Load Real Time Demand Forecast

Monday, June 15, 2015

1:40 PM

***Query***

You may query for a particular market day and resource by location name and market using the message described below.

To query the market for a submitted demand forecast for a given effective day, the following QueryRequest is issued:

This message format is used to query previously submitted hourly load forecast for Load Zones, Intermittent and

Dispatchable Intermittent Resources (DIR). Using the query message described below, data previously submitted may be queried.

<QueryRequest>

<QueryRTDemandForecast day="yyyy-mm-dd">

<LocationName>xxx</LocationName>

<PortfolioName>xxx</PortfolioName>

</QueryRTDemandForecast>

</QueryRequest>

***Outputs***

Report file is saved to the auditpath directory and displayed on the Forecast UI (not created yet).

The hour specified in the <RTDemandForecast> message is the effective hour of the forecast in the range of 01-24.

<QueryResponse>

<RTDemandForecast location="zzz" day="yyyy-mm-dd">

<RTDemandForecastPoint hour="xx" MW="xx.x">

</RTDemandForecast>

</QueryResponse>

***Load Process***

Forecast data is stored in the MC\_LOAD\_FORECAST table to be displayed on the Forecast UI.

A record is loaded per each unique Participant, Transaction Point (location), Source, and Start Dt (day & hour)

***Lookup Table Population :***

MC\_LOAD\_FORECAST\_TYPE

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **LOAD\_FORECAST\_TYPE\_CD** | **LOAD\_FORECAST\_TYPE\_DESC** | **DISPLAY\_NME** | **ISO\_REF** | **LOAD\_FORECAST\_TYPE\_INTRVL** | **USER\_ID** | **REVISED\_DT** |
| RTDemandForecast | Real Time Demand Forecast | Real Time Demand Forecast | RTDemandForecast | 60 |  |  |

MC\_LOAD\_FORECAST\_SOURCE\_TYPE

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **LOAD\_FORECAST\_SOURCE\_CD** | **LOAD\_FORECAST\_SOURCE\_DESC** | **DISPLAY\_NME** | **SOURCE\_CATEGORY\_CD** | **USER\_ID** | **REVISED\_DT** |
| ISO | ISO | ISO | ISO |  |  |

***MC\_LOAD\_FORECAST Mapping :***

|  |  |  |
| --- | --- | --- |
| **Name** | **Comments** | **Source** |
| LOAD\_FORECAST\_ID | Load Forecast Identifier: A number, generated from a sequence, which uniquely identifies this row. |  |
| LOAD\_FORECAST\_TYPE\_CD | Load Forecast Type Code: A code that uniquely identifies the type of the load forecast. Valid values are stored in the table MC\_LOAD\_FORECAST\_TYPE. | 'RTDemandForecast' |
| SOURCE\_CD | Source Type Code: A code that uniquely identifies the type of the load forecast source. Valid values are stored in the table MC\_SOURCE\_CODE\_TYPE. | 'ISO' |
| PTCPT\_ID | Participant ID: A id that uniquely identifies a market participant. Valid values are stored in the table X\_PTCPT. | Party  Or  Selected by user |
| XP\_ID | Transaction Point Identifier: The nMarket identifier for a transaction point. Valid values are stored in the table X\_XP\_MASTER. | location |
| START\_DT | Start Date: The start date and time of the interval.  MISO file is in interval ending and we will store as interval beginning. | day + hour (- 1)  ( need to check in the db tht hour is stored with an 1 hr early value) |
| DT\_INTRVL\_VAL | Date Interval Value: The interval value to denote the duration of the data. | '+000 01:00:00.000000'  (need to have neg scn to check interval less thn 1 hr) |
| START\_DAY\_DT | Verify this is populated by the trigger. |  |
| QUANTITY | Quantity: The quantity of the load forecast. | mw |
| EXT\_ID | External Identifier: Identifier from an external system to identify records in nMarket. |  |
| STATUS\_CD | Status Code: A code that indicates the submission status of the record. Valid values are stored in MC\_STATUS\_CODE\_TYPE. | 'SUB' |
| ISO\_STATUS | ISO Status: The ISO status of the record. |  |
| INACTIVE\_FLG | Inactive Flag: A flag that indicates that the record has been inactivated. Valid values are 1 and 0. A value of 1 indicates the record has been inactivated, a value of 0 indicates the record is current. | 0 |
| USER\_ID | User Identifier: The user that added or updated this record. Valid values are stored in the table X\_USER\_LOGIN. |  |
| REVISED\_DT | Revised Date: The system date and time when the record was added or updated. |  |
| PUBLISH\_DATE | Publish Date: Time stamp indicating when the load forecast was crated. |  |

***Examples***

<QueryResponse>

<RTDemandForecast location="TEST" day="2015-06-16">

<RTDemandForecastPoint hour="01" MW="1.1">

<RTDemandForecastPoint hour="02" MW="2.1">

<RTDemandForecastPoint hour="03" MW="3.1">

<RTDemandForecastPoint hour="04" MW="4.1">

<RTDemandForecastPoint hour="05" MW="5.1">

<RTDemandForecastPoint hour="06" MW="6.1">

<RTDemandForecastPoint hour="07" MW="7.1">

<RTDemandForecastPoint hour="08" MW="8.1">

<RTDemandForecastPoint hour="09" MW="9.1">

<RTDemandForecastPoint hour="10" MW="10.1">

<RTDemandForecastPoint hour="11" MW="11.1">

<RTDemandForecastPoint hour="12" MW="12.1">

<RTDemandForecastPoint hour="13" MW="13.1">

<RTDemandForecastPoint hour="14" MW="14.1">

<RTDemandForecastPoint hour="15" MW="15.1">

<RTDemandForecastPoint hour="16" MW="16.1">

<RTDemandForecastPoint hour="17" MW="17.1">

<RTDemandForecastPoint hour="18" MW="18.1">

<RTDemandForecastPoint hour="19" MW="19.1">

<RTDemandForecastPoint hour="20" MW="20.1">

<RTDemandForecastPoint hour="21" MW="21.1">

<RTDemandForecastPoint hour="22" MW="22.1">

<RTDemandForecastPoint hour="23" MW="23.1">

<RTDemandForecastPoint hour="24" MW="24.1">

</RTDemandForecast>

</QueryResponse>

***Error Handling***

* Invalid Participant. Skip record.
  + *No participant exists in the nMarket Database for the party name = <party>.*
* Invalid Transaction Point. Skip record.
  + *No transaction point exists in the nMarket Database for the location name = <location>.*
* Invalid Date
  + *Invalid date passed from the file <interval> is not a valid value.*
* Invalid Value
  + *Invalid value passed from the file*