

The Rte logo is a light blue circle containing the letters 'Rte' in white. The background of the entire page is a dark blue with a network of light blue lines and dots.

Rte

TURPE 5

TARIFF SETTING OF NETWORKS
UNDERSTANDING THE TARIFF



**Consumers
&
Generators**

JULY 2020 EDITION



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Editorial by Khalid ABDALLAOUI, RTE
Commercial Director

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Discover the TURPE 5



Editorial by Khalid ABDALLAOUI, RTE Commercial Director

Our mission: To provide a safe, economical and clean access to the power supply for the benefit of our customers.

RTE is in a regulated monopoly position for the operation of the public electricity transmission system. The revenues related to this activity are therefore decided by the French Energy Regulatory Commission and passed on to users through a tariff, the TURPE (public transmission system access tariff).

The TURPE is our principal financial resource and the main contractual relationship we have with you. It accounts for almost 90% of RTE's revenue and covers our investments and all of the operation and maintenance activities of the public electricity transmission system.

All of our areas of expertise mobilised to meet your needs carry a number of costs that need to be covered by the tariff.

The main regulatory principles implemented by the CRE aim to ensure that the TURPE guarantees a good coverage of our costs while carrying out our role as a responsible and effective market player.

This tariff is a means for us to service your performance and continually provide new services best suited to your needs.

TURPE 5, which came into force on 1 August 2017 for 4 years, provides for an authorised income trajectory for RTE between 2017 and 2021. However, this trajectory is corrected ex-post at the end of each year.

The difference between the tariff revenue actually received by RTE and the ex-post authorised revenue implies **an annual change in the tariff on 1 August of each year**.

Thus, if the tariff revenues are less than the authorised revenue, the tariff increases. If not, it decreases. If the change is not sufficient to offset the imbalance, the remainder is carried over to the following year.

This is the context of the **tariff change of 1 August 2020 of -1.08%** which takes into account the inflation recorded + 0.92% offset by an adjustment account for expenses/income (*compte de régularisation des charges et des produits* (CRCP)) to be settled on 1 January 2020, significantly less than 1 January 2019 (impact of -2% on the tariff).

The CRE is preparing the next step with TURPE 6 for the 2021-2025 period. In this context, several public consultations have been launched to gather the opinion of all stakeholders and transmission system users concerning the structure of future transmission tariffs.

Over the next few years, we will strengthen and develop our actions in support of your performance and provide you with quality services that meet your expectations.

To best assist you with the issues that matter most to you, RTE's Sales Division teams are available to meet your needs and advance your projects.

The main principles

The public transmission system access tariff is designed to invoice you according to the costs incurred by your use of the network.

The tariff is based on four main principles

1. Postage stamp principle:

Pricing is independent of the distance travelled by the power between the site where it was generated and the site where it was consumed.

2. Tariff equalisation principle:

To be fair across all territories, TURPE is applied in the same way throughout the continental metropolitan national territory.

3. Principle of the tariff's dual component (called a binomial tariff):

Excluding HV-B 3 and excluding injection, the tariff includes a part for power and a part for energy divided into several categories to account for our customers' different kinds of uses.

4. Principle of hourly/seasonal adjustments:

The cost of the energy part varies according to the seasons, days and hours of use of the Public Transmission System.

Indexing of the tariff schedule

The tariff schedule is updated every year on 1 August according to two parameters:

- The non-tobacco consumer price index
- The a posteriori correction of the differences in revenue and expenditure with respect to authorised income, with an effect on the evolution of the tariff of between -2% and +2%.

Incentive regulation encourages us to continually improve our performance

In addition to the tariff, the CRE also sets out a regulatory framework to encourage RTE to improve its performance by setting up incentive mechanisms. These financial mechanisms result in bonuses or penalties, depending on whether the objectives are met.



Authorised income:

As for its use of the Public Transmission System for Electricity, RTE is in a regulated monopoly situation. Thus, your bills are not the result of a market price but of a tariff set by the regulator: the French Energy Regulatory Commission (CRE).

This tariff covers RTE's costs, which represents the "authorised income" reference level defined by the CRE. In order to guarantee this coverage, the tariff is increased the following year if this income was not met. It is otherwise revised downwards in order to refund overages to all RTE customers.

In order to limit cash flow fluctuations, the tariff will be reviewed annually on 1 August within a range of -2% + CPI to +2% + CPI for the duration of TURPE 5.

CPI: Non-tobacco consumer price index

The main differences compared with previous tariffs

HV-B 3 extraction is only invoiced for the energy transferred

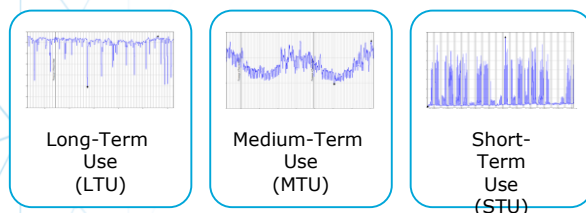
In load extraction, customers connected to HV-B 3 are only charged for the energy part, linked to their extraction volume, at a flat price of €3.2/MWh (i.e. a non-binomial tariff that is not adjusted for time/season).

Time range schedule changes

The names of the time ranges of the HV-B 2, HV-B 1 and HV-A rates change: there are always 5 time ranges, but winter (November to March) and summer (April to October) are replaced by high and low season.

3 tariff versions corresponding to 3 consumption profiles

For HV-B 2 and HV-B 1 tariffs, three "Tariff Versions", Short-Term Use (STU), Medium-Term Use (MTU) and Long-Term Use (LTU) are substituted for the three "Tariff Options" previously used in TURPE 4.



For the HV-A 1 tariff, new fixed and mobile peak tariffs are applied in two tariff versions called Short-Term Use (STU) and Long-Term Use (LTU).

Scheduled power exceedances are extended to the calendar year

You can also benefit from one-time exceedances scheduled at any time of the year, only in case of work on your electrical installations and subject to refusal or suspension by RTE, motivated by operating constraints on the public transmission system.

The adjustment of HV-A rates for time/season is strengthened

For the HV-A voltage range, the concave option (not adjusted for time/season, single subscribed power) and the 8 time range tariff disappear, replaced by a uniform division of tariff schedules into five time ranges. A mobile peak tariff is introduced, the peak period of which corresponds to the peak period known as "PP1" in the capacity mechanism.



The PP1 Peak Period

The PP1 period is the reference period when establishing the obligation of each actor required in the capacity mechanism. It consists of 10 hours per day on the time frames [7am; 3pm] and [6pm; 8pm] for the days reported by RTE. The reported days are not fixed before winter. However, they still include the working days from November to March minus the period corresponding to the Christmas school holidays. The reporting for PP1 days is transmitted on D-1 at 9:30am. It is based on a consumption criterion. The number of PP1 days reported varies between 10 and 15 per year of delivery.

The rules for changing subscribed powers are changing

You can change your subscribed power in the middle of the month (instead of the 1st at the moment), but without retroactive effect, with a notice of at least 3 working days.

Carry-over is financially neutralised

In the case of load transfers requested by RTE for works between two main or complementary power supplies of the same consumption site, exceedances incurred by customers are capped during the load transfer period.

This system does not apply to HV-A connection points.

Tariff elements, formulas, and rates

Presentation of the tariff

At each connection point or grouping point, the annual price for accessing the Public Electricity Transmission System is the sum of:

For all customers

- + **MC** – annual Management Component
- + **CC** – annual Metering Component
- + **CACS** – annual Additional and Backup Power Component
- + **CR** – Tariff grouping component for connection points
- + **CS** – annual component for Extraction
 - + **CMDPS** – monthly components for subscribed capacity exceedances
 - + **CDPP** – Monthly component for one-off, scheduled exceedances
- + **CER** – annual component for Reactive Energy
- + **CI** – annual Injection Component

=

Amount of the annual bill for accessing the Public Electricity Transmission System*

* Excluding taxes and contributions

The energy used to calculate the different components (excluding CG, CC, and fixed CACS costs) corresponds to the physical flow measured at the point of connection concerned.

Description of the components of the tariff

The tariff's annual components for accessing the Public Electricity Transmission System by connection point or by grouping point are described below.

The formulas and coefficients presented below are derived from the 17 November 2016 French Energy Regulatory Commission's (CRE) decision on charges for the use of public networks of power starting 1 August 2017 for HV-B voltage, published in the Official Bulletin of 28 January 2017;

Following the decision of the Council of State of 9 March 2018, the CRE published the decision of 28 June 2018 on new distribution tariffs. Following the decision of the Council of State of 9 March 2018, the CRE published the decision of 28 June 2018 on new electricity distribution tariffs (so-called "TURPE 5 bis HV-A-LV").

The deliberations of the French Energy Regulatory Commission of 28 May 2020 set the annual evolution of tariffs for the use of power networks.

The tariff schedule for the use of public electricity networks in the HV-B voltage ranges will be up by -1.08% on 1 August 2020 which takes into account the inflation recorded + 0.92% offset by an adjustment account for expenses/income (*compte de régularisation des charges et des produits* (CRCP)) to be settled on 1 January 2020, significantly less than 1 January 2019 (impact of -2% on the tariff).

The tariff schedule for the use of public electricity networks in the HV-A and LV voltage ranges is that applied to users of the electricity distribution system. It will go up + 2.75 % on 1 August 2020 in order to take account of the inflation recorded + 0.92 % to which is added the balance of the adjustment account for expenses/income to be settled on 1 January 2020 significantly higher than on 1 January 2019 (impact of + 1.85% on the tariff) in particular due to the exceptional contribution of Enedis in 2019 to the Electricity Equalisation Fund to catch up the 2012 to 2019 years.

Annual management component (CG)

The annual component for management covers the costs of managing customer records, such as receiving, contracting, invoicing and collection. This component is established for each main power connection point. Its amount depends on the voltage range (HV-B or HV-A).

Voltage range	a_1 € / year
HV-B	8855.88
HV-A	423.36

Annual injection component (CI)

If you inject power on the public transmission network, you may be billed for the annual injection component. It is established for each connection point, depending on the active energy injected and the voltage range.

Voltage range	c€ / MWh
HV-B 3	20
HV-B 2	20
HV-B 1	0
HV-A	0

Annual component for metering (CC)

The annual component for metering covers the costs of metering, control, reading and transmission of customer metering data, as well as leasing and maintenance costs, if applicable. It is based on the metering device's ownership status.

Metering device owned by RTE

Voltage range	Annual component €/ year / device
HV-B	3061.92
HV-A	564.72

Metering device owned by the customer

Voltage range	Annual component €/ year / device
HV-B	549.72
HV-A	170.76

The annual component for extractions (CS) and the monthly components for subscribed capacity exceedances (CMDPS)

The tariff for HV-B 3 extraction not adjusted for time/season

For the HV-B 3 voltage range, the extraction component is calculated as a function of the energy withdrawn at a flat price and for each connection point. The notion of subscribed power exceedances is no longer applicable for this voltage range.

At each of these connection points, the annual extraction component shall be established according to the following formula:

$$CS = c \times E$$

HV-B 2, HV-B 1 and HV-A tariffs adjusted for time/season

The subdivision of subscribed capacities

For each one of your connection points, you choose a subscribed capacity for each time range and a pricing version. These subscriptions are set for 12 months. The five subscribed powers must be subdivided in the following order:

Tariff versions

For the HV-B 1 and HV-B 2 ranges, three tariff versions are available depending on your network usage profile: short-term use, medium-term use or long-term use.

Calculation formula

At each of these connection points, the annual extraction component shall be established as follows:

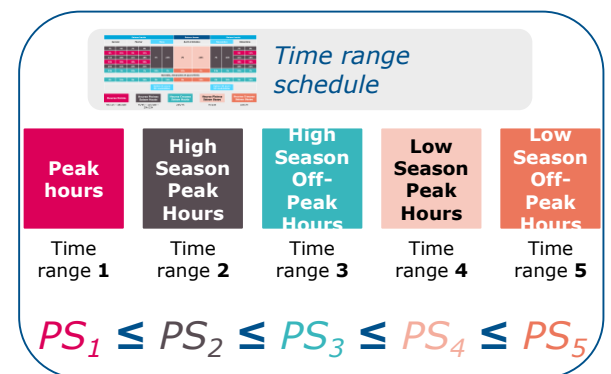
$$CS = \underbrace{b_1 \times PS_1 + \sum_{i=2}^5 b_i \times (PS_i - PS_{i-1})}_{\text{Fixed part = Power part}} + \underbrace{\sum_{i=1}^5 c_i \times E_i}_{\text{Energy part}} + \underbrace{\sum_{12 \text{ mois}} \sum_{i=1}^5 0,04 \times b_i \times \sqrt{\sum_j (P_j - PS_i)^2}}_{\text{Exceedances}}$$

Where:

- i denotes the time interval;
- b_i is the weighting factor of the capacity defined by time interval i according to the voltage range and the tariff version concerned;
- PS_i is the subscribed power of time interval i ;
- c_i is the weighting factor of the energy for time interval i according to the voltage range and the tariff version concerned;

The applicable c factor is:

Voltage range	c€ / kWh
HV-B 3	0.32



For the HV-A 1 range, you have two options (fixed or mobile). For each option, two tariff versions are available depending on your network usage profile: short-term use or long-term use.

The connection points connected to the HV-A 2 voltage range are priced as those on HV-B 1 voltage range are.



Time range

The b_i and c_i coefficients used that are applicable to the HV-B 2 voltage range are:

For the short-term use tariff version (STU)

	Peak hours (i=1)	High Season Peak Hours (i=2)	High Season Off-Peak Hours (i=3)	Low Season Peak Hours (i=4)	Low Season Off-Peak Hours (i=5)
Weighting coefficient for power b_i (€/kW/year)	0.87	0.79	0.76	0.69	0.37
Weighting coefficient of power c_i (c€/kWh)	1.39	0.87	0.87	0.69	0.54

For the medium-term use tariff version (MTU)

	Peak hours (i=1)	High Season Peak Hours (i=2)	High Season Off-Peak Hours (i=3)	Low Season Peak Hours (i=4)	Low Season Off-Peak Hours (i=5)
Weighting coefficient for power b_i (€/kW/year)	4.52	4.32	4.29	3.40	2.13
Weighting coefficient of power c_i (c€/kWh)	1.18	0.87	0.62	0.49	0.30

For the long-term use tariff version (LTU)

	Peak hours (i=1)	High Season Peak Hours (i=2)	High Season Off-Peak Hours (i=3)	Low Season Peak Hours (i=4)	Low Season Off-Peak Hours (i=5)
Weighting coefficient for power b_i (€/kW/year)	12.26	11.77	9.78	7.62	3.77
Weighting coefficient of power c_i (c€/kWh)	0.84	0.61	0.44	0.28	0.21

The b_i and c_i coefficients used that are applicable to the HV-B 1 voltage range are:

For the short-term use tariff version (STU)

	Peak hours (i=1)	High Season Peak Hours (i=2)	High Season Off-Peak Hours (i=3)	Low Season Peak Hours (i=4)	Low Season Off-Peak Hours (i=5)
Weighting coefficient for power b_i (€/kW/year)	2.43	2.02	1.86	1.11	0.60
Weighting coefficient of power c_i (c€/kWh)	2.36	1.92	1.59	1.25	0.90

For the medium-term use tariff version (MTU)

	Peak hours (i=1)	High Season Peak Hours (i=2)	High Season Off-Peak Hours (i=3)	Low Season Peak Hours (i=4)	Low Season Off-Peak Hours (i=5)
Weighting coefficient for power b_i (€/kW/year)	18.22	17.48	14.47	9.79	4.59
Weighting coefficient of power c_i (c€/kWh)	1.73	1.37	0.80	0.58	0.40



Time range

HV-B 1

For the long-term use tariff version (LTU)

	Peak hours (i=1)	High Season Peak Hours (i=2)	High Season Off-Peak Hours (i=3)	Low Season Peak Hours (i=4)	Low Season Off-Peak Hours (i=5)
Weighting coefficient for power b_i (€/kW/year)	31.03	30.02	24.19	17.26	8.89
Weighting coefficient of power c_i (c€/kWh)	1.42	1.04	0.61	0.40	0.15

The b_i and c_i coefficients used that are applicable to the HV-A 1 voltage range are:

HV-A 1

For the Fixed Peak tariff and the Short-Term Use Tariff Version (STU)

	Fixed Peak Hours (i=1)	High Season Peak Hours (i=2)	High Season Off-Peak Hours (i=3)	Low Season Peak Hours (i=4)	Low Season Off-Peak Hours (i=5)
Weighting coefficient for power b_i (€/kW/year)	2.66	2.38	2.01	1.83	0.96
Weighting coefficient of power c_i (c€/kWh)	3.11	2.93	2.11	1.95	1.18

For Fixed Peak tariff and Long-Term Use Tariff Version (LTU)

	Fixed Peak Hours (i=1)	High Season Peak Hours (i=2)	High Season Off-Peak Hours (i=3)	Low Season Peak Hours (i=4)	Low Season Off-Peak Hours (i=5)
Weighting coefficient for power b_i (€/kW/year)	16.31	15.76	13.29	8.75	1.67
Weighting coefficient of power c_i (c€/kWh)	2.85	2.14	1.34	0.99	0.87

For the Mobile Peak tariff and the Short-Term Use Tariff Version (STU)

	Mobile peak hours (i=1)	High Season Peak Hours (i=2)	High Season Off-Peak Hours (i=3)	Low Season Peak Hours (i=4)	Low Season Off-Peak Hours (i=5)
Weighting coefficient for power b_i (€/kW/year)	3.26	2.29	2.01	1.83	0.96
Weighting coefficient of power c_i (c€/kWh)	4.15	2.80	2.11	1.95	1.18

For the Mobile Peak tariff and the Long-Term-Term Use Tariff Version (LTU)

	Mobile peak hours (i=1)	High Season Peak Hours (i=2)	High Season Off-Peak Hours (i=3)	Low Season Peak Hours (i=4)	Low Season Off-Peak Hours (i=5)
Weighting coefficient for power b_i (€/kW/year)	18.75	17.43	13.29	8.75	1.67
Weighting coefficient of power c_i (c€/kWh)	3.26	1.96	1.34	0.99	0.87

Annual component for additional and backup power (CACS)

Supplementary power supplies and emergency power supplies are subject to a fixed rate. It is based on the parts that are dedicated to you, depending on the number of cells, the lines' length and type (overhead or underground).

If the backup power supply is connected to the same voltage range as that of the main power supply and is connected to a transformer on the public network different from that used for the main power supply, it will incur an additional fixed charge for power reserves.

Load extractions performed on a backup at the same voltage range as the main power supply are invoiced under the extraction component (CS) and the monthly components for

subscribed capacity exceedances (CMDPS) for the main power supply.

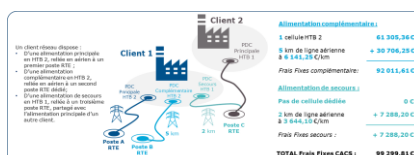
Extractions and exceedances of subscribed power from the emergency power supply are then invoiced according to a specific tariff.

Please note that if several customers are connected to a single backup line that supplies exclusive backup power, the fixed costs are prorated on the basis of the subscribed power of each customer connected to this connection.

Fixed costs for additional and backup power

Voltage range	Cells (€ / cell / year)	Lines (€ / km / year)
HV-B 3	105809.30	10026.70
HV-B 2	63 811.75	Overhead lines: 6392.33 Underground lines: 31 960.50
HV-B 1	33 145.12	Overhead lines: 3793.08 Underground lines: 7586.15
HV-A	3 324.83	Overhead lines: 906.97 Underground lines: 1360.45

Example of calculation of fixed costs CACS



Other power reserve power supply costs

Voltage range	€ / kW / year or € / kVA / year
HV-B 2	1.53
HV-B 1	2.95
HV-A	6.49

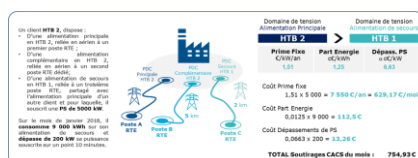
Specific charges for backup power supplies from a different voltage range than the main power supplies

If the backup power supplies are of a different voltage range than the main power supplies and are equipped with a meter measuring the active power exceedances, the monthly component of the subscribed power exceedance shall be calculated according to the following formula:

$$CMDPS = \alpha \cdot \sqrt{\sum (\Delta P^2)}$$

Voltage range of the main power supply	Voltage range of the backup power supply	Fixed part € / kW / year	Energy part c€ / kWh	α c€ / kW
HV-B 3	HV-B 2	7.33	0.76	31.05
	HV-B 1	5.39	1.30	23.00
HV-B 2	HV-B 1	1.57	1.30	6.90
	HV-A	8.42	1.82	67.59
HV-B 1	HV-A	2.93	1.82	24.00

Example of the calculation of SP extractions and exceedances on a backup power supply



The grouping component (CR)

If you have separate connection points to the Public Transmission System on your site with the same voltage and that are equipped with remote-controlled meters, you can benefit from the conventional grouping of all or part of these connection points.

The grouping component depends on the set of powers subscribed to at the grouping point and on the total length of the network and the type of connection (overhead or underground) necessary for the grouping of the connection points.

This system can allow you to optimise your invoice by multiplying your different extractions.

The component is calculated annually using the following formula:

$$CR = (L_a \times k_a + L_s \times k_s) \times PS_{grouped}$$

Where:

- $(L_a + L_s)$ is the smallest total length of the electrical structures on the PTS that physically enable the grouping, with L_a being the length of the overhead lines and L_s being the length of the underground lines,
- k_a and k_s the grouping coefficients for overhead and underground lines, respectively,
- $PS_{grouped}$ equals the grouped subscribed power of the grouping point, except for the HV-B 3 range, where it is equal to the maximum hourly extraction capacity of the grouping point observed over the last 12 months.

Except for HV-B 3, the grouped subscribed power is calculated according to the following formula:

$$PS_{grouped} = PS_1 + \sum_{i=2}^5 \frac{b_i}{b_1} \times (PS_i - PS_{i-1})$$

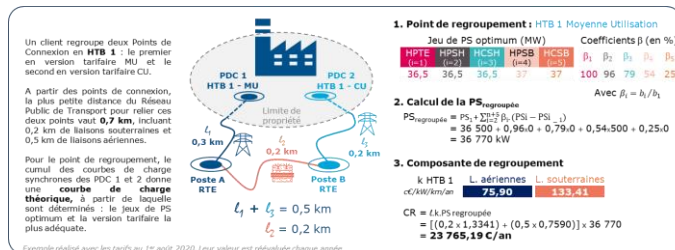
Where:

- i denotes the time interval,
- PS_i is the subscribed power for time interval i ,
- b_i is the weighting factor of the capacity defined by time interval i and the tariff version.

The k coefficients used are:

Voltage range	k (c€ / kW / km / year)
HV-B 3	5.75
HV-B 2	Overhead lines: 14.96 Underground lines: 57.49
HV-B 1	Overhead lines: 75.90 Underground lines: 133.41
HV-A	Overhead lines: 52.00 Underground lines: 75.00

Example of calculation of the grouping component of 2 connection points: to be found on page 31

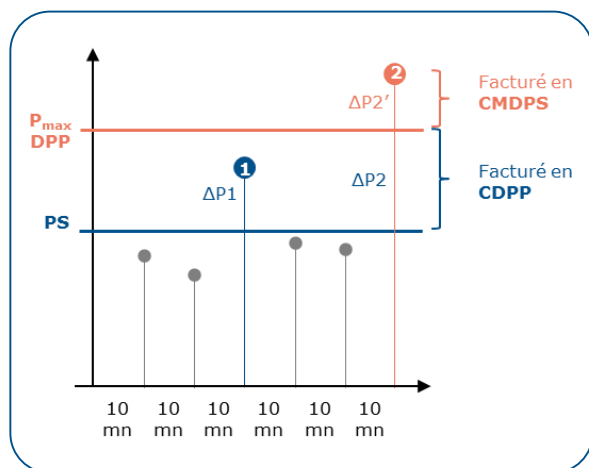


Component for one-off scheduled exceedances (CDPP)

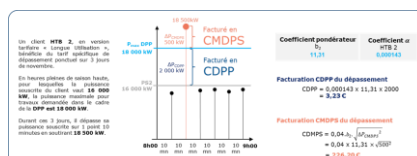
For your HV-B 1 and HV-B 2 connection points, when you are working on your electrical installations, you can ask RTE for scheduled one-time exceedances at any time of the year, in the forms and within the time limits stipulated in the Transmission System Access Contract.

If the network's capacity can support it and your request is accompanied by elements justifying the work to be carried out on your electrical installations, RTE will approve it.

Your request must have a maximum requested capacity, applicable for all time ranges of the desired period.



Example of calculation of CDPP



During this period, subscribed power exceedances below the maximum scheduled capacity exceedances granted are billed at a specific rate.

This arrangement is available for each connection point, once a year and for up to 14 consecutive indivisible days. It does not apply to backup emergency power supplies or to HV-B 3 and HV-A connection points.

The component is calculated using the formula:

$$CDPP = \alpha \cdot b_i \cdot \sum \Delta P$$

Where:

- i denotes the time interval;
- b_i is the weighting factor of the capacity defined by time interval i according to the voltage range and the tariff version concerned.

The α coefficient used is:

Voltage range	α
HV-B 2	0.000149
HV-B 1	0.000094

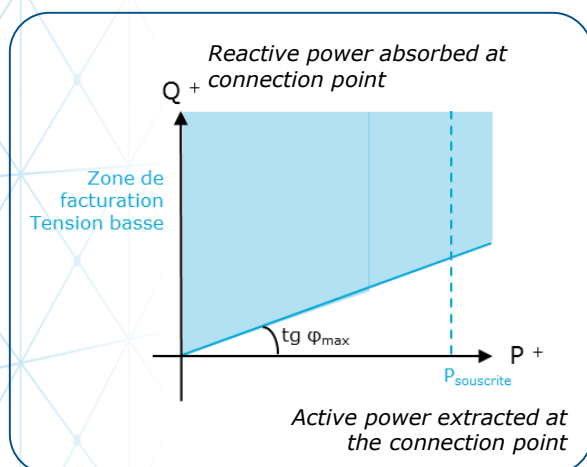
Annual component for reactive energy (CER)

The reactive energy extracted is invoiced from November to the end of March.

For the period between November and the end of March, if the quantity of reactive energy extracted from 6am to 10pm, Monday through Saturday in HV-B 3, and from 7am to 11pm, during working days in HV-B 1 and HV-B 2 is greater than 40% of the amount of active energy consumed, this surplus of reactive energy extracted is charged to you according to the voltage range.

Invoicing for the extracted reactive energy on 1 August 2020

Voltage range	Report $\text{tg } \varphi_{\max}$	Coefficients in c€/kvar.h
HV-B 3	0.4	1.49
HV-B 2	0.4	1.59
HV-B 1	0.4	1.79
HV-A	0.4	2.00



Extraction flow

From April to October, RTE offers free reactive energy. From November to March, you may be invoiced under the conditions described in the previous paragraph.

November to March inclusive				
Consumer & Generator	HV-B 3	Invoicing	Monday to Saturday	6am to 10pm
		No invoicing	Monday to Saturday	10pm to 6am
			Sunday	0:00 to 24:00
	HV-B 2 HV-B 1	Invoicing (peak and peak high season hours)	Monday to Friday	7am to 11pm
		No invoicing (off-peak high season hours)	Monday to Friday	11pm to 7am
			Saturday, Sunday and public holidays	0:00 to 24:00

Invoicing terms

The invoicing of consumption in HV-B3 not adjusted for time of day and season

For HV-B 3, this component is calculated only from the energy E extracted during month M , according to the formula:

$$CS = c \times E$$

Its monthly amount for month M is invoiced at the beginning of month $M + 1$ (in arrears).

The invoicing of HV-B 2, HV-B 1 and HV-A 1 consumption adjusted for time and season

For voltage ranges adjusted for time/season, the annual amount of the extraction component is found using the following formula:

$$CS = \text{fixed part} + \text{variable part}$$

Where:

$$\text{fixed part} = b_1 \times PS_1 + \sum_{i=2}^5 b_i \times (PS_i - PS_{i-1})$$

And:

$$\text{variable part} = \sum_{i=1}^5 c_i \times E_i + \sum_{12 \text{ months}} CMDPS$$

Where:

- i denotes the time interval;
- b_i is the weighting factor of the capacity defined by time interval i and the tariff version;
- PS_i is the subscribed power for time interval i ;
- c_i is the weighting factor of the energy for time interval i and the tariff version concerned;
- E_i is the active energy extracted over the year during time interval i , expressed in kWh.

Please note that in case of changes to the subscribed power and/or tariff version during the year:

- The annual fixed portion corresponds to the intraday pro rata temporis of the annual fixed parts corresponding to each unique set of subscribed power and tariff version;
- The monthly CMDPS distinguishes the exceedances associated with each tariff version in effect for the month in question.

Invoicing for the fixed part

The monthly amount for the fixed part for month M is invoiced at the beginning of month M (in advance). It corresponds to one 12th of the fixed annual part.

Invoicing for the variable part

The total for each of the invoicing elements for month M, with the exception of the fixed part, shall be invoiced at the beginning of the following month, M+1 (in arrears).

Contribution

The tariff does not include taxes. A contribution is added to your invoice.

Transmission Tariff Contribution (CTA)

Since 1 January 2005, RTE collects the Transmission Tariff Contribution from Consumers and Generators. Calculated on the fixed part excluding taxes, management fees, the annual metering component and the costs of the dedicated parts and power reserves of the annual component of the complementary and back-up power supplies of the Public Transmission System access tariff, it is then transferred by RTE to the Caisse Nationale des Industries Electriques et Gazières.

Rates are set by ministerial order. For information, the rates applicable on 1 August 2017 are 10.14% for transmission services and 27.04% for distribution services (HV-A backup).

Payment terms

You can pay your invoice by cheque, wire transfer or direct debit.

RTE offers a free electronic invoicing service.

Annexes

Definitions

Main power supply

A set of attachment structures that ensure the transfer of energy and the availability of the extraction capacity to which the User has subscribed and/or the maximum agreed Injection capacity under normal operation of the User's electrical structures.

Additional power supply

A set of attachment structures that ensure the transfer of energy, and are in the same Voltage Range as the Principal Supply and not necessary to the power supply of the Site. The User Supplies that are neither the Principal Supplies nor Backup Supplies, are the Additional Supplies for this User.

Connection voltage (Un)	Voltage range		
Un ≤ 1 kV	LV		Low voltage range
1 kV < Un ≤ 40 kV	HV-A 1	HV-A range	High voltage range
40 kV < Un ≤ 50 kV	HV-A 2		
50 kV < Un ≤ 130 kV	HV-B 1	HV-B range	
130 kV < Un ≤ 350 kV	HV-B 2		
350 kV < Un ≤ 500 kV	HV-B 3		

The tariffs applicable to Users connected to the public networks in HV-A 2 are those from the HV-B 1 voltage range.

Active energy

All of the active power P during a defined time period.

Reactive energy

All of the reactive power Q during a defined time period.

Subscription Period

Duration of validity of a Subscribed Power subscription. This is normally 12 months but may be of a shorter duration, especially in the case of a change in the Subscribed Power. At each change in Subscribed Power the Subscription Period is renewed for 12 months. If not modified, the Subscribed Power is tacitly renewed for a

Backup Power

A set of attachment structures kept live, but which is used for the transfer of energy between the Public Transmission or Distribution System and the installations of one or more Users only in the event that all or part of their main and additional supplies are unavailable.

Voltage range

The Voltage Ranges of the alternating current Public Transmission and Distribution Networks are defined in the table below:

new Subscription Period.

Time Range

For all Usage Tariffs on the public power networks, all times of the year during which the same tariff coefficient applies.

Metering Point

Physical point where the instrument transformers for metering the energy flows are located.

Connection Point:

The User's Connection Point(s) to the public power network coincide with the ownership boundary between the User's electrical structures and the electrical structures of the public network, generally at the end of an electrical structure, embodied by a switching device. The term "switching device" is understood to mean an apparatus installed on an electrical network, making it possible to interrupt a non-zero current flowing between the two ends of this apparatus.

Subscribed Power(s):

Power capacity that the Customer determines at the Connection Point, in accordance with its PTS needs. Capacity deemed to be in excess of the Subscribed Power corresponds to an exceedance.

The term HV-A refers to the HV-A 1 voltage range. The HV-A 2 voltage range is clearly mentioned

Public transmission system access tariff

Tariffs for the use of the public transport system and public electricity distribution systems (TURPE) applicable to users. These tariffs are calculated in a non-discriminatory manner in order to cover all costs resulting from the execution of public service contracts and tasks.

Tariff version:

For HV-B 2 and HV-B 1 tariffs adjusted for time/season, there are three tariff versions:

- short-term use (STU),
- medium-term use (MTU),
- long-term use (LTU).

For HV-A 1 tariffs adjusted for time/season, there are two tariff versions:

- short-term use (STU),
- long-term use (LTU).

The time ranges in HV-B 2, HV-B 1, and HV-A 1

The high season extends from November to March, the low season extends from April to October.

- Peak hours are from 9-11am and 6-8pm, December-February.

High peak hours are from 7am-11pm during weekdays, excluding peak hours previously set.

- Off-peak hours are from 11pm-7am during weekdays, and on Saturdays, Sundays and public holidays.

For the mobile HV-A tariff, mobile peak hours are the hours of the PP1 period of the capacity mechanism (10 to 15 days a year, from 7am to 3pm and from 6pm to 8pm).

For the fixed peak HV-A tariff, peak hours are the same as for HV-B 1 and HV-B 2 tariffs.

Saison haute						Saison basse		Saison haute			
Janvier		Février		Mars		Avril à Octobre		Novembre		Décembre	
7h	9h	7h	9h	7h	23h	7h	23h	7h	23h	7h	9h
9h	11h	9h	11h							9h	11h
11h	18h	11h	18h							11h	18h
18h	20h	18h	20h							18h	20h
20h	23h	20h	23h							20h	23h
23h	7h	23h	7h	23h	7h	23h	7h	23h	7h	23h	7h
Samedis, dimanches et jours fériés											
0h	24h	0h	24h	0h	24h	0h	24h	0h	24h	0h	24h
Option 31 jours SH modulables						Option 30 jours SH modulables					
Heures Pointe		Heures Pleines Saison Haute		Heures Creuses Saison Haute		Heures Pleines Saison Basse		Heures Creuses Saison Basse			

3 new tariff versions corresponding to 3 consumption profiles

With the implementation of TURPE 5, the "tariff versions" replace the "tariff options" used in TURPE 4. There are three tariff versions, called Short-Term Use (STU), Medium-Term Use (MTU), and Long-Term Use (LTU).

For the HV-B 1, HV-B 2, HV-A 1 and HV-A 2 ranges, they apply to the Injection Consumption Point of Delivery and are subscribed for a minimum period of 12 months. Beyond this time, a customer can now modify its tariff version any day of the month and without notice. The new version then takes effect the day after the request for a new period of at least 12 months. In the case of tariff grouping, only one tariff version applies.

On the other hand, these tariff versions do not apply:

- To the connection points on the HV-B 3 voltage range;
- To the connection points dedicated to a backup power supply at a voltage range lower than that of the main power supply

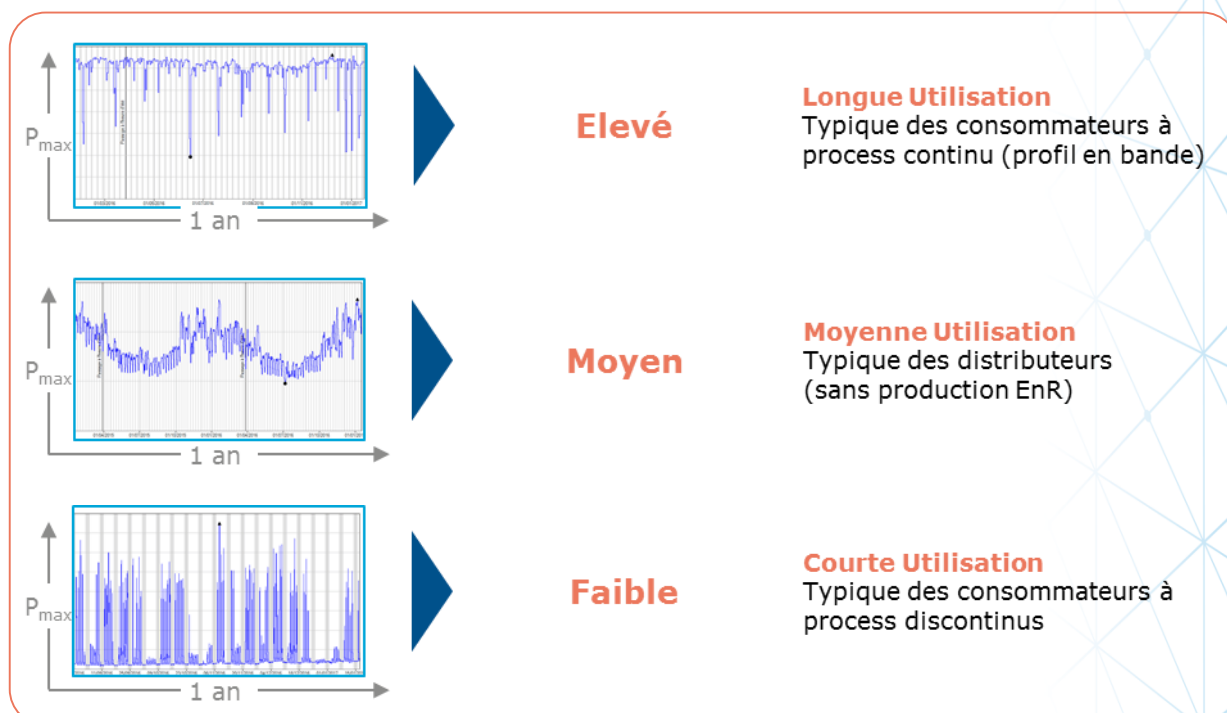
For the customer, the optimal tariff version tends to reflect the ratio between the energy consumed over 1 year and the maximum power demanded over the same period:

$$\frac{\text{Energie}_{12 \text{ mois}}}{P.\text{max}_{\text{soutirée}}}$$

This ratio, which is provided as a guideline only, can assist the customer in its tariff version choice.

However, there is no threshold value for the Power to Capacity ratio that can be used to attribute a tariff version to a consumption profile. The best tariff version for a given consumption profile must therefore be determined on a case-by-case basis.

It necessarily involves carrying out simulations on the customer's load curve and simultaneously optimising the tariff version and the subscribed power set.



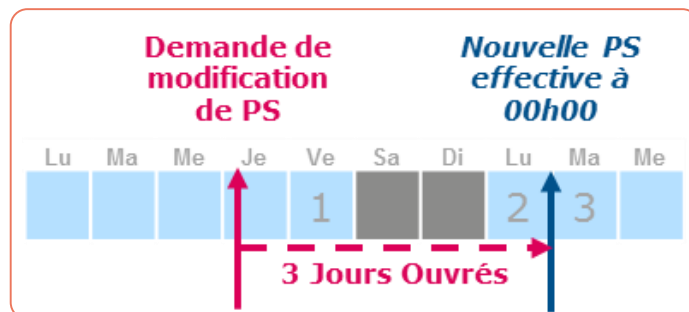
Manage your subscribed power

The subscribed power is set for 12 months. However, during this period, it can be amplified or diminished in accordance with the terms of the contract. In the HV-B 2, HV-B 1 and HV-A tariff that is adjusted for time/season, each subscribed power (SP) on each time range is modified independently of the others, in compliance with the following rule:



You can now change your subscribed capacity several times during the same billing month, up to once a day.

The change takes effect on the date you indicated on your request, which must be no earlier than 3 working days after your request.



When the network needs to be strengthened, it shall apply to the first day of the month following the date strengthening work has been completed.

The principles for changing subscribed powers are as follows:

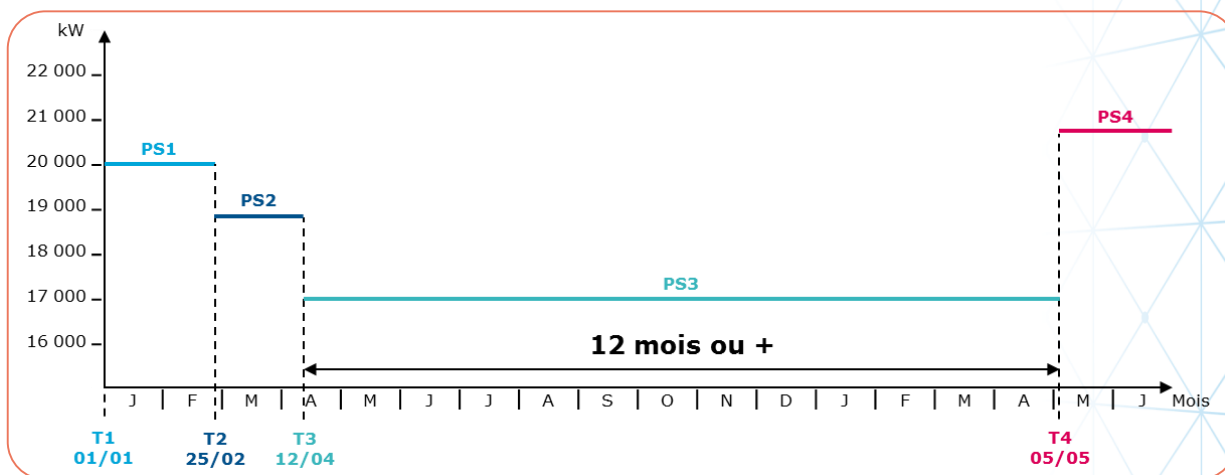
- You can freely proceed with a succession of consecutive reductions if you have not increased your subscribed capacity during the last 12 running months;
- You can increase your subscribed power at any time **if the capacity of the network allows it**. However, if you have reduced your power during the last 12 months, you will be asked for a financial adjustment.

Three cases of increase after a SP reduction

For tariffs adjusted for time/season, the following cases apply independently for each time range.

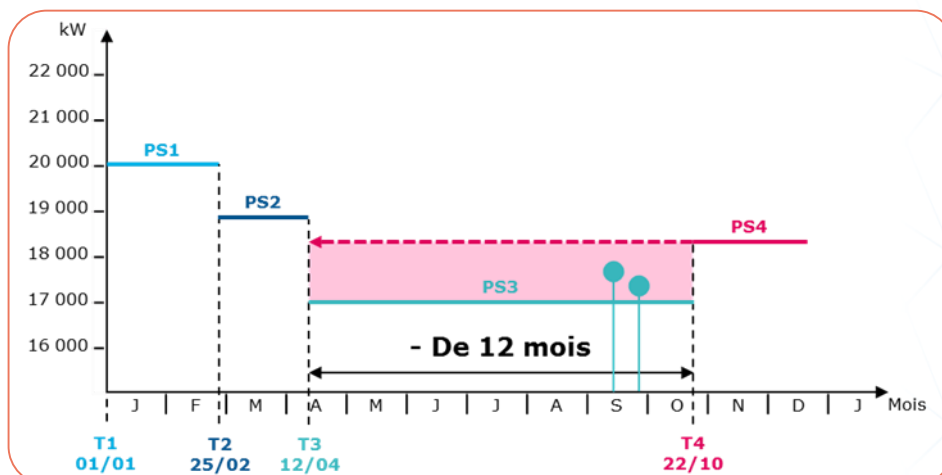
Case 1: Case 1: The new SP (SP4) is higher than SP (SP3) that remained unchanged for 12 months

- During the last 12 running months, the SP (SP3) remained unchanged.
- The SP (SP4) applies on the effective date of the T4 request.



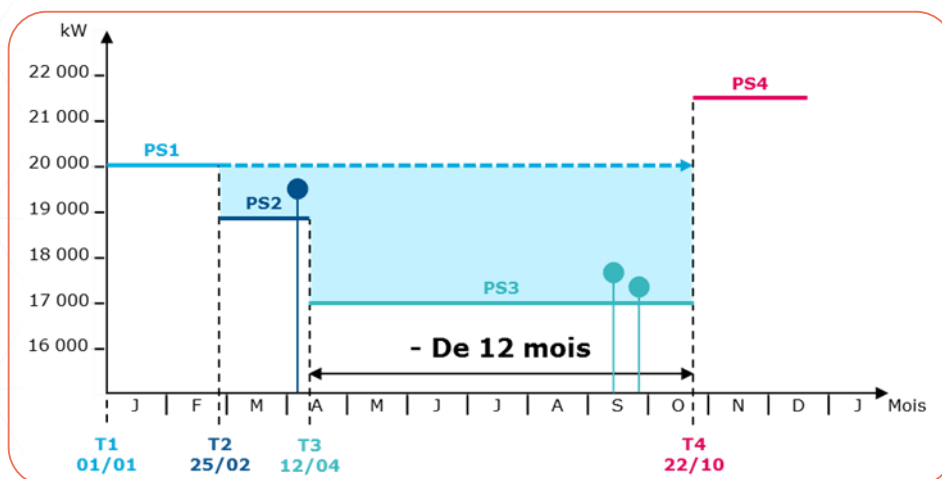
Case 2: Case 2: The new SP (SP4) is lower than the SP before the last decrease (SP2) performed less than 12 months ago

- SP4 applies to the effective date of the last decrease in the last 12 months which led to a capacity that is less than or equal to the new subscribed power from T3.
- The settlement of the fixed part of the CS is requested for the differential between SP3 and SP4, for the entire period between T3 and T4.
- The SP (SP3) exceedances that happened between T3 and T4 remain with RTE.
- SP4's subscription period starts in T3.



Case 3: The new SP (SP4) is higher than the SP before the first decrease (SP1) performed less than 12 months ago

- The SP (SP4) applies on the effective date of the T4 request.
- SP (SP2 and SP3) decreases are cancelled.
- The settlement of the fixed part of the CS is requested for the differential between SP1 and SP2 then SP3 and SP4, for the entire period between T2 and T4.
- SP (SP2 and SP3) exceedances that happened between T2 and T4 remain with RTE.
- SP4's subscription period starts in T4.



Examples of calculations for certain tariff components

Example of calculation for the CS without exceedances

An **HV-B 2** customer, on the "Long-Term Use" tariff version, receives its RTE invoice for the month of January 2021.

For its sole main power supply, this customer has subscribed to a power package ranging from 16 000 to 22 000 kW, the distribution of which complies with the principle of subdivision.

As January is not part of the low season, only the high season and peak hour time slots are used to invoice the energy part.

Subscribed Power

SP₁ – 16 000 kW
SP₂ – 16 000 kW
SP₃ – 18 000 kW
SP₄ – 22 000 kW
SP₅ – 22 000 kW

Energy consumed January 2021

E1 – 1 930 454 kWh
E2 – 5 469 132 kWh
E3 – 3 252 478 kWh
E4 – 0 kWh
E5 – 0 kWh

b_i (€/kW)

12.26
11.77
9.78
7.62
3.77

Fixed part =

Δ powers

16 000
16 000 – 16 000
18 000 – 16 000
22 000 – 18 000
22 000 – 22 000

= 246 200.00
€/year
= 20 516.67
€/month

C_i (c€/kWh)

0.84
0.61
0.44

Energy part =

Energy consumed

1,930,454
5,469,132
3,252,478

= 63 888.41 €

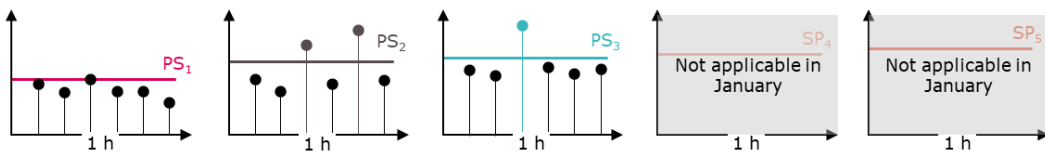
Total CS_{Jan2021} = €84 405.08

(Excl. exceedances)

Example of calculation of the CMDPS

Subscribed Power

SP₁ – 16 000 kW
SP₂ – 16 000 kW
SP₃ – 18 000 kW
SP₄ – 22 000 kW
SP₅ – 22 000 kW

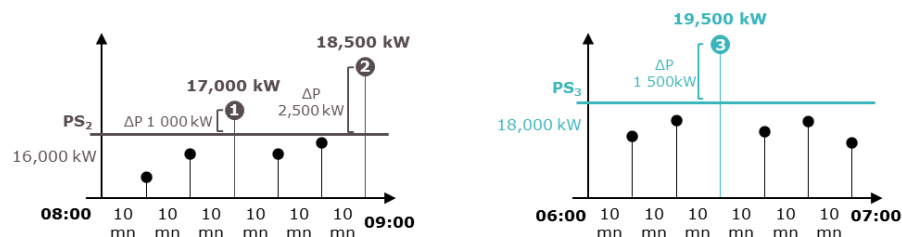


An **HV-B 2** customer, on the "Long-Term Use" tariff version, receives its RTE invoice for the month of January 2021.

Three 10-minute points exceeding its subscribed power give rise to CMDPS billing.

The two first correspond to two 10-minute points on Monday 8 January, between 6am and 7am (peak high season hours).

The third is a 10-minute point on Monday 15 January, between 6am and 7am (off peak high season hours).



$$\text{CMDPS} = 0.04.b_2.\sqrt{(\Delta P1^2 + \Delta P2^2)} + 0.04.b_3.\sqrt{\Delta P3^2}$$

$$= 0.04 \times 11.77 \times \sqrt{(1000^2 + 2500^2)} + 0.04 \times 9.78 \times \sqrt{1500^2}$$

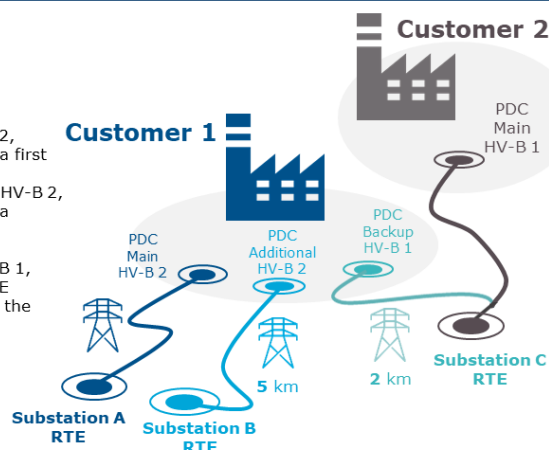
$$= 1\,854.47 \text{ €}$$

b₂ = 11.77
b₃ = 9.78

Example of calculation of fixed costs CACS

A network client has:

- A main supply of HV-B 2, connected overhead to a first RTE substation;
- An additional supply of HV-B 2, connected overhead to a second dedicated RTE substation;
- A backup supply of HV-B 1, connected to a third RTE substation, shared with the main supply of another customer.



Example based on 1 August 1 2020 tariffs. Their value is reassessed annually.

Additional power supply:

1 HV-B 2 cell	€ 63,811.75
5 km of overhead line at € 6 392.33/km	+ 31 961.65 €
Additional fixed costs:	€ 95,773.40

Backup Power:

No dedicated cell	€ 0
2 km of overhead line at € 3 793.08/km	+ 7 586.16 €
Backup fixed costs:	€ 7,586.16

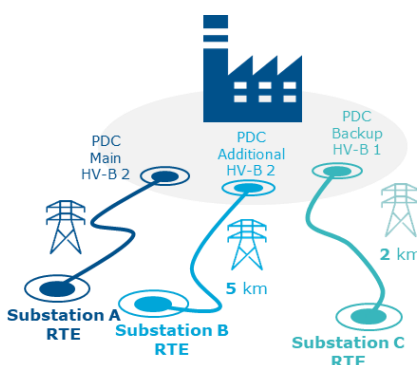
TOTAL CACS Fixed costs: € 103,359.56

Example of the calculation of SP extractions and exceedances on a backup power supply

An HV-B 2 customer has:

- A main supply of HV-B 2, connected overhead to a first RTE substation;
- An additional supply of HV-B 2, connected overhead to a second dedicated RTE substation;
- A backup supply of HV-B 1, connected to a third RTE substation, shared with the main supply of another customer and for which it has a **SP of 5000 kW**.

In January 2021, it **consumes 9 000 kWh** on its backup power supply and **exceeds by 200 kW** its subscribed power on a 10-minute point.



Example based on 1 August 1 2020 tariffs. Their value is reassessed annually.

Voltage range Main Power Supply

HV-B 2

Fixed part
€/kW/year
1.57

Voltage range Backup Power Supply

HV-B 1

Energy part
c€/kWh
1.30

Exceedances PS
α c€/kW
6.90

Fixed part cost

$$1.57 \times 5\,000 = \mathbf{7\,850\,€/\text{year}} = \mathbf{654.17\,€/\text{month}}$$

Energy part cost

$$0.0130 \times 9\,000 = \mathbf{€\,117.00}$$

SP exceedances cost

$$0.0690 \times 200 = \mathbf{€\,13.80}$$

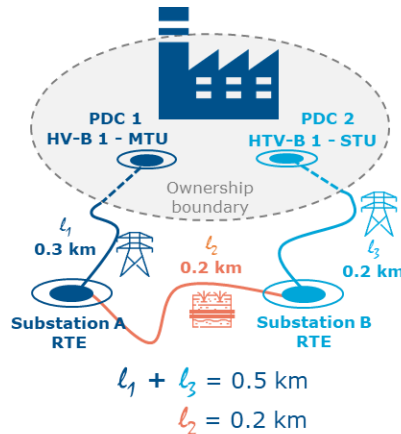
TOTAL CACS consumption for the month: € 784.97

Example of calculation of the grouping component of 2 connection points

A customer has two Connection Points in **HV-B 1**: the first in MTU tariff version and the second in STU tariff version.

From the connection points, the smallest distance of the Public Transmission System to connect these two points is **0.7 km**, including 0.2 km of underground lines and 0.5 km of overhead lines.

For the grouping point, the cumulative synchronous load curves of PDC 1 and PDC 2 gives a **theoretical load curve**, from which are determined: the optimum SP sets and the most suitable tariff version.



1. Grouping point: HV-B 1 Medium-Term Use

optimum PS set (MW)					Coefficients β (in %)				
PHET (i=1)	HSPH (i=2)	HSOPH (i=3)	LSPH (i=4)	LSOPH (i=5)	β_1	β_2	β_3	β_4	β_5
36.5	36.5	36.5	37	37	100	96	79	54	25

Where $\beta_i = b_i/b_1$

2. Calculation of the PS_{grouped}

$$PS_{\text{grouped}} = SP_1 + \sum_{i=2}^{n+5} \beta_i (PS_i - PS_{i-1})$$

$$= 36\,500 + 0.96 \times 0 + 0.79 \times 0 + 0.54 \times 500 + 0.25 \times 0$$

$$= 36\,770 \text{ kW}$$

3. Grouping component

k HV-B 1 overhead L. underground L.

	75.90	133.41
--	-------	--------

c€/kW/km/year

$$CR = \ell.k. PS_{\text{grouped}}$$

$$= [(0.2 \times 1.3341) + (0.5 \times 0.7590)] \times 36\,770$$

$$= 23\,765.19 \text{ €/year}$$

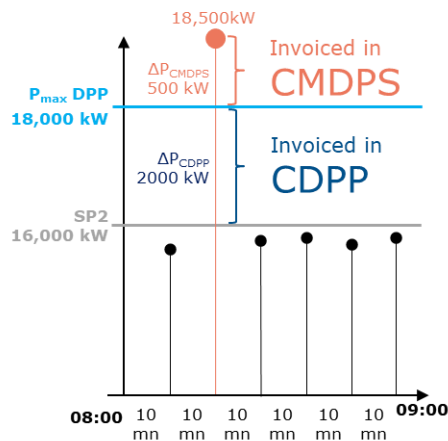
Example based on 1 August 1 2020 tariffs. Their value is reassessed annually.

Example of calculation of CDDP

An **HV-B 2** customer, on the "Long-Term Use" tariff version, benefits from the specific one-time 3-day exceedance tariff in November.

In high season peak hours, for which the customer's subscribed power is **16 000 kW**, the maximum power for work requested under the DPP is **18 000 kW**.

During these three days, it exceeds its subscribed power on one 10-minute point by drawing **18 500 kW**.



Weighting factor

b_2
11.77

Coefficient α

HV-B 2
0.000149

CDDP billing of the exceedance

$$CDDP = 0.000149 \times 11.77 \times \sqrt{2000^2}$$

$$= 3.51 \text{ €}$$

CMDPS billing of the exceedance

$$CMDPS = 0.04 \cdot b_2 \cdot \sqrt{\Delta P_{CMDPS}^2}$$

$$= 0.04 \times 11.77 \times \sqrt{500^2}$$

$$= 235.40 \text{ €}$$

Example based on 1 August 1 2020 tariffs. Their value is reassessed annually.

Your contacts

Your customer services for any questions regarding contracts, network access, power quality, maintenance or connection:

St Denis Customer Service

22 boulevard Finot
93200 SAINT-DENIS
Tel.: +33 1 41 66 70 00
Email: marketservices@rte-france.com

Lille Customer Service

913 avenue de Dunkerque - BP 427
59160 LOMME
Tel.: +33 3 20 22 67 63
Email: commercial-lille@rte-france.com

St QUENTIN Customer Service

2 square Franklin
Montigny-le-Bretonneux - BP 443
78055 ST QUENTIN YVELINES CEDEX
Email: commercial-sqy@rte-france.com

Nancy Customer Service

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54608 VILLERS-LES-NANCY
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Email: commercial-nancy@rte-france.com

Nantes Customer Service

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6 rue Kepler - BP 4105
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Email: commercial-nantes@rte-france.com

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Immeuble VillaRte
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Email: commercial-lyon@rte-france.com

Toulouse Customer Service

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Tel.: +33 5 62 14 92 41
Email: commercial-toulouse@rte-france.com

Marseille Customer Service

82 avenue de Haïfa - CS 70319
MARSEILLE CEDEX 08
Tel.: +33 4 91 30 96 61
Email: commercial-marseille@rte-france.com

Your customer data and contracts services departments for any question concerning metering data, invoices or any contract modifications:

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6 rue Kepler - BP 4105
44241 LA CHAPELLE SUR ERDRE CEDEX
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Tel: 04 27 86 33 01
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de transport
d'électricité

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