# Load Reserve Zone Demand Requirements

LOAD FROM FILE : Load Market-Wide Demand Requirements

Datamodel

Populates the table MC\_MARKET\_DATA.

Uses lookup tables used: MC\_MARKET\_DATA\_TYPE, X\_XP

Outputs

<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">

<env:Header/>

<env:Body>

<QueryResponse xmlns="http://markets.midwestiso.org/dart/xml">

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

<ZoneRequirements zone="xxx">

<ZoneRequirementsHourly hour="hh">

<RegulationReserveRequirementMW>xx</RegulationReserveRequirementMW>

<SpinningReserveRequirementMW>xx</ SpinningReserveRequirementMW >

<SupplementalReserveRequirementMW>xx</ SupplementalReserveRequirementMW >

</ZoneRequirementsHourly>

</ZoneRequirements>

</ReserveZoneRequirements>

</QueryResponse>

</env:Body>

</env:Envelope>

Description

|  |  |  |
| --- | --- | --- |
| **Field: MC\_MARKET\_DATA table** | **Description** | **Source/Value** |
| MKT\_DATA\_TYPE\_ID | Market Data Code    Look up MARKET\_DATA\_TYPE\_ID in MC\_MARKET\_DATA\_TYPE table based on code | Use MISO\_REG\_RZN\_REQ for <RegulationReserveRequirementMW>xxx.x</RegulationReserveRequirementMW>    Use MISO\_SPIN\_RZN\_REQ for <SpinningReserveRequirementMW>xxx.x</SpinningReserveRequirementMW>.    Use MISO\_SUPP\_RZN\_REQ for <SupplementalReserveRequirementMW>xxx.x</SupplementalReserveRequirementMW>. |
| PTCPT\_ID | Participant Code | null |
| SOURCE\_CD | A code that indicates the source of the record. | ‘ISO’ |
| XP\_ID | Indicates the market as the transaction point. | NM\_XP.XP\_ID where NM\_XP.ISO\_REF =  <ZoneRequirements zone="xxx"> |
| START\_DT | Indicates the operating day date of the Market-Wide requirement. | Start Date:  <MarketWideDemandRequirements day="yyyy-mm-dd">  <MarketWideDemandRequirementsHourly hour="hh"> - 1Hr |
| DT\_INTERVAL\_VAL |  | +000000 01:00:00 |
| NUM\_VAL | The MW quantity for the minimum regulation, and operating reserve requirement for the market, hour, and day. | <RegulationReserveRequirementMW>xxx.x</RegulationReserveRequirementMW>    <SpinningReserveRequirementMW>xxx.x</SpinningReserveRequirementMW>    <SupplementalReserveRequirementMW>xxx.x</SupplementalReserveRequirementMW> |
| USER\_ID | The user that added or updated this record. | NM\_USER\_LOGIN.USER\_ID |
| REVISED\_DT\_SYS | The system date and time when the record was added or updated. | Current system date and time. |

Processing

If price for a given start datetime/location/data type/source DOES NOT exist, INSERT the new record.

If price for a given start datetime/location/data type/source ALREADY exists, UPDATE the existing record.

Examples

<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">

<env:Header/>

<env:Body>

<QueryResponse xmlns="http://markets.midwestiso.org/dart/xml">

<ReserveZoneRequirements day="2007-08-01">

<ZoneRequirements zone="123">

<ZoneRequirementsHourly hour="01">

<RegulationReserveRequirementMW>20</RegulationReserveRequirementMW>

<SpinningReserveRequirementMW>10</ SpinningReserveRequirementMW >

<SupplementalReserveRequirementMW>5</SupplementalReserveRequirementMW>

</ZoneRequirementsHourly>

<ZoneRequirementsHourly hour="02">

<RegulationReserveRequirementMW>20</RegulationReserveRequirementMW>

<SpinningReserveRequirementMW>10</ SpinningReserveRequirementMW >

<SupplementalReserveRequirementMW>5</SupplementalReserveRequirementMW>

</ZoneRequirementsHourly>

<ZoneRequirementsHourly hour="03">

<RegulationReserveRequirementMW>20</RegulationReserveRequirementMW>

<SpinningReserveRequirementMW>10</ SpinningReserveRequirementMW >

<SupplementalReserveRequirementMW>5</SupplementalReserveRequirementMW>

</ZoneRequirementsHourly>

…

<ZoneRequirementsHourly hour="24">

<RegulationReserveRequirementMW>20</RegulationReserveRequirementMW>

<SpinningReserveRequirementMW>10</ SpinningReserveRequirementMW >

<SupplementalReserveRequirementMW>5</SupplementalReserveRequirementMW>

</ZoneRequirementsHourly>

</ZoneRequirements>

< ZoneRequirements zone="789">

<ZoneRequirementsHourly hour="01">

<RegulationReserveRequirementMW>20</RegulationReserveRequirementMW>

<SpinningReserveRequirementMW>10</ SpinningReserveRequirementMW >

<SupplementalReserveRequirementMW>5</SupplementalReserveRequirementMW>

</ZoneRequirementsHourly>

<ZoneRequirementsHourly hour="02">

<RegulationReserveRequirementMW>20</RegulationReserveRequirementMW>

<SpinningReserveRequirementMW>10</ SpinningReserveRequirementMW >

<SupplementalReserveRequirementMW>5</SupplementalReserveRequirementMW>

</ZoneRequirementsHourly>

<ZoneRequirementsHourly hour="03">

<RegulationReserveRequirementMW>20</RegulationReserveRequirementMW>

<SpinningReserveRequirementMW>10</ SpinningReserveRequirementMW >

<SupplementalReserveRequirementMW>5</SupplementalReserveRequirementMW>

</ZoneRequirementsHourly>

…

<ZoneRequirementsHourly hour="24">

<RegulationReserveRequirementMW>20</RegulationReserveRequirementMW>

<SpinningReserveRequirementMW>10</ SpinningReserveRequirementMW >

<SupplementalReserveRequirementMW>5</SupplementalReserveRequirementMW>

</ZoneRequirementsHourly>

</ZoneRequirements>

</ReserveZoneRequirements>

</QueryResponse>

</env:Body>

</env:Envelope>

Error Handling

* + Invalid Date
    - *Invalid date passed from the file <day> is not a valid value.*
  + Invalid Hour
    - *Invalid hour passed from the file <hour> is not a valid value.*
  + Invalid Transaction Point. Skip record.
    - *No transaction point exists in the nMarket Database for the location name = <zone>.*
  + Invalid Regulation Reserve Requirement MW
    - *Invalid value passed from the file <RegulationReserveRequirementMW> is not a valid value.*
  + Invalid Spinning Reserve Requirement MW
    - *Invalid value passed from the file <SpinningReserveRequirementMW> is not a valid value.*
  + Invalid Supplemental Reserve Requirement MW
    - *Invalid value passed from the file <SupplementalReserveRequirement> is not a valid value.*

Testing Approach

|  |  |
| --- | --- |
| **ISO LOADS** | **(A)utomated / (M)anual** |
| Connectivity - Download From Market | **N/A** |
| FileListener | **N/A** |
| Job Scheduler | **On hold** |
| Load From File | **M** |
| Verify data appears correctly on View Market Data screen. | **On hold** |
| Load from File: Verify the correct Load from File process is recognized. | **On hold** |
| Verify data is stored in the tables correctly. | **M** |
| Verify that the start date and date interval values are determined correctly. | **M** |
| Unique key validations for data integrity | **A** |
| File with All the Valid Types that are supported | **A** |
| Validate the Auditpath and Load Summary window has correct information | **M** |
| Error handling- Duplicate data validation for data integrity | **A** |
| Error handling- Business Keys (required fields and unique keys) | **A** |
| Error handling - Formatting | **A** |