Notification of Availability/Outage CSV File Format

Please note: The requirements in this document will apply to DC, DM and DR and will only come into effect once the DM and DR services have gone live.

Date	Version	Comments	Author
13/01/2022	1	Initial release	National Grid ESO

File Naming

CSV files shall be named in the format **UID_Timestamp_redecv1.csv**.

UID is the unique identifier assigned to the Response Unit.

Timestamp is the file submission datetime (UTC) and is in the format YYYYMMDDHHMMSS where:

- YYYY is the 4-digit year
- MM is the month of year zero padded to 2 characters (00-12)
- DD is the day of month zero padded to 2 characters (01-31)
- HH is the hour of day in 24-hour format zero padded to 2 characters (00-23)
- MM is the minutes past hour zero padded to 2 characters (00-59)
- SS is the seconds past minute zero padded to 2 characters (00-59)

An example filename for UID "ABCDE" and timestamp "15/09/2020 17:20:00" is:

ABCDE_20200915172000_redecv1.csv

File Size and Creation Frequency

Each CSV file can contain data for multiple re-declarations. Each line would represent one line of re-declaration per response unit and service.

Each CSV file may contain a maximum of 100 lines of data. If more than 100 rows of data are required to be submitted then the re-declaration file needs to be broken into multiple files.

File Structure

Text Encoding

CSV files shall be formatted in accordance with RFC 4180, encoded using ISO 8859-1 text encoding (no byte order mark) and using CR LF line endings.

Headers

The first line of the CSV file shall contain the header line.

The headers are listed below. All headers must be in lower case and must match the exact naming and order specified. All headers must be included even if some are not applicable to the unit.

Field	Description	Example
unit	Unique identifier assigned to the Response Unit	ABCDE
t_start	ISO 8601 timestamp in UTC including milliseconds for when the redeclaration starts	2021-12-04T16:00:00.000Z
t_end	ISO 8601 timestamp in UTC including milliseconds for when the redeclaration ends	2021-12-04T17:30:00.000Z
available_capacity	Actual capacity in MW to 2 decimal places.	27.13
service	One of the DCL, DCH, DML, DMH, DRL or DRH service types for the availability declared.	DCH

Table 1 - CSV Headers

Data Rows

Each row should represent a re-declaration of availability for a service during specific period valid between t_start and t_end.

A value should always be included for every field in the data row, empty cells are treated as invalid.

The **available_capacity** field is expected to be set to **0.00** when the service is unavailable or to be set to the actual capacity when the service is restored for a previous unavailability declared.

For each unit and service the unavailability and restoration row must not have any overlap of time between t_start and t_end (i.e. unavailability and restoration of a unit and service should not be declared in the same file for any overlapping periods)

Example:

The example below is **NOT ACCEPTABLE**.

unit	t_start	t_end	available_capacity	service
ABCDE	2022-12-04T16:00:00.000Z	2022-12-04T17:12:00.000Z	0.00	DML
ABCDE	2022-12-04T16:00:00.000Z	2022-12-04T16:30:00.000Z	1.00	DML

There is an overlap between 16:00 and 16:30 for the re-declarations above for the same unit and service in the same file.

Timestamps

Timestamps should be formatted according to RFC 3339 and in UTC time zone. This will give timestamps of exactly 24 characters in length and in the format **YYYY-MM-DDTHH:MM:SS.nnnZ** where:

- YYYY is the 4-digit year
- MM is the month of year zero padded to 2 characters (01-12)
- DD is the day of month zero padded to 2 characters (01-31)
- T is a fixed separator character between the date and time parts
- HH is the hour of day in 24-hour format zero padded to 2 characters (00-23)
- MM is the minutes past hour zero padded to 2 characters (00-59)

- SS is the seconds past minute zero padded to 2 characters (00-59)
- nnn is the milliseconds past second padded to 3 characters (000-999)
- Z is a fixed time zone identifier to indicate the timestamp is in UTC time zone

The **t_start** should have a timestamp no earlier than the staring datetime for the contracted capacity for the specified service and unit and **t_end** should be **greater** than t_start and less or equal to the ending datetime for the contracted capacity.

Example File

```
unit,t_start,t_end,available_capacity,service
ABCDE,2022-12-04T16:00:00.000Z,2022-12-04T16:30:00.000Z,1.00,DML
ABCDE,2022-12-04T21:30:00.000Z,2022-12-04T23:00:00.000Z,0.00,DCH
ABCDE,2022-12-04T21:30:00.000Z,2022-12-04T23:00:00.000Z,0.00,DCL
ABCDE,2022-12-05T21:30:00.000Z,2022-12-05T23:00:00.000Z,0.00,DRH
ABCDE,2022-12-05T21:30:00.000Z,2022-12-05T23:00:00.000Z,0.00,DRL
```

File Upload

The CSV will need to be uploaded no more than 24 hours, and not after, the start time of the earliest availability data being uploaded.

To obtain API connection details, contact commercial.operation@nationalgrideso.com.