



## A DOORWAY TO THE FRENCH MARKET

The Balance Responsible Entity (BR) system allows consumers, distributors, generators, traders/suppliers to conduct all kinds of commercial transactions in the electricity market. By becoming a Balance Responsible entity, you can create your portfolio of business, which is referred to as your «perimeter».

This system enables you to reduce your financial risk, by diversifying your purchases and sales: smoothing your customers' physical/declared extractions, physical injections by your generating units, your counterparts' declared injections, and purchases and sales on the power exchanges operating in France.

## PRINCIPLES

### THE BALANCE PERIMETER

As a Balance Responsible Entity, you declare your portfolio of business to RTE and the DSOs:

- physical sites consuming or generating power and connected to the PTS or PDS;
- purchases and/or sales on the power exchanges operating in France;
- purchases and/or sales of electricity from/to counterparts;
- energy exports and/or imports;
- sales of energy to RTE or a DSO to compensate losses.

### IMBALANCES

The uncertainties surrounding demand and generation forecasts and contingencies can result in discrepancies between extractions and injections on your perimeter. These discrepancies are known as imbalances.

At the end of every half-hour, RTE calculates your imbalances for that elapsed period between the declared and actual physical energy volumes injected and extracted on the PTS and PDS. RTE performs this calculation based on its own data and figures supplied by the DSOs.

### RESPONSIBILITIES OF CUSTOMERS AND RTE

You undertake to compensate RTE financially for the value of your imbalances, if it is negative. Conversely, if they are positives, then RTE will remunerate you. In exchange, your imbalances are physically compensated by RTE, which guarantees the Supply/Demand balance by calling on the Balancing Mechanism.

## DEFINITIONS

**ADJUSTED CONSUMPTION:**  
Sum over a given time interval, equal to the total volume of energy extracted by a consumer site, minus all supplied declared for that site.

**DECLARED ELEMENT:**  
On block Exchange Notification, import or export transaction, transaction on power exchanges. These elements are referred to as «declared» as they are subject to energy programmes agreed between two counterparts, and deemed to be carried out.

**PHYSICAL ELEMENT:**  
Generation or consumption site.

**DSO:** Distribution System Operator.

**PDS:** Public Distribution System.

**PTS:** Public Transmission System.

## DEFINITIONS

**LOAD CURVE:** Record of average extracted or injected power values.  
**CURTE:** The Transmission System Users' Committee (from the French: Clients Utilisateurs du Réseau de Transport d'Electricité).  
**DECLARED SUPPLY OR BLOCK:** Quantity of energy declared to RTE by Balance Responsible entities, corresponding to a programme of predetermined power values, and attached as an injection or extraction to the Balance Responsible entity's perimeter (concerns imports, exports and NEBs or block exchange notifications).  
**TEMPORAL RECONCILIATION:** Temporal Reconciliation is calculated once per year in October of year Y+2, and is used to take account of energy values read during the period to be profiled. The resulting exchanges of energy between Balance Perimeters are valued at the reference spot price.

## IMBALANCE PRICES

The price of imbalances is directly dependent on the price of the balancing offers activated by RTE through the Balancing Mechanism in order to maintain the supply/demand balance on the French power system, and the spot market price on the Epex power exchange: <http://www.epexspot.com/>. The Balancing Mechanism is based on a global picture of the imbalances on the power system and thus produces a reference price for each half-hour period of time, based on the weighted average prices of upward (WAPu) and downward (WAPd) balancing offers.

When the imbalance of your perimeter helps to reduce the overall imbalance on the power system, it is valued at the Epex spot price. Inversely, when the imbalance of your perimeter serves to increase the overall imbalance on the power system, it is valued on the basis of prices resulting from the Balancing Mechanism.

### IMBALANCE PRICE FORMATION

	Upward balancing trend	Downward balancing trend
Positive imbalance (I > E) RTE usually remunerates the BR	Epex spot price	WAPd / (1+k)*
Negative imbalance (I < E) The BR remunerates RTE	WAPu x (1+k)**	Epex spot price

\*Upper limit: Epex spot price. \*\*The Epex spot price is a floor price. k: weighting coefficient fixed at 5% as of 1st January 2009. Current value is published on the RTE website.

## ENERGY CALCULATIONS

The energy volumes assigned to the Balance Responsible entity's balance are calculated on the basis of:

- programmes declared to RTE for declared elements;
- remotely read load curves for consumer or generating sites connected to the PTS or PDS and which are equipped with telemetry meters;
- estimated load curves for consumer or generating sites connected to the PDS and equipped with index meters. This estimate is done according to a method known as «profiling».

## HOW TO BECOME A BALANCE RESPONSIBLE ENTITY ?

### TO BECOME A BALANCE RESPONSIBLE ENTITY :

- you sign a Balance Responsible Participation Agreement with RTE, based on rules laid down in consultation with players via the CURTE's market access committee. These rules are approved by the French energy regulator, CRE;
- you supply RTE with a bank guarantee, the amount of which will depend on your volume of business;
- you sign a contract with the DSOs on whose networks you want to operate.

### INJECTIONS (I)

- + Generation (A)
- + Purchases from other actors (D)
- + Purchases on power exchanges (D)
- + Imports (D)

### EXTRACTIONS (E)

- Adjusted consumption (A)
- Sales to other players (D)
- Sales on power exchanges (D)
- Exports (D)

= Imbalances

Actual (A) i. e. measured -  
Declared (D)

## PRICE OF THE SERVICE

The price of the service includes:

- management fees, fixed for 2010 at €77 per declared element within your perimeter;
- a price proportional to the physical extraction, equal to € 0.11 per MWh as of 1st January 2010.

## DATA EXCHANGES WITH RTE

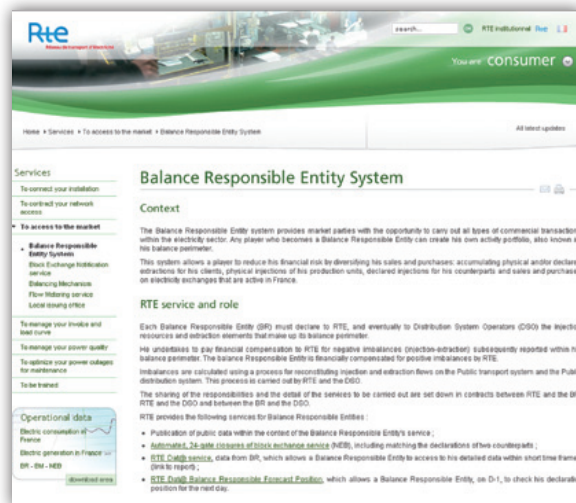
### DATA EXCHANGES WITH RTE CONCERN:

- the definition and management of the perimeter;
  - the sending of programmes relating to your activity (import/export, block exchanges, etc.).
- In addition, RTE publishes:**
- the list of elements making up your balance perimeter;
  - the figures used to calculate and invoice your imbalance;
  - the figures used to calculate temporal reconciliation and the corresponding financial compensation between Balance Responsible entities.

## FOR MORE INFORMATION

The Rules can be found on the RTE website at the following address: [http://clients.rte-france.com/index\\_en.jsp](http://clients.rte-france.com/index_en.jsp) in the section:

- for consumers, generators and traders



## CONTACT

For more information, contact the Customer Relations Group in RTE National System Control Center at +33 (0)141 667 334

Temporal Reconciliation is calculated once per year in October of year Y+2, for the period running from July of year Y to June of year Y+1.

It is used to take account of energy values read during the period profiled. The resulting exchanges of energy between Balance Perimeters are valued at the reference spot price.

## DEFINITIONS

**INJECTION** : Physical generation or purchase of energy (import or declared supply) used to supply the perimeter. Injections are counted positively for the purpose of calculating imbalances.

**EXTRACTION** : Physical consumption or sales of energy (export or declared supply) which represents the consumption of the perimeter.

Extractions are counted negatively for the purpose of calculating imbalances.

**PHYSICAL EXTRACTION** : Per half-hourly period of time and for a given Balance Responsible Entity's perimeter, the sum of adjusted consumption figures for physical sites, declared supplies to the physical sites of another Balance Responsible Entity, and consumption balances on the DSO's network when positive.