

Application provisions and Network Tariffs

for Vattenfall's Regional Network

applicable commencing 2025-01-01



VATTENFALL

Table of contents

1.	Connection	3
2.	Pricing of network services on Vattenfall's regional network	6
3.	Normal tariff for withdrawals of electricity from the regional network	13
4.	Tariff for input of electricity into the regional network.....	19
5.	Fees for new or modified connections	23
6.	Determination of connection fee	27

Version updates

This version contains the following updates relative to previous versions:

Section 1.1 The definition of *point of connection* has been supplemented.

Section 2.4 Temporary input below 1 MW at a point of connection shall not be subject to a power fee for such temporary input.

Section 3.3 A provision has been added according to which Vattenfall may reduce the Customer's subscribed power.

Section 3.4 This is a new section regarding aggregated subscriptions for withdrawal.

Section 3.6 Temporary subscriptions are now permitted throughout the year provided capacity exists.

Section 3.7 The subscription exceeding fee is reduced from 2 to 1.5 times the annual power fee.

Sections 3.10-3.12 These sections contain new limits for free reactive annual power and new fees for reactive power.

Section 4.2 This section has been supplemented for input in the same manner as for withdrawal as mentioned above regarding section 3.3.

Section 4.10 Maundy Thursday has been removed from the definition of *peak-load hours*.

Section 5.4 This section contains new provisions connections which have been increased stepwise.

Appendix 2 has been expanded with a table and (nearly) all fees in the tariffs have been amended.

1. Connection

1.1 Definitions

Set forth herein are the Application Provisions applicable commencing 1 January 2025 in respect of pricing network services on regional networks belonging to Vattenfall Eldistribution AB, company registration no 556417-0800, hereinafter referred to as "Vattenfall". The Application Provisions constitute Vattenfall's rules and regulations for the network service and contain, among other things, terms and conditions and provisions regarding new and modified connections and the transmission of electricity to the company's Customers (hereinafter referred to as "Customer", "Customers" or "the Customer").

Point of connection is defined in these Application Provisions as a collective term for the Customer's physical connections to Vattenfall's regional network at the same system voltage and within a limited area. Normally, the limited area consists of a property on which Vattenfall's relevant facility (transformer or distributing station) is located. Examples of a point of connection include seven outgoing lines from a switchyard, several incoming lines to a switchyard, a branching point or a bus-bar. Connections to an A- and B-bar with the same voltage in a switchyard is normally counted as one point of connection, while connections to different voltage levels in the same transformer station are regarded as different points of connection. Two or more connections with the same customer with the same voltage to a customer within the customer's industrial property are regarded as one point of connection subject to payment of an extra metering fee for connections no. 2, no. 3, etc.

Amended terms

Network service is defined in these Application Provisions as the connection of the Customer's facilities to Vattenfall's network and Vattenfall's transmission of electricity to or from the Customer's point of connection to the extent agreed.

Withdrawal in these Application Provisions means transmission of electricity from Vattenfall's network. Input means the transmission of electricity into Vattenfall's network. Scope of connection means the Customer's subscription for active and reactive power and purchase by the Customer of additional services (e.g. purchases of extra reactive power) at the point of connection.

The regional network tariffs include the costs for the feeding national grid. Customers on the regional network thus need only to have an agreement with Vattenfall regarding network issues and do not need to execute an agreement for transmission on the national grid level.

1.2 Special terms and conditions for connection - compensation of capacitive earth fault currents

Where Vattenfall assumes responsibility for central compensation of capacitive earth fault currents, the Customer's facilities should meet the following recommendations at points of connection to Vattenfall's network at 10 kV and 20 kV:

- The high-voltage line connected to the point of connection should normally not require compensation exceeding 25 A at 10 kV or at 20 kV.

The short-circuit protection and touch voltage in the Customers' PEN conductor systems are highly dependent on the technical arrangement and function of the neutral point and its operational management. Accordingly, these issues should be regulated in a separate agreement for each individual facility.

Central compensation of capacitive earth fault currents up to the stated levels can normally be effected at Vattenfall's neutral point. If additional compensation of

capacitive earth fault currents is necessary in order to comply with these recommendations, compensation should take place at distributed neutral point reactors established at neutral points in network stations in the Customer's high-voltage network. It is at all times the transmission line owner's responsibility to ensure that the earthing of the entire system meets the requirements of the regulations.

The Customer shall in due time provide such information as is necessary for ensuring that total compensation of capacitive earth fault currents in the relevant network from time to time can be carried out in an appropriate way and in accordance with generally accepted technical practices.

1.3 Connection voltage

Normal voltage at the Customer's connection to Vattenfall's network is stated as a nominal voltage in connection and transmission agreements. Frequently, normal operating voltage and, consequently, also construction voltage may deviate from the stated nominal voltage. It is the responsibility of the Customer to obtain information regarding construction voltage at the point of connection for the proper dimensioning of devices at the Customer's site.

1.4 Disconnection from use

Svenska Kraftnät, in its capacity as the governmental authority responsible for the system, has issued regulation SvKFS 2012:1 concerning disconnection from use. The aforementioned regulation was replaced on 18 December 2022 by a new regulation, SvKFS 2021:1. The regulation entails that Vattenfall's electricity facility is equipped so as to allow automatic and manual disconnection from use.

1.5 Restoration of operations in conjunction with extensive disruptions

Svenska Kraftnät, in its capacity as the governmental authority responsible for the system, has issued the operating instruction, SvK D026, concerning restoration of operations following extensive disruptions or network outages in all or part of the national grid. In order to ensure rapid, secure and coordinated restoration of operations can take place, D026 requires the issuance by all network companies of local instructions with the grid subscriptions regarding contacts, information, training and coordination of connected regional network Customers. Based on D026 and the local instructions issued by Vattenfall, Vattenfall has issued instruction ND-I-00257, instruction for Vattenfall Eldistribution AB' Customers connected to the regional network (re-distributors, and Customers and producers) regarding restoration of operations following network outages. (SW: *Instruktion för Vattenfall Eldistribution AB:s regionnätanslutna kunder (återdistributörer, slutkunder och producenter) avseende driftåteruppbyggnad efter nätsammanbrott*). The instruction has been provided to all affected Customers of Vattenfall who are connected to regional networks.

It is incumbent on all Customers connected to Vattenfall's regional network to comply with the instructions set forth in instruction ND-I-00257 or the instruction which replaces it. Each Customer shall ensure that there are internal routines and instructions which provide support and ensure that personnel take the measures and possess the proper training and knowledge to be able to deal with restoration of operations.

1.6 New production facility or change to existing production facility

The Commission has established Commission Regulation (EU) 2016/631 establishing a network code on requirements for grid connection of generators. As a consequence of the Commission Regulation, the Swedish Energy Markets Inspectorate has established regulations regarding the establishment of

requirements which are generally applicable to the connection of generators to networks, EIFS 2018:2.

The regulation groups production facilities into type A (up to 1.5 MW), type B (1.5-10 MW), type C (10-30 MW) and type D (over 30 MW and facilities connected to voltages >110 kV).

Production facilities which, according to EU 2016/631, are regarded as existing and are type C or type D, shall, pursuant to Article 4.1 A, notify in advance their plans to the relevant system operator if they intend to undertake the modernisation of a plant or replacement of equipment impacting the technical capabilities of the power-generating module. The relevant supervisory authority shall thereafter determine which requirements imposed by EU 2016/631 and EIFS 2018:2 shall apply following the change.

In conjunction with connections in accordance with EU 2016/631 and EIFS 2018:2 and changes to existing production facilities as a consequence of which parts of EU 2016/631 and EIFS 2018:2 begin to apply, the following documentation shall be submitted to the Network Owner:

- Commissioning certificate for the production facility;
- Documentation containing technical information regarding the power-generating module and appurtenant networks significant to the network connection;
- Documentation with results from compliance testing in accordance with EU 2016/631, Title IV "compliance";
- Documentation with results from compliance simulation in accordance with EU 2016/631, Title IV "compliance".

1.7 Mutual responsibility for switchgear bays for outgoing lines

At many points of connection, Vattenfall provides switchgear bays for outgoing lines which connect the Customer's facilities. Mutual responsibility shall apply to these switchgear bays for outgoing lines as follows:

- Following consultations with the Customer, Vattenfall will issue the necessary operating instructions for switchgear bays for outgoing lines which shall include establishing appropriate operational management boundaries in the relevant facilities. Vattenfall shall, in accordance with generally accepted engineering practices, be responsible for operation and maintenance of the switchgear bays. This shall include the maintenance of devices and routine inspection of relay protection, implementation of connection measures, relay settings and taking and reporting meter readings, relay data and similar to the extent necessary for the Customer's operation of the Customer's facilities.
- The Customer shall regularly provide such information and data to Vattenfall as is necessary to properly set relay protection, etc. Upon request by Vattenfall, the Customer shall immediately provide such information and data.
- Vattenfall shall be entitled to temporarily limit the Customer's use of switchgear bays for outgoing lines in conjunction with the performance of any supervision and work. In the event such limitation can be anticipated, the Customer and Vattenfall shall discuss the most suitable time for performance of the work.
- Vattenfall undertakes to remedy without unreasonable delay any faults in its facilities which cause a limitation or interruption in the Customer's use of switchgear bays for outgoing lines.

2. Pricing of network services on Vattenfall's regional network

2.1 Customer

Vattenfall's Customer is a legal person who, as licensee, owns or manages the facility which is connected to Vattenfall's regional network. Pricing is applied to circumstances at each individual point of connection and is based on the physical exchange of electricity at the point of connection.

2.2 Withdrawal

At a point of connection at which withdrawals of electricity are made from the regional network, the network service shall be priced subject to fees in accordance with tariff for withdrawals, commonly referred to as normal tariffs. Please refer to Part 3.

2.3 Input

At a point of connection at which electricity is fed into the regional network, the network service shall be priced in accordance with the special rules formulated for costs relating to input. Please refer to Part 4.

2.4 Periodic input, periodic withdrawal

At a point of connection with periodic input of electricity and periodic withdrawal of electricity from the regional network, the network service shall be priced on the basis of the connection's highest subscribed power:

- Input point of connection: subscribed power for input is greater than subscribed power for withdrawal.
- Withdrawal point of connection: subscribed power for withdrawal is greater than or equal to subscribed power for input.

The following shall apply for input points of connection: input pricing (Part 4) for the Customer's input. The Customer's withdrawals from Vattenfall's network shall be subject to an average power fee for withdrawals from Vattenfall's overlying network and transmission fees in accordance with the normal tariffs (section 3.9).

For connections with periodic withdrawals, subscribed power shall be determined for the withdrawal.

Points of connection which are defined as input points of connection are subject to rules and regulations applicable to reactive power at input points of connection (section 4.11) where the connection is a power-generating module or power park module, both in conjunction with input and withdrawal of active power.

Other customers (i.e. adjacent network companies and end customers) are subject to rules and regulations for reactive power at withdrawal points of connection (sections 3.9-3.12) both in conjunction with withdrawal and input of active power in respect of which the entitlement to reactive exchange is determined on the basis of subscribed power for input.

Fees for reactive input are not charged at points of connection which are defined as input points of connection.

The following shall apply for withdrawal points of connection: The Customer's input into Vattenfall's network shall be subject to any power fees payable for input

into Vattenfall's overlying network and transmission fees in accordance with the normal tariffs (Part 3) with inverse figures. Withdrawal points of connection subject to tariff X are charged transmission fees in accordance with tariff T2 with inverse figures.

For connections with periodic input, subscribed power shall be determined for the input. Subscribed annual power below 1 MW (1,000 kW) shall not be subject to any power fee for such temporary input.

Points of connection which are defined as output points of connection are subject to rules and regulations applicable to reactive power in withdrawal points of connection (sections 3.9-3.12) both in conjunction with withdrawal and input of active power in respect of which the entitlement to reactive exchange is determined on the basis of subscribed power for withdrawal.

2.5 Pricing of energy/battery storage systems

The Swedish Energy Markets Inspectorate has issued a revised version of its regulations and general guidelines (EIFS 2023:3) regarding the requirements to be fulfilled in order for the transmission of electricity to be of good quality (hereinafter the "Regulation"), which enters into force 1 January 2024. According to Chapter 4, section 4 of the Regulation, energy/battery storage systems are exempted from the so-called *functional requirement*.

Section 4. The functional requirements do not apply either to the withdrawal or input part of facility points to which electricity production or energy storage facilities, or both, are connected. The aforementioned shall apply also to concession networks to which only electricity production or energy storage facilities, or both, are connected.

The exemption in accordance with the first paragraph shall apply only where the principal operation is electricity production or energy storage, or both.

The exemption in accordance with the first paragraph applies to both exemptions from the functional requirement in Chapter 4, section 20 of the Swedish Electricity Act (SFS 1997:857) and the functional requirement in Chapter 4, sections 1-2 of these provisions.

Due to the fact that the function of an energy/battery storage system entails that electricity is periodically withdrawn from, and periodically fed into, the electricity network, and most frequently during brief periods of time and used for a negligible period of time on an annual basis, Vattenfall has decided to treat energy/battery storage systems as a separate customer category, distinct from normal withdrawal and input points of connection. As a consequence, Vattenfall may impose special requirements on energy/battery storage systems which are connected directly to Vattenfall's electricity network.

An energy/battery storage system connected to the regional network may either be connected directly or be connected to be part of an existing production facility or an existing withdrawal facility.

An energy/battery storage system which is connected independently will be subject to periodic input of electricity into, and periodic withdrawal of electricity from, the regional network. Irrespective of the subscribed power for withdrawal and input, the network service shall then be priced as an input point of connection in accordance with the preceding section 2.4.

Vattenfall's special requirements: in the event utilization time (energy/power) of an independent energy/battery storage system for subscribed power for input or withdrawal exceeds 1,000 hours per year, and/or where the net withdrawal and input energy deviates from zero by more than what may be justified by individual use or energy losses the energy/battery storage system will no longer be regarded as an energy/battery storage system. In such cases, an application for expanded connection to Vattenfall's electricity network shall be submitted which presents the new conditions.

The purpose of connecting an energy/battery storage system to an industrial Customer or a network company is often to reduce or decrease peak loads, standalone operation in conjunction with outages, etc. The energy/battery storage system shall then be priced as an integrated part of a withdrawal point of connection.

If the energy/battery storage system is part of a solar or wind power plant, the storage system will be an integrated part of an electrical facility for the production of electricity. It will store electrical energy for use on an occasion other than at the time of production and release electrical energy into the network when needed. The energy/battery storage system shall then be priced as an integrated part of an input point of connection.

2.6 Pricing of new or expanded connection, connection fees

Connection fees shall cover Vattenfall's customer-specific investments implemented to be able to provide a new or expanded connection or for reconnection.

For more detailed account of the rules regarding connection fees, please refer to Part 5.

2.7 Compensation for outages to electricity users

The Swedish Electricity Act has rules regarding the payment of compensation for outages upon the occurrence of outages during which the outage time exceeds a consecutive period of 12 hours. An outage is deemed to have terminated when the outage ceases, provided that transmission continues thereafter uninterrupted for the immediately following two-hour period. The rules in the Swedish Electricity Act are formulated such that they apply to electricity users, i.e. those persons previously referred to as end electricity users or end customers. The rules in the Swedish Electricity Act regarding compensation for outages thus do not apply from the regional network *vis-à-vis* local networks or other regional network companies or to the input of electricity into Vattenfall's network.

Input points of connection or power stations are not regarded as electricity users within the context of the Swedish Electricity Act. Compensation for outages is not paid for any power the Customer could not input into the network during the outage.

However, withdrawals of electricity at the input points of connection in Vattenfall's network may occur during parts of the year, for example, for local power in power stations or for points of connection with periodic input and periodic withdrawal. Compensation for outages to input points of connection is limited only to the Customer's withdrawal of electricity.

Vattenfall shall document the date and time of the commencement of the outage and its cessation. In stating this time information, consideration shall be given to the fact that the outage period is deemed to be terminated only when the transmission of electricity has thereafter occurred for a consecutive period of not less than two hours.

The Swedish Electricity Act states that the Customer is not entitled to compensation for outages in the event the outage is due to the negligence of the Customer, or the outage occurred as a consequence of measures relating to electrical power safety, or to maintain reliability and security of supply, or where the outage is outside the network company's control responsibility or where the outage is due to faults in the national grid.

The obligation to pay compensation may be adjusted according to what is reasonable where efforts to reinitiate transmission of electricity have been delayed to avoid exposing workers to substantial risk.

Compensation shall not be paid to Customers who, at the time of the outage, were disconnected from the electricity network. In the event Vattenfall has due and payable claims against the Customer, such claims shall be set off against the compensation for outages and the compensation paid shall be reduced.

Compensation for outages shall, according to the Swedish Electricity Act, be set off against damages which are paid for the same outage in accordance with other provisions in the Swedish Electricity Act or other act. Accordingly, if the Customer has already received damages from Vattenfall for the same outage, the compensation for outages shall be reduced by the amount of the damages received, however not less than SEK 0.

On 28 June 2007 the Swedish Supreme Administrative Court decided that compensation for outages is not subject to value added taxation.

The compensation amount is calculated as a percentage multiplied by the Customer's calculated annual network costs including fees imposed by governmental authorities, however not less than a minimum amount which is a percentage of the price base amount pursuant to the Swedish National Insurance Act (Swedish Code of Statutes 1962:381) rounded up to the nearest SEK 100. In respect of 2025, the price base amount is SEK 58,800. The maximum amount is 300% of the Customer's calculated annual network costs including fees imposed by governmental authorities. The legal requirements provide for the following compensation for various outage periods:

Period of outage		Compensation	Minimum amount	
		(% of calculated annual network costs including fees payable to governmental authorities)	(% of price base amount and SEK)	
12 - 24 hours	(> 0.5 24-hour period)	12.5%	2%	SEK 1,200
24 - 48 hours	(> 1 24-hour period)	37.5%	4%	SEK 2,400
48 - 72 hours	(> 2 24-hour period)	62.5%	6%	SEK 3,600
72 - 96 hours	(> 3 24-hour period)	87.5%	8%	SEK 4,800
96 - 120 hours	(> 4 24-hour period)	112.5%	10%	SEK 5,900
120 - 144 hours	(> 5 24-hour period)	137.5%	12%	SEK 7,100
144 - 168 hours	(> 6 24-hour period)	162.5%	14%	SEK 8,300
168 - 192 hours	(> 7 24-hour period)	187.5%	16%	SEK 9,500
192 - 216 hours	(> 8 24-hour period)	212.5%	18%	SEK 10,600
216 - 240 hours	(> 9 24-hour period)	237.5%	20%	SEK 11,800
240 - 264 hours	(> 10 24-hour period)	262.5%	22%	SEK 13,000
264 - 288 hours	(> 11 24-hour period)	287.5%	24%	SEK 14,200
> 288 hours	(> 12 24-hour period)	300.0%	26%	SEK 15,300

Compensation for outages shall be paid without unreasonable delay and at no time later than six months following the expiry of the month in which Vattenfall knew or should have known of the outage. In the event Vattenfall does not pay compensation for outages in due time, Vattenfall shall pay penalty interest in accordance with section 6 of the Swedish Interest Act (Swedish Code of Statutes 1975:635). Penalty interest shall be payable at an annual rate equal to the Swedish Central Bank's reference rate plus eight percentage points.

In the event the Customer, notwithstanding the aforementioned rules regarding payment, has not received compensation for outages, the Customer must make a claim for compensation for outages within a period of two years of the date on which the outage terminated on penalty of forfeiture of the right to compensation.

2.8 Right of recourse for Customers who are network companies

Local networks or other network companies are not regarded as electricity users within the context of the Swedish Electricity Act and thus are not covered by the Swedish Electricity Act's rules regarding compensation for outages. The Swedish Electricity Act has a rule which provides network owners, local networks or regional networks with a right to pass on their claims for compensation to Vattenfall for compensation for outages paid to their electricity users where the cause for the outage is due to Vattenfall's regional network (commonly referred to as a "right of recourse").

A network company which has forwarded its costs to Vattenfall shall not be entitled to compensation where the outage is due to the negligence of the network company, where the outage is intentional due to measures relating to electrical power safety or to maintain reliability and security of supply, where the outage is due to circumstances outside Vattenfall's control responsibility or where the outage is due to faults in the national grid.

As regards Customer in respect of whom Vattenfall has due and payable claims against the Customer, such claims may be set off against such compensation and the manually paid compensation may be reduced.

Compensation for outages shall, according to the Swedish Electricity Act, be set off against damages which are paid for the same outage in accordance with other provisions in the Swedish Electricity Act or other act. Accordingly, if the Customer has already received damages from Vattenfall for the same outage, the compensation for outages shall be reduced by the amount of the damages received, however not less than SEK 0. The aforementioned also applies to claims pursuant to a right of recourse.

2.9 Fees payable to governmental authorities

Fees included in Vattenfall's regional network tariffs are stated exclusive of value added tax (VAT). Vattenfall's regional network tariffs do not include the electricity safety fee which electricity users are obligated to pay the Swedish National Electrical Safety Board (preliminarily, SEK 905 per year), which fee Vattenfall must collect and pay. Vattenfall's tariff also does not include the network monitoring fee payable to the Swedish Network Authority (preliminarily, SEK 870 per year) or the electricity preparedness fee payable to the Electricity Preparedness Unit (*sw: elberedskapsenhet*) at Svenska Kraftnät (preliminarily, SEK 4,897 per year), which fee Vattenfall must pay to the respective authority according to law. These fees (for a total of SEK 6,672 per year) are reported separately on standard invoices for the network service.

2.10 Invoicing energy tax

According to law, network companies have been responsible for invoicing energy tax since January 2018. Vattenfall shall accordingly invoice energy tax in accordance with applicable provisions.

2.11 Invoicing and payment

All fees shall be paid in arrears against an invoice issued by Vattenfall. The Customer's payment must be received by Vattenfall on the designated bank account or plus giro account not later than the due date set forth on the invoice, which date shall fall not earlier than 30 days after Vattenfall has issued the invoice.

After the end of the year, Vattenfall shall issue a final invoice with respect to fees for the year, whereupon the preliminarily invoiced fees shall be finally settled.

In addition to the applicable tariff-based fees, the Customer shall pay any taxes and other government charges which Vattenfall must, by law, charge the Customer.

Upon delay in payment, the Customer shall be obligated to pay penalty interest commencing on the due date until the day on which Vattenfall has received payment. Penalty interest shall be calculated in accordance with the Swedish Interest Act, i.e., an interest rate equal to the reference rate applied by the Swedish Central Bank plus eight percentage points, during the period of delay. In the event the aforementioned interest is no longer published, Vattenfall shall be entitled to apply an equivalent penalty interest rate.

2.12 Extended payment period

As regards Customers who wish to extend the payment period, the due date for monthly invoices may be postponed by Y days relative to Vattenfall's normal payment terms and conditions. In conjunction with monthly invoicing, the due date shall then fall not earlier than 30 + Y days after Vattenfall has issued the invoice.

The fee for the extended payment period is invoiced on the relevant monthly invoice. The fee is calculated as interest on the invoiced amount per day during Y days. Such interest is established in accordance with the reference interest rate of the Swedish Central Bank plus 9 percentage points during the relevant Y days.

2.13 General Agreement Terms and Conditions

The network service shall be subject to the industry General Agreement Terms and Conditions, NÄT2012H (rev), for connection of electrical high-voltage facilities to the electrical network and transmission of electricity to or from such facilities.

Connected Customers who are local network owners or other regional network owners are subject to the General Agreement Terms and Conditions, NÄT2012H (rev), with the exception of sections 1.3, 2.10, 2.11, 2.13, 2.14, 2.15, 2.16, 2.17, 2.18, 2.19, 3.15, 4.6 third paragraph, 5.2, 6.1, 6.2, 6.3, 6.4, 6.5, 8.1, 8.2, 8.3, 8.4 and the text of section 4.8, first paragraph, first sentence should be concluded as follows, "...the amount of electricity transmitted will be estimated by the electricity network company in consultation with the relevant parties".

2.14 Term of agreement

The agreement governing network services, connection and transmission of electricity shall be executed with a term of agreement subject to further notice.

Changes in the parties, i.e. assignments of network agreements, shall be notified to Vattenfall not later than one month prior to such change. Terms and conditions in network agreements entered into with Vattenfall are normally not amended in conjunction with changes to the parties.

2.15 Amendments of terms and conditions

In the event the General Agreement Terms and Conditions are amended by industry agreement, Vattenfall shall effect a comparable amendment *vis-à-vis* the Customer. The amendment shall apply to the Customer three months after the Customer has been notified by Vattenfall of such amendment.

On or about the end of calendar year, Vattenfall shall be entitled to amend relevant application provisions and fees and terms and conditions and shall, in such context, be obliged to notify the Customer regarding such amendments not later than six weeks prior to the entry into force thereof.

In the event Svenska Kraftnät amends its tariff *vis-à-vis* Vattenfall during a current calendar year, Vattenfall shall be entitled, with immediate effect, to effect a comparable change in fees *vis-à-vis* the Customer. In this context, Vattenfall shall immediately notify the Customer regarding the change.

Svenska Kraftnät's transmission fees in the in the national grid tariff are passed on to the Customer through Vattenfall's regional network tariffs by means of an estimated annual mean value. In the event the estimation of this annual mean value deviates substantially from the actual cost, Vattenfall shall be entitled, during the pending calendar year, to correct the transmission fees of the tariffs insofar as pertains to Svenska Kraftnät's transmission fee. The aforementioned shall apply both to withdrawal tariffs and tariffs for input. In such cases, Vattenfall shall be obliged to immediately notify the Customer of the change.

2.16 Review of terms and conditions

According to the Swedish Electricity Act, the Network Authority exercises supervisory powers over Vattenfall's application provisions, terms and conditions and fees. The address of the Swedish Energy Markets Inspectorate is Box 155, 631 03 Eskilstuna.

3. Normal tariff for withdrawals of electricity from the regional network

The tariff is based on the point tariff principle and covers fixed fees, annual power fees and transmission fees.

Each point of connection is priced in accordance with the tariff alternative which corresponds to the structural connection of the respective point of connection to the regional network. The structure of Vattenfall's normal tariff is set forth schematically in appendix 1.

Vattenfall's regional network is divided into three tariff areas with separate, normal tariffs applicable in each area. Vattenfall's regional network in Norrbotten constitutes one tariff area, Vattenfall's regional network in middle Norrland constitutes one tariff area and Vattenfall's regional network in South and Middle Sweden constitutes one tariff area. Differences in fees amongst the three different tariff areas are due only to Svenska Kraftnät's north-south differentiated fees throughout Sweden for network services on the grid. These fees for Vattenfall's regional network are included in Vattenfall's normal tariff. Vattenfall's normal tariffs are set forth in their entirety in appendix 2.

3.1 Determination of tariff

"National grid" refers to lines with a voltage interval of 400-220 kV.

"Transmission network" refers to lines with a voltage interval of 130-70 kV.

"Regional distribution network" refers to lines with a voltage interval of 50-20 kV.

Tariff level T0 refers to points of connection at 130 kV in stations with step-down transformation from the national grid or connections at 130 kV with subscribed power over 500 MW.

Tariff level L1 refers to points of connection connected directly to the regional transmission network.

Tariff level T1 refers to points of connection at 50-30 kV in stations with step-down transformation from regional transmission networks. In the 220-70-20 kV voltage chain, tariff T1 also refers to points of connection at 20 kV.

Tariff level L2 refers to other points of connection connected directly to the regional distribution network.

Tariff level T2 refers to points of connection at 20-6 kV in stations with step-down transformation from the regional distribution network.

Tariff level T12 refers to points of connection at 20-6 kV in stations with step-down transformation from the regional transmission network in which the connection does not use the regional distribution network. In the 220-70-20 kV voltage chain, tariff T12 refers only to 10-6 kV connections.

Tariff level T13 refers to points of connection at 50-30 kV in stations with step-down transformation from the grid. In the 220-70-20 kV voltage chain, tariff T13 refers also to points of connection at 20 kV.

Tariff level X is a tariff formulated specially to constitute high-cost protection, i.e. in order to limit network costs for smaller Customers.

Vattenfall establishes a tariff per point of connection. The tariff level is determined on the basis of the primary feeding route to the point of connection and the Customer's use of the network service.

However, the following rules apply to smaller Customers:

- Customers at tariff level T0 may choose tariff L1 without paying a separate fee.
- Customers at tariff level L1 may choose tariff L2 or X without paying a separate fee.
- Customers at tariff level T1 may choose tariff L2 or X without paying a separate fee.
- Customers at tariff level L2 may choose tariff X without paying a separate fee.
- Customers at tariff level T2 may choose tariff X without paying a separate fee.
- Customers at tariff level T12 may choose tariff T2 or X without paying a separate fee.
- Customers at tariff level T13 may choose tariff T1, L2 or X without paying a separate fee.

And the following rules apply to larger Customers with lower voltage:

- Customers at tariff level L2 may choose tariff T1 against payment of an annual supplement in accordance with appendix 2.
- Customers at tariff level T2 may choose tariff T12 against payment of an annual supplement in accordance with appendix 2.

So-called ramping up, i.e. a stepwise increase of subscribed annual power over a period of time, shall be subject to a determination of the network tariff for each step in the ramping up in accordance with the above-described rules.

3.2 Fixed fee

A fixed fee shall be paid in the amount of one-twelfth per month. The fixed fee includes costs for metering, reporting and invoicing.

3.3 Annual power fee

Subscribed annual power is normally purchased on a calendar-year basis and must be notified in writing in advance per point of connection not later than 1 November prior to the new calendar year.

Subscribed annual power should be determined on the basis of the used annual power during the previous year with the addition of any agreed right to a subscription increase. As regards general growth in the community at large, there is a possibility to annually increase subscribed annual power by 1-2% provided that subscribed annual power is achieved.

Used annual power is defined as the average of the two highest values, taken from different months, of the average power withdrawn per hour during the year (i.e. 2 of 12). However, in the event the subscribed annual power applied for a period of less than 6 months, the used annual active power during the period shall be deemed to be the highest value of the mean power withdrawn per hour during the period. The annual power fee for subscribed power shall be paid in an amount of one-twelfth per month.

New provision

In the event subscribed annual power has in recent years significantly exceeded the used annual power, there will be an unused part of the subscription which fictitiously occupies part of the electricity network and can constitute an

impediment for new connections for other customers. Following consultation with the relevant Customer, Vattenfall shall be entitled, for periods of one year at a time, to unilaterally reduce the subscribed annual power to a level comparable to the expected annual power used. As regards subscribed annual power which has been reduced by Vattenfall in this manner to a new, lower level for a calendar year, the subscription exceeding fee in accordance with section 3.7 shall not be applied during the calendar year.

The annual power fee for subscribed annual power shall be paid in the amount of one-twelfth per month.

New provision

3.4 Aggregated subscriptions for withdrawal

Aggregated subscriptions are annual power subscriptions which have been added together in respect of several points of connection for withdrawal. Following evaluation by Vattenfall, aggregated subscriptions may, for periods of one year at a time, be offered to Customers with several points of connection within a limited area in which the points of connection use essentially the same part of Vattenfall's regional network and overlying network, i.e. in which the aggregate load is dimensioned for the planning and operation of the regional network. Input subscriptions are not taken into account in aggregated subscriptions for withdrawal.

With the exception of additional fees for exceeding subscribed active annual power, points of connection covered by an aggregated subscription shall be subject to normal terms and conditions and normal tariffs.

Vattenfall shall establish an aggregated subscription for relevant points of connection as the sum of the Customer's applicable subscribed annual power from time to time per point of connection. In such context, Vattenfall shall designate a technical limitation for maximum withdrawal for the relevant points of connection (so-called *ceiling power*).

Upon exceeding an aggregate subscription, the subscription exceeding fee shall be paid by the Customer in accordance with section 3.7 based on the annual power applicable to the points of connection which have the highest subscribed annual power.

Aggregated subscriptions normally apply on a calendar year basis.

Used aggregated subscriptions are defined as the average value of the two highest values during different months of the withdrawn average power per hour during the year (i.e. 2 of 12) of the withdrawal in the relevant points of connection simultaneously added together. In the event the aggregated subscription applies for a period of less than six months, however, an active aggregated subscription used during the period shall be deemed to be the highest value of the average power withdrawn per hour for the relevant points of connection simultaneously added together for the period.

For points of connection which are covered by aggregated subscriptions, the terms and conditions for reactive power shall be determined in accordance with normal rules for each point of connection.

3.5 Changes of subscribed annual power

Changes of subscribed power are conditional on a written agreement regarding the change and the terms and conditions being agreed upon in advance. Any such change shall normally take place on or about the end of the calendar year and a written request therefor shall be submitted not less than one month in

advance. Fees in accordance with Chapter 5 may apply in the event the change gives rise to investments in Vattenfall's electricity network.

Changes of subscribed power - increases or reductions - may take place during a current calendar year provided that, in the opinion of Vattenfall, sufficient capacity is available in the network and where the change is required due to permanent changes in the Customer's use of the network service. Examples of such changes may include new investments, test runs of new facilities or winding-up of a facility, in whole or in part, which affects the use of the network service. These changes must normally be notified in writing with subject to not less than two months' notice.

Amended terms

3.6 Temporary power subscriptions

In the event Vattenfall is of the opinion that sufficient power is available in the regional network, a temporary subscription for withdrawals over and above the subscribed annual power may be subscribed for every month of the year subject to the following conditions:

- for individual weeks, commencing Monday at 00:00
- for whole, four-week periods, commencing Monday at 00:00

The fee for temporary subscriptions during individual weeks is 1/50 of the ordinary annual power fee, and the fee for whole, four-week periods is 1/15 of the ordinary annual power fee. The fees are rounded upwards to the nearest whole Swedish krona per kW.

The fees in accordance with the above shall be calculated on the power quantity at which the temporary subscription is executed, i.e. whereby the normal subscription is extended. The fee shall be paid monthly with the first invoice after the temporary subscription. All tariff-based fees and other terms and conditions shall otherwise apply to the network service.

In addition to the obligation of Vattenfall to terminate or restrict transmission according to law, Vattenfall shall be entitled, subject to a period of notice of 8 hours, to terminate the temporary subscription in the event Vattenfall is of the opinion that there is a risk that the transmission capacity will be limited. After Vattenfall has notified the Customer that it can resume the temporary subscription, the Customer shall be entitled to choose whether to reinstate the temporary subscription. In the event the temporary subscription is terminated by Vattenfall, the fee for the temporary subscription shall be reduced to correspond to the actual time during which the temporary subscription was used.

Requests for temporary subscriptions shall be submitted to Vattenfall in writing not later than 9:00 on the last work day (normally a Friday) prior to the commencement of the subscription.

3.7 Exceeding subscribed power

Vattenfall shall be entitled to charge a separate fee when subscribed annual power is exceeded, meaning that the used active power exceeds the subscribed annual power. The fee is one and a half (1.5) times the annual power fee for the quantity of power by which the subscribed annual power is exceeded.

The subscription exceeding fee can be provisionally invoiced monthly after the excess withdrawal is detected but is normally invoiced in the final invoice per calendar year.

In the event Vattenfall is of the opinion that the technical conditions so allow, the Customer shall be entitled, during the remaining portion of the calendar year, to

make withdrawals in excess of the subscribed power up to the level for which the fee was paid or is to be paid in accordance with the preceding paragraph without incurring an additional subscription exceeding fee.

Withdrawals in excess of subscribed power due to or related to faults or auxiliary operation status in Vattenfall's regional network shall not be regarded as excess of the subscription.

3.8 Transmission fees

Transmitted energy is measured and transmission fees shall be paid monthly for transmitted energy. The transmission fees may be changed during the calendar year in accordance with section 2.15.

3.9 Free annual reactive power

Amended terms

The free annual reactive power is expressed as a percentage of subscribed annual power for withdrawals and is linked to the respective tariff level in the normal tariff. As regards tariff T0, there is an established level for reactive power.

Customers with tariff T0 are entitled to	15 MVar
Customers with tariff L1 or T13 are entitled to	10% free reactive power
Customers with tariff T1 or T12 are entitled to	20% free reactive power
Customers with tariff L2, T2 or X are entitled to	30% free reactive power
Customers with tariff T1 with a special supplement are entitled to	20% free reactive power
Customers with tariff T12 with a special supplement are entitled to	20% free reactive power

Points of connection which are defined as output points of connection are subject to rules and regulations applicable to reactive power in withdrawal points of connection both in conjunction with withdrawal and input of active power in respect of which the entitlement to reactive exchange is determined on the basis of subscribed power for withdrawal.

Used annual reactive power is defined as the average value of the two highest values, taken from different months, of withdrawn reactive average power per hour during the year (i.e. 2 of 12). However, where subscribed annual power has applied for a period of less than 6 months, used annual reactive power during the period shall be deemed to be the highest value of the withdrawn reactive average power per hour during the period.

3.10 The Customer's purchase of reactive power

To the extent that Vattenfall, taking into account access to reactive power and transmission possibilities, deems it possible to provide reactive power in addition to the normal undertaking in accordance with the above, Vattenfall may grant increased withdrawals of reactive power for an annual fee for the power quantity by which the provision of power increases. The fee is determined on the basis of the following table.

Tariff T0, L1 and T13	SEK 15/kVAr
Tariff T1 and T12	SEK 25/kVAr
Tariff L2, T2 and X	SEK 30/kVAr

Purchases of increased withdrawal of reactive power normally occur on a calendar year basis and are notified in advance in writing per point of connection not later than 1 November of the year prior to the new calendar year. The fee for increased withdrawals (purchases) of reactive power over and above the free reactive power shall be paid in an amount of one-twelfth per month.

3.11 Excess withdrawal of reactive power

In conjunction with exceeding the agreed reactive power at the connection, meaning that the used reactive power exceeds the total free annual reactive

power and any agreed purchase of reactive power, Vattenfall shall be entitled to charge a separate fee. The fee is determined on the basis of the following table.

Tariff T0, L1 and T13	SEK 30/kVAr
Tariff T1 and T12	SEK 50/kVAr
Tariff L2, T2 and X	SEK 60/kVAr

The subscription exceeding fee can be provisionally invoiced in the month after the excess withdrawal is detected but is normally invoiced upon final invoicing per calendar year. Vattenfall may reduce or waive the fee in the event the excess withdrawal occurred outside the period of time during which the reactive power balance was strained.

In the event Vattenfall is of the opinion that the technical conditions so allow, the Customer shall be entitled, during the remaining portion of the calendar year, to withdraw reactive power in excess of the scope of the connection up to the level for which the fee was paid in accordance with the preceding paragraph without incurring an additional subscription exceeding fee.

Withdrawals in excess of subscribed power due to or related to faults or auxiliary operation status in Vattenfall's regional network shall not be regarded as excess withdraw. Furthermore, a subscription exceeding fee shall not be charged for excess withdrawals as a consequence of the Customer's participation, at Vattenfall's request, in voltage regulation on Vattenfall's network.

3.12 Input of reactive power

The right to free input of reactive power is expressed as a percentage of subscribed annual power for withdrawals and is linked to the respective tariff level in the normal tariff. As regards tariff T0, there is an established level for reactive power.

Customers with tariff T0 are entitled to	15 MVAr free reactive input
Customers with tariffs L1 or T13 are entitled to	5% free reactive input
Customers with tariff T1 or T12 are entitled to	10% free reactive input
Customers with tariff L2, T2 or X are entitled to	15% free reactive input
Customers with tariff T1 with a special supplement are entitled to	10% free reactive input
Customers with tariff T12 with a special supplement are entitled to	10% free reactive input

Used annual reactive input power is defined as the average value of the two highest values, taken from different months, of the average reactive power input per hour during the year (i.e. 2 of 12). However, in the event the contract term is less than 6 months, used annual reactive power input during the period shall be deemed to be the highest value of the average reactive power input per hour during the period.

To the extent Vattenfall determines, taking into account operational conditions and transmission possibilities on the regional network, that it is possible to allow input of reactive power which exceeds the normal undertaking in accordance with the above, Vattenfall may allow increased input of reactive power in consideration of an annual fee for the power amount whereby the permissible input of reactive power is increased. The fee is set forth in the following table.

Tariff T0, L1 and T13	SEK 25kVAr
Tariff T1 and T12	SEK 35/kVAr
Tariff L2, T2 and X	SEK 40/kVAr

Increased input of reactive power is normally subscribed on an annual basis and is to be notified in writing in advance per point of connection not later than 1 November

of the year prior to the new calendar year. The fee for input of reactive power over and above free input is to be paid in the amount of 1/12 per month.

In conjunction with exceeding the connection's permissible input of reactive power, as a consequence of which the used reactive power input exceeds the annual aggregate free input of reactive power and at the agreed increase in input of reactive power, Vattenfall shall be entitled to charge a separate fee. The fee is set forth in the following table.

Tariff T0, L1 and T13	SEK 50/kVAr
Tariff T1 and T12	SEK 70/kVAr
Tariff L2, T2 and X	SEK 80/kVAr

The fee for excess input of reactive power may be provisionally invoiced monthly after the input has been confirmed but is normally invoiced in connection with final invoicing per calendar year.

Input of reactive power which is due to or related to faults or auxiliary operation status in Vattenfall's network will not be subject to a fee. Furthermore, no fee shall be charged for excess input of reactive power as a consequence of the Customer's network switches or participation, at Vattenfall's request, in voltage regulation on Vattenfall's network.

4. Tariff for input of electricity into the regional network

Input or production transmission entails the transmission of power-station production to a point in the network at which the power is balanced with transmission to consuming customers. Pricing takes place based on the principle that the Customer shall pay the Customer's share of the network costs for the facilities which are used and necessary for the connection, calculated fees for transmission (averaged into one tariff), and the costs paid by the regional network to Svenska Kraftnät for such connections.

Input into the regional network may also occur at connections with other network owners at which a power station connected to another network owner causes input into Vattenfall's regional network.

4.1 Fixed fee

A fixed fee in accordance with an established tariff shall be paid in the amount of one-twelfth per month.

4.2 Annual power

Subscribed annual power is normally purchased on a calendar-year basis and notified in writing in advance per point of connection not later than 1 November prior to the new calendar year.

Used annual power is defined as the average of the two highest values, taken from different months, of the average power input per hour during the year (i.e. 2 of 12). However, in the event the subscribed annual power has applied for a period of less than 6 months, the used annual active power during the period shall be deemed to be the highest value of the average power input per hour during the period.

New provision

In the event subscribed annual power has in recent years significantly exceeded the used annual power, there will be an unused part of the subscription which fictitiously occupies part of the electricity network and can constitute an impediment for new connections for other customers. Following consultation with the relevant Customer, Vattenfall shall be entitled, for periods of one year at a time, to unilaterally reduce the subscribed annual power to a level comparable to the expected used annual power. As regards subscribed annual power which has been reduced by Vattenfall in this manner to a new, lower level for a calendar year, the subscription exceeding fee in accordance with section 3.7 shall not be applied during the calendar year.

4.3 Capacity fees

Vattenfall shall apply an averaged tariff for capacity-related costs on the regional network. The tariff may be described as standard channel pricing in which the fees are comprised of a fixed fee, a power fee and a distance-dependent power fee. In addition to the tariff, which pertains only to capacity fees relating to the regional network, individually calculated fees for other components are applied in the pricing.

Tariff level PT0 refers to points of connection at 130 kV in stations with step-down transformation from the national grid.

Tariff level PL1 refers to points of connection on transmission lines within a voltage interval of 130-70 kV.

Tariff level PT1 refers to points of connection at 50-30 kV in stations with step-down transformation from regional transmission networks. In the 220-70-20 kV voltage chain, tariff PT1 also refers to points of connection at 20 kV.

Tariff level PL2 refers to points of connection on transmission lines within a voltage interval of 50-20 kV.

Tariff level PT2 refers to points of connection for 20-6 kV in stations after stepdown transformation from 50-20 kV.

Tariff level PT12 refers to points of connection at 20-6 kV in stations with step-down transformation from the regional transmission networks in which the connection does not use the regional distribution network. In the 220-70-20 kV voltage chain, reference is made only to 10-6 kV connections.

Vattenfall establishes a tariff per point of connection. The tariff level is determined on the basis of the primary feeding route to the point of connection.

The fixed fee and annual power fee shall be paid in the amount of one-twelfth per month.

The annual power fee is determined with the distance-dependent fee component in the established tariff by multiplying it by a distance. "Distance" means the straight-line distance from the point of connection to the closest (electrical) national grid node connected to Vattenfall's regional network. Any power fee shall be added in the established tariff.

4.4 Change in subscribed power

Changes in subscribed power may be effected in accordance with the provisions of section 3.5.

4.5 Exceeding subscribed power

The provisions of section 3.7 shall apply when the subscribed annual power is exceeded, i.e. the used active power exceeds the subscribed annual power.

4.6 Compensation for reduced losses in the regional network

Vattenfall shall pay general compensation for reduced energy losses on Vattenfall's regional network if the input reduces energy losses on Vattenfall's regional network. The compensation shall be paid as a negative transmission fee in öre/kWh.

Transmitted energy is measured and transmission fees shall be paid monthly for transmitted energy. No compensation shall be payable for input points of connection which clearly do not reduce the energy losses in Vattenfall's regional network.

4.7 Power fees paid to Svenska Kraftnät

Capacity fees for the input of power into Vattenfall's overlying network shall be divided in accordance with the netting principle between parties who caused the input of power. This means that the cost for input of power into the overlying network shall be divided proportionately between the participants on the regional network who input electricity into the regional network. For each input point of connection on the regional network, a percentage share of the regional network's capacity costs for the overlying network at one or more national grid node connected to Vattenfall's electricity network is calculated. The input points of connection shall bear a share of Vattenfall's fees paid to Svenska Kraftnät or other overlying network at the relevant national grid node or nodes.

The Customer's annual power fee for the national grid corresponds to a given percentage of Vattenfall's provisional power fees paid to Svenska Kraftnät for input into the relevant national grid node or nodes.

The annual power fee for the national grid shall be paid in an amount of one-twelfth per month for subscribed annual power.

4.8 Transmission fees paid to Svenska Kraftnät

Vattenfall's transmission fees paid to the overlying network shall be divided between the parties in accordance with the gross principle. This applies both to consuming and input customers. This means that each kWh input into, or kWh withdrawn from, the regional network shall be subject to a transmission fee in accordance with Svenska Kraftnät's current fees for the input of power into, or the withdrawal of power from, the overlying national grid in accordance with previously established national grid node or nodes.

Commencing 2021, Svenska Kraftnät shall apply transmission fees calculated as follows:

Fee = loss coefficient per node x hourly spot price in the relevant electricity area

Vattenfall does not forward the transmission fee for each hour in accordance with this formula but, rather, instead determines the average spot price on an annual basis and forwards a predetermined transmission price to Vattenfall's Customers. See, also, section 2.15.

Transmitted energy is measured and transmission fees are paid monthly for the transmitted energy.

4.9 Temporary power subscription

In the event Vattenfall is of the opinion that sufficient capacity is available on the regional network, input customers can temporarily subscribe for input over and above the subscribed annual power each month during the year in accordance with the provisions of section 3.6.

4.10 Compensation for power

Input points of connection which contribute to a reduction in withdrawals from Vattenfall's overlying network are paid compensation for input during peak-load hours.

The compensation is comprised of the public utility, Svenska Kraftnät's, power fee for withdrawals from the national grid in a nearby national grid node for the estimated network benefit recalculated as a transmission fee during peak-load hours.

Peak-load hours are weekdays from 06:00-22:00 during the periods January – March and November – December. Weekdays are normally Monday – Friday. The following days, which may fall on a day Monday to Friday, are not considered weekdays: New Year's Day, Epiphany, Good Friday, Easter Monday, Christmas Eve, Christmas Day, the day after Christmas, and New Year's Eve. The stated times pertain to Sweden national time according to which Vattenfall follows the official times in Sweden when transitioning from normal time to summer time and *vice versa*.

As regards input points of connection which do not contribute to a reduction in withdrawals from Vattenfall's overlying network, no compensation is paid.

As regards withdrawal points of connection with temporary input in which the input is priced on the basis of the energy fees in the tariff for withdrawals with inverse figures, no compensation is paid.

4.11 Rules regarding input/withdrawals of reactive power at input points of connection

The following rules apply to the input/withdrawal of reactive power into/from the regional network at points of connection which are priced in accordance with the Application Provisions for Input.

EIFS 2018:2

Connected power-generating modules (production facilities) covered by EIFS 2018:2 must, at a minimum, be able to produce and consume reactive power respectively in accordance with the requirements imposed by EIFS 2018:2. Type B power park modules (wind power plants) are subject to the same requirements as are applied to type C and type D.

Power park modules (wind power plants) must be able to compensate reactive use and production in their own networks and the additional network of the network owner even where such entails greater demands than in the preceding paragraph. "Additional network" means all new networks covered by the relevant new connection which make a reactive contribution, e.g. cables, aerial lines and transformers.

Power park modules (wind power plants) must be able to automatically switch from reactive power regulation to voltage regulation when the voltage falls below 95% in accordance with Chapter 5, section 5 of EIFS 2018:2.

SvKFS 2005:2

Connected production facilities covered by SvKFS 2005:2 must, at a minimum, produce or consume reactive power in accordance with the requirements imposed by SvKFS 2005:2.

Others

Other production facilities are deemed to be those connected prior to 2005 and which have not been modified. Connected production facilities which are not covered by EIFS 2018:2 or SvKFS 2005:2 must, at a minimum, be able to produce and consume reactive power respectively in accordance with the terms and conditions of the applicable network agreement.

Points of connection which are defined as input points of connection are subject to rules and regulations as above for reactive power at input points of connection where the connection is a power-generating module or power park module, both in conjunction with input and withdrawal of active power.

Other customers (i.e. adjacent network companies and end customers) are subject to rules and regulations for reactive power at withdrawal points of connection both in conjunction with withdrawal and input of active power in respect of which the entitlement to reactive exchange is determined on the basis of subscribed power for input.

Fees for reactive input are not charged at points of connection which are defined as input points of connection.

5. Fees for new or modified connections

5.1 Introduction

According to the Swedish Electricity Act, "connection" means a new connection of a facility, reconnection of an existing facility, and an increase in agreed power at input points of connection or withdrawal points of connection (so-called expanded connection). In conjunction with a connection, the Customer shall pay a connection fee to the network company. A main principle applicable to a connection fee is that it shall, to the greatest extent possible, correspond to the actual, customer-specific costs arising as a consequence of the connection.

Vattenfall applies fees in conjunction with new or modified connections in any respect in accordance with the rules in Chapter 5.

5.2 New connection

In conjunction with new connections to Vattenfall's regional network, Vattenfall shall offer and, within a reasonable period of time, implement a technically adequate and economically justified connection alternative. Vattenfall shall designate the point of connection on Vattenfall's regional network and shall decide the technical arrangement. An overall assessment of the network structure, operational safety, costs and environmental considerations shall determine the point of connection. Vattenfall shall determine in consultation with the Customer the voltage for the point of connection. In the event of a deficiency in capacity in the area, the connection may take longer than was previously normal.

In conjunction with the establishment of a new point of connection for withdrawals or for input, the connection fee shall be paid by the Customer in an amount equal to Vattenfall's customer-specific investment for the new connection. The connection fee shall be determined in accordance with Vattenfall's separate application provisions for the calculation of connection fees (see Chapter 6).

In the event a connection other than that offered by Vattenfall is desired, please refer to section 5.5 below.

5.3 Increase in the scope of the connection

In conjunction with an increase in the scope of the connection, Vattenfall shall, within a reasonable time, provide for the increased capacity need with a technically adequate and economically justified connection alternative.

In conjunction with an increase in the scope of the connection at the point of connection for withdrawal or for input, the connection fee shall be paid by the Customer in an amount equal to Vattenfall's customer-specific investment for the new connection. The connection fee shall be determined in accordance with Vattenfall's separate application provisions for the calculation of connection fees (see Chapter 6).

New provision

5.4 Specifically regarding connections expanded stepwise

In conjunction with new or expanded connections to Vattenfall's regional network, use of the power shall commence not later than 12-18 months following completion of the connection.

In the event the power cannot be used within 12-18 months, the application shall be divided into stages. The stages shall be regarded as separate connections in which the first is a new connection and subsequent stages constitute expanded connections.

5.5 Reduced scope or termination of the connection

As regards Customers who are connected in accordance with the connection terms and conditions applicable prior to 1 January 2021, the following shall apply.

In conjunction with a reduction of the scope or termination of the connection which is due only to the Customer's reallocation of the use of the network service between different points of connection, a fee shall be paid by the Customer. The fee shall equal the estimated residual value of the facilities which become redundant following the reduction of the scope or termination of the connection and other direct costs, including demolition costs, entailed by the modification. The calculated residual value shall equal an age-adjusted, new investment value - so-called regulatory residual value - but not less than the book economic residual value.

5.6 Connection other than the alternative offered

Where a connection alternative other than that offered by Vattenfall is desired, an additional fee shall be paid by the Customer equal to the Vattenfall's customer-specific investment for the additional measures.

In the event Vattenfall is to carry out the conversion work in its network and the Customer wishes to influence the design or scope of Vattenfall's conversion, an additional fee shall be paid by the Customer equal to Vattenfall's customer-specific investment for the additional measures.

5.7 Switchgear bays for outgoing lines

In the event the Customer desires to reduce the number of used switchgear bays for outgoing lines at the point of connection, Vattenfall shall meet the request without charging a fee.

In the event the Customer desires to increase the number of used switchgear bays for outgoing lines at the point of connection, and where the Customer

desires that Vattenfall assume responsibility for this service, Vattenfall shall, within a reasonable period of time, meet the request. A connection fee will be imposed on the Customer equal to Vattenfall's customer-specific investment for the additional measures

5.8 Extra measures in Vattenfall's network caused by the Customer

Where, as a consequence of the characteristics of the Customer's facility and/or the use thereof, measures are necessary in Vattenfall's network which are not capacity-related for the Customer's subscribed power, a fee shall be paid by the Customer equal to the Vattenfall's customer-specific investment for the additional measures

An example of such measures is the provision by Vattenfall of higher short-circuit power due to the Customer's intermittent use. Another example is the provision by Vattenfall of a transformer at the point of connection which is larger than necessary for the Customer's subscribed power due to the Customer's higher and recurring, short-term power withdrawals. A third example is Vattenfall's extra measures in the network as a consequence of harmonics and voltage variations generated in the Customer's facility and which disrupt adjacent Customers.

5.9 Relocation of lines or facilities

Certain rules applicable to the relocation of lines or facilities are set forth in Chapter 2, sections 66-71 of the Swedish Electricity Act. In addition to those rules, Vattenfall has the following provisions.

In conjunction with the relocation by Vattenfall, at the Customer's request, of lines or another facility owned or managed by Vattenfall, the Customer shall pay all of Vattenfall's direct expenditures incurred, including demolition costs, as a consequence of the relocation.

The Customer shall not pay the book economic residual value of the facilities which are relocated.

In conjunction with relocation of lines which are replaced by a cable, the Customer shall also pay for compensation for the generation by the cable of reactive power which occurs by means of reactors. Were such compensation does not take place in immediate connection to the relevant cable or in some other manner is not part of the relevant relocation of the line, the Customer shall pay for Vattenfall's central compensation of reactive power at another location by means of a standard fee of SEK 300/kVAr for the calculated generation of reactive power by the cable.

5.10 Payment of connection fees

Established connection fees shall be paid to Vattenfall in accordance with Vattenfall's instructions. In this context, Vattenfall may, following consideration of the circumstances in each individual case, allow a connection fee to be paid gradually over a period determined by Vattenfall. During such extended payment period for established connection fees, the fee shall be subject to interest for the duration of the payment period. The interest shall be determined on the basis of the reference rate applied by the Swedish Central Bank plus 9 percentage points during the relevant period.

In respect of high connection fees, Vattenfall reserves the right to request that the Customer provide Vattenfall a bank guarantee during the period of time the necessary facilities are being constructed.

5.11 Miscellaneous

The need for measures in Vattenfall's network which are due to changes in circumstances in conjunction with an expanded connection of a customer, but which were not identified or regulated prior to the implementation of expanded connection shall not be paid for by the Customer with the connection fee. The connection fee shall cover only customer-specific measures which are foreseeable in conjunction with new or modified connections or which are due to subsequent modifications in the Customer's use of the network service.

In the event Vattenfall carries out conversions in the regional network on its own initiative and for reasons not relating to the customer, current customers will not be affected economically. An example of the aforementioned is the conversion of a 70 kV line to a 130 kV line.

6. Determination of connection fee

6.1 Connection fee for new or modified connection

In conjunction with a new or modified connection to Vattenfall's network, the following rules shall apply. The stated provisions apply in respect of all connections for input and withdrawal.

Each connection to Vattenfall's network is regarded as a separate connection.

In conjunction with a connection, irrespective of size, a connection fee shall be established as the customer-specific investment for necessary measures in Vattenfall's network as a consequence of the connection. Please refer to section 6.2 regarding the determination of the customer-specific investment. As regards measures in facilities involving several known/planned, additional connections in upcoming years, Vattenfall shall thereupon be entitled to distribute the investments between the expected new connections equally.

Where a Customer desires to increase the scope of the connection, the Customer shall pay a connection fee in accordance with the aforementioned rules for the power by which the connection increases. Unless otherwise agreed with the Customer, the connection fee shall be determined in accordance with the terms and conditions applicable at the time of entering the agreement.

6.2 Customer-specific investment

Customer-specific investment is defined as the Customer's share of the total investment for necessary measures in Vattenfall's network as a consequence of the new or modified connection. This includes the investments requested by the Customer over and above those which are technically necessary.

Investments for measures in Vattenfall's network over and above those relating to the new or modified connection shall not be included in the customer-specific investment.

6.2.1 Cost basis

Calculations for the determination of the customer-specific investment for a new or modified connection shall be based on suitable technical and economic connection alternatives taking into account the scope of the connection and in compliance with a long-term network development plan for the area.

The calculation shall cover calculated investments according to Vattenfall's technical instructions for facilities caused by the new or modified connection.

The calculation for the customer-specific investment shall also take into account so-called regulatory residual values (age-adjusted investment values) for facilities demolished and costs for demolishing such facilities and returnable materials in conjunction with the exchange or upgrading of facilities. The value of the returned materials shall be calculated in accordance with the EBR cost catalogue taking into account the age of the facility.

The customer-specific investment shall also cover the calculated and reported shares of any connection fees to the network or networks reported as overlying networks to Vattenfall's regional network incurred as a consequence of the new or modified connection.

At the point of connection, Vattenfall shall be responsible for electricity meters and related equipment and the installation thereof. The investment costs for electricity meters shall not be included in the connection fee.

The customer-specific investment shall not cover costs for operation and maintenance and shall not, furthermore, cover normal network tariffs which Vattenfall pays for Vattenfall's overlying network.

6.2.2 Determination of the customer-specific investment

New facilities in proximity to the Customer

100% of the investments for new facilities which will be used exclusively by individual Customers shall be included in their entirety in the customer-specific investment.

100% of the entire investment for facilities which are clearly established for the sole purpose of handling special circumstances in new or modified connections shall be included in the customer-specific investment. Examples of such conditions may be the need to achieve increased short-circuit power at the connection of the electricity production facility.

In the event a line is built parallel to an existing line, such line shall be regarded as though the existing line had been upgraded/converted when dividing the investment for the line. Please see below. However, the aforementioned shall not apply where the measure is necessary for technical reasons, e.g. in order to obtain sufficient short-circuit power and in order to reduce disruptions on neighbouring networks. In such cases, 100% of the entire investment shall be included in the customer-specific investment.

For other new facilities, Vattenfall shall make an assessment of the utilisation based on existing Customers and known/planned new connections in upcoming years.

Where the assessment concludes that existing Customers and expected new connections will not use the new facilities, the entire investment for the facility shall be included in the customer-specific investment.

New facilities with shared utilisation

Where the assessment is that existing Customers or anticipated new connections will use the new facilities, the division of the investment in the relevant facilities shall be carried out between the affected existing Customers and known/planned new connections within the upcoming years. The estimated share of the investment in the facilities of the relevant connections shall be included in the customer-specific investment. "Calculated share" means the proportional share of the total rated power of the relevant connection for the **existing and known/planned new connections** within the upcoming years which will use the new facilities.

Subsequent repayment of paid connection fees divided in such a manner will not occur.

Upgraded/converted facilities

Investments in upgrading/conversion of facilities shall be considered in the customer-specific investment calculation in two respects:

- The new investment value (sw: *NUAK*) of the increased capacity in the facility shall be taken into account by calculating the difference between the facility value of the converted facility and the existing facility, i.e. the difference between the new investment value (*NUAK*) prior to and after conversion. The

conversion of the facility without an increase in capacity shall thereby not result in an increase in the facility value.

- The cost for carrying out the conversion at an earlier time shall be taken into account. Such cost is comprised of the calculated new value difference between performing the conversion now in lieu of at some point in the future. The determination to carry out the conversion at an earlier time shall be taken on the basis of the planned time for conversion if such time has been determined or on the basis of the normal calculation of the remaining period of usefulness which is used in the calculation of the technical current value.

As regards upgraded/converted facilities, the allocation of the investments in relevant facilities shall be made between **known/planned new connections**. The calculated share of the investments in the facilities for the relevant connection shall be included in the customer-specific investment. "Calculated share" means the proportional share of the total rated power of the relevant connection for the **known/planned new connections** within the upcoming years which will use the new facilities.

Connection fees payable to the overlying network

A share of the connection fees payable to the overlying network shall be calculated as the share of the relevant connection's total rated power for the **known/planned new connections** which together give rise to the connection fee.

Totalling the customer-specific investment

The customer-specific investment is calculated as the sum of the share of the components calculated in the various sub-sections above, i.e. investments in new facilities in proximity to the Customer, new facilities which are used jointly, upgraded/converted facilities and any connection fees payable to overlying networks.

Vattenfall shall be entitled to reduce the calculated connection fee under certain circumstances.

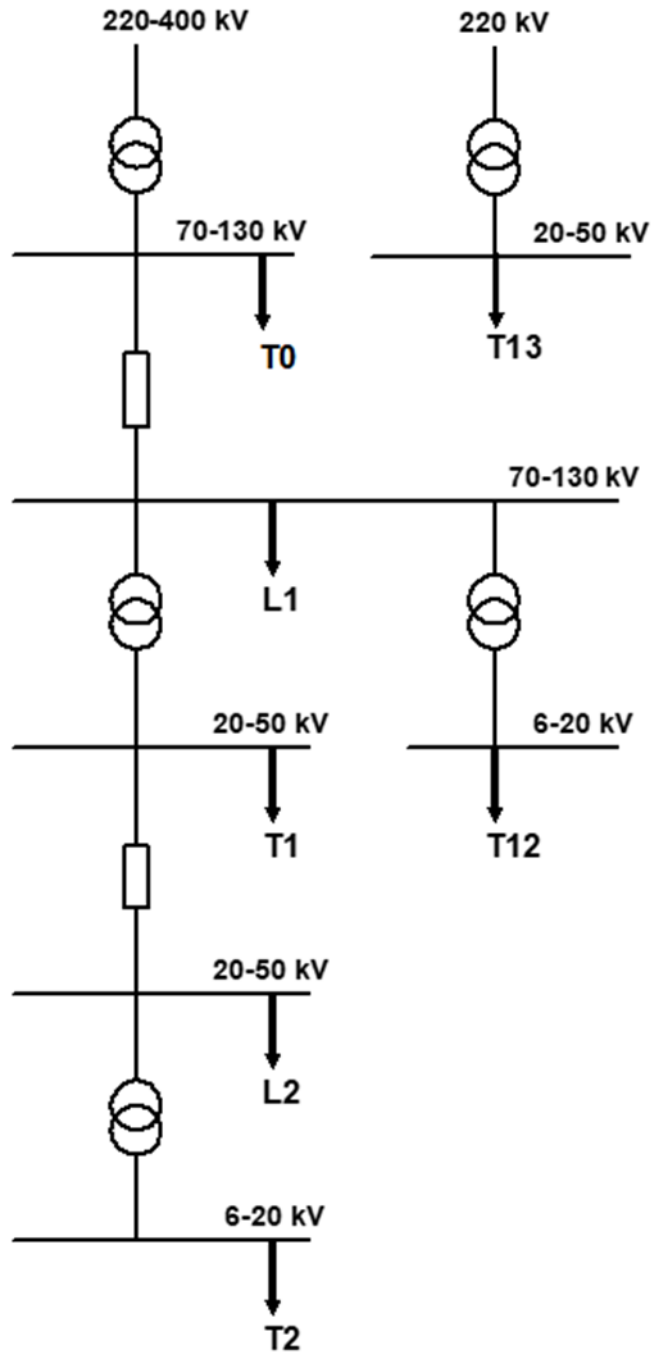
6.3 Connection power

Connection power is defined as the technically dimensioned power for which the Customer has paid the connection fee. In conjunction with increases in subscribed annual power above this power allowance, the Customer shall pay additional connection fees.

6.4 Information

As regards connection fees based on a customer-specific investment, Vattenfall shall, upon request by the Customer, provide the Customer with the relevant calculation, the data and the assessments regarding future connections forming the basis for the calculation. Such data shall be provided in such a manner as does not disclose information which is sensitive from commercial, security or secrecy perspectives.

APPENDIX 1: SEGMENTED TARIFF STRUCTURE



**APPENDIX 2:
VATTENFALL ELDISTRIBUTION AB'S REGIONAL NETWORK TARIFF
NORMAL TARIFF – 2025**

TARIFFS FOR WITHDRAWALS of electricity from Vattenfall's electricity network.

Norrbottnen	T0	L1	T1	L2	T2	T12	T13	X	
Fixed fee	5,800	400	1,600	100	500	1,400		25	SEK '000/year
Annual power fee	44	196	208	394	406	208		406	SEK/kW, year
Transmission fee	-1.8	-1.1	-0.7	+0.4	+1.7	+0.1		+9.1	öre/kWh

Middle Norrland	T0	L1	T1	L2	T2	T12	T13	X	
Fixed fee	5,800	400	1,600	100	500	1,400	2,900	25	SEK '000/year
Annual power fee	47	199	211	397	409	211	59	409	SEK/kW, year
Transmission fee	-1.3	-0.6	-0.2	+0.9	+2.2	+0.6	-1.5	+9.6	öre/kWh

Southern tariff area	T0	L1	T1	L2	T2	T12	T13	X	
Fixed fee	5,800	400	1,600	100	500	1,400	2,900	25	SEK '000/year
Annual power fee	50	202	214	400	412	214	62	412	SEK/kW, year
Transmission fee	+1.7	+2.4	+2.8	+3.9	+5.2	+3.6	+1.5	+12.6	öre/kWh

Special rules

Customers at L2 may subscribe for tariff T1 for a supplement of SEK 1,400,000/year plus SEK 15/kW annual power fee.

Customers at T2 may subscribe for tariff T12 for a supplement of SEK 2,000,000/year plus SEK 35/kW annual power fee.

TARIFFS FOR INPUT of electricity into Vattenfall's electricity network (applicable to all areas):

	PT0	PL1	PT1	PL2	PT2	PT12	
Fixed fee	2,900	400	1,600	100	500	1,400	SEK '000/year
Annual power fee	10	0	12	0	12	12	SEK/kW, year
Distance-dependent annual power fee	0	1.11	1.11	2.61	2.61	1.11	SEK/kW, km, year
Transmission fee	0.34	0	0	0	0	0	öre/kWh

"Distance" is the straight-line distance (electrical) to the closest national grid node.

Compensation for energy at input points of connection which reduce energy losses in Vattenfall's electricity network.

	PT0	PL1	PT1	PL2	PT2	PT12	
Compensation for energy	0	-0.98	-1.38	-2.52	-3.67	-2.04	öre/kWh

Individual compensation for power supplied to stations in accordance with the list, as well as a share of Svenska Kraftnät's power and energy fees, is also paid.

Annual power fee for withdrawals in conjunction with temporary withdrawals at input points of connection:

Norrbottnen	34 kr/kW
Middle Norrland	37 kr/kW
Southern Sweden	40 kr/kW

Vattenfall Eldistribution AB
RU 2560
169 92 Stockholm
Please direct inquiries to:
Regionnät Kundrelationer
Stockholm + 46 (0)8-739 50 00
Trollhättan +46 (0)520-880 00
Luleå +46 (0)920-770 00
info@vattenfall.com
vattenfalleldistribution.se