Case No: 79159

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[Non-confidential version]

[The information in square brackets is covered by the obligation of professional secrecy]

EFTA SURVEILLANCE AUTHORITY DECISION

of 17 June 2016

on the sale of electricity to Thorsil

(Iceland)

The EFTA Surveillance Authority ("the Authority"),

HAVING REGARD to the Agreement on the European Economic Area ("the EEA Agreement"), in particular to Article 61(1) and Protocol 26,

HAVING REGARD 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(2) of Part II,

Whereas:

I. FACTS

1 Procedure

(1) By letter dated 10 May 2016 and registered on 11 May 2016, the Icelandic authorities notified for legal certainty a contract on the sale of electric power for a silicon metal plant, to be constructed and operated by Thorsil ehf. in Helguvík in South-West Iceland.¹

2 Description of the notified measure

2.1 Background information

(2) Since 2010, Landsvirkjun, the Icelandic national power company, and Thorsil ehf. have been discussing and negotiating a power contract for a silicon metal plant to be built in Iceland ("the Power Contract"). The plant is to be located in Helguvík in Reykjanesbær in Iceland. The Power Contract was entered into between Landsvirkjun and Thorsil ehf. on 10 May 2016. The Power Contract is conditional upon the Authority's approval.

Documents No 804273, 804267 and 804232, as well as 12 Annexes (Documents No 804233-804236, 804225-804231 and 804263).



2.2 The contracting parties

2.2.1 Thorsil

- (3) Thorsil ehf. ("Thorsil") is a private limited liability company, established, registered and operating under Icelandic laws. Thorsil is owned by Northsil ehf. (60.1%) and Strokkur Silicon ehf. (39.9%), both private limited liability companies under Icelandic laws.
- (4) Thorsil has the objective of constructing, building, operating and owning a silicon metal plant in Helguvík in Reykjanesbær that will serve international corporations, institutions and other customers, with a planned capacity of up to 54 000 tons of silicon metal, 27 000 tons of silica fume and 5 300 tons of silicon slag.²

2.2.2 Landsvirkjun

- (5) Landsvirkjun is a public partnership company regulated by Act No 42/1983 on Landsvirkjun, as amended ("the Landsvirkjun Act").
- (6) The company was established as an enterprise, jointly owned by the State Treasury and the City of Reykjavík in equal parts, on the basis of Act No 59/1965 on Landsvirkjun,³ by a Partnership Agreement of 1 July 1965 between the Government of Iceland and the City Council of Reykjavík.
- (7) Laxá Power Station, a power company jointly owned by the Town of Akureyri and the State Treasury, was merged with Landsvirkjun with effects from 1 July 1983 and the Town of Akureyri thereby became a minority owner in Landsvirkjun. At the same time, Landsvirkjun became a national electricity company operating all over Iceland, whereas it had been operating only in parts of the country before.
- (8) As of 1 January 2007, the State Treasury took over the ownership shares of the Town of Akureyri and the City of Reykjavík in Landsvirkjun. The company remained a partnership company with joint liability of the owners. Landsvirkjun is now jointly owned by the State Treasury (99.9%) and Eignarhlutir ehf. (0.1%). The latter is a limited liability company wholly owned by the State Treasury.
- (9) Landsvirkjun is by far the largest electricity producer in Iceland with an output of 13 710 gigawatt hours ("GWh") in 2015, which, according to the company's own estimates, represents approximately 73% of Icelands's overall electricity production. The company produces electricity from hydro (96%) and geothermal (4%) sources, and operates 18 power stations.⁴

Documents No 804233 (Power Contract, Annex B) and 804232. Further information available at: http://www.althingi.is/altext/144/s/0628.html.

³ Act No 59/1965 was later repealed and replaced by Act No 42/1983. See http://www.althingi.is/lagas/nuna/1983042.html.

Information from the website of Landsvirkjun. Annual report for 2015 available in Icelandic at: http://arsskyrsla2015.landsvirkjun.is/.



2.3 The Power Contract

- 2.3.1 The characteristics of the electricity market in Iceland
- (10) The Icelandic electricity system is isolated, i.e. no interconnection exists to other countries. There have been discussions about a future interconnector between Iceland and the UK ("IceLink").⁵ Landsvirkjun, along with its partners, are currently assessing the feasibility of such a project, and working towards a commissioning date for IceLink in the time period 2025-2029.
- (11) In 2015, 73.3% of electricity production in Iceland was derived from hydropower (13 780 GWh). Geothermal production accounted for 5 003 GWh (26.6% of the total production), the rest coming from fuel and wind power (4 and 11 GWh, respectively).⁶ The total generation of electricity in Iceland in 2015 was 18 798 GWh,⁷ of which Landsvirkjun generated approximately 73%.
- (12) Landsvirkjun is active only on the wholesale market for electricity, where its main competitors are Orka náttúrunnar (Our Nature ON) and HS Orka. The sale of electricity is completed through directly-negotiated contracts concluded with energy-intensive users. These are in turn connected to the transmission system directly, by transmission contracts negotiated with Landsnet (the Icelandic transmission company).⁸
- (13) According to publicly available information provided by Orkustofnun (the National Energy Authority), 76.4% of the electricity is consumed by energy-intensive users (aluminium, ferrosilicon and aluminium foil industry) and 23.6% is attributed to general usage and transmission losses, see table 1 below:⁹

See Energy statistics in Iceland for 2015. Available in Icelandic at the website of Orkustofnun: http://os.is/gogn/os-onnur-rit/orkutolur_2015-islenska.pdf.

For further information see Landsnet's webpage: http://landsnet.is/.

See draft Ten-Year Network Development Plan 2014, prepared by ENTSO-E, European Network of Stransmission System Operators for Electricity, pages 161-2, available at https://www.entsoe.eu/major-projects/ten-year-network-development-plan/tyndp-2014/Pages/default.aspx.

See data available at the website of Orkustofnun. Available in Icelandic at: http://os.is/gogn/os-onnur-rit/orkutolur 2015-islenska.pdf.

See data available at the website of Orkustofnun. Available in Icelandic at: http://os.is/gogn/os-onnur-rit/orkutolur 2015-islenska.pdf.



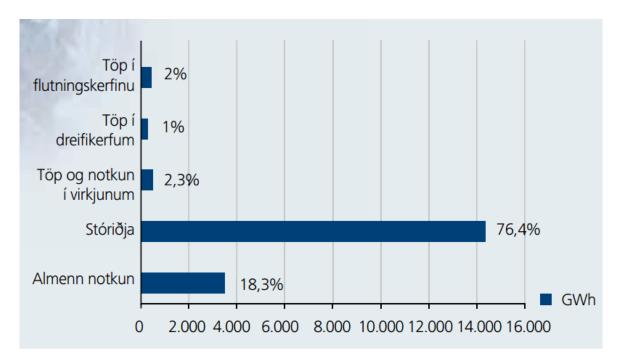


Table 1. Electricity consumption in 2015. Source: Orkustofnun 10

2.3.2 Landsvirkjun's new power projects

- (14) Landsvirkjun anticipates to bring online two new power plants in the period of 2017-2019, due to growing demand and ongoing negotiations with power intensive companies.
- (15) The capacity of Búrfell's Hydro Electric Power Plant will be expanded and increased by 100 MW. Construction has started, with the intention to bring the extension into full commercial operation in late April 2018.¹¹
- (16) Construction of the 90 MW Þeistareykir Geothermal Power Plant is already underway. The construction is carried out in two phases. The first phase is the construction of a 45 MW power station, followed by a 45 MW expansion in the second phase. Commissioning of the of the first phase is scheduled in October 2017, and the second phase in April 2018. 12
- (17) During the period 2018-2021, Landsvirkjun expects a load increase for the network of 549 GWh. 365 GWh (67%) thereof are attributed to Thorsil, as shown in table 2 below:¹³

The Authority's informal translation: Töp í flutningskerfinu (transmission losses), Töp í dreifikerfum (distribution system losses), Töp og notkun í virkjunum (power plant own use), Stóriðja (energy intensive users), Almenn notkun (public use).

Document No 804235, where the Board of Directors of Landsvirkjun approved the enlargement of the Búrfell Power Plant on 16 September 2015.

Document No 804236, where the Board of Directors of Landsvirkjun, on 27 August 2015, resolves to begin the second stage of the Peistareykir Power Plant.

¹³ Document 804232, page 7.



Load increase	Total	BUR	THR
Increased generation capacity	549 GWh	290 GWh	259 GWh
Share delivered to Thorsil	67%	67%	67%
Energy delivered to Thorsil	365 GWh	193 GWh	172 GWh

Table 2. Source: Landsvirkjun¹⁴

2.3.3 The Power Contract with Thorsil

- (18) The silicon metal plant to be constructed in Helguvík ("the Plant"), will operate two electrical arch furnaces, each requiring approximately 42 MW of power when in full operation. According to the Power Contract, Landsvirkjun will provide all the power for the first furnace and part of the power for the second one. In October 2015, Thorsil publicly announced that HS Orka would also deliver power to the Plant.
- (19) The production capacity of the Plant will be 54 000 tons of silicon metal, 27 000 tons of silica fume and 5 300 tons of silicon slag per annum. The Plant is expected to start operation on 1 April 2018.¹⁷
- (20) According to the Power Contract, starting on 15 March 2018 until 30 June 2020, Landsvirkjun will gradually increase its supply to Thorsil to 55 MW (460 GWh) per year, according to a schedule defined in the Power Contract, and thereafter reduce supply to 49.5 MW and 415 GWh annually. The Power Contract has a duration of [...] years and [...] months, starting on 15 March 2018. It therefore ends on [...].
- (21) The power ("Contract power") is available to Thorsil on a firm basis ("Firm Energy") and on an interruptible basis ("Secondary Energy"). Landsvirkjun has the right to curtail or suspend entirely the availability of Secondary Energy, under certain circumstances described in Paragraphs (3) and (4) of Article 3 of the Power Contract. If Landsvirkjun has to curtail the Contract power between 15 March 2018 and 30 June 2019 for other reasons than permitted under Article 3 of the Power Contract, Landsvirkjun undertakes to reduce the amount of curtailed capacity to no less than 16.5 MW during the period from 1 July 2018 until 31 December 2018, and no less than 8.5 MW during the period 1 January 2019 until 30 June 2019 for a continuous and uninterrupted period of no more than sixty days. Landvirkjun can only exercise a sixty-day curtailment once each calendar year. Furthermore, Landsvirkjun is entitled to reduce its delivery of the Firm Energy if it is forced to reduce power to its customers by reason of disturbances in its interconnected system due to circumstances including Force Majeure, provided it does so in a proportionate and non-discriminatory manner after putting into operation all commercially available resources.

Abbreviations: Búrfell Power Plant (BUR) and Þeistareykir Power Plant (THR). Document No 804232, page 7.

¹⁵ Documents No 804232, page 19 and 804233, page 5.

See press release by HS Orka hf., available at: http://hsorka.is/HSNews.aspx?id=1054.

¹⁷ Document No 804233 (Power Contract, Annex B).

Document No 804233 (Power Contract, table 1 in Annex A).



- (22) During the period between 15 July 2018 and 30 June 2020, Landsvirkjun also undertakes to make 12 MW available temporarily to Thorsil ("Temporary power"), provided that Landsvirkjun has such power available within Landsvirkjun's system, having fulfilled contractual obligations with other clients. This temporary power can also be curtailed by Landsvirkjun without penalties or compensation.
- (23) Article 6 of the Power Contract contains a "Take or Pay" obligation, according to which Thorsil must pay for at least [...] GWh (from 15 March 2018 until 31 December 2018) and [...] GWh (during the calendar year 2019), even if its actual consumption is less. Between 1 January 2020 and 30 June 2020, Thorsil must pay for at least [...] GWh per calendar year. From 1 July 2020 until 31 December 2020, this will be reduced to [...] GWh, and then rise again to [...] GWh during calendar year 2021 and until end of the Power Contract.
- (24) The contract price is [...] USD per MWh during the first five years and nine months, and thereafter increases steadily until it reaches [...] USD per MWh¹⁹ (see below).

Period		Prices 2013	Prices 2016	
From	To			
15.3.2018	31.12.2023	[]	[]	
1.1.2024	31.12.2027	ĪĪ	ĪĪ	
1.1.2028	31.12.2029	ĪĪ	ĪĪ	
1.1.2030	31.12.2030	ĪĪ	[]	
1.1.2031	31.12.2031	ĪĪ	ĪĪ	
1.1.2032	31.05.2036	[]	[]	

- (25) The price is subject to [...] indexation (on the basis of July [...]).²⁰
- (26) The contract price does not include transmission costs, which will be paid by Thorsil to Landsnet.

3 Comments by the Icelandic authorities

- (27) The Icelandic authorities and Landsvirkjun are of the view that the notified Power Contract does not entail state aid. The Icelandic authorities have notified the Power Contract for legal certainty.
- (28) The Icelandic authorities submit that there is a foreseeable increase in demand for electricity due to existing contractual engagements, growing wholesale demand and ongoing negotiations with power-intensive companies planning to establish themselves in Iceland. Therefore, Landsvirkjun is investing in extending existing facilities and exploring new facilities to serve the current needs of its customers and be able to enter into new contracts. However, delivery of power to Thorsil is not bound to the development of either of the two power plants in Búrfell and Þeistareykir. ²²
- (29) The Icelandic authorities further submit that the duration of [...] years and [...] months, is shorter than many other Landsvirkjun's power contracts that are currently in place. This is

²¹ Document No 785275.

¹⁹ Document No 804233 (Power Contract, Article 11).

^{20 [...]}

²² Document No 804232, page 7.



in line with Landsvirkjun's strategy to limit the risk linked to each contract and each power plant. In addition, the Power Contract with Thorsil enhances the diversity of Landsvirkjun's client base.

(30) Finally, the Icelandic authorities argue that no economic advantage has been granted to Thorsil for the sale of electricity, as the transaction complies with the requirements of the MEO (market economy operator) test, and Landsvirkjun has acted as a prudent private operator.²³

II. ASSESSMENT

1. The presence of state aid

1.1 Article 61(1) of the EEA Agreement

- (31) According to Article 61(1) of the EEA Agreement, a measure constitutes state aid if it is granted by the State or through state resources, confers a selective economic advantage on undertakings, and is liable to distort competition and to affect trade between the Contracting Parties to the EEA Agreement. These conditions are cumulative.²⁴
- (32) The Authority notes that the main arguments put forward by the Icelandic authorities relate to the absence of an economic advantage conferred on Thorsil by the Power Contract. The assessment below will therefore focus on the question of whether the measure confers an economic advantage.

1.2 No economic advantage conferred by the Power Contract

- (33) Landsvirkjun argues that the contract was concluded on market terms, i.e. by comparing price and duration with contracts with energy-intensive users in the past and referring to the profitability and the business risk related to the investment needed. Thus, according to Landsvirkjun, no economic advantage has been granted to Thorsil.
- (34) The Court of Justice of the European Union has stated that in order to confirm whether a State measure constitutes aid, it is necessary to establish whether the recipient undertaking, in this case Thorsil, receives an economic advantage that it would not have obtained under normal conditions.²⁵ In doing so, the Authority has to apply the market economy operator (MEO) test, which in essence provides that state aid is granted whenever a State makes funds available to an undertaking which, in the normal course of business, would not be provided by a private investor applying ordinary commercial criteria and disregarding other considerations of a social, political or philanthropic nature.²⁶
- (35) Accordingly, the Authority will apply the MEO test to the Power Contract. It will examine whether a private operator in the same situation as Landsvirkjun would have chosen to enter

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²³ Document No 804232, page 37.

According to settled case law, classification as aid requires that all conditions set out in the provision should be fulfilled, see judgment in *Belgium v Commission ("Tubemeuse")*, C-142/87, EU:C:1990:125, paragraph 25.

²⁵ Judgment in *SFEI v La Poste*, C-39/94, EU:C:1996:285, at paragraph 60.

²⁶ Cf. for example Opinion of Advocate General Jacobs in *Spain v the Commission*, C-278/92, C-279/92 and C-280/92, EU:C:1994:112, at paragraph 28.



into a long-term bilateral contract for the same price and on the same terms as in the Power Contract under assessment.²⁷

- (36)The measure at hand – a power contract entered into with a state-owned company – could thus entail an element of state aid if its terms are such that they would not have been acceptable to a private market operator, and in particular if the sale of electricity could not have been expected to be sufficiently profitable for a private operator.
- (37)Whilst the Authority fully recognises the right for public companies such as Landsvirkjun to operate on the market on commercial terms, it nevertheless must consider carefully whether similar agreements would have been concluded by a private market operator.²⁸ Moreover, the Authority must base its assessment of the price and terms of the Power Contract on the information available at the time it was concluded.
- Ordinarily, when a sale by a public company or a public authority is assessed, the market (38)price for the good under assessment can be used as a relevant benchmark. In the case at hand, however, a market price is not readily available, given the peculiarities of the Icelandic electricity market. A large majority of all electricity is sold to a few customers, which have all concluded long-term agreements with the domestic power providers at different points in time. Furthermore, the Icelandic market is isolated from the rest of the world, as currently no power can be transmitted across the border.²⁹ The abundant potential to produce electricity in Iceland and its isolation are assumed to be the main reasons for the differences in the price of electricity in Iceland and elsewhere in the EEA States.
- Against this background, the Authority cannot base its assessment on benchmarking, i.e. the comparison with transactions carried out by comparable private operators in comparable situations. Instead, it has to examine the Power Contract individually.
- (40)The Authority does not dispute the view that there might be a general need to expand existing plants and explore new opportunities to generate electricity in Iceland, in order to satisfy a future increase in demand. Therefore, it could be in principle accepted that the investments considered in this decision – the power plants in Búrfell and Þeistareykir – are not directly related to the Power Contract with Thorsil. In this respect, the Authority notes that the National Energy Authority also predicts an increase in demand in the future.³⁰ At the same time, the Authority also notes that the Power Contract will account for about twothirds of the projected load increase, and thus contribute significantly to the need for new generation capacity.
- (41) The Authority has therefore decided to assess the Power Contract primarily on the basis that the investment in new generation capacity is not specific to Thorsil, but to also verify if the

See the Authority's Decision No 67/15/COL on the sale and transmission of electricity to United Silicon in Helguvík.

See the Authority's guidelines, Part IV: Rules on public service compensation, state ownership of enterprises and aid to public enterprises, Application of state aid provisions to public enterprises in the manufacturing sector, paragraph 5(1), (OJ L 274, 26.10.2000, page 29 and EEA Supplement No 48, 26.10.2000).

See paragraph 10 above.

See the National Energy Authority's electrical power forecast for the years 2015-2050, available in Icelandic at: http://os.is/media/orkusparnefnd/raforka/SPAR2015.pdf.



assessment would be different in the alternative, i.e. if such investment is, in fact, specific to Thorsil.

- (42) Landsvirkjun has provided the Authority with detailed profitability calculations based on the assumption that the investment in new power generation capacity is not specific to Thorsil. These calculations show that, in order to achieve a return on equity of [...]% (based on an equity ratio of 40% which results in weighted average cost of capital ("WACC") of [...]%), the average price (in 2016 terms) at which Landsvirkjun should sell its output is [...] USD/MWh (increasing to [...] USD/MWh during the time period 2015-2020). As these required minimum prices are below the contract price of [...] USD/MWh (in 2013 terms; [...] USD/MWh in 2016 terms; see paragraph (24) above), the Authority is able to conclude that the power contract signed with Thorsil is profitable. It therefore has been concluded on market terms. Indeed, the contract price is higher than the average price required to obtain a reasonable rate of return on equity from Landsvirkjun's total portfolio of investments.
- (43) Furthermore, Landsvirkjun has provided the following estimate of the expected NPV of the Power Contract, based on two main scenarios. The first scenario is based on the monthly delivery of energy, during the contract period, being 55 MW between July 2019 and June 2020, and then reduces to 49.5 MW for the remainder of the contract period (see paragraph (20) above). The second scenario is based on the monthly delivery of energy, during the contract period, being 67 MW (whereas Landsvirkjun delivers the Temporary power of 12 MW in addition to 55 MW) between July 2018 and June 2020, and then reduces to 49.5 MW for the remainder of the contract period (see paragraphs (20) and (22) above). The minimum price required by Landsvirkjun, using [...] USD/MWh as a minimum price, has been calculated assuming +/-5% CAPEX flexibility. Such a change in CAPEX leads to an increase/decrease by [...] USD/MWh in minimum price required for a [...]% WACC. The analysis below shows positive total NPV for both scenarios in USD millions:³¹

		5 th	median	95 th
		Percentile.		Percentile.
			Scenario I	
Minimum price USD/MWh [[[]	75.3	79.7	84.4
	[]	74.7	79.2	84.0
	[]	74.1	78.6	83.3
	[]		Scenario II	
	[]	77.1	81.4	86.3
	[]	76.3	80.9	85.6
	[]	75.9	80.4	85.1

Table 3. Total NPV results in mUSD of the two scenarios tested with the effect of +/- 5% change in CAPEX shown. Source: Landsvirkjun

(44) In the Authority's view, the calculations provided indicate that the contract is concluded on market terms, as it can be assumed that the Power Contract generates an acceptable rate of return for Landsvirkjun.

³¹ The analysis suggest a 90% confidence level of total NPV ranging from [...] to [...] mUSD for the first scenario, and [...] to [...] mUSD for the second scenario. Documents No 804263 and 804232, page 36.



- (45) This conclusion is also reached if the Authority assumes that the investment in new power generation capacity is, in fact, specific to Thorsil. Landsvirkjun has also provided detailed financial calculations for both power projects considered in this decision (in Búrfell and Þeistareykir). The calculations show that the minimum sale price to achieve a return on equity of [...]% (see paragraph 42 above) for each of these projects is below the contract price of [...] USD/MWh³² (in 2013 terms; [...] USD/MWh in 2016 terms; see paragraph (24) above).
- (46) Other characteristics of the Power Contract also support the conclusion that it has been concluded on market terms.
- (47) Firstly, the Take or Pay obligation (see paragraph (23) above) for [...]% of the contracted power in any calendar year ensures that there will be a constant stream of revenues, regardless of the business success of Thorsil.³³ The Authority notes that the Take or Pay obligation covers a substantial part of the contracted power, thereby providing Landsvirkjun with additional certainty as to the revenues to be expected from the Power Contract.
- (48) Secondly, the duration of the Power Contract is shorter than that of average existing contracts with energy-intensive users in Iceland. This should allow Landsvirkjun to adjust its prices to market developments elsewhere better than was possible in past contracts with energy-intensive users, and thereby limit the risk linked to each contract and each power plant.³⁴
- (49) Finally, Landsvirkjun has flexible curtailment options that allow Landsvirkjun to adjust its delivery of power in certain situations, according to the Power Contract (see paragraph (21) above). The Authority notes that the possibility to curtail power delivery will allow Landsvirkjun to better manage its electricity production.
- (50) For the above reasons, the Authority concludes, on the basis of the information provided by Icelandic authorities and in line with the MEO test, that Landsvirkjun has acted as a private operator would have done when signing the Power Contract. Consequently, the Authority concludes that the conditions of the Power Contract do not entail an economic advantage for Thorsil.
- (51) The Authority therefore concludes that the Power Contract does not result in the granting of state aid in favour of Thorsil. Since the criteria in Article 61(1) of the EEA Agreement are cumulative, there is no need to establish whether the other criteria of the notion of state aid are met in the case at hand.

For Peistareykir (90 MW), the minimum price is [...] USD/MWh and for Búrfell (100 MW), the minimum price is [...] USD/MWh.

Document No 804233 (Power Contract, Article 6).

Document No 804233 (Power Contract, Article 21).

Document No 804233 (Power Contract, Article 3).



2. Conclusion

(52) On the basis of the foregoing assessment, the Authority considers that the Power Contract dated 10 May 2016 does not constitute state aid within the meaning of Article 61(1) of the EEA Agreement.

HAS ADOPTED THIS DECISION:

Article 1

The Power Contract dated 10 May 2016 between Landsvirkjun and Thorsil, notified for legal certainty, does not constitute state aid within the meaning of Article 61(1) of the EEA Agreement.

Article 2

This Decision is addressed to Iceland.

Article 3

Only the English language version of this decision is authentic.

Done in Brussels, on 17 June 2016

For the EFTA Surveillance Authority

Sven Erik Svedman Frank J. Büchel Helga Jónsdóttir

President College Member College Member

Placeholder