User Notice: EDF's REMIT publication platform

Background

For the implementation of the REMIT regulation (EU n°1227/2011), EDF publishes the following information on the edf.fr website for the French market and over a 3-year period:

1. Generation units with an installed capacity of at least 100 MW: planned and unplanned unavailabilities, as well as variations in availability, of at least 100MW with a duration of at least one hour;
2. Generation plants with an installed capacity of at least 100 MW: planned and unplanned unavailabilities, as well as variations in availability, of at least 100MW with a duration of at least one hour;
3. Daily series of minimum achievable powers by each nuclear unit for each hour of the following two days, as soon as a value is at least 100MW higher, over one hour, than the minimum design powers available on the EDF's Open Data website;
4. Other information qualified as inside information under Article 2(1) of the REMIT Regulation.

Information is made available on two separate tabs:

- The "Unavailability List" tab for urgent messages (UMM);
- The "Message List" tab for free text messages.

Information encompasses all assets held by the EDF Group in mainland France. Luminus, a company active on the Belgian market, also publishes REMIT information on edf.fr.

The main website for the publication of the EDF Group's inside information under the REMIT regulation is the RTE Portal Service. EDF cannot be held responsible in any way whatsoever for the use that may be made of the data by a third party.

Access to publications of unavailabilities and messages is possible through two RSS feeds, and users can also download historical data since 2015. Filters are available for users to search by criteria.

Data relating to installed capacity and the technical characteristics of some assets are also available for information purposes on the EDF's Open Data website.

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Data downloads

Unavailability publications are provided in the format defined by the ENTSO-E's Manual of Procedures. The times indicated are in UTC format for the Central European Time zone.

The following information is provided to users in the different columns of the file:

- **Column A - Status:** the status of the publication defines whether the unavailability information is valid ("active"), whether it is not the latest version communicated to the market ("inactive"), or whether the unavailability has been cancelled ("cancelled"). Historically, EDF's publications have included both statuses "deleted" and "cancelled". For simplification purpose, these two statuses will be merged into the "cancelled" status during Y2023.
- **Column B - Identifier**: each unavailability has a unique identifier.
- **Column C - Version number:** the version of the unavailability is updated as soon as any of the information it contains needs to be updated (for example start date, end date, power of unavailability etc.).
- **Columns D and E - Name and production line of the asset**
- **Columns F and G - Start and end date of unavailability**
- **Column H - Type:** EDF has 3 types of publications
  - Planned: the unavailability is planned ahead of time
  - Unplanned: the unavailability results from a hazard on the generation asset
  - Daily series: see above
- **Columns I and J - Cause and Additional Information:** fields in the publication providing information on the cause of the unavailability.
- **Column K – Maximum design Power (MW)**
- **Column L - Available Power (MW)**
- **Column M - Date of publication:** date and time of the publication on the edf.fr website

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Fuel saving management of EDF French nuclear reactors

At the time of its refueling, a nuclear reactor has a finite stock of fuel that allows it to produce at full load for a certain duration. This duration, known as the natural campaign length, is expressed in number of days at full load operations.

Due to industrial or regulatory constraints, it is not always possible to align the campaign end date (corresponding to fuel depletion) with the start date of the next refueling outage. Moreover, to increase the availability of nuclear production during periods of high demand, it may be necessary to plan the start date of the next outage beyond the end date of the natural campaign length. In such cases, the reactor needs to save fuel throughout its cycle, a process known as "fuel saving".

A nuclear reactor can save fuel in three different ways:

- By contributing to balance the power grid by providing ancillary services for primary and secondary reserves (FCR and aFRR), which means that the reactor does not operate at its maximum load.
- By reducing its output during low demand periods to maintain the Production/Consumption balance.
- By scheduling planned outages during the production cycle between two refueling outages.

In accordance with REMIT regulations, EDF publishes all planned outages as unavailability Urgent Market Messages, including those carried out as part of fuel saving.

When fuel saving needed for a given reactor leads to long or repeated outages or frequent load reductions, EDF provides its best estimate of the required fuel saving volume when the reactor is reconnected to the grid using a message with the following format:

"As of DD/MM/YYYY, XXX unit will have to save about Y days of full load operation before its next refueling outage, planned on DD/MM/YYYY. This will be done through imposed load limitations, ancillary services or outages. The quantity of fuel to be saved may be readjusted in case of modification in the unit maintenance schedule."

This message remains "ACTIVE" throughout the campaign duration.

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At any time, the remaining volume of fuel saving can be calculated using:

$$V_{fuel\ eco} = V_{initial} - V_{reduction} - V_{outage} - V_{ancillary\ services} + \Delta V_{schedule}$$

Where :

$V_{fuel\ eco}$	: Remaining volume of fuel saving to be achieved
$V_{initial}$	: Initial volume of fuel saving stated in the message
$V_{reduction}$	: Volume of saving already achieved through load reductions
V_{outage}	: Volume of saving already achieved through planned or unplanned outages
$V_{ancillary\ services}$	: Volume of saving already achieved through ancillary services
$\Delta V_{schedule}$	: Change in the volume of saving due to the rescheduling of the next outage