

TARIFFS 2015 FOR GRID USE AND ANCILLARY SERVICES

The tariff conditions for grid use and ancillary services, as stipulated by the decision of the CREG dated May 16^{th} 2013 and dated December 18 2014 are in application from January 1^{st} 2015 until December 31^{st} 2015.

Unless stated otherwise, tariff periods used for the application of tariffs are: « Peak hours », « Off peak hours », « Weekend », as defined below. Winter corresponds to the months January to March, and October to December. Summer corresponds to April to September.

Day	Hour	Peak	Off peak	Weekend
		hours	hours	
Monday-Friday	0 to 7 hour		\checkmark	
Monday-Friday	7 to 22 hour	\checkmark		
Monday-Friday	22 to 24 hour		\checkmark	
Saturday	0 to 7 hour		\checkmark	
Saturday	7 to 24 hour			\checkmark
Sunday	0 to 22 hour			\checkmark
Sunday	22 to 24 hour		\checkmark	

The tariffs mentioned hereafter are applicable for each "offtake or injection point", as defined in the Technical Code Transmission.

A. TARIFF FOR GRID USE

<u>1°</u> Tariff for power subscription and additional power for the offtake, according to the <u>"standard formula"</u>

a) Tariff for power subscription for the offtake

Table 1:Tariff for power subscription for the offtake according to the "standard formula"

		Customers directly	
		connected to the Elia	Grid Operator
		grid	
		Tariff (€/kW.period)	Tarif (€/kW.period
On the 380/220/150 kV n	etwork		
Yearly subscription		13,1092000	
Monthly subscription	Winter – Peak hours	0,8705000	
	Winter – Off peak hours	0,4855000	
	Winter - Weekend	0,3376000	
	Summer – Peak hours	0,6354000	
	Summer – Off peak hours	0,4293000	
	Summer - Weekend	0,2870000	
At transformer output to	o the 70/36/30 kV network		
Yearly subscription		20,3146000	12,8522000
Monthly subscription	Winter – Peak hours	1,3497000	0,8539000
	Winter – Off peak hours	0,7391000	0,467600
	Winter - Weekend	0,5056000	0,319900
	Summer – Peak hours	0,9693000	0,613300
	Summer – Off peak hours	0,6494000	0,4109000
	Summer - Weekend	0,4313000	0,2729000
On the 70/36/30 kV netw	ork		
Yearly subscription		28,9622000	18,3771000
Monthly subscription	Winter – Peak hours	1,8841000	1,1955000
	Winter – Off peak hours	1,0335000	0,6558000
	Winter - Weekend	0,7032000	0,446300
	Summer – Peak hours	1,3595000	0,862600
	Summer – Off peak hours	0,9070000	0,575500
	Summer - Weekend	0,6891000	0,437300
At transformer output to	o medium voltage		
Yearly subscription	~	35,1560000	22,014700
Monthly subscription	Winter – Peak hours	2,2982000	1,439100
- 1	Winter – Off peak hours	1,2536000	0,785000
	Winter - Weekend	0,8477000	0,530800
	Summer – Peak hours	1,6424000	1,028600
	Summer – Off peak hours	1,0926000	0,684200
	Summer - Weekend	0,7839000	0,490900

Remarks:

- For the offtake covered by local generation, the price for the subscribed power for offtake is reduced by 30%. This reduction is applied to a maximum power of 75 MW. This contractual formula is only applicable for yearly subscriptions and is limited to 1.000 hours a year.
- For the mobile charges of the railway company, the price for subscribed power for the offtake is reduced by 7%.

b) Tariff for additional power for the offtake

1) On annual basis

Table 2: Tariff for additional power for the offtake on annual basis according to the
"standard formula"

	Customers directly connected to the Elia grid	Grid Operators
	Tariff (€/kW.year)	
On the 380/220/150 kV network	2,3347000	
At transformer output to the 70/36/30 kV network	4,3309000	
On the 70/36/30 kV network	6,1047000	
At transformer output to medium voltage	8,8108000	

The additional offtaken power on annual basis is monthly ex-post determined as the maximal peak for a running year (month of performance M up to month M-11).

2) On monthly basis

The additional monthly offtaken power is ex-post registered by Elia as the difference between the maximal peak of the past month for the considered tariff period and the total subscribed power for the offtake for that month of that period.

The price equals 115% of the price for power subscription for the offtake according to the monthly scheme, during the corresponding period.

Remark:

• For the mobile charges of the railway company, the price for additional power for the offtake is reduced by 7%.

c) Tariff for the power put at disposal

	Grid Operators
	Tariff
	(€/kVA)
On the 380/220/150 kV network	
At transformer output to the 70/36/30 kV network	4,1090000
On the 70/36/30 kV network	5,8754000
At transformer output to medium voltage	7,0384000

Table 3:Tariff for the power put at disposal

2° <u>Tariff for power subscription and additional power for the offtake, according to the "Day</u> / Night and weekend formula"

For the application of the tariffs for subscribed power and complementary power for the offtake, according to the « Day / Night and weekend » formula, the tariff periods « Day » and « Night and weekend » have been defined as follows:

- Day : from 8h to 20h, Monday to Friday (60 hours per week)
- Night and week-end : from 20h to 8h (Monday to Friday) + Saturday and Sunday, whole day (108 hours per week)

This formula will be applied under following conditions:

- For each access point, the Access holder chooses between the « standard formula » or the « Day / Night and weekend » formula. These possibilities are mutually exclusive. The choice of the « Day : Night and weekend » is valid for one year.
- The offtake from the concerned access point has shown a profile (during the preceding year of the choice), such that :
 - The maximal power offtaken during "Day" hours was smaller than the maximal power offtaken during "Night and Week-end";
 - The energy offtaken during "Day" hours is smaller than 25% of the energy offtaken during "Night and Week-end" hours.

a) Tariff for power subscription for the offtake

		Customers directl connected to the Elia grid
		Tarif
		(€/kW.period
On the 380/220/150 kV netwo	rk	
Yearly subscription	Day	5,252800
	Night and week-end	8,028400
Monthly subscription	Winter - Day	0,706200
	Winter - Night and week-end	1,011900
	Summer - Day	0,513500
	Summer - Night and week-end	0,852000
At transformer output to the	70/36/30 kV network	
Yearly subscription	Day	8,212100
i can'y succentration	Night and week-end	12,351500
Monthly subscription	Winter - Day	1,093900
inonany succerption	Winter - Night and week-end	1,535600
	Summer - Day	0,782500
	Summer - Night and week-end	1,286800
On the 70/36/30 kV network		
Yearly subscription	Day	11,599200
really subscription	Night and week-end	17,804300
Monthly subscription	Winter - Day	1,531500
,	Winter - Night and week-end	2,149100
	Summer - Day	1,100900
	Summer - Night and week-end	1,891400
At transformer output to mee	lium voltage	
Yearly subscription	Day	17,525100
i carry subscription	Night and week-end	26,504500
Monthly subscription	Winter - Day	2,304500
subscription	Winter - Night and week-end	3,212300
	week ond	5,212500
	Summer - Day	1,640800

Table 4 :Tariff for power subscription for the offtake, according to the « Day / Night and
weekend » formula

Remarks:

- For the offtake covered by local generation, the price for the subscribed power for the offtake is reduced by 30%. This reduction is applied to a maximum power of 75 MW. This contractual formula is only applicable for yearly subscriptions and is limited to 1.000 hours a year.
- For the mobile charges of the railway company, the price for subscribed power for the offtake is reduced by 7%.

b) Tariff for additional power for the offtake

1) <u>On annual basis</u>

	Customers directly
	connected to the Elia
	grid
	Tariff
	(€/kW.year)
On the 380/220/150 kV network	2,3347000
At transformer output to the 70/36/30 kV network	4,3309000
On the 70/36/30 kV network	6,1047000
At transformer output to medium voltage	8,8108000

The additional offtaken power on annual basis is monthly ex-post determined as the maximal peak for a running year (month of performance M up to month M-11).

2) On monthly basis

The additional monthly offtaken power is ex-post registered by Elia as the difference between the maximal peak of the past month for the considered tariff period and the total subscribed power for the offtake for that month of that period.

The price equals 115% of the price for power subscription for the offtake according to the monthly scheme, during the corresponding period.

Remark:

• For the mobile charges of the railway company, the price for additional power for the offtake is reduced by 7%.

3° <u>Tariff for System management for the offtake</u>

	Tariff (€/kWh gross limited offtaken ¹)
On the 380/220/150 kV network	0,0005646
At transformer output to the 70/36/30 kV network	0,0008213
On the 70/36/30 kV network	0,0011724
At transformer output to medium voltage	0,0015495

Table 6:Tariff for System management for the offtake

B. TARIFFS FOR ANCILLARY SERVICES

<u>1°</u> Tariff for the reservation of primary frequency control, the reservation of the secondary control of the equilibrium in the Belgian control area, the reservation of the tertiary reserve and the black-start-service

Table 7: Tariff for the reservation of primary frequency control, the reservation of thesecondary control of the equilibrium in the Belgian control area, the reservation of thetertiary reserve and the black-start-service

	Tariff
	(€/kWh gross limited
	offtaken ²)
On the 380/220/150 kV network	0,0010013
At transformer output to the 70/36/30 kV network	0,0010013
On the 70/36/30 kV network	0,0010013
At transformer output to medium voltage	0,0010013

Tariff
(€/kWh gross limited injected ³)
injected ³)
0,0009111

¹ For the definition, see further in this document under C. Definitions relative to power and energy.

 $^{^{2}}$ For the definition, see further in this document under C. Definitions relative to power and energy.

³ For the definition, see further in this document under C. Definitions relative to power and energy.

2° Tariff for voltage control and for reactive power

	Tariff (€/kWh gross limited
	offtaken ⁴)
On the 380/220/150 kV network	0,0002093
At transformer output to the 70/36/30 kV network	0,0002093
On the 70/36/30 kV network	0,0002093
At transformer output to medium voltage	0,0002425

Table 8 :Tariff for voltage control and for reactive power

Remarks:

• Elia System Operator makes quarter-hourly deliveries of reactive power that exceed tg φ =0,329 per off take point. This leads to a term for supplementary deliveries of reactive energy, according to the article 209 §4 and §5 of the Technical Code.

	Tarif (€/kVArh)					
	Peak hours Off peak hours Weekend					
	Inductive	Capacitive	Inductive	Capacitive	Inductive	Capacitive
On the 380/220/150 kV network	0,003400	0,001700	0,002750	0,002750	0,001700	0,003400
At transformer output to the 70/36/30 kV network	0,006750	0,003500	0,005500	0,005500	0,003500	0,006750
On the 70/36/30 kV network	0,006750	0,003500	0,005500	0,005500	0,003500	0,006750
At transformer output to medium voltage	0,007500	0,003750	0,006500	0,006500	0,003750	0,007500

Table 9:Tariff for supplementary deliveries of reactive energy

- In the case the offtaken active energy does not exceed, on a quarterly basis, 10% of the valid subscriptions at any given point, the additional delivery of reactive energy will be defined as the excess in respect of 32,9% of the 10% of the valid subscriptions at that point.
- In the case in offtake regime, the *capacitive* reactive power doesn't exceed the following limit values, tariff for supplementary deliveries of reactive energy equals 0€/kVArh.

⁴ For the definition, see further in this document under C. Definitions relative to power and energy.

	Limit values capacitive reactive power		
	Customers directly connected to the Grid Opera Elia grid		
On the 380/220/150 kV network	9 MVAr	-	
At transformer output to the 70/36/30 kV network	2,5 MVAr	5 MVAr	
On the 70/36/30 kV network	2,5 MVAr	5 MVAr	
At transformer output to medium voltage			

<u>3° Tariff for congestion management</u>

	Tariff
	(€/kWh offtaken ⁵)
On the 380/220/150 kV network	0,0000211
At transformer output to the 70/36/30 kV network	0,0000211
On the 70/36/30 kV network	0,0000211
At transformer output to medium voltage	0,0000211

Table 10 : Tariff for congestion management

4° Tariff for the compensation of losses of active energy in the grid

Table 11 : Tariff for the compensation of losses of active energy in the grid (in ϵ/kWh offtaken⁶)

	Winter			Summer		
	Peak hours	Off peak hours	Week-end	Peak hours	Off peak hours	Week-end
On the 380/220/150 kV network	0,0000000	0,0000000	0,0000000	0,0000000	0,0000000	0,0000000
At transformer output to the 70/36/30 kV network	0,0001498	0,0000885	0,0000892	0,0001159	0,0000599	0,0000596
On the 70/36/30 kV network	0,0007338	0,0004083	0,0004178	0,0006011	0,0002974	0,0003010
At transformer output to medium voltage	0,0007048	0,0003950	0,0004014	0,0005738	0,0002826	0,0002841

<u>Note</u>: There are no tariffs for compensation of losses on the 380/220/150 kV networks. Losses on these networks have to be compensated by Access Responsible Parties, in agreement with their balancing responsibility defined in the Access Responsible Party agreement.

⁵ For the definition, see further in this document under C. Definitions relative to power and energy.

⁶ For the definition, see further in this document under C. Definitions relative to power and energy.

C. DEFINITIONS RELATIVE TO POWER AND ENERGY

1. Definitions relative to offtaken power and energy

The gross limited offtaken power, on an access point for a given quarter of an hour, is the difference, if positive, between the offtaken power by the load(s) connected in this access point and the injected power by the local generation(s) associated to this access point, and this for the part of the injected power by these local generations that is smaller or equal to 25 MW. In case the before mentioned difference gives a negative value, the gross limited power is equal to 0.

The gross limited offtaken energy, on a given access point for a given period, is the integral of the gross limited offtaken power in this access point for the given period.

In other words, if

• $P_{load}(qh)$ is the average <u>offtaken</u> power <u>by the loads</u> on an access point for a given quarter of an hour qh, and

• $P_{generation}(qh)$ is the <u>injected</u> (produced) power <u>by the local generation</u>(s) associated to this access point on the given quarter of an hour qh,

the gross limited offtaken energy, for the period per, equals

$$E_{gross_limited_offtaken}(per) = \sum_{qh \in per} \max(0; P_{load}(qh) - \min(P_{generation}(qh); 25MW)).$$

The offtaken power, on an access point for a given quarter of an hour, is the difference, if positive, between the offtaken power by the load(s) connected in this access point and the injected power by the local generation(s) associated to this access point. In case the before mentioned difference gives a negative value, the offtaken power is equal to 0.

The offtaken energy, on a given access point for a given period, is the integral of the offtaken power in this access point for the given period.

In other words, if

• $P_{load}(qh)$ is the average <u>offtaken</u> power <u>by the loads</u> on an access point for a given quarter of an hour qh, and

• $P_{generation}(qh)$ is the <u>injected</u> (produced) power <u>by the local generation</u>(s) associated to this access point on the given quarter of an hour qh,

the offtaken energy, for the period *per*, equals

$$E_{offtaken}(per) = \sum_{qh \in per} \max(0; P_{load}(qh) - P_{generation}(qh)).$$

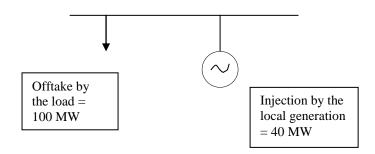
Remarks

If the injected power by the local generation(s) equals 0, the gross limited offtaken energy coincides with the offtaken energy.

The generation units are measured from 1 MW on.

Example

For a load of 100 MW (for a given quarter of an hour), and an injection of 40 MW by a local generation associated to this load:



For the given quarter of an hour:

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    Offtaken energy
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- = max (0, 100 MW 40 MW) * 15 minutes
- = 15 MWh
- Gross limited offtaken energy = max (0, 100 MW - min(40 MW, 25 MW)) * 15 minutes =18,75 MWh.

2. Definitions relative to injected power and energy

The gross limited injected power, on an access point for a given quarter of an hour, is the difference, if positive, between the injected power by the generations associated to this access point and the offtaken power by the loads associated to this access point, and this for the part of the offtaken power by these loads that is smaller or equal to 25 MW. In case the before mentioned difference gives a negative value, the gross limited injected power is equal to 0.

The gross limited injected energy, on a given access point for a given period, is the integral of the gross limited injected power in this access point for the given period.

In other words, if

- $P_{generation}(qh)$ is the <u>injected</u> (produced) power <u>by the generation</u>(s) associated to this access point on the given quarter of an hour qh, and
- $P_{load}(qh)$ is the average <u>offtaken</u> power <u>by the loads</u> on an access point for a given quarter of an hour qh,

the gross limited injected energy, for the period per, equals

$$E_{gross_limited_injected}(per) = \sum_{qh \in per} \max(0; P_{generation}(qh) - \min(P_{load}(qh); 25MW)).$$

The injected power, on an access point for a given quarter of an hour, is the difference, if positive, between the injected power by the generation(s) associated to this access point and the offtaken power by the load(s) associated to this access point. In case the before mentioned difference gives a negative value, the injected power is equal to 0.

The injected energy, on a given access point for a given period, is the integral of the injected power in this access point for the given period.

In other words, if

• $P_{generation}(qh)$ is the <u>injected</u> (produced) power <u>by the generation</u>(s) associated to this access point on the given quarter of an hour qh, and

• $P_{load}(qh)$ is the average <u>offtaken</u> power <u>by the loads</u> on an access point for a given quarter of an hour qh,

the injected energy, for the period per, equals

$$E_{injected}(per) = \sum_{qh \in per} \max(0; P_{generaton}(qh) - P_{load}(qh)).$$

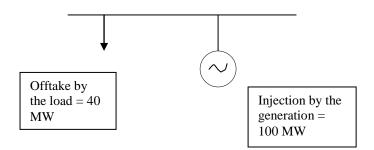
Remarks

If the injected power by the local generation(s) equals 0^7 , the gross limited offtaken energy coincides with the offtaken energy.

The generation units are measured from 1 MW on.

Example

For a load of 40 MW (for a given quarter of an hour), and an injection of 100 MW by a generation associated to this load:



For the given quarter of an hour:

- Injected energy = max (0, 100 MW - 40 MW) * 15 minutes = 15 MWh
- Gross limited injected energy = max (0, 100 MW - min(40 MW, 25 MW)) * 15 minutes =18,75 MWh.

⁷ Either because there is no load associated to the concerned generation, or because a load exists but doesn't take off the grid.