EFTA SURVEILLANCE AUTHORITY DECISION
of 25 March 2015
on the sale and transmission of electricity to United Silicon in Helguvík
(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 and Protocol 26,

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(2) of Part II,

Whereas:

I. FACTS

1 Procedure

(1) By letter submitted electronically on 15 April 2014 (Doc No 705823) and by registered mail from Landsvirkjun received on 17 April 2014 (Doc Nos 705959-61), 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 United Silicon hf. in Helguvík pursuant to Article 1(3) of Part I of Protocol 3.

(2) By letter dated 19 May 2014 (Doc No 708680) the Authority requested additional information from the Icelandic authorities regarding the pricing of electricity and the necessary investment to which it received a partial reply on 19 June 2014 by way of registered mail from Landsvirkjun, the national power company (Doc No 711547). Landsvirkjun provided further information by way of email submitted 22 August 2014 (Doc No 720013) and the Icelandic authorities submitted further information from Landsnet hf., the transmission system operator, by way of an electronically submitted letter on 22 September 2014 (Doc No 722916). The Authority requested further clarifications from the Icelandic authorities regarding the transmission of electricity in a letter dated 26 September 2014 (Doc No 723347) to which it received a reply on 13 October 2014 (Doc No 725496). Furthermore, the matter was briefly discussed during meetings between the Icelandic
authorities and the Authority in Brussels on 18 December 2014 and 14 January 2015 and in a conference call on 20 January 2015. Additional information was also submitted by emails on 19 January (Doc. No 742079) and 10 February (Doc No 744630). Finally, the case was discussed with the Icelandic authorities and Orkustofnun, i.e. the Energy Agency (“the EA”) at a meeting in Reykjavik on 13 February 2015. Following the meeting, on 27 February 2015, the EA sent to the Authority additional clarifications on the functioning of the electric system in Iceland (Docs No 748003 and 748004).

2 Description of the measures and the parties

(3) The Icelandic authorities notified the contract between Landsvirkjun and United Silicon (“the Power Contract”) for reasons of legal certainty. The Power Contract was entered into between Landsvirkjun and United Silicon on 19 March 2014 (Doc No 705960). It refers to a separate agreement, entered into on the same day, between Landsnet and United Silicon, on the transmission of the contract power (“the Transmission Agreement”) (Doc No 722918). The Power Contract and the Transmission Agreement are linked to the same project. Therefore, the Authority will in this Decision assess the relevant elements of both agreements.

2.1 The parties to the Power Contract and the Transmission Agreement

2.1.1 United Silicon

(4) United Silicon hf. was founded in February 2014, according to the Icelandic company register. It is a limited liability company. According to the Preamble of the Power Contract the company’s shareholders are:

a) United Silicon Holding BV, a limited liability company incorporated in 2013 with registered office in Amsterdam, owned by Silicon Mineral Ventures BV, which again is owned by Fondel Holding BV, whose main business is import, shipping and supply of raw materials to the steel, aluminium and fertilizer industries and through its subsidiary BIT Fondel BV is the largest independent importer of silicon metal in Europe and actively involved in the sale and distribution of silicon metal to the aluminium and chemical industries in Europe.

b) USI Holding BV, a limited liability company established in 2013 owned by several private shareholders, headquartered in Amsterdam, involved in engineering, financing and industrial development, and which through its wholly owned subsidiary, Stakksbraut 9 ehf. owns the land Stakksbraut 9 consisting of 108 000 m² of land next to the harbour of Helguvík.

2.1.2 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, by a Partnership Agreement of 1 July 1965 between the Government of Iceland and the City Council of Reykjavík. Laxá Power Station, a power company jointly owned by the Town of Akureyri and the State Treasury, was merged with Landsvirkjun with effect 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.

1 Act No 59/1965 was later repealed and replaced by Act No 42/1983.
(7) The founding of Landsvirkjun in 1965 may be traced back to the Icelandic government’s growing interest in increasing the utilization of hydroelectric energy resources, including by attracting foreign investors for the energy-intensive industry in Iceland. In 1966, an agreement was concluded with the Swiss aluminium producer Alusuisse to build an aluminium plant in Iceland; the Straumsvík Aluminium Plant, which started operation in 1970. The plant is currently owned by Rio Tinto Alcan Iceland.

(8) Landsvirkjun is by far the largest electricity producer in Iceland with an output of 12 842 gigawatt hours (GWh) in 2013, which according to the company’s own estimates, represents approximately 71% of Iceland’s overall electricity production. The company produces electricity from hydro (96%) and geothermal (4%) sources and operates 16 power stations.²

(9) Landsvirkjun is currently governed by the provisions of the Landsvirkjun Act. According to Article 1(1) of the Act, the legal form of the company is a public partnership with joint liability. The owners are responsible for Landsvirkjun’s liabilities as further stipulated in the Landsvirkjun Act. An unlimited State guarantee for all Landsvirkjun’s liabilities was in place until 2011, when a State guarantee on new financial obligations was made subject to an approval by the State and an appropriate premium, whereas it was subject to limited premium before.³ An unlimited guarantee is retained for all liabilities entered into before the entering into force of Act No 21/2011, amending the Landsvirkjun Act.

(10) 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. The State’s interests are controlled by the Ministry of Finance and Economic Affairs.

(11) According to the Landsvirkjun Act, the company shall be financially independent. It is foreseen that Landsvirkjun shall pay dividends to its owners, determined on the basis of the performance of the company and the profits carried forward from preceding years.

(12) Landsvirkjun’s board of directors is composed of five members and an equal number of alternate members, all appointed by the Minister of Finance and Economic Affairs. The board adopts its own Rules of Procedure and according to the information provided by the Icelandic authorities the board functions like any other independent board of directors of a company engaging in competitive business operations.⁴

2.1.1 Landsnet

(13) Following the liberalization of the electricity sector the Electricity Act No 65/2003 (“the Electricity Act”) was adopted in 2003 and on 1 January 2005 Landsvirkjun's Transmission Division became Landsnet hf., a limited liability company, owned by the Icelandic Treasury, and later a subsidiary of Landsvirkjun.⁵ Landsnet owns and operates the Icelandic transmission system.

(14) According to Article 8 of the Electricity Act, a sole company shall be entrusted with the transmission of electricity in Iceland and the balancing of the electricity. According to the Act, the majority stakeholders in the transmission system operator (“the TSO”) shall be the State and/or entities or companies solely owned by the State. Act No 75/2004 on Landsnet

---

² Information from the website of Landsvirkjun.
³ According to Act No 21/2011 amending the Landsvirkjun Act. See also Decision No 302/09/COL proposing appropriate measures for Landsvirkjun.
⁴ See Decision No 392/11/COL, paragraph 11, and Decision No 543/14/COL, paragraph 13.
⁵ Landsnet is owned by the following state owned utilities: Landsvirkjun 64.73%, RARIK (Iceland State Electricity) 22.51%, Orkuveita Reykjavíkur (Reykjavík Energy) 6.78% and Orkubú Vestfjarða (Westfjord Power Company) 5.98%.
(“the Landsnet Act”) established Landsnet as the sole transmission system operator (TSO) in Iceland. According to the Landsnet Act the company’s board of directors shall operate independently from other companies operating in the field of generation, sale or distribution of electricity. At the outset, the Icelandic Treasury was the sole owner of the shares in Landsnet and subsequently the shares were transferred to State owned utilities in Iceland in exchange for their transmission system assets, which became part of Landsnet’s assets.

2.2 The Power Contract

(15) The Icelandic electricity system is an isolated one; no interconnection exists. There have been discussions about an interconnector between Iceland and the UK on a long term horizon, but this is preliminary and no decision has been taken.6

(16) The energy-intensive users constitute approximately 80% of the total electricity consumption in Iceland (aluminium, ferrosilicon and aluminium foil industry), whereas 20% is consumed by public services, other industrial users and households.

(17) As described above, Iceland has attracted energy-intensive users since the creation of Landsvirkjun. The total generation of electricity in Iceland in 2013 was 18 116 GWh, out of which Landsvirkjun generated around 71%. Landsvirkjun is only active on the wholesale market for electricity, where its competitors are Orka náttúrunnar (Our Nature – ON) and HS Orka. Landsvirkjun’s customers are composed of seven energy-intensive users representing purchase of 85% of the company’s output, and six distribution companies, purchasing 13%, whereas Landsnet, the TSO, purchases 2% for electricity losses. The sale of the electricity is made through directly-negotiated contracts and the energy-intensive users are connected to the transmission system directly.

(18) Landsvirkjun will provide electricity for United Silicon’s new plant to be constructed in Helguvík ("the Plant"). According to the Icelandic authorities, Landsvirkjun entered into negotiations with United Silicon in early 2011,7 whereas formal negotiations took place in the course of 2013 and 2014. The ensuing negotiations were handled on behalf of Landsvirkjun by a committee of four members, reporting to Landsvirkjun’s Executive Vice President for Marketing and Business Development and its CEO. The Power Contract was signed by the parties on 19 March 2014.

(19) The Plant is expected to start production in the first half of 2016 and will require 35 MW of power (mean per hour). The power will be provided exclusively by Landsvirkjun, from its existing facilities. According to the Icelandic authorities, the electricity that Landsvirkjun has agreed to provide is already available in its power system in the South-West part of Iceland and thus no further construction of power plants will be needed.

(20) The Power Contract has a duration of […] years, from 30 April 2016.

(21) Both parties have an option […], according to Article 3 of the Power Contract. Furthermore, Landsvirkjun has the right to curtail or suspend the full contract power up to a maximum of […] hours annually, with 30 days’ notice, for a minimum of […] consecutive hours each period. A further curtailment of the contract power can be made for up to […] hours annually, provided that Landsvirkjun pays […]. Furthermore, Landsvirkjun is entitled to reduce its delivery of the contract power if it is forced to reduce power to its customers by reason of disturbances in its interconnected system due to any circumstances, including

---


7 United Silicon ehf. was only founded in 2014. The Authority assumes that the reference is to negotiations with Íslenska Kísilfélagið ehf., which later abandoned its project.
Force Majeure, provided it does so in a proportionate and non-discriminatory manner after putting into operation all commercially available resources.

(22) Article 6 of the Power Contract contains a “Take or Pay obligation” according to which United Silicon must pay for at least [...] GWh ([…] of the annual contract power) regardless of whether the actual consumption is less, and […] GWh average energy ([…] of the annual contract power) over any rolling three year period, until […] and an identical proportion of the contract power during […] to […], depending on whether the parties have used their option to […] according to Article 3 of the Power Contract.

(23) The contract price is established on the basis of an indexed base price. The base price is set out in the Article 11 of the Power Contract as follows (in […] real prices):

<table>
<thead>
<tr>
<th>Calendar year</th>
<th>USD per MWh</th>
</tr>
</thead>
<tbody>
<tr>
<td>[…]</td>
<td>[…]</td>
</tr>
</tbody>
</table>

(24) The base price is subject to USD CPI indexation (on the basis of December […] CPI).

(25) Independently of the above, an annual bonus may apply, based on the market price of silicon metal.

(26) The contract price does not include the cost of transmission, which will be paid by United Silicon to Landsnet in accordance with the Transmission Agreement.

2.3 The Transmission Agreement and network charges in Iceland

(27) In Iceland, transmission network charges are established by Landsnet. However, the charges have to be authorized by the regulator, i.e. the EA.

(28) Article 12a of the Electricity Act and Article 15 of Regulation No 1040/2005 on the implementation of the Electricity Act, as amended (“the Electricity Regulation”) set out principles governing the establishment of transmission network tariffs (out-feed):

- Network charges shall be cost-oriented.
- Tariffs shall be non-discriminatory, objective and transparent and approved by the EA.
- A revenue cap is established by the EA, based on historical costs, including depreciation of assets, and a set profit margin. One tariff applies for distribution system operators (DSOs), calculated in Icelandic Króna, and another for energy-intensive users, calculated in US Dollars.
- Out-feed tariff for DSOs is based on (i) total electricity transmitted to the DSO’s geographical area; plus (ii) direct out-feed from power plants within the area.
- Tariffs for DSOs shall be based on average cost and depend on the network connection level (calculated on the basis of 66 kV) but regardless of the physical distance between the place of supply.
- When power is exceptionally transmitted directly by the TSO to an energy-intensive user at a voltage 66 kV or below, a surcharge shall be charged to cover the additional cost of stepping down (“the Step-down Surcharge”).
- Extra charge shall be levied for the necessary additional costs resulting from connecting new power facilities or new energy-intensive users, which would otherwise increase the fees for the existing users (“the System Contribution”), and reduced tariff if it results in more favourable development or utilisation of the network.
(29) Landsnet and United Silicon entered into the Transmission Agreement on 19 March 2014, in connection with the Power Contract. The duration of the contract is [...] years.

(30) The Transmission Agreement has conditions precedent which have been fulfilled, according to information provided by the Icelandic authorities.

(31) The Transmission Agreement concerns the connection of the Plant to the transmission system; the transmission of the power purchased by United Silicon from Landsvirkjun; and the transforming of the purchased power from the transmission voltage (132 kV) to 33 kV, to enable the in-feed of 35 MW power. The purchased electricity for the Plant requires delivery of electric capacity and energy in the amount expected to be up to 35 MW; [...] GWh per year and [...] hours per year. The points of supply set out in Annexes 1 and 3 of the Transmission Agreement are the existing power plants of Landsvirkjun and the point of delivery is a new substation to be constructed in Helguvík.

(32) For this purpose, Landsnet will design and construct certain transmission facilities required to accommodate the provision of electric transmission services to the Plant. In particular, this entails the following, as set out in Annex 1 to the Transmission Agreement, titled “Transmission System Works to be constructed by Landsnet”:

- new 132 kV circuit breaker at the existing Fitjar substation;
- new 132 kV underground power cable from Fitjar substation to Helguvík; and
- new 132 kV substation at the Helguvík industrial site.

(33) Furthermore, Annex 4 to the Transmission Agreement, titled “Special Connection Fee and Step-down Transformers”, sets out that Landsnet will install:

- a transformer in Helguvík for stepping down the power from 132 kV to 33 kV, together with the necessary equipment, shelter and foundation (step-down transformers).

(34) According to Article 10.1 of the Transmission Agreement, the charges payable by United Silicon are threefold:

- a fee for transmitting the Contract Power (mean 35 MW per hour, maximum [...] MW per hour and [...] GWh per year), including but not limited to ancillary services, transmission losses and firm commitment, as defined in the Transmission Agreement (“the Transmission Charge”);

b. a surcharge for stepping down the voltage from 132 kV; “fees based on the actual cost for having the Contract Power delivered at 33 kV voltage” (“the Step-down Surcharge”); and

c. a system contribution “due to the cost associated with connection of the [Plant]” to the transmission system (“the System Contribution”).

2.3.1 The Transmission Charge

(35) The Icelandic authorities have explained that the Transmission Charge for energy-intensive users is, according to a tariff approved by the EA on the basis of the Electricity Act,8 a combination of:

- delivery charge per year;
- capacity charge per MW per year (“the Capacity Charge”);
- energy charge per kWh (“the Energy Charge”);

---

8 Available at http://landsnet.is/english/transmissionandmarket/transmissiontariff/tariff/
d. fee for ancillary services per kWh; and

e. transmission losses per kWh.

Article 10.1 of the Transmission Agreement refers to a sample of an invoice attached in Annex 5 to the Agreement.

2.3.2 The Step-down Surcharge

(36) The Step-down Surcharge has its legal basis in Article 12a(7) of the Electricity Act, which reads:

“The Transmission System Operator may deliver electricity to energy-intensive users at voltage 66 kV or below, provided a special charge covers the extra costs.”

(37) Article 10.1 of the Transmission Agreement sets out that the Step-down Surcharge is based on actual costs of having the contract power delivered at 33 kV voltage. Reference is made to Annex 1 and 4 to the agreement and Landsnet’s “relevant Terms and Conditions”.

(38) The Step-down Surcharge is an additional fee, added to the Capacity Charge and the Energy Charge and is, according to Annex 4 of the Transmission Agreement, meant to compensate for the actual cost of stepping down the electricity for United Silicon as a power intensive user; “calculated to repay the actual cost of stepping down the electricity”.

(39) The actual costs of the equipment (the step-down transformers) are estimated at [...] ISK, according to Annex 4 to the Transmission Agreement:

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Voltage</th>
<th>Estimated cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>One step-down transformer in Helguvík (50 MVA), and associated equipment</td>
<td>132/33 kV</td>
<td>[...] ISK</td>
</tr>
<tr>
<td>Shelter for transformer with foundation</td>
<td></td>
<td>[...] ISK</td>
</tr>
</tbody>
</table>

(40) For calculating the Step-down Surcharge, Landsnet applies a formula set out in a grid code which it issues (“the Grid Code”). The formula applied to calculate the Step-down Surcharge according to the Transmission Agreement is the one provided for in Article 4.2 of Section B.9 of the Grid Code issued 1 February 2011, version 1.0 on Terms for Delivering Electricity to Power Intensive Users at Voltages below 132 kV, also copied in Annex 4 of the Transmission Agreement:

9 The Authority’s informal translations. The Icelandic text reads: “Flutningsfyrirtækinu er heimilt að afhenda raforku til stórtotenda á 66 kV eða lægri spennu enda standi sérstök gjaldtaka undir viðbótarkostnaði.”
10 Available at http://landsnet.is/english/transmissionandmarket/gridcode/.
11 It should be noted that this version of the Grid Code was amended on 1 March 2015. According to the new version, the share in stepped-down voltage cost to be included in the formula shall amount to 80%-100% of the stepping-down expense. The new version of the Grid Code is still only available in Icelandic, at: http://www.landsnet.is/library/Skrar/Raforkukerfid/Netmali/B9%20010315.pdf.
12 According to Article 9, paragraph 6 of the Electricity Act the transmission system operator (Landsnet) shall, in consultation with electricity companies, establish rules on the management of the system, which
2.3.3 The System Contribution

(41) The System Contribution has its legal basis in Article 12a(10), first indent, of the Electricity Act, which reads:

“Additional fee shall be charged in case new power plants or new energy-intensive users cause additional costs for existing users.”

(42) As referred to above, United Silicon shall pay the System Contribution “due to costs associated with connection of the Customer to the Transmission System, as laid down in table 4 of Annex 1” of the Transmission Agreement. These costs are estimated as follows in the Transmission Agreement:

| Circuit breaker (132 kV) at Fitjar            | […] ISK |
| Cable, approx. 8.9 km (500 q) Fitjar to Helguvík | […] ISK |
| Connection point in Helguvík                  | […] ISK |
| Total                                          | […] ISK |

(43) According to Annex 1 of the Transmission Agreement, the estimated total System Contribution to be paid by United Silicon is […] ISK. However, the System contribution is in fact calculated and paid in the form of an annual contribution. The Icelandic authorities have informed that United Silicon will pay, for the transmission of 35 MW, an annual System Contribution of […] ISK and they have provided the following table demonstrating possible annual System Contribution payable by United Silicon in different scenarios:

<table>
<thead>
<tr>
<th>[…] MW</th>
<th>[35 MW]</th>
<th>[…] MW</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISK […]</td>
<td>ISK […]</td>
<td>ISK […]</td>
</tr>
</tbody>
</table>

shall be approved by the Minister. According to the EA, the Grid Code B.9 on the step-down Surcharge is based on Article 9 of the Electricity Act.


Informal translation by the Authority. The Icelandic text reads: “Krefjast skal greiðslu ef tending nýrra virkjana eða stórnootenda við flutningskerfi veldur auknum tilkostnaði annarra notenda kerfisins.”

Doc No 725496.
The Icelandic authorities have provided the following general presumptions for the calculation of the annual System Contribution payable by United Silicon:\(^{15}\):

<table>
<thead>
<tr>
<th>WACC</th>
<th>Power</th>
<th>Utilization time</th>
<th>Proportion of income for return on investment calculations (ht)</th>
<th>Operating cost rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.31%</td>
<td>35 MW</td>
<td>[…] h/year</td>
<td>27%</td>
<td>1.2%</td>
</tr>
</tbody>
</table>

and the following formula used for cash flow calculations of the investment:

\[
\text{Cash flow} = \frac{\text{Investment} \cdot \text{WACC}}{1 - (1 + \text{WACC})^\text{years}}
\]

Transmission charges

\[
= \text{ht} \cdot (\text{Delivery charge} + \text{Power} \cdot \text{Capacity charge} + \text{Energy} \cdot \text{Energy charge})
\]

System contribution payments

\[
= \text{Cash flow} - \text{Transmission charges} + \text{Operating cost}
\]

(45) The income framework of Landsnet is based on the company’s assets, approved by the EA. Landsnet splits its assets into three categories, as assigned to the in-feed, the main and the out-feed parts of the grid. The following proportional assignment of the asset base for the energy-intensive users is currently applied by the company:

<table>
<thead>
<tr>
<th>Energy-intensive users</th>
<th>In-feed</th>
<th>Main</th>
<th>Out-feed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>11%</td>
<td>62%</td>
<td>27%</td>
</tr>
</tbody>
</table>

(46) The connection of United Silicon to the grid belongs to the Out-feed part of the grid. As a consequence, when calculating the System Contribution, Landsnet has applied 27% of the Transmission Charges which United Silicon would pay, as an income when calculating the return on the investment needed to connect the Plant to the grid. The proportional assignment of 27% for the out-feed part of the grid is not based on a statutory rule. However, the rationale being that this proportion (27%) is the same as the one assigned to the out-feed part of the grid. Landsnet’s regulated assets are divided between distribution and power intensive users according to a ratio decided on the basis of capacity ratios (power consumption) between distribution and power intensive consumers, as approved by EA.

(47) The EA reviews the profitability calculations provided by Landsnet for the connections of new energy-intensive users in the context of assessing applications from Landsnet for a licence for construction of new transmission facilities with components of 66 kV and above. This is so, since the construction of transmission facilities at the voltage 66 kV and above are subject to a licence issued by the EA, according to Article 9(2) of the Electricity Act.

(48) The EA has confirmed to the Authority that the principles described above in calculating the System Contribution are applied by Landsnet in a systematic and non-discriminatory manner, and that the methodology in calculating the System Contribution is reviewed by the EA in each case of investment for energy-intensive users.

\(^{15}\) Op. cit.
(49) The Icelandic authorities have provided the Authority with a copy of Landsnet’s application for a licence to construct and operate the transmission facilities in question, initially submitted for a silicon metal plant to be constructed by Íslandska Kísilfélagið ehf., together with the profitability calculations for the investment needed for connecting that plant, dated 12 May 2011, and a revised profitability calculation submitted to the EA on 22 September 2014, for the United Silicon Plant. According to the revised calculations, Landsnet proposed, instead of the 500 mm² cable necessary for the Plant, to lay a 800 mm² cable with a capacity of 140 MVA and the estimated additional cost of […] million ISK compared to the 500 mm² cable. The System Contribution payable by United Silicon is calculated on the basis of the cost of a 500 mm² cable.

(50) The System Contribution of […] million ISK payable by United Silicon is calculated on the basis of a depreciation period of 40 years.

(51) The EA issued a licence on 15 December 2011 and confirmed the licence, with the revised profitability calculations, on 18 December 2014 (both documents were sent to the Authority by mail dated 19 January 2015 (Doc No 742079)).

2.4 The scope of this Decision

(52) In this Decision, the Authority will assess the terms of the Power Contract and the aspects of the Transmission Agreement concerning the Step-down Surcharge and the System Contribution. It therefore falls outside the scope of this Decision to assess whether there is potential State aid involved in any other elements of the Transmission Agreement and to what extent the transmission tariff might entail State aid in general or in the context of this case, apart from the Step-down Surcharge and the System Contribution in the Transmission Agreement.

3 Comments by the Icelandic authorities

(53) The Icelandic authorities and Landsvirkjun are of the view that the notified Power Contract does not entail State aid and have submitted their arguments to that end. The Icelandic authorities notified the Power Contract for legal certainty. In particular, the Icelandic authorities have in this regard put forward arguments pertaining to the presence of an advantage. They submit that the Power Contract yields an acceptable return and that its terms fall within the margin of discretion which a public company enjoys in running its business. The Icelandic authorities have submitted that this is demonstrated by (i) a comparison with other contracts with energy-intensive users; (ii) the determination of price and the presence of business risk; (iii) its duration and potential for adjustment to market developments; and (iv) the profitability of investments made by Landsvirkjun. The arguments have to some extent been further developed in Landsvirkjun’s submissions, in particular as regards the profitability. The profitability calculations submitted are discussed in subsection II.1.2 below. Furthermore, it is submitted that the following factors must be taken into account: (i) that the power price is high compared to existing power contracts with energy-intensive users; (ii) the duration of the Power Contract is shorter than in existing power contracts with energy-intensive users; and (iii) there is the possibility of getting higher prices from the Plant and its extension in the future, and to get higher prices from other energy-intensive users.

(54) The Icelandic authorities submit that since there is a surplus capacity in the generation system (in the South-West of Iceland), the necessary capital investment is limited to investments in the transmission system. They have explained that the necessary transmission investments for supplying the power to the Plant in Helguvík from Landsnet’s substation in Fitjar entail the construction of: (i) one 132 kV circuit breaker in Fitjar substation, (ii) new 132 kV underground cable, 8.9 km, from Fitjar substation to a planned substation in Helguvík, (iii) installation of a 132/33 kV step-down transformer in Helguvík,
50 MVA, together with necessary equipment, foundations and shelter, and (iv) completing the first construction phase of the future substation in Helguvík.\textsuperscript{16} The Icelandic authorities have provided clarifications as regards the share United Silicon pays in this investment. The Icelandic authorities have submitted that the transmission of the power to United Silicon is not a part of Landsvirkjun’s operations but that of Landsnet’s.

(55) The Icelandic authorities have submitted, that with a duration of [...] years, the Power Contract is shorter in duration than many of the power contracts that are currently being executed by Landsvirkjun, of which a duration of 20 years and more was common. However, Landsvirkjun has for some time aimed at shortening the contract periods in new power contracts towards no longer than 15 to 18 years, which would facilitate the adjusting of the price for contract electricity to the price developments in more liquid electric power markets than that of Iceland.

(56) In the Icelandic authorities’ view it is at the same time evident that an investor setting up a new energy-intensive industry plant requires some certainty about the price of the electricity, which is a major cost factor that has a strong impact on the profitability of the investment, and its feasibility forecast. Against this background the result of the negotiation dialogue between Landsvirkjun and United Silicon is to be seen as a compromise that satisfies the interests of both parties.

(57) The Icelandic authorities have informed the Authority that Landsvirkjun sees the contract also as an implementation of the company’s new strategy that is aimed at increasing the diversity of its client base. Silicon metal represents a new industry in the company’s portfolio, which it believes has good long-term prospects in Iceland where power is generated from renewable energy sources only. They submit that the Power Contract was negotiated on normal market terms and provides an acceptable rate of return to Landsvirkjun, and that it hence does not confer an advantage on United Silicon. Moreover, they contend that there was no transfer of State resources, and that there is neither a distortion of competition nor an affectation of intra-EEA trade.

(58) The Icelandic authorities have provided more specific views on the issue of imputability, in particular as regards the involvement of Landsvirkjun’s owners, \textit{i.e.} the Icelandic State. The State was informed of the progress of discussions between Landsvirkjun and United Silicon while the negotiations were in progress, but according to the Icelandic authorities no formal approval was obtained from it, neither with regard to the methodology used or individual substantive provisions of the power contract. In essence, the Icelandic authorities argue that the State did not exert any direct influence on the contract or the negotiations, and that therefore the measure is not imputable to the State.

II. ASSESSMENT

1 The presence of State aid

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

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

\begin{quote}
“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
\end{quote}

\textsuperscript{16} Doc No 705959,
shall, in so far as it affects trade between Contracting Parties, be incompatible with the functioning of this Agreement.”

Accordingly, a measure constitutes State aid within the meaning of Article 61(1) of the EEA Agreement if the following conditions are cumulatively fulfilled: the measure (i) is granted by the State or through State resources; (ii) confers an economic advantage on the beneficiary; (iii) is selective; (iv) it is liable to affect trade between Contracting Parties and distort competition.\(^\text{17}\)

1.2 The Power Contract

To be qualified as State aid, the advantage must be granted by the State or through State resources. The advantage can also be granted though a public undertaking provided there is imputability to the State.\(^\text{18}\) However, the question of whether there is imputability to the State is only relevant if the Power Contract is not concluded on market conditions in line with the market economy operator (MEO) test.\(^\text{19}\) In other words, the Authority does not need to assess the question of imputability insofar Landsvirkjun entered into an agreement that any private electricity producer operating on the market would have found acceptable. Against this background, the Authority observes that the issue is to examine whether a private investor operating in a market economy would have chosen to enter into a long term bilateral contract for the same price and on the same terms as in the Power Contract under assessment.\(^\text{20}\)

When governments make financial transactions and investments, the Court of Justice of the European Union (“CJEU”) has stated that in order to confirm whether a State measure constitutes aid, it is necessary to establish whether the recipient undertaking receives an economic advantage, which it would not have obtained under normal conditions.\(^\text{21}\) In doing so, the Authority has to apply the abovementioned 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.\(^\text{22}\)

The measure at hand – a power contract, with a publicly owned company as a seller could thus entail an element of State aid if its terms are such that they would not have been acceptable to a private market investor and that the sale of electricity could not have been expected to be sufficiently profitable for a private operator.

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 investor.\(^\text{23}\)

---

\(^\text{17}\) According to settled case law, classification as aid requires that all the conditions set out in the provision are fulfilled, see judgment in Belgium v. Commission (“Tubemeuse”), C-142/87, EU:C:1990:125, paragraph 25.


\(^\text{20}\) See the Authority’s Decision No 305/09/COL on power sales agreement entered into by Notodden municipality and Becromal Norway AS.


\(^\text{23}\) 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).
Moreover, the Authority must base its assessment of the price and terms of the contracts between Landsvirkjun and United Silicon on the information available at the time of the conclusion of the Power Contract.

(65) Ordinarily, when a sale by a public company or a public authority is assessed, the market 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. The abundant potential to produce electricity in Iceland and this isolation are assumed to be the main reasons for the differences in the price of electricity between Iceland and other EEA States.

(66) Against this background, the Authority must base its assessment on indicators other than “pari passu” transactions; an open, transparent, non-discriminatory and unconditional tender procedure; or benchmarking (comparable transactions carried out by comparable private operators in comparable situations).

(67) In the case at hand, the contract power will be exclusively provided by Landsvirkjun’s existing power generation system. In the context of the Authority’s assessment in Decision No 392/11/COL Landsvirkjun provided information on the average cost of production of electricity in its existing generation system, which mainly consists of hydroelectric power stations (96%). The average production cost of Landsvirkjun’s existing power plants in 2010 (sales 12,926 GWh) was […] USD per MWh before taxes. The estimated average price in the Power Contract in real terms is […] USD per MWh and […] USD per MWh including the bonus, according to calculations provided by Landsvirkjun, assessed and verified by the Authority. Furthermore, Landsvirkjun has provided the following estimate of the expected NPV (before tax) of the Power Contract, taking into account the average cost of production from Landsvirkjun’s current power generation system:

<table>
<thead>
<tr>
<th>Discount Rate</th>
<th>5th Percentile</th>
<th>Mean</th>
<th>95th Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.8%</td>
<td>[…]</td>
<td>[…]</td>
<td>[…]</td>
</tr>
<tr>
<td>7.8%</td>
<td>[…]</td>
<td>[…]</td>
<td>[…]</td>
</tr>
<tr>
<td>8.8%</td>
<td>[…]</td>
<td>[…]</td>
<td>[…]</td>
</tr>
</tbody>
</table>

Figure 2. Source: Landsvirkjun.

(68) In the Authority’s view, the calculations provided are already a strong indicator for the contract to be concluded on market terms, as it can be assumed that the Power Contract generates an acceptable rate of return for Landsvirkjun.

(69) Secondly, the bonus arrangement which […] has only an upside for Landsvirkjun and does not carry the negative exposure on […] prices according to the Power Contract.
(70) Third, the Take or Pay Obligation for [...] of the contract power per annum and [...] for each rolling three year period ensures that there will be a constant stream of revenue, regardless of the business success of United Silicon.

(71) Fourth, 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, in particular as Landsvirkjun has the option to [...] and [...] of the contract power.

(72) Fifth, Landsvirkjun has [...] curtailment options according to the Power Contract.

(73) Finally, the Authority observes that in its Decision No 392/11/COL it assessed a power contract entered into between Landsvirkjun and Íslenska Kísilfélagið ehf. on the sale of electricity, and to make 35 MW of power ([...] GWh per year) available as of 2013 for a planned silicon metal plant in Helguvík. The Icelandic authorities informed at the time that the electricity Landsvirkjun had agreed to provide for this plant as of 2013 was already available in its power generation system and thus no further construction of power plants would be needed. The Authority concluded in its Decision No 392/11/COL that there was no State aid involved in the contract. This contract never entered into effect. The prices and terms negotiated in the Power Contract currently under assessment, for the same volume of energy as in the previous contract, are not less favourable for Landsvirkjun than in the contract entered into with Íslenska Kísilfélagið ehf., according to the calculations provided by Landsvirkjun in the case at hand. This is another indicator for the Power Contract to be on market terms.

(74) For the above reasons, the Authority concludes that the terms of the Power Contract fall within the margin of discretion that public companies enjoy in running their business. On the basis of the information provided by the Icelandic authorities, the Authority can conclude that the conditions of the power contract do not entail an advantage for United Silicon.

1.2.1 Conclusion on the presence of aid in the Power Contract

(75) As the Power Contract does not entail an advantage for United Silicon, and the criteria laid down in Article 61(1) of the EEA Agreement are cumulative, the Authority will not assess in this Decision whether the remaining conditions for a measure to constitute State aid are met. The Authority therefore concludes that there is no State aid involved in the Power Contract.

1.3 The Step-down surcharge and the System Contribution

(76) As a preliminary point, the Authority observes that transmission tariffs are one of the key elements of the EEA internal electricity market.

(77) Directive 2003/54/EC concerning common rules for the internal market in electricity provides that national regulators shall ensure non-discriminatory and cost-reflective transmission tariffs by fixing or approving the tariffs or the methodology underlying the calculation of the tariffs. The Authority is of the view that a tariff within the meaning of Directive 2003/54/EC covers not only the Transmission Charge, but also the System Contribution, since the latter is established in order to cover costs of accessing the transmission network.

---

24 Incorporated into Annex IV (point 22) to the EEA Agreement by Joint Committee Decision No 146/2005 of 2 December 2005.
25 See Recital 18, Article 23.2 and Article 20 of the Directive.
(78) The system of allocating costs to transmission users is not regulated by the internal market legislation, and different tariff schemes coexist in the EEA. An overview of the transmission tariffs in Europe can be found in a recent ENTSO-E synthesis, according to which infrastructure is the main component of the Icelandic transmission tariff and energy-intensive grid users pay for the infrastructure connecting their installation to the transmission grid based on actual cost (not fully socialized via the tariff). This is in line with the information provided by the Icelandic authorities in the case at hand, according to which Article 12a of the Electricity Act provides that for connecting new energy-intensive users in Iceland: (i) Step-down Surcharge shall be charged in case the electricity is delivered at voltage below 132 kV, for covering the extra costs of the stepping-down (see Article 12a(7) of the Electricity Act); and (ii) System Contribution (connection fee) shall be charged for necessary additional costs resulting from the connection (see Article 12a(10) of the Electricity Act, and also Article 15(11) of the Electricity Regulation).

(79) The Authority observes that the issue is to examine whether United Silicon will receive an economic advantage in the form of preferential charges via the Transmission Agreement in the form of exemptions from costs that normally would be borne by the company in its normal course of business, in the case of the Step-down Surcharge and the System Contribution. The Authority recalls that the system of transmission charges in Iceland was outlined and the Transmission Agreement was described in subsection 1.2.3 above. Insofar as the Step-down Surcharge and the System Contribution paid by United Silicon deviate from the statutory rules and the general principles and an established administrative practice in Iceland, this may entail State aid. This will be addressed below.

1.3.1 The Step-down Surcharge

(80) As describe above, the Step-down Surcharge is established by statutory rules and is intended to compensate for the actual extra costs related to the stepping-down of the electricity from 220 kV or 132 kV (the voltage of the grid) to the lower delivery voltage requested by the DSOs or energy-intensive user.

(81) The Transmission Agreement prescribes at Article 10.1 that a Step-down Surcharge will be charged for having the contact power delivered at a 33 kV and 11 kV voltage, as further laid down in the Grid Code B.9 and in Annex 5 to the Transmission Agreement.

(82) Annex 4 of the Transmission Agreement sets out the estimated actual cost of stepping down the electricity for United Silicon. The cost is estimated at ISK […] million (approximately EUR […] million) and includes one step-down transformer and related equipment, and shelter for the transformer with foundation. The Icelandic authorities have explained that this is not part of the public service obligation imposed on Landsnet by statutory rules, but rather an option they have in order to provide additional services to the customer.

(83) Annex 4 to the Transmission Agreement refers to the Step-down Surcharge as established in Landsnet’s Grid Code B.9. The Authority observes that the legal basis for the Step-down Surcharge is in Article 12a(7) of the Electricity Act, and recalls its wording:

---

27 Doc No 722917.
28 Article 12a(7) of the Electricity Act, as amended by Act No 19/2011.
29 According to Landsnet, the Electricity Act was amended in 2011 to include an authorization for the company to provide step-down services. The reason for this authorization was that DSOs were not in all instance in a position to provide the service. Allowing Landsnet to provide this service was considered necessary to guarantee that the stepping-down would not lead to disruption in the operation of the transmission system. Furthermore, it was considered economically feasible as the cost of stepping-down could be lowered with the pooling of such services and the standarisation of the equipment.
“The transmission system operator may deliver electricity to energy-intensive users at a voltage of 66 kV or below, provided the extra costs are covered by a special surcharge.”

(84) It is the Authority’s understanding that the Step-down Surcharge is intended to fully cover the extra costs of the stepping-down to the voltage level requested by the energy-intensive customer. The Icelandic authorities have submitted a formula (see also Figure 1 above) applied in the case of United Silicon, for calculating a surcharge on the Capacity Charge (per year) and Energy Charge (per kWh) parts of the Transmission Charge for energy-intensive users. The Authority observes that the formula only takes into account an 80% share of the total actual expenses related to the stepping-down. However, the Icelandic authorities have explained to the Authority that the actual cost is not 100% of the investment needed for United Silicon, but rather 80%. This is so, because of certain synergies that reduce the actual cost. This understanding has been confirmed to the Authority by the EA (see Doc. No 747838). The Authority has also been informed that at the new substation in Helguvik, not only United Silicon but other energy-intensive user and the DSO for the area, HS Veitur, will require Step-down services.

(85) On this basis, the Authority concludes that no advantage is conferred upon United Silicon as regards the Step-down Surcharge.

1.3.2 The System Contribution

(86) The Icelandic authorities have explained that the general Transmission Charge for energy-intensive users does not include a fee for connecting new customers to the transmission grid. They have explained that according to statutory rules the connection of new customers shall not result in increased cost for the existing customers. It is the Authority’s understanding that the payment (the System Contribution) shall be established on the basis of the necessary costs of connection.

(87) The Authority understands that Article 12a(10) of the Electricity Act provides that the TSO shall charge for the additional cost that connecting a new energy-intensive user would otherwise entail for the existing grid users. Moreover, Article 15(11) of the Electricity Regulation provides that the TSO shall inform the new energy-intensive user beforehand of whether a System Contribution will be charged and shall provide him with the assumptions on the basis of which it is calculated.

(88) The Icelandic authorities have explained that the “income framework” of Landsnet is based on its assets, which are assigned to the in-feed, the main, or the out-feed part of the grid. They have provided the following proportional assignment of Landsnet’s assets, as regards the energy-intensive part, stating that this is the current proportional assignment of the assets as calculated by Landsnet:

<table>
<thead>
<tr>
<th>Energy-intensive users</th>
<th>In-feed</th>
<th>Main</th>
<th>Out-feed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>11%</td>
<td>62%</td>
<td>27%</td>
</tr>
</tbody>
</table>

30 The Authority’s informal translation. The original text reads as follows: “Flutningsfyrirtækinu er heimilt að afhenda raforku til stórmotenda á 66 kV eða lægri spennu enda standi sérstök gjaldtaka undir viðbótarkostnaði.”
31 See formula in Figure 1 of this Decision.
32 Landsnet refers to different type of synergies such as joint utilization of facilities, equipment and reserve components. Landsnet has explained that the standardisation of components for certain voltage levels, although beneficial for the company, can create a disadvantage for its customers.
33 Doc No 722917.
34 Doc No 725496. The Icelandic authorities have not provided information as to the breakdown of the asset base between the energy-intensive part and the DSO part.
(89) Landsnet applies this proportion to calculate the System Contribution. Therefore, Landsnet currently allocates 27% of the future revenues from new energy-intensive users (stemming from the general Transmission Charge) to the investment and operational costs of connecting them to the grid. Landsnet has explained that this is an administrative practice applied on a non-discriminatory basis. This has been confirmed by the EA. However, the Authority observes that this practice is not published, neither by Landsnet nor the EA. The EA has explained that, in general, it approves the methodology, which are informed by EA to be general principles, applied by Landsnet in calculating the System Contribution in the context of assessing the profitability calculations attached to Landsnet’s applications to the EA for new transmission facilities with components of voltage 66 kV and above, for which licence is required from the EA, according to Article 9(2) of the Electricity Act.

(90) The Authority has been provided with a copy of Landsnet’s application for the infrastructure needed for the connection to Helguvík, dated 12 May 2011. In the application Landsnet explicitly referred to, at Annex A, the fact that the profitability calculations for the investment needed do not cover any cost of upgrading the main grid. Therefore, the share of the Transmission Charges attributed to the investment cost for the connection would recoup the investment.

(91) On this basis, the Authority understands that the investment needed for United Silicon, within the meaning of Article 12a(10) of the Electricity Act only concerns the connection from Fitjar substation to a planned substation at the industrial site in Helguvík (8.9 km), whereas it does not cover any new investment in infrastructure from Fitjar substation to Hamranes substation (see Figure 3). United Silicon is the first energy-intensive customer to establish in the planned industrial site at Helguvík. Any potential future costs that may incur in the context of upgrading the connection from Fitjar substation to Hamranes (see Figure 3) is therefore outside the calculation of the System Contribution payable by United Silicon and outside the scope of this Decision.

Figure 2. Connection of Fitjar substation to the main grid. The 220 kV grid is shown in green and the 132 kV grid is shown in red.

Figure 3. Source: Landvirkjun. Helguvík is north of Fitjar.

---

35 See Figure 2 on page 6 in the notification letter from Landsvirkjun, received on 17 April 2014. Doc No 705959.
36 See also http://landsnet.is/landsnet/upplysingatorg/frettir/frett/2014/12/03/Landsnet-semur-um-nyjan-jardstreng-fra-Fitjum-til-Helguvikur/
37 See Figure 2 on page 6 in the notification letter from Landsvirkjun, received 17 April 2014. Doc No 705959.
The Authority recalls that Article 15(11) of the Electricity Regulation sets out that the TSO shall inform the new energy-intensive user beforehand of whether a System Contribution will be charged and shall provide him with the assumptions on the basis of which it is calculated. According to the information provided in the case at hand the estimated System Contribution set out in Table 4 in Annex 1 to the Transmission Agreement is in line with the statutory rules in Iceland.

The Authority has been provided with a spread sheet demonstrating the calculation of the ISK […] million payable by United Silicon in System Contribution. The assumptions made in the calculations are that a constant stream of revenues, based on 35 MW, will come from United Silicon for the full lifetime of the investment, 40 years, even if the duration of the Transmission Agreement is only […] years. Therefore, no risk of reduced energy during the […] years contract period has been taken into account and neither has the risk of no or less energy being transmitted during years […] to 40 of the investment lifetime. The EA has explained that this methodology is according to their guidelines and is acceptable. According to the EA, the general rule is to use a depreciation period of 40 years when calculating the System Contribution, and this rule applies for all investments (Doc. No 747838).

On the basis of the above, the Authority comes to the conclusion that there is no selective advantage involved in the Transmission Agreement as the calculation of the System Contribution is in line with the statutory rules. Therefore, no selective advantage is conferred upon United Silicon in the context of the System Contribution.

Since the criteria in Article 61(1) of the EEA Agreement are cumulative, there is no need to establish whether State resources were involved in the case at hand. The same applies to other criteria in Article 61(1).

1.3.3 Conclusion on the existence of State aid in the Transmission Agreement

In light of the above, the Authority concludes that there is no State aid involved in the Step-down Surcharge and the System Contribution of the Transmission Agreement, within the meaning of Article 61(1) of the EEA Agreement.

2 Conclusion

The Authority finds that neither the Power Contract nor the provisions of Step-down fee or the System Contribution in the Transmission Agreement entail the granting of State aid.

HAS ADOPTED THIS DECISION:

Article 1

The Power Contract dated 19 March 2014 between Landsvirkjun and United Silicon, as notified for legal certainty, and the Step-down Surcharge and System Contribution in the Transmission Agreement dated 19 March 2014 between Landsnet and United Silicon do 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.
Decision made in Brussels, on 25 March 2015,

*For the EFTA Surveillance Authority*

Oda Helen Sletnes  
*President*

Frank J. Büchel  
*College Member*