[Non confidential version]

EFTA SURVEILLANCE AUTHORITY DECISION
of 6 April 2011
on state aid to Midtfjellet Vindkraft AS for the Midtfjellet 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,

Whereas:

I. FACTS

1. Procedure

The Norwegian authorities notified a proposal to grant state aid to Midtfjellet Vindkraft AS ("MVK"), for the establishment of the Midtfjellet wind park, pursuant to Article 1(3) of Part I of Protocol 3 by letter of 8 February 2011 (Event No 584904). In addition, there has been informal electronic correspondence throughout the procedure.

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 MVK for the establishment and operation of Midtfjellet wind park. The wind park will be located in the municipality of Fitjar in Hordaland County.

The wind park will have an installed capacity of 52.5 MW ([…]). The estimated annual production is 165.8 GWh.[1] Midtfjellet wind park is expected to generate a total of approximately 3,316 GWh in the course of its lifetime. The energy produced is intended to be sold on the spot market at the Nord Pool power exchange. MVK furthermore does not exclude the option of selling the energy via bilateral over the counter ("OTC") contracts.

2.2. The recipient - Midtfjellet Vindkraft AS ("MVK")

The recipient of the aid, MVK, is a limited liability company. MVK is a single purpose company created for the purpose of establishing and operating the Midtfjellet wind park.

MVK has to date been 100% financed by its owners, DONG Energy (50%) and Fitjar Kraftlag (50%). In a signed shareholder agreement between DONG Energy and Fitjar Kraftlag it has been agreed that in the future the proportion of shares will change, with Fitjar Kraftlag owning between 20 and 33.4% of MVK, while DONG Energy will hold the remainder, between 66.6 and 80% of the company.

2.2.1. Fitjar Kraftlag SA

Fitjar Kraftlag is a co-operative which is 90% owned by individuals and 10% owned by the municipality of Fitjar. It is a locally based power company in the community of Fitjar, located on the island of Stord, Norway.

Fitjar Kraftlag's focus is on regional hydropower production, on local electrical power distribution, and sales of electrical energy. The company also supplies high speed communication (FTH – fibre to the home) to local private and industrial customers. It owns and operates 2 local mini hydropower stations, has a 3.4% ownership in the hydropower production company Sunnhordland Kraftlag AS, and has a strategic goal to be directly involved in all local energy projects concerning renewable resources.

2.2.2. DONG Energy Power A/S:

DONG Energy Power A/S is part of DONG Energy A/S, a Danish-based energy company whose principal shareholder is the Danish State. DONG Energy Power's core activity is production of power and heat. Existing production takes place at thermal power stations in Denmark and from wind farms in Denmark, the UK, Poland, Norway, Sweden and France - with wind farms accounting for a rapidly growing proportion of DONG Energy Power's generating capacity. As of August 2010 DONG Energy Power has a total wind power production capacity of 1,096 MW and an additional capacity of 1,076 MW under construction.

DONG Energy Power's strategic focus in wind power in Norway has been on greenfield development, working together with Norwegian energy companies. DONG Energy Power is engaged in partnerships with Nordkraft Produksjon AS in the project company Nordkraft Vind AS, with Fitjar Kraftlag SA in the project company Midtfjellet Vindkraft AS, and with Østfold Energi AS, Vardar AS, and EB Kraftproduksjon AS in the two project companies Zephyr AS and Kvalheim Kraft DA. In Norway, DONG Energy Power owns, through Kvalheim Kraft DA, 33.3% of the operational wind farms Mehuken I (4.3 MW) and Mehuken II (18.4 MW); and, through Nordkraft Vind AS, owns 50% of the operational wind farm Nygårdsfjellet I (6.9 MW) and 50% of Nygårdsfjell II (25.3 MW), which is under construction.

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[1] In a normal operational year.

In addition to the wind power activities in Norway, DONG Energy Power operates the 280 MW Mongstad gas-fired power and heat generation station in Norway. For the Mongstad station, DONG Energy has a long-term tolling agreement with Statoil through which the former builds and operates the power station while the latter supplies the fuel and takes off the output from the station.

3. Energy production in Norway

Norwegian power companies supply electricity to the transmission or distribution network. Once delivery of the electricity has been completed, it is not possible to distinguish between supplies from different producers. However it is known that in December 2008, of the overall installed power capacity (including hydro, wind and thermal power) in Norway of approximately 30,807 MW, 430 MW was generated from wind power capacity (based on 200 turbines).[2] The wind power capacity 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 proposed funding to MVK is to be granted under the Norwegian Energy Fund scheme, which was approved by the Authority Decision No 125/06/COL on 3 May 2006[3] 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 scheme.

Grants under the Energy Fund scheme are disbursed through programmes. The funding in the present case is granted under the Renewable Energy Programme and more specifically under the Wind Power Chapter of it. 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

In its Decision No 125/06/COL concerning the Energy Fund scheme the Authority set out its interpretation of the relevant provisions in its guidelines on state aid for environmental protection ("the EAG") [5] as well as its reasons for approving of the Energy Fund scheme.

The EAG contain separate provisions on renewable energy production for:

(i) "investment aid" based on identifying the investment eligible costs (either directly or on the basis of a counterfactual);[6] and

(ii) "operating aid"[7]

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[2]   95.7 % of this installed effect is hydropower.

[3]   As amended by the Authority's Decision No 486/10/COL of 15.12.2010 on the prolongation of the Norwegian Energy Fund scheme.

[4]   Decision of Parliament 5.4.2001: Odelstingets vedtak til lov om endringar 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]   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/.

[6]   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.

Point 54 of the EAG in force at the time the Decision was taken and point 109, option 1 (a) of the new EAG provide that *"EFTA States may grant operating aid to compensate for the difference between the cost of producing energy from renewable sources, including depreciation of extra investments for environmental protection, and the market price of the form of energy concerned. Operating aid may then be granted until the plant has been fully depreciated according to normal accounting rules."* Point 54 of the previous EAG and point 109, option 1 (b) of the new EAG also provide 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."* 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 point 54 of the EAG applicable at the time.[8] On the basis of point 54 of the EAG, therefore, 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 lifetime of the plant. Account was also taken of the fact that point 54 states that *"The aid may cover a fair return on capital"*.[9]

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 lifetime of the plant.[10]

On the basis of those premises, the Authority accepted in its decision that the maximum amount of aid could be based on a Net Present Value ("NPV") calculation derived from 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 must calculate and submit to Enova a NPV calculation 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, 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 is fair, the discount rate is established by external, independent experts, the Professors Gjølberg 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 with 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

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[7] Point 54 of the previous EAG and point 109 of the new EAG.

[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.

[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,

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. 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 that 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.

- 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.

A tender process is also required, which along with the NPV method, should 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 with a public tender where bids are assessed on the amount of aid they require (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.[13] 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.[14]

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,[15] and announced publicly two 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 must be verified by an independent expert and is hence

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Depreciation and Amortization. This comprises net cash inflow from operating activities, before working capital movements.

[13] See Gjølberg and Johnsen report.

[14] Enova has refused discount rates as low as 1%.

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

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.[16]

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.[17] 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 commencement of production.[18] 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 falls on the bidder as no additional grants are awarded by Enova.

4.2.2. The 2nd 2009 Wind Power Tender – aid to MVK

In 2009, Enova launched two tenders for wind power projects, one of which was published on 29 November 2009. The deadline for application was 29 January 2010. This tender resulted in the submission of seven bids, of which MVK was one[19].

As all tenders under the Wind Power Chapter, the 2nd 2009 Wind Power Tender was based on the submission by each bidder of a NPV calculation and the requested aid amount. The NPV calculation in the 2nd 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 0,35.

- The lifetime of the project is 20 years plus the construction phase.

- A discount rate in the NPV of a maximum of 8%.

4.2.3. The bid submitted by MVK

The following table shows the total investment cost of the Midtfjellet wind park, based on estimates of the market prices at the time of the application, as put forward in the revised version:

Investment costs (in million NOK)

Turbine cost	[…]
Foundation costs	[…]
Roads and quay structures	[…]
Internal network	[…]

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[16] The expected volume of electricity produced in a normal production year is divided with the amount requested as aid. This shows how many NOKs of aid are spent per KWh of electricity produced.

[17] 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.

[18] The time limit for submission of the report is stated in the letter of award.

[19] MVK originally presented a bid for a total electricity production of 313.7 GWh and requested NOK 654.2 million of aid.

External network	[…]
Land acquisition	[…]
Project management	[…]
Total	[…]

Operating cost (in NOK pr. KWh produced)

Operation and maintenance	[…][20]
Salary and social costs	[…][21]
Feed in costs	[…][22]
Property tax	[…][23]
Annual compensations	[…]
Other operational cost	[…]
Total	[…]

The lifetime of the Midtfjellet wind park is 20 years. The construction phase will last for two years and the Midtfjellet wind park is expected to be operational from 2012 until 2032.

In the NPV calculation, MVK used a lower discount rate than 8 %, specifically […]%. On this basis the project had a negative net present value and a negative rate of return […]without aid. MVK requested NOK 346.5 million of aid. 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 a […]% discount rate, resulted in zero. Enova found that the requested aid of NOK 346.5 million was indeed the amount necessary to ensure that an, otherwise negative, NPV based on […]% discount rate, would amount to zero.

Enova also verified the cash flow and annual production. The Midtfjellet wind park is set to generate a positive cash flow starting in 2013. The annual production is estimated to be 166 GWh for the period from 2013 to 2031.[24] The sale of electricity is expected to generate NOK 58.03 million in sales annually based on a sales price of NOK 0.35/KWh.

On 30 April 2010, 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.[25] Of the seven projects, Enova selected the first three of the following projects:

Rank	Project	Applicant	GWh[26]	Aid[27]	Efficiency ratio[28]

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[20] During the production years 1-5 the wind turbine manufacturer operates and maintains the wind turbines. The service agreement is not split into maintenance costs and wages, which means that during this period a large part of the maintenance costs are wages to the wind turbine manufacturer service personnel. From year six of operation, the owner will take over the operation of the wind park, and the costs will be split between maintenance and wages.

[21] See footnote 22.

[22] Based on Statsnetts tariffs.

[23] Annual property tax is set by Fitjar municipality at 0.7% throughout the period.

[24] The project is expected to generate less electricity in the start-up year (2012) and in the year of shut-down (2032).

[25] The number of winners is dependent on the amount available under the tender.

[26] Expected production verified by an independent third party.

[27] The aid amount applied for in NOK million.

1	Lista	Norsk Miljø Energi	206.6	388.0	1.88
2	Havøygavlen	Arctic Wind AS	8.2	15.5	1.89
3	Ytre Vikna	Sarepta Vindkraft AS	110.1	228.0	2.07
4	Midtfjellet	Midtfjellet Vindkraft AS	313.7	654.2	2.09

The Midtfjellet wind park was considered to be the fourth most efficient based on an annual production of 313.7 GWh and assuming an aid amount of NOK 654.2 million which is equivalent to NOK 2.09 of aid per KWh.

In April 2010, the board of Enova decided to grant aid to the three projects with the highest volume of electricity produced per NOK requested as aid; Lista, Havøygavlen and Ytre Vikna. The three projects together received aid to an amount corresponding to NOK 632 million (of a total budget limit of NOK 1,000 million). The fourth project had requested more aid than funds available under the Enova programme and was therefore refused.

However, in the Revised Enova Budget for 2010, it was proposed to use the rest of the available funds (i.e. NOK 350 million) to aid the development of wind power. Enova therefore suggested that aid be granted to the next project on the list from the latest tender, i.e. Midtfjellet wind park, with the amount available.

On this basis, MVK downscaled the original project size to make it a viable project with a maximum aid amount of NOK 350 million, while keeping the original efficiency ratio. To meet these conditions, MVK reduced the scale of Midtfjellet wind park from 44 to 21 windmills, which will produce 165.8 GWh annually, thus reducing the amount of aid needed to NOK 346.5 million, while keeping the efficiency ratio at 2.09 kr/kWh.

On those terms ba, the board of Enova decided on 25th October 2010 to grant aid of NOK 346.5 million to MVK to construct the Midtfjellet wind park.

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.

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[28] As mentioned above, this shows how many NOKs of aid are spent per KWh of electricity produced.

It is recalled that MVK has received aid under the Wind Power Chapter of the Energy Fund. Firstly, the funding under the Wind Power Chapter comes 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.[29] 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) through bilateral contracts to customers in Norway and other EEA countries, such as Sweden or Finland.[30] The aid therefore 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 MVK 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 MVK 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.[31] The aid of NOK 346.5 million (EUR 42.11 million) to MVK was therefore notified on the basis of Section 160(b)(i) EAG.

On 8 February 2011, the Norwegian authorities notified the aid to MVK. 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 MVK under the EAG and the Energy Fund scheme. As set out above, in its Decision No 125/06/COL the Authority approved the NPV method which limits the maximum aid to the amount necessary to bring a, otherwise negative, NPV up to zero. The NPV method is coupled with a public tender where bidders

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[29] 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 Finnfjord* [2005] EFTA Court Report p. 117, point 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, point 33. See also Case C-66/02 *Italy* v *Commission* [2005] ECR I-10901, point 95.

[30] See in this respect Case 730/79 *Philip Morris* v *Commission* [1989] ECR p. 2671, point 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.*"

[31] 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.

compete to be the most efficient wind power project (i.e. with the lowest NOK/KWh ratio) to ensure that aid is granted only to efficient projects.

As explained above, since the grant of aid to MVK 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 the 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, 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.[32] 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.[33]

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 the hydropower produced in Norway can meet 98.5% of the current Norwegian demand. In practice a part of the demand is covered by conventional energy and other renewable energies than hydropower. Moreover, Norway exports energy to other Nordic countries. The other Nordic countries rely on conventional power to a greater extent than Norway. The intention is to further increase the share of renewable energy in the Nordic energy mix.

The Authority notes that undertakings acting in their own interest without incentives to take into account the costs of negative externalities (pollution) arising from their production is a commonly acknowledged market failure. An essential step on the way to achieving the aim of reducing the emission of CO_2 is to increase the production of renewable energy. Investments in renewable energy production are, 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 correcting this market failure by contributing to the costs of producing greener energy in order to encourage the establishment of green energy producers.

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[32] Point 164 of the EAG.
[33] Point 166 of the EAG.

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

The Authority considers that in view of the fact that the Midtfjellet wind park will have a total capacity of approximately 52.5 MW (and annual energy production of 165.8 GWh) and will thereby increase energy production from renewable energy sources, the state aid to MVK contributes to environmental protection in quantifiable terms.

Moreover, the operating costs related to the production of wind power are generally lower than those 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 to the market failure.[34]

3.1.2. Appropriate instrument

In the present case, the Authority considers that state aid is the appropriate policy instrument for the 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 the 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 encouraging 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." MVK submitted its application/bid for aid to Enova on 29 January 2010, i.e. before the commencement of the construction of the Midtfjellet 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 point 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

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[34] Point 167 of the EAG.

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 MVK would not, without the aid, have engaged in the same activity because of its intrinsic benefits.[35] 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.[36]

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 MVK, the discount rate was […]%, thus below the maximum of 8%. Furthermore, the NPV, without the aid based on a discount rate of […]% is negative. However, the NPV, with the aid based on a discount rate of […]%, is zero. The Norwegian authorities have explained that the investment strategies of the parent company, Fitjar Kraftlag SA, require a pre-tax rate of return between […] and […]% for investments in the Midtfjellet wind project. For Fitjar Kraftlag the initial internal rate of return in this project is too low, however, the ambition is through the tender process and negotiation power to decrease CAPEX and increase the internal rate before taking investment decision.

The Norwegian authorities have explained that the investment strategies of the parent company, DONG Energy Power A/S, require a pre-tax rate of return between […] and […]% for investments in Norwegian onshore wind projects. For DONG Energy Power A/S the initial internal rate of return in this project is too low. Wind power is not yet a commercial technology and all of DONG Energy Power's wind farms in generation or under construction in Norway or elsewhere have only been realised due to subsidies of some sort.

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: MVK would not, without the aid, have undertaken the investment in the Midtfjellet wind park which increases renewable energy production by around 165.8 GWh annually. Moreover, the fact that MVK 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 MVK was selected as a winner of the public tender because the Midtfjellet wind park is in need of less aid (in NOK) per KWh generated than other wind power projects.

To summarise, under the NPV method aid is only granted where the project is not profitable. Therefore MVK would not, without the aid, have engaged in the same activity (i.e., the Midtfjellet wind park) because of its intrinsic benefits. Consequently, the Authority considers that the aid has the necessary incentive effect.

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[35] 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.*"

[36] 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.

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. MVK was chosen in a non-discriminatory, open and transparent selection process: the 2nd 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 20 years (plus the construction period), are objective and non-discriminatory and applied in the same manner to all bidders. The Midtfjellet wind project was initially not among the selected ones, and was included only after downsizing of the project to fit the budget limits of the 2nd 2009 Wind Power Tender, while maintaining the original efficiency ratio. However, this does not change the fact that MVK participated in the tender and was selected on the same parameters as the others; the project was downsized in order to fit within the budget constraints of Enova. In this particular case, the Authority is of the opinion that this will not affect the assessment of the aid to the project.

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 with 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 method[37] 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.[38] Hence bidders can only compete in the NPV method on costs and the rate of return required for the project. In the case of Midtfjellet wind park, the owners, MVK, limited the requested return on capital to […]%.

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[37] 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.

[38] Or at least independently fixed.

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 viable[39]; 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 MVK 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 undertaking in the relevant product markets.

The relevant product market is the market for electricity.

With regard to the relevant geographical market, the Midtfjellet 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, it appears that the finding of a pan-Nordic market is not justified for three main reasons.[40]

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.[41]

Irrespective of whether there is a pan-Nordic market, the fact that the national market share of MVK (following the investment in Midtfjellet wind park) will be 0.13% (based on the annual overall production of approximately 131,420 GWh), means that the effect on competition and trade will be minimal. The effects on competition and trade are

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[39] Enova has refused discount rates as low as 1%.
[40] Energy Sector Inquiry of 10.1.2007; http://www.eftasurv.int/?1=1&showLinkID=10775&1=1
[41] See Section 3.3.3 of the Energy Sector Inquiry.

therefore very limited. DONG Energy also owns an important share in other renewable energy projects in Norway, in particular Kvalheim (with a market share 0.04%) and Nordkraft (with a market share 0.04%). Nonetheless, the overall market share of the company is not of a size to have any significant effect on trade.

This conclusion is further confirmed by the Authority's examination of whether the aid (i) provides MVK with a first mover advantage (i.e. crowding out); (ii) maintains an inefficient company afloat; and (iii) strengthens the market power of MVK to an extent which is detrimental to competition; and (iv) the effects on trade and location. The conclusion of this examination follows below.

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.[42] On the basis of the information provided by the Norwegian authorities, the Midtfjellet wind park cannot be considered innovative. MVK will invest in […] turbines which are available in the market. On this basis, the Midtfjellet wind park does not provide MVK with a first mover advantage.

3.2.2. Maintaining inefficient firms afloat

The Authority considers that the aid will not keep an inefficient firm afloat. Enova has examined the financial statements of MVK for the last five years to ensure that the undertaking is not experiencing financial difficulties. 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 on the Nord Pool exchange. The Norwegian market is not characterised by overcapacities or inefficient market structures.

MVK 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 MVK.[43]

On the Norwegian market, relatively small players will not realistically be able to dictate nor substantially influence prices. The national market power of MVK is less than 1 % and hence the structure of the market for electricity production is not likely to be altered by the grant of aid to MVK. By comparison, the largest operator, Statskraft 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.[44] The aid is only granted to one beneficiary. The electricity generated is mostly intended to be sold at the Nord Pool power exchange at spot price. Because of this, the

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[42] Point 178 of the EAG.
[43] Points 181-182 of the EAG.
[44] Points 183-185 of the EAG.

Authority considers it unlikely that the aid will attract more investments in the region where MVK is located.

3.3. Balancing

On the basis of the above, the Authority considers that the positive effects of the aid to MVK, 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. Other

The Authority draws the attention to the fact that the Norwegian authorities have, in their notification, made reference to the "extra costs" method set out 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. In the notification it would appear that the Norwegian authorities also based their analysis on the extra costs method, stating that the aid amount of NOK 346.5 million to MVK 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 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 and total net present value of investment and operational cost - which is not in line with the wording of the EAG.

In addition, in case the investment costs turn 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 not by reference to an extra cost method based on a no counterfactual.

4. Conclusion

On the basis of the foregoing assessment, the Authority considers that the aid to MVK for Midtfjellet 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 Midtfjellet Vindkraft AS for the establishment of the Midtfjellet wind park amounting to NOK 346.5 million as 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 6 April 2011.

For the EFTA Surveillance Authority

Per Sanderud   Sverrir Haukur Gunnlaugsson
President   *College Member*