

# Tariff for the Transmission of Electricity and Ancillary Services

No. 13 Effective as of Jan 1 st 2012

This tariff applies to the transmission of electricity through Landsnet's transmission system.

The tariff also applies to producers connected to Landsnet's transmission system through a distribution system.

# **Article 2**

The following definitions apply and are used in this tariff:

*Delivery/supply voltage*: The standard voltage (nominal voltage) at which Landsnet delivers/supplies electricity:

*Point of delivery*: A point in a transmission or distribution system where electricity is taken out.

Calendar year: 1 January – 31 December each year.

Transmission system: Electrical lines and connected facilities needed to transmit electricity from producers to power intensive users and to distribution system operators. It extends from the ingoing switch in the transmission system operators switchyard, to the outgoing switch for a distribution company/power intensive user in the transmission companys switchyard.

Curtailable transmission: Electricity which Landsnet is permitted to curtail due to circumstances in accordance to paragraph 5.1 in Landsnets terms for curtailable transmission. This does no apply to curtailments and rationing according to the ninth paragraph of Art. 9 of the Electricity Act.

*In-feed*: Electricity which is supplied to the transmission system or the distribution system.

*Power intensive user*: A user who uses in one place and within three years of startupa minimum of 80 GWh annually.

Out-feed: Electricity delivered to customers out of Landsnet's transmission system, together with the electricity produced in power stations connected to Landsnet through a distribution system.

The points of delivery and supply and voltage for the in-feed and out-feed of electricity are as follows:

Points of (In-feed) supply,	Supply voltage:
Andakílsvirkjun	66 kV
Blöndustöð	132 kV
Búrfellsstöð	220 kV og 66 kV
Fljótsdalsstöð	220 kV
Hellisheiðarvirkjun	220 kV
Hrauneyjafossstöð	220 kV
Írafossstöð	132 kV
Kröflustöð	132 kV
Lagarfossvirkjun	66 kV
Laxárstöð	66 kV
Ljósafossstöð	66 kV
Mjólkárvirkjun	66 kV
Nesjavellir	132 kV
Reykjanesvirkjun	132 kV
Sigöldustöð	220 kV
Steingrímsstöð	66 kV
Sultartangastöð	220 kV
Svartsengi	132 kV
Vatnsfellsstöð	220 kV
Points of (Out-feed ) delivery,	<u>Delivery voltage</u>
Points of (Out-feed ) delivery,  To Power intensive users:	<u>Delivery voltage</u>
To Power intensive users:	220 kV
To Power intensive users: Switchyard ALCAN	220 kV . 220 kV
<b>To Power intensive users:</b> Switchyard ALCAN Switchyard Fjarðaál	220 kV . 220 kV 220 kV
To Power intensive users: Switchyard ALCAN Switchyard Fjarðaál	220 kV . 220 kV 220 kV 220 kV
To Power intensive users: Switchyard ALCAN Switchyard Fjarðaál. Switchyard Járnblendifélag Switchyard Norðurál	220 kV . 220 kV 220 kV 220 kV 132 kV
To Power intensive users: Switchyard ALCAN Switchyard Fjarðaál Switchyard Járnblendifélag Switchyard Norðurál Switchyard Becromal Switchyard Ásbrú	220 kV . 220 kV 220 kV 220 kV 132 kV
To Power intensive users: Switchyard ALCAN Switchyard Fjarðaál Switchyard Járnblendifélag Switchyard Norðurál Switchyard Becromal	220 kV . 220 kV 220 kV 220 kV 132 kV
To Power intensive users:  Switchyard ALCAN  Switchyard Fjarðaál.  Switchyard Járnblendifélag  Switchyard Norðurál  Switchyard Becromal  Switchyard Ásbrú.  To Distribution system operators:	220 kV . 220 kV 220 kV 220 kV 132 kV 33 kV
To Power intensive users:  Switchyard ALCAN Switchyard Fjarðaál Switchyard Járnblendifélag Switchyard Norðurál Switchyard Becromal Switchyard Ásbrú  To Distribution system operators: Akranes Blanda	220 kV . 220 kV 220 kV 220 kV 132 kV 33 kV 66 kV 11 kV
To Power intensive users:  Switchyard ALCAN  Switchyard Fjarðaál  Switchyard Járnblendifélag  Switchyard Norðurál  Switchyard Becromal  Switchyard Ásbrú  To Distribution system operators:  Akranes	220 kV 220 kV 220 kV 220 kV 132 kV 33 kV 66 kV 11 kV
To Power intensive users:  Switchyard ALCAN  Switchyard Fjarðaál  Switchyard Járnblendifélag  Switchyard Norðurál  Switchyard Becromal  Switchyard Ásbrú  To Distribution system operators:  Akranes  Blanda  Bolungarvík	220 kV 220 kV 220 kV 220 kV 132 kV 33 kV 66 kV 11 kV 66 kV
To Power intensive users:  Switchyard ALCAN  Switchyard Fjarðaál.  Switchyard Járnblendifélag  Switchyard Norðurál  Switchyard Becromal  Switchyard Ásbrú.  To Distribution system operators:  Akranes  Blanda  Bolungarvík  Breiðadalur	220 kV . 220 kV 220 kV 220 kV 132 kV 33 kV 66 kV 11 kV 66 kV 66 kV
To Power intensive users: Switchyard ALCAN Switchyard Fjarðaál. Switchyard Járnblendifélag Switchyard Norðurál Switchyard Becromal Switchyard Ásbrú.  To Distribution system operators: Akranes Blanda Bolungarvík Breiðadalur Brennimelur	220 kV . 220 kV 220 kV 132 kV 33 kV 66 kV 11 kV 66 kV 66 kV 11 kV
To Power intensive users:  Switchyard ALCAN  Switchyard Fjarðaál.  Switchyard Járnblendifélag.  Switchyard Norðurál  Switchyard Becromal  Switchyard Ásbrú.  To Distribution system operators:  Akranes.  Blanda  Bolungarvík  Breiðadalur.  Brennimelur  Búrfell	220 kV . 220 kV 220 kV 220 kV 132 kV 33 kV 66 kV 11 kV 66 kV 11 kV 66 kV 11 kV 66 kV
To Power intensive users:  Switchyard ALCAN  Switchyard Fjarðaál  Switchyard Járnblendifélag  Switchyard Norðurál  Switchyard Becromal  Switchyard Ásbrú  To Distribution system operators:  Akranes  Blanda  Bolungarvík  Breiðadalur  Brennimelur  Búrfell  Dalvík	220 kV 220 kV 220 kV 132 kV 33 kV 66 kV 11 kV 66 kV 11 kV 66 kV 11 kV 66 kV

Fitjar	132 kV
Flúðir	66 kV
Geiradalur	132 kV
Glerárskógar	132 kV
Grundarfjörður	66 kV
Hamranes	132 kV
Hella	66 kV
Hnoðraholt	132 kV
Hólar	132 kV
Hrútatunga	132 kV
Hryggstekkur	11 kV
Húsavík	33 kV
Hveragerði	66 kV
Hvolsvöllur	66 kV
Ísafjörður	66 kV
Kópasker	66 kV
Korpa	132 kV
Krafla	
Lagarfoss	66 kV
Laxá	
Laxárvatn	132 kV
Lindarbrekka	66 kV
Ljósafoss	11 kV
Mjólká	. 33 kV
Neskaupsstaður	66 kV
Ólafsvík	66 kV
Prestbakki	132 kV
Rangárvellir	66 kV
Rauðavatn	132 kV
Rimakot	66 kV
Sauðárkrókur	66 kV
Selfoss	66 kV
Seyðisfjörður	
Sigalda	.11 kV
Silfurstjarna	66 kV
Stuðlar	66 kV
Svartsengi	132 kV
Tálknafjörður	66 kV
Teigarhorn	132 kV
Þorlákshöfn	66 kV
Varmahlíð	11 kV
Vatnshamrar	66 kV
Vegamót	66 kV
Vestmannaeyjar	33 kV
Vogaskeið	66 kV
Vopnafjörður	66 kV
Öldugata í Hafnarfirði	132 kV

4.1 Transmission charges<sup>1</sup>

#### In-feed:

Delivery charge per year...... ISK 4.317.536

#### Out-feed:

Distribution system operators:

Delivery charge per year...... ISK 4.317.536

Capacity charge per MW per year..... ISK 4.432.936

Energy charge per MWh......ISK 320,99

Power intensive users

Delivery charge per year......USD 53.496

Capacity charge per MW per year.....USD 28.305

Charges for ancillary services and transmission losses are not included in the transmission charges above and are collected separately pursuant to Section 4.2.

4.2 Charge for Ancillary Services and transmission losses<sup>2</sup>

Ancillary services per MWh......ISK 28,70

Transmission losses per MWh ......ISK 44,70

- 4.3 A discount of 5% is granted on the capacity charge and energy charge pursuant to Section 4.1 where electricity is delivered to distributors at a nominal voltage over 66 kV.
- 4.4 No capacity charge is imposed on curtailable transmission, and such transkission shall be in accordace to Landsnets terms B5.
- 4.5 A capacity charge for out-feed is calculated based on the average of the four highest 60-minute monthly power-peaks of the year for each delivery point.
- 4.6 A discount of 17% is granted on the charge for ancillary services relating to curtailable transmission. This discount amounts to the cost incurred by Landsnet for reserve power.
- 4.7 A power intensive user that will not grow above 75MW can apply to have electricity delivered at less than 132 kV. The Tariff for such transmission is according to Landsnets terms B9.
- 4.8 Charges for running the Balance Power Market is 2% of the balancing energy and is charged to the balnce responsible party

<sup>1</sup> Number formats are used according to icelandic tradition.

Effective as of Jan 1 st 2012.

<sup>&</sup>lt;sup>2</sup> Charges for transmission losses and ancillary services will be adjusted based on Landsnet's purchases of losses and ancillary services.

Charges for ancillary services and transmission losses are imposed on all out-feed, with the exception provided for in Section 8.3.

#### **Article 6**

Points of delivery shall, as a rule, be metered separately. However, points of delivery within an interconnectably operated distribution network area shall be metered collectively provided that each point of delivery can handle at least 1/(n-1)\*100% of the total consumption of the distribution network area, where "n" is the number of points of delivery.

#### Article 7

- 7.1 Each customer will be charged a delivery charge for each point of supply and for each point of delivery when the customer is connected to the transmission system at more than one connection point within the point of supply or point of delivery and at different voltage, cf. Article 3.
- 7.2 A discount is granted on the out-feed delivery charge if the maximum power out-feed is as follows:

In the range of 3.0 - 6.0 MW the discount is 40%.

Less than 3.0 MW the discount is 70 %.

Maximum power is the highest 60 minute power peak at each point of delivery.

- 7.3 At each point of delivery as specified in art. 3, Landsnet will provide customers with one connection point for the delivery voltage specified in Article 3. Customers shall pay all costs of any requested additional connection point; the same applies to connection points for a different voltage than that specified in Article 3.
- 7.4 Buyers of curtailable transmissionshall pay any and all cost of a special connection point for such electricity.

#### **Article 8**

- 8.1 Distribution system operators shall pay out-feed charges pursuant to Article 4 for electricity produced in power plants connected to Landsnet through a distribution system, as follows:
  - 1. For energy produced in power plants under 1,42 MW, no out-feed charge is paid.
  - 2. For electricity produced in power plants in the size range of 1,42-3.1 MW, no out-feed charge is paid at the lower limit of the range, but the charge then increases proportionally up to 60% of the full out-feed charge at the upper limit.
  - 3. For energy from power plants of 3.1 10 MW, 60% of the full out-feed charge is paid.
- 8.2 Distribution system operators shall pay a charge for ancillary services pursuant to section 4.2 for electricity which is produced in power plants connected to Landsnet through a distribution system and does not enter the Landsnet transmission system.
- 8.3 Charges pursuant to article 8 shall be settled separately.

- 9.1 This tariff assumes a minimum average power factor of  $\cos\phi$  0.9 at the out-feed at distribution systems at each point of supply, except as otherwise specified in separate contracts between Landsnet and the customer.
- 9.2 In the event that the average power factor of a single month falls below the above limit the energy charge and capacity charge pursuant to Article 4 shall increase by 2% for each 1% that the power factor falls below the limit.

## **Article 10**

The price of balancing power is variable as determined by the market price at any time and will be posted on the website of Landsnet www.landsnet.is.

# Article 11

This tariff is established by Landsnet hf. in compliance with the income revenue cap determined by Orkustofnun for Landsnet hf. and is effective as of Janury  $1^{st}$  2012.

## Article 12

Orkustofnun (the National Energy Authority) supervises the compliance of Landsnet with the provisions of the Electricity Act No. 65/2003 with later amendments and with conditions applicable to its activities pursuant to statutory law and government regulations.