

EUROPEAN COMMISSION

Brussels, 06.11.2014 C(2014) 8385 final

In the published version of this decision, some information has been omitted, pursuant to articles 24 and 25 of Council Regulation (EC) No 659/1999 of 22 March 1999 laying down detailed rules for the application of Article 93 of the EC Treaty, concerning non-disclosure of information covered by professional secrecy. The omissions are shown thus [...]. PUBLIC VERSION

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<u>Subject:</u> State aid SA.38428 (2014/N) – FI – Finnish offshore wind farm demonstration project.

The European Commission wishes to inform Finland that, having examined the information supplied by your authorities on the matter referred to above, it has decided to raise no objections to the notified aid measure.

I. PROCEDURE

1. Following pre-notification contacts, by electronic notification of 16 October 2014, Finland notified, pursuant to Article 108(3) of the Treaty on the Functioning of the European Union (hereinafter referred to as TFEU), the financing of an offshore wind power demonstration project in Finland.

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II. DESCRIPTION OF THE MEASURE

Background and objectives of the notified project

- 2. The notified project will demonstrate the construction and operation of an offshore wind farm in Finnish arctic conditions. The intention is to gain useful experience and knowhow from a demonstration project in extreme conditions (including, e.g., low air temperatures with high moisture content and frozen sea during winter).
- 3. According to the Finnish authorities, the National Energy and Climate Strategy requires more extensive implementation of offshore wind energy in order to generate nine terawatt-hours of wind energy by 2025. The Finnish National Renewable Action Plan does not envisage significant deployment of offshore wind power to reach the 2020 European targets.
- 4. The Finnish authorities will provide EUR 20 million of investment aid as well as operational aid in the form of a feed-in premium on the amount of generated electricity to the planned offshore wind farm.
- 5. The Finnish authorities have stressed that the project risks are considerable compared to offshore wind farms in other climate zones including, for example, the effect of ice and lower temperatures.

Beneficiaries

- 6. The beneficiary will be selected in an open and competitive tendering procedure. The procedures were launched on 27 June 2013, and the deadline for applications was 30 September 2013. In total 5 companies submitted 6 applications. All 6 bids passed the preselection stages and continued to the second selection stage.
- 7. The 5 companies participating in the tender are independent entities with multiple shareholders. Ownership structure of the 5 companies is shown in Table 1.

Table 1: Ownership structure of the	5 companies participating in the tende	er (source: Finnish authorities).

Company	Shareholders	
	Main shareholders (>10 % share)	Other shareholders (<10 % share)
Rajakiiri Oy	EPV Energia Oy (60,2 %), Oy Katternö Kraft Ab (19,9 %), Outokumpu Oyj (18,71 %).	Rautaruukki Oyj (1,19 %)
Propel Voima Oy AND Lumituuli Oy	Vakka-Suomen Voima Oy (35 %), Rauman Energia Oy (20 %), Keravan Energia Oy (15 %), Etelä-Savon Energia Oy (15 %), Oulun Seudun Sähkö (15 %).	Company has more than one thousand shareholders: private citizens, companies, societies and Lumijoki community
Innopower Oy (2 projects)	Kymppivoima Oy (32,81 %), City of Oulu (18,37 %), Suomen Voima Oy (11,82 %).	EPV Energia Oy (9,78 %), Haukiputaan Sähköosuuskunta (< 10 %), Iin Energia Oy (< 10 %), Kemin Energia Oy (< 10 %), Kemira Oyj (< 10 %), City of Kokkola (< 10 %), Metsä Board Oyj (< 10 %), Myllykoski Oyj (< 10 %), Oy Perhonjoki Ab (< 10 %), City of Pori (< 10 %), City of Pori (< 10 %), Rantakairan Sähkö Oy (< 10 %), UPM-Kymmene Oyj (< 10 %), Vantaan Energia (< 10 %), Yli-Iin Sähkö Oy (< 10 %).
Mervento Oy	VNT Management Oy (33,44 %), Mutual Pension Insurance Company Varma (19,62%), Vaasan Sähkö (12,74 %), Martti Ala-Vainio (10,09 %).	AC Cleantech Growth Fund I Holding AB (7,57 %), EPV Energia Oy (7,56 %), Patrik Holm (4,14 %), Soldino Oy (3,64 %), Company's own personnel (1,20 %).
Suomen Merituuli Oy	EPV Energia Oy (50 %), Helsingin Energia (50 %).	
Suomen Hyötytuuli Oy	Helsingin Energia (12,5 %), Jyväskylän Energia Oy (12,5 %), Lahti Energia Oy (12,5 %), Lappeenrannan Energia Oy (12,5 %), Pori Energia Oy (12,5 %), Tampereen sähkölaitos (12,5 %), Turku Energia Oy (12,5 %), Vantaan Energia Oy (12,5 %)	

- 8. The applications will be assessed on the basis of published criteria evaluating the construction, use and maintenance of offshore wind power designed for use in Finnish conditions and the financial and overall viability of the project. Evaluation criteria include:
 - impacts of the project on the commercialisation of new technologies relevant to offshore wind power and promoting their introduction;
 - significance of the new technology contained in the project for promoting offshore wind power in Finland;
 - possibilities of commercialising a new technology contained in the project;
 - replicability of the project in Finnish sea and wind conditions;
 - possibilities of sharing the experiences and expertise gained through the project;
 - cost-effectiveness of the project;
 - volume of wind power generated by the project;
 - acceptable risk level related to project funding and the applicants;
 - financial and operational capabilities for implementing the project;
 - implementation schedule of the project.
- 9. The Finnish authorities expect to select the beneficiary towards the end of 2014.

Budget, aid intensity and duration

- 10. The amount of EUR 20 million was earmarked in the 2014 national budget for the investment aid to the demonstration offshore wind power project.
- 11. The project will also be granted a feed-in premium for a maximum of 12 years. The feedin premium will be calculated every three months. The calculation of the feed-in premium is based on the amount of generated electricity and the difference between the target price of 83.5 EUR/MWh and the average spot price of electricity during those three months.
- 12. The projects submitted in the tender procedure differ from each other regarding their technology, profitability, production capacity, location and distance to the shore. The installation eligible for the support must be entirely new. To be eligible for the feed-in premium the minimum capacity of the installation is 500 kVA (~0.5 MW). No other capacity requirements exist. The size of the installation (measured in terms of the generation capacity installed) is one of the evaluation criteria of the tender.
- 13. The maximum amount of generated electricity during the 12 years period for which the feed-in premium can be paid will be defined with an administrative decision. In order to avoid overcompensation, the Finnish authorities will define a maximum amount of electricity to be subsidised. No feed-in premium will be paid to the generated electricity that exceeds this maximum amount.

- 14. In case the electricity market price falls below EUR 30/MWh, the feed-in premium will be reduced and no subsidy will be paid in case of negative electricity prices. The beneficiary will be subject to standard balancing responsibilities.
- 15. The beneficiary will have to sell its electricity on the market and the electricity will be measured through metering of a network operator. The beneficiary will thus receive income from such sales. In case the electricity cannot be sold to the market, no aid will be granted.
- 16. Based on a preliminary analysis of the applications received, the Finnish authorities confirm that in any event the internal rate of return (IRR) for the project will not exceed 11%. The IRR was calculated taking into account both the investment aid and the feed-in premium.
- 17. Since the beneficiary will be selected only towards the end of 2014, it is not possible to calculate exactly the aid intensity of the investment aid.

National regulatory framework

- 18. For the investment aid, the legal bases are the Act on Discretionary Government Transfers (688/2001) and the Government Decree on General Terms of Granting Energy Support (1063/2012). The granting authority of the investment aid is the Ministry of Employment and the Economy.
- 19. For the feed-in premium, the legal basis is the Act on Production Support for Electricity Produced from Renewable Energy Sources (1396/2010). An amendment to the act is underway with the aim of taking into account demonstration projects for offshore wind power. The feed-in premium is administrated by the Energy Authority, while the Ministry is responsible for general guidance, monitoring and development of the aid scheme.
- 20. The Finnish authorities confirmed that the measure will be financed from the State budget.

III. ASSESSMENT

Presence of state aid

21. Article 107 (1) TFEU provides that "any aid granted by a Member State 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 Member States, be incompatible with the common market".

Aid granted by a Member State or through State resources

22. The beneficiary will receive support from the Finnish government for generating electricity. The notified measure favour the generation of electricity from the offshore wind installation operated by the selected beneficiary. Electricity is widely traded between Member States and therefore the notified measure is likely to distort the competition on

the electricity market and affect trade between the Member States. Therefore the notified measures constitute State aid in the meaning of Article 107 TFEU.

Legality

23. The final decision on the project is expected towards the end of 2014. Therefore, the Finnish authorities have not put the aid measure into effect before a final Commission decision. Thus, Finland has complied with the stand-still obligation set out in Article 108(3) TFEU.

Compatibility under the Environmental and Energy Guidelines

24. The Commission notes that the notified measure aims at promoting the generation of electricity from renewable sources, namely offshore wind. As it regards support for electricity from renewable sources, the notified measure falls within the scope of the Guidelines on State aid for environmental protection and energy 2014-2020 (EEAG)¹. The Commission has therefore assessed the notified measure based on the general compatibility provisions of the EEAG (set out in its section 3.2.) and based on the specific compatibility criteria for operating aid granted for electricity from renewable energy sources (sections 3.3.1 and 3.3.2.1. of the EEAG) as required in point 119 for individually notified investment aid and in point 120 for individual notified operating aid measures.

Objective of common interest

- 25. The aim of the notified aid measure is to help Finland to achieve the long term climate change and energy sustainability targets set by the EU as part of its EU 2030 strategy. The project will help Finland diversify its energy mix, expanding the portfolio of available renewable energy technologies. In line with points 30 and 31 of the EEAG, Finland defined the objective of the measure and explained the expected contributions toward ensuring a competitive, sustainable and secure energy system.
- 26. The Commission considers that the notified aid measure is aimed at an objective of common interest in accordance with Article 107(3)(c) of the Treaty.

Need for state aid, appropriate instrument and incentive effect

- 27. In point 107 EEAG the Commission acknowledges that "under certain conditions State aid can be an appropriate instrument to contribute to the achievement of the EU objectives and related national targets".
- 28. According to point 108 and 116 of the EEAG, in order to allow Member States to achieve their targets in line with the EU 2020 and 2030 objectives, the Commission presumes the granting of State aid is in principle an appropriate instrument to promote energy from renewable sources.

¹ OJ C 200 of 28.06.2014.

- 29. In line with point 49 of the EEAG, the incentive effect occurs if the aid induces the beneficiary to change his behaviour towards reaching the objective of common interest which it would not do without the aid.
- 30. The Commission notes that without the aid the notified project would not be financially viable, as the pilot plant will generate electricity at a cost much higher than the expected market price of electricity. In this context, the Finnish authorities pointed out that the production costs for offshore wind power are roughly three times higher than the current wholesale price for electricity. Without aid, offshore wind power cannot compete with electricity generated from other sources and the total rate of return for the project would be negative. The aid therefore allows the beneficiary to change his behaviour and invest in the notified offshore wind project.
- 31. The Commission further notes that the market for offshore wind energy in artic regions is limited. Private companies are not likely to invest in developing the required technology without clear policy support. Finland, on the other hand, needs assurance that the technology is viable and costs are acceptable before committing to support deployment. Without policy support and aid for a demonstration project, it is unlikely that development could be financed by private R&D funding alone.
- 32. The Finnish authorities confirmed that the applicants were required to submit a number of applications during the tendering process. The Commission notes that the notified measure complies with the obligation to use an application form for aid, as set out in point 51 of the EEAG. The Commission further notes that the application was submitted before work on the projects has started.
- 33. Consequently, the Commission considers that the aid for the notified project is necessary, granted by means of an appropriate instrument and provides the necessary incentive effect to address the objective of common interest.

Proportionality

- 34. According to point 69 EEAG, environmental aid is considered to be proportionate if the aid amount per beneficiary is limited to the minimum needed to achieve the environmental protection objective aimed for.
- 35. The Commission assessed proportionality of the aid under the provisions of Section 3.3.2 EEAG for the operating aid and Sections 3.3.1 and 3.2 for the investment aid.
- 36. In compliance with point 124 EEAG, operating aid is provided in the form of a variable premium, on top of the reference price for electricity. As described in point 11, this premium consists in the difference between the administratively-set price of EUR 85 /MWh and the reference price of electricity calculated as the average spot over 3 months.
- 37. As mentioned in point 17 above, the intensity of the investment aid to the project is not known as the final beneficiary has not been selected. However, in line with point 80 of the

EEAG, the aid amount may reach 100 % of the eligible costs in case the aid is granted in a competitive bidding process based on clear, transparent and non-discriminatory criteria.

- 38. The objectives of the measure in particular the objective of gaining experience on construction, use and maintenance of offshore wind power in arctic conditions cannot be quantified purely in terms of electricity generation costs. Therefore, the tendering process described in point 8 above includes other selection criteria apart from lowest cost per MWh generated. It is expected that this procedure will select the most valuable project for the aims stated above.
- 39. The selection criteria for the tendering process include: criteria related to the use and maintenance of offshore wind power for use in Finnish conditions (for example, technological innovation and possibility of replication and commercialisation); financial viability and cost effectiveness (volume of wind power generated, cost-effectiveness, implementation schedule, etc.).
- 40. The Commission considers that this procedure will ensure the selection of the best possible project at the given price. In particular, the Commission notes that, according to the information provided, the tendering process will be conducted in a clear, non-discriminatory and transparent manner. Furthermore, the companies participating in the tender and described in Table 1 appear to be independent entities.
- 41. On the basis of the information provided by the Finnish authorities on the tendering process, the Commission concludes that the tender which is the object of the present decision can be considered a competitive bidding process satisfying the provisions of point 80 EEAG.
- 42. As mentioned in point 16, the Finnish authorities stated that the IRR of the project will not exceed 11% independently of the application eventually selected for support. In line with the provisions of point 129 EEAG, the IRR is calculated taking into account both the investment and the operating aid. This ceiling will in any event prevent overcompensation. Other offshore wind projects approved by the Commission have been granted IRRs of a similar level. For example, the Cases SA.38758 Walney Offshore Wind Farm; SA.38761 Hornsea Offshore Wind Farm; SA.38812 Beatrice Offshore Wind Farm have estimated rates of return of [...],[...] and [...] respectively. Aid for these projects (all from the UK) was recently assessed by the Commission and declared as compatible with Article 107 TFEU. The Commission notes that the project object of this decision involves considerably higher risks than a conventional off shore wind farm eventually justifying higher rates of return.
- 43. Based on the above, the Commission considers that the aid granted for the notified project is proportional.

Distortion of competition and balancing test

- 44. According to point 90 EEAG, the Commission considers that aid for environmental purposes will by its very nature tend to favour environmentally friendly products and technologies at the expense of other, more polluting ones. Furthermore, the effect of the aid will in principle not be viewed as an undue distortion of competition since it is inherently linked to its very objective.
- 45. The Commission further notes that the electricity generated by the demonstration project will be a small fraction of the Finnish electricity market². Therefore, the Commission considers that the notified project would not have any significant impact on competition in the Finnish electricity generation market.
- 46. As described in point 14 above, no aid will be paid in case of negative electricity prices and the beneficiary will be subject to standard balancing responsibilities.
- 47. As described in point 15, the beneficiary will sell the electricity produced on the market.
- 48. These measures aim at preventing distortions in the electricity market providing an incentive to operate the wind farm according to market signals.
- 49. As described in point 8 above, a plan for sharing the experience generated by the project is part of the evaluation criteria for the tender. However, it is likely that the aid beneficiary will acquire intellectual property and thus a competitive advantage. The open bidding process minimises the distortion of competition selecting the most advantageous offer for reaching the objective.
- 50. The Commission therefore considers that aid to renewable energy does not have undue distortive effects on competition and trade so that the overall balance is positive.

Conclusion with regard to the compatibility of the measure

51. In light of the above, the Commission considers that the notified aid measure pursues an objective of common interest in a necessary and proportionate way and that therefore the aid is compatible with the internal market on the basis of the EEAG.

IV. CONCLUSION

- 52. The Commission has decided, on the basis of the foregoing assessment, to consider the notified aid measure compatible with Article 107(3)(c) of the Treaty on the Functioning of the European Union.
- 53. If this letter contains confidential information which should not be disclosed to third parties, please inform the Commission within fifteen working days of the date of receipt. If the Commission does not receive a reasoned request by that deadline, you will be deemed to agree to the disclosure to third parties and to the publication of the full text of the letter in the authentic language on the Internet site:

http://ec.europa.eu/competition/elojade/isef/index.cfm.

² Estimated at significantly less than 0.5%.

Your request should be sent to:

European Commission Directorate-General for Competition State Aid Registry B-1049 BRUSSELS Telefax n°: + 32-2-296.12.42

Please mention the name and number of the case in all correspondence.

Yours faithfully,

For the Commission

Margrethe Vestager