 below, the distortion of competition in the present case is very limited and the following assessment is therefore based on this premise.

3.1 Positive effects of the aid

The main positive element to be taken into consideration when assessing the compatibility of the aid is that it induces undertakings to pursue environmental protection which they would not otherwise have pursued.³⁰

3.1.1 Existence of a market failure

The environmental objective of the project is twofold; to reduce production of conventional energy and to meet expected increased demand for electricity with renewable energy.

The Norwegian authorities have indicated that on average 98.5% of the electricity consumed in Norway today is generated by hydropower. A part of the total demand is still covered by conventional energy. The intention is to further increase the share of renewable energy in the Norwegian energy mix.

The Authority notes that there is a commonly acknowledged market failure consisting of undertakings acting in their own interest without incentives to take into account the costs of negative externalities (pollution) arising from their production. An essential step on the way to achieve the aim of reducing the emission of CO₂ is to increase the production of renewable energy. Investments in renewable energy production is, however, expensive compared to the investment costs of producing conventional energy. Moreover, since the sales price of electricity remains the same irrespective of whether the energy is green, renewable electricity producers cannot recuperate the extra costs of investing in green energy. Indeed, the Norwegian authorities have stated that no wind parks would be established in Norway without aid. The objective of the Energy Fund scheme is aimed at this market failure by contributing to the costs of producing greener energy in order to encourage the establishment of green energy producers.

The EAG requires that state aid is targeted at the market failure (consisting of a lack of investments in renewable energy production) by having a substantial impact on environmental protection in quantifiable terms.

²⁹ Point 164 of the EAG.

³⁰ Point 166 of the EAG.

The Authority considers that in view of the fact that the Høg-Jæren wind park will have a total capacity of about 73.6 MW (and an annual energy production of 231.9 GWh) and thereby increase energy production from renewable energy sources, the state aid to Jæren contributes to environmental protection in quantifiable terms.

Moreover, the operating costs related to the production of wind power are generally lower than that of conventional energy production (such as coal and natural gas). Because the operating costs are cheaper, wind power is well-suited to replace the production of conventional energy during those periods where electricity demand can be met by renewable energy.

For the reasons set out above, the Authority considers the aid to be targeted at the market failure consisting of the lack of investments in renewable energy.³¹

3.1.2 Appropriate instrument

In the present case, the Authority considers that state aid is the appropriate policy instrument for purposes of addressing the market failure of protecting the environment by increased production of renewable energy.

Due to the fact that 98.5 % of Norwegian power production is already environmentally friendly, restrictive regulatory requirements or standards (such as ceasing the grant of concessions to conventional power production), will not be effective for purposes of furthering the establishment of alternative renewable energy sources in the market place. Therefore, in line with other EEA States, the Norwegian authorities have considered to encourage investments in renewable energy by introducing other measures than state aid, such as green certificates. However, the Norwegian authorities have explained that such a scheme will not be adopted before 2012 at the earliest. In such circumstances the Authority accepts that positive encouraging incentives, such as state aid, are appropriate to achieve the aim of increased renewable energy production.

3.1.3 Incentive effect and necessity of aid

According to point 143 of the EAG, “(t)he Authority considers that aid does not present an incentive effect for the beneficiary in all cases in which the project has already started prior to the aid application by the beneficiary to the national authorities.” Jæren submitted its application/bid for aid to Enova on 15 May 2009, i.e. before the start-up of the construction of the Høg-Jæren wind park. Therefore, the incentive effect referred to in point 143 of the EAG is met.

Under the detailed assessment, the Authority must further assess the incentive effect and necessity of aid in accordance with points 171-173 of the EAG.

Point 171 stipulates that the aid “must result in the recipient changing its behaviour to increase the level of environmental protection”. Normally, this can be demonstrated by showing that the project realised with aid has an increased environmental benefit compared to the credible counterfactual (point 172 (a) of the EAG). The Authority notes that the reference to a counterfactual situation is linked to the method in the EAG for determining eligible investment costs. Due to the fact that the NPV method has been accepted as the basis for determining the maximum aid amount, the appropriate manner to examine the incentive effect is not a comparison with an alternative behaviour, but rather whether the use of the NPV method is evidence that Jæren would not, without the aid,

³¹ Point 167 of the EAG.

have engaged in the same activity because of its intrinsic benefits.³² Such an approach will equally show whether the aid has changed the behaviour of the recipient. This approach is indirectly expressed in point 172(g) which states that, where the project is not profitable (without the aid), aid will normally have an incentive effect.³³

The Authority notes that the NPV method consists of determining the amount required to bring an, otherwise negative, NPV up to zero. As stated in Decision No 125/06/COL, no rational investor can be expected to launch a project with a negative NPV and for this reason the NPV calculation can serve as a demonstration of the indispensability of the aid granted.

In the case of the grant to Jæren, the discount rate was 8%. Furthermore, the NPV, without the aid, based on discount rate of 8 %, was negative (NOK -435.45 million). However, the NPV, with the aid, based on a discount rate of 8%, is close to zero (NOK -68 823). The Norwegian authorities have explained that the investment strategies of the parent companies of Jæren can reasonably require a pre-tax rate of return of approximately [...] % for investments in onshore wind projects. With an IRR of 8 %, the Høg-Jæren wind park is therefore in line with the investment strategies of the parent companies of Jæren.

The Authority further considers that the expected environmental effect is linked to the change in behaviour as required by point 172(b) of the EAG: Jæren would not, without the aid, have undertaken the investment in the Høg-Jæren wind park which increases renewable energy production with about 231.9 GWh annually. Moreover, the fact that Jæren was chosen in a public tender shows that the investment in this wind park increases environmental protection to a higher degree than investments in other wind power projects. In this regard Jæren was selected as runner-up of the public tender because the Høg-Jæren wind park generates more renewable electricity per NOK of aid than other wind power projects.

In sum, with the NPV method aid is only granted where the project is not profitable. Therefore Jæren would not, without the aid, have engaged in the same activity (i.e., the Høg-Jæren wind park) because of its intrinsic benefits. Consequently, the Authority considers that the aid has the necessary incentive effect.

3.1.4 Proportionality of the aid

Point 174 of the EAG requires that the state aid amount must be limited to the minimum to bring about the investment. In making this assessment account shall be taken (i) of an accurate cost calculation (limiting the costs to the necessary); (ii) of the presence of a non-discriminatory selection process; and (iii) that the aid should not exceed the lack of profitability (including a normal return over the life time).

For reasons of simplicity, the second criteria is dealt with first. Jæren was chosen in a non-discriminatory, open and transparent selection process: The 1st 2009 Wind Power Tender is open and transparent because it was announced in major national and regional newspapers. The tender criteria, which require that all the bidders were subject to (i) the same electricity price set by Enova; (ii) confirmation of energy production volume by an independent expert; (iii) a maximum discount rate of 8%; (iv) a maximum aid amount (defined by the amount required to bring the NPV up to zero); and (v) a project lifetime of

³² Point 27 of the EAG in the chapter on “*Incentive effect and necessity of the aid*” states that “*investments which increase the level of environmental protection may at the same time increase revenues and/or decrease costs and thus be economically attractive in their own right.*”

³³ Point 172(g) of the EAG which states that where the profitability level is negative over the life time of the project (i.e. full depreciation) aid will normally have an incentive effect.

20 years (plus the construction period), are objective and non-discriminatory and applied in the same manner to all bidders.

The Norwegian authorities have provided a detailed description of the costs and their calculation. The calculation of eligible cost seems accurate. This, however, does not ensure that the costs are limited to the minimum necessary. The criterion that costs are kept to the minimum can be verified by examining the NPV method coupled to the public tender. In the same context, the question of whether the aid exceeds the lack of profitability can be answered.

As regards the requirement that the aid does not exceed the lack of profitability, this is exactly the objective of the NPV method. The calculation of the aid under the NPV method³⁴ is designed to limit the aid to the minimum necessary to trigger the project. Only aid granted to bring the NPV to zero (with a reasonable return on capital) is allowed.

Furthermore, as regards the limitation of the costs to the minimum necessary, the Authority notes that only the most efficient projects are selected in a tender procedure. The winner of the tender is selected on the basis of the lowest aid amount per KWh of electricity produced. The bidders therefore compete on being in the need of the lowest aid amount possible. The aid amount is determined by the amount required to bring a negative NPV to zero. Important parameters for the result of the NPV (and therefore also the aid amount) are income and costs. Income is composed of the electricity price and production volume. As is clear from the above, in the tender procedure, the electricity price is set by Enova. The parameters for setting the income in the NPV are therefore the same for all bidders.³⁵ Hence bidders compete in the NPV on costs, the rate of return required for the project, and the production volume.

As explained above, the maximum rate of return is 8 %. The competition on a lower level of rate of return is limited by two elements: (i) Enova will refuse a discount rate which, based on the overall financial and production capacity of the bidder, indicates that the project is not viable³⁶; and (ii) investors will not accept a discount rate which does not provide a minimum return in view of the fact they have also contributed own capital.

Costs are therefore the parameter fully open to competition. The higher the cost, the higher the aid amount. Since the winner of the tender is chosen by reference to the lowest aid amount, bidders with higher costs risk losing the bid. This serves to press the costs downwards. On this basis, costs are kept to the minimum.

In conclusion, the Authority considers that the NPV coupled to a public tender ensures both that costs are kept to a minimum and that the overall aid amount is limited to cover unprofitability. In light of this, the aid to Jæren is proportionate.

3.2 Analysis of the distortion of competition and trade

The Authority has examined the distortion of competition in light of the impact of the aid on competition and trade between undertakings in the relevant product markets.

The relevant product market is the market for electricity.

³⁴ The NPV method is based on the fact that the provisions in the EAG on operating aid for the production of energy from renewable sources fixes the upper limit for the maximum aid that can be granted.

³⁵ Or at least independently fixed.

³⁶ Enova has refused discount rates as low as 1%.

With regard to the relevant geographical market, the Høg-Jæren wind park will produce electricity for sale on the Nord Pool power exchange. The fact that the major trading pool to which Norway is connected, i.e., Nord Pool combines several national Nordic electricity markets (i.e., Danish, Swedish) could be an indication that the electricity market is wider than just the national market. However, based on the Authority's 2007 Energy Sector Inquiry,³⁷ it appears that the finding of a pan-Nordic market is not justified for three main reasons.

Firstly, the mere fact that there is congestion of interconnectors means that there are a certain number of hours during which the behaviour of a hypothetical dominant firm within a certain Nord Pool area would be insufficiently constrained by the competitive dynamics of neighbouring areas.

Secondly, the percentage of congested hours, and consequently the level of price differences, is significant between any two pairs of areas and over time. Furthermore, congestion levels and directions over time vary during the day. At night the flow of electricity tends to be from the South East to the North-West, as hydropower plants hold back their generation capacity for the more lucrative daytime hours. At the same time, less flexible south-eastern coal and nuclear power plants keep producing, even at lower night-time prices.

Thirdly, it appears that congestion can be foreseen (and might even be influenced) by market participants, and that congested periods between two areas are not a transitory but rather a recurrent theme.³⁸

Irrespective of whether there is a pan-Nordic market, the fact that the national market share of Jæren (following the investment in Høg-Jæren wind park) will be 0.17% (based on the annual overall production of 131 428.6 GWh), means that the effect on competition and trade will be minimal. Even if account is taken of the market power of the parent companies of NME, Eurus Energy Europe, Norsk Vind Energi AS, Norsk VindPro AS, and ewz (Deutschland) GmbH on the Norwegian power market, the market share of Jæren remains minimal. The effects on competition and trade are therefore very limited.

This conclusion is further confirmed by the Authority's examination of whether the aid (i) provides Jæren with a first mover advantage (i.e., crowding out); (ii) maintains an inefficient company afloat; and (iii) strengthens the market power of Jæren to an extent which is detrimental for competition. The conclusion of this examination is set out in the following.

3.2.1 *Dynamic incentives/crowding out*

The Authority considers that the aid will not crowd out investments in other EEA States or distort dynamic incentives for investing in wind power technology.³⁹ On the basis of the information provided by the Norwegian authorities, the Høg-Jæren wind park cannot be considered innovative. Jæren will invest in standard turbines (2.3 MW 93 m) which are available in the market. On this basis, the Høg-Jæren wind park does not provide Jæren with a first mover advantage.

³⁷ Energy Sector Inquiry of 10.1.2007; <http://www.eftasurv.int/?1=1&showLinkID=10775&1=1>

³⁸ See Section 3.3.3 of the Energy Sector Inquiry.

³⁹ Point 178 of the EAG.

3.2.2 *Maintaining inefficient firms afloat*

The Authority considers that the aid will not keep an inefficient firm afloat. On the basis of the information provided by the Norwegian authorities, there is no evidence that the beneficiary is in financial difficulties.

The electricity produced will be sold mainly on the Nord Pool exchange. The Norwegian market is not characterised by overcapacities and inefficient market structures.

Jæren was selected as one of the winners in the 1st 2009 Wind Power Tender. Hence, Jæren was chosen in a non-discriminatory and transparent manner. According to the EAG, the deployment of such a selection process lowers the risk that the aid artificially maintains the undertaking in the market.

3.2.3 *Market power/exclusionary behaviour*

The Authority considers that the aid will not significantly strengthen or maintain market power of Jæren.⁴⁰

On the Norwegian market relatively small players will not realistically be able to dictate nor substantially influence prices. The national market power of Jæren is less than 1 % (0.17 %) and hence the structure of the market for electricity production is not likely to be altered by the grant of aid to Jæren. By comparison, the largest operator, Statkraft Energi AS, has a market share of 37.66% owning facilities with a total capacity of 12 351 MW producing an annual 49 496 GWh.

3.2.4 *Effects on trade and location*

The Authority considers that the aid will not have a significant effect on trade and location.⁴¹ The aid is only granted to one beneficiary. 80% of the electricity generated are intended to be sold at the Nord Pool power exchange at spot price. Because of this, the Authority considers unlikely that the aid will attract more investments in the region where Jæren is located.

3.3 **Balancing**

On the basis of the above, the Authority considers that the positive effects of the aid to Jæren, namely the fact that the aid is aimed at increasing renewable energy production, outweigh the limited negative potential impact which the aid might have on competition and trade.

3.4 **Adjustment of aid amount**

The Authority draws the attention to the fact that the Norwegian authorities have, in their notification, made reference to the “extra costs” method set forth in the EAG. The extra costs method provides that eligible costs shall be calculated by reference to a counterfactual. On this basis an aid intensity of 60% is permitted. The Norwegian authorities have stated that based on the extra costs method the aid amount of NOK 511 million to Jæren represents [...] % of total investment costs.

However, as pointed out above the Authority has approved the Energy Fund Scheme on the basis of the premise that disbursements of aid are calculated on the basis of the NPV method coupled to a public tender. The Authority considers therefore that a calculation of the eligible costs and aid intensity by reference to the extra costs method is irrelevant for

⁴⁰ Points 181-182 of the EAG.

⁴¹ Points 183-185 of the EAG.

the present purposes. In any event, the Authority notes that the calculation of [...] % in the notification is based on a premise that there is no counterfactual - which is not in line with the wording of the EAG.

Furthermore, the Authority notes that in case the investment costs turns out to be lower than initially estimated (when first calculating the NPV) Enova can adjust the aid amount by withholding up to 20% of the total award. Such adjustments are assumed to be made on the basis of the NPV method. Hence final calculations and adjustments made in the aid amount are to be based on the NPV method and references to the aid intensity expressed as a share solely of the investment costs are not relevant.

4 Conclusion

On the basis of the foregoing assessment, the Authority considers that the aid to Jæren for Høg-Jæren wind park which the Norwegian authorities are planning to implement is compatible with the functioning of the EEA Agreement within the meaning of Article 61 of the EEA Agreement.

HAS ADOPTED THIS DECISION:

Article 1

The EFTA Surveillance Authority raises no objections to the aid to Jæren Energi AS for the establishment of the Høg-Jæren wind park amounting to NOK 511 million because it is compatible with the EEA Agreement within the meaning of its Article 61(3)(c).

Article 2

The implementation of the measure is authorised accordingly.

Article 3

This Decision is addressed to the Kingdom of Norway.

Article 4

Only the English language version of this decision is authentic.

Decision made in Brussels, on 15 December 2010.

For the EFTA Surveillance Authority

Per Sanderud
President

Sverrir Haukur Gunnlaugsson
College Member