DRBizNet

Web Services Guide

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Revision 0.3
DRBizNet Web Services User Guide

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DRBizNet Web Services User Guide

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1 Introduction

This document describes some common use cases and sample requests for accessing Alstom’s DRBizNet system via web services. It is not intended to be an exhaustive list of all possible scenarios and requests, but rather to give examples of some typical usage patterns.

1.1 Abbreviations and Acronyms

<table>
<thead>
<tr>
<th>Term or Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBL</td>
<td>Customer Baseline Load</td>
</tr>
<tr>
<td>CSP</td>
<td>Curtailment Service Provider</td>
</tr>
<tr>
<td>CSV</td>
<td>Comma separated value format</td>
</tr>
<tr>
<td>DA</td>
<td>Day ahead market</td>
</tr>
<tr>
<td>DLC</td>
<td>Direct load control</td>
</tr>
<tr>
<td>DR</td>
<td>Demand resource.</td>
</tr>
<tr>
<td>EDC</td>
<td>Electric Distribution Company</td>
</tr>
<tr>
<td>FSL</td>
<td>Firm Services Level, a type of load reduction for Emergency Capacity registrations.</td>
</tr>
<tr>
<td>GLD</td>
<td>Guaranteed Load Drop, a type of load reduction for Emergency Capacity registrations.</td>
</tr>
<tr>
<td>HE</td>
<td>Hour ending, a value typically in the range 1-24</td>
</tr>
<tr>
<td>ISO</td>
<td>Independent System Operator</td>
</tr>
<tr>
<td>LSE</td>
<td>Load Serving Entity</td>
</tr>
<tr>
<td>Location</td>
<td>A place that can be metered and registered for participation in a DR program</td>
</tr>
<tr>
<td>Program</td>
<td>Demand response program, can be defined using emergency or economic rules</td>
</tr>
<tr>
<td>Registration</td>
<td>The process by which a customer location is registered for a specific DR program</td>
</tr>
<tr>
<td>RT</td>
<td>Real-time market</td>
</tr>
<tr>
<td>SAA</td>
<td>Symmetric additive adjustment, a method for calculating CBLs</td>
</tr>
<tr>
<td>WSA</td>
<td>Weather sensitive adjustment, a method for calculating CBLs</td>
</tr>
</tbody>
</table>

1.2 References

<table>
<thead>
<tr>
<th>Document</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>WebServiceSpecification.doc</td>
<td>DRBizNet Web Services design specification.</td>
</tr>
<tr>
<td>UserGuide.doc</td>
<td>DRBizNet User Guide</td>
</tr>
</tbody>
</table>
1.3 Document Conventions

Items highlighted in Red in XML elements are parameters that must be supplied in requests. Verb / Noun pairs are highlighted in Teal. Refer to the data dictionary to get the format, allowed values and purpose of the data elements.

Where relevant, mandatory code table values are defined in XML requests as “See Table”. The allowed values for each referenced element will be supplied in a table at the end or the request definition. An exact value from the table must be supplied, or an error will be generated.

1.4 DRBizNet Web Services Overview

There are two ways of interacting with DRBizNet via web services: By processes (workflow); and by objects (data). Generally speaking process operations require the processID to be specified, whereas data operations require the object ID e.g. locationID, registrationID, eventID, settlementID. Process oriented operations will typically have a noun of <Noun>process</Noun>, while object oriented operations will have the noun of the object e.g. <Noun>settlement</Noun>

The DRBizNet web services provide an application program interface for performing operations in the DRBizNet system, including:

- Managing processes and workflow.
- Retrieving data about objects such as Locations, Registrations and Settlements.
- Updating data for objects such as Locations, Registrations and Settlements.

The interface is designed for machine to machine operation, although because it uses XML the data is also human-readable.

Interaction with DRBizNet is via requests and responses. A request to DRBizNet is issued to the appropriate end-point, and DRBizNet returns a response with the results of the operation. See the Web Services design specification for details of the request / response formats and operation.

1.5 Error handling

The ReplyCode in the response message can take three values:

1. “OK”: indicates that the request was successful,
2. “ERROR”: Indicates that there is a problem with the request e.g. the Registration ID specified does not exist.
3. “FATAL”: indicates that an internal error occurred and DRBizNet was unable to process the request.
4. “SOAP Fault”: indicates that the message could not be processed e.g. service unavailable, etc

When a code of ERROR or FATAL is returned there may be additional information about the problem in the payload.

See the web services design document for details of the web services error handling and error messages.
2 Get Web Services Result Limits

To reduce performance impacts, the following time limits (by days) are enforced on some web services:

Get Process=100
Get Registration=730
Get Event=100
Get Daily Data=100
Get Interval Data=100
Get Settlement=100
Get Compliance=100

The above limits are the maximum number of days in a date ranges supported for these web services.

- If a date range is supplied in a web service request and it exceeds the limit, an error will be returned in the response.
- If a date range is not supplied in a web service request, the above limits will be used by default as the date range for retrieving results.

3 Running Web Services as DRBizNet Users

For Web Service requests that use the login ID of a DRBizNet user, the request XML must contain an additional parameter (below the “Source” parameter) for “UserID”. E.g.:

<mes:UserID>UserID</mes:UserID>

4 Processes

There are a number of requests for getting details about processes:

<table>
<thead>
<tr>
<th>#</th>
<th>Verb</th>
<th>Noun</th>
<th>Input</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>get</td>
<td>process</td>
<td>ID=single process id</td>
<td>All open tasks for the specified process instance ID available for user’s organization, regardless of who owns the process. Outputs include process info, task headers (name, org, user, started, due) only.</td>
</tr>
<tr>
<td>2</td>
<td>get</td>
<td>process</td>
<td>The parameters <a href="">mes:Request</a> &lt;/mes:Request&gt; needs to exist.</td>
<td>All open tasks available for user’s organization, regardless of who owns the process. Outputs include process info, task headers and task decision details.</td>
</tr>
<tr>
<td>3</td>
<td>get</td>
<td>process</td>
<td>Match=Registration Option=process</td>
<td>All open Registration tasks available for user’s organization, regardless of who owns the process. Outputs include process info and task headers only.</td>
</tr>
<tr>
<td>4</td>
<td>get</td>
<td>process</td>
<td>AlternateID=regId</td>
<td>All open Registration tasks for the specified</td>
</tr>
<tr>
<td>#</td>
<td>Verb</td>
<td>Noun</td>
<td>Input</td>
<td>Output</td>
</tr>
<tr>
<td>----</td>
<td>--------</td>
<td>------------</td>
<td>--------------------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>3</td>
<td>get</td>
<td>process</td>
<td>Match=Registration Option=process</td>
<td>registration available for user’s organization, regardless of who owns the process. Outputs include process info and task headers only.</td>
</tr>
<tr>
<td>5</td>
<td>get</td>
<td>process</td>
<td>Match=Settlement Option=process</td>
<td>All open Settlement tasks available for user’s organization, regardless of who owns the process. Outputs include process info and task headers only.</td>
</tr>
<tr>
<td>6</td>
<td>get</td>
<td>process</td>
<td>AlternateID=setlId Match=Settlement Option=process</td>
<td>All open Settlement tasks for the specified settlement available for user’s organization, regardless of who owns the process. Outputs include process info and task headers only.</td>
</tr>
<tr>
<td>7</td>
<td>get</td>
<td>process</td>
<td>Match=Registration Option=history</td>
<td>All open or completed tasks, regardless of who is performing them, for all open or completed registration processes owned by the user’s org. Outputs include process info and task headers.</td>
</tr>
<tr>
<td>8</td>
<td>get</td>
<td>process</td>
<td>AlternateID=regId Match=Registration Option=history</td>
<td>All pending or completed registration processes and completed tasks for the specified registration owned by org</td>
</tr>
<tr>
<td>9</td>
<td>get</td>
<td>process</td>
<td>Match=Settlement Option=history</td>
<td>All pending or completed registration processes and completed tasks owned by org</td>
</tr>
<tr>
<td>10</td>
<td>get</td>
<td>process</td>
<td>AlternateID=setlId Match=Settlement Option=history</td>
<td>All pending or completed settlement processes and completed tasks for the specified settlement owned by org</td>
</tr>
<tr>
<td>11</td>
<td>get</td>
<td>task</td>
<td>Match=Registration Option=task</td>
<td>Same records as in outputs from #3 above except that the outputs here also include the task details.</td>
</tr>
<tr>
<td>12</td>
<td>get</td>
<td>task</td>
<td>AlternateID=regId Match=Registration Option=task</td>
<td>Same records as in outputs from #4 above except that the outputs here also include the task details.</td>
</tr>
<tr>
<td>13</td>
<td>get</td>
<td>task</td>
<td>Match=Settlement Option=task</td>
<td>Same records as in outputs from #5 above except that the outputs here also include the task details.</td>
</tr>
<tr>
<td>14</td>
<td>get</td>
<td>task</td>
<td>AlternateID=setlId Match=Settlement Option=task</td>
<td>Same records as in outputs from #6 above except that the outputs here also include the task details.</td>
</tr>
</tbody>
</table>
4.1 Get Process by ID

This request returns details of the specified active process. The result set will be restricted in accordance with the user’s permissions for the process, and an error will be returned if the process is not active or does not exist.

The Object ID for the element <mes:AlternateID> is the ID for the type of Object e.g. Registration, Settlement, Event etc.

```xml
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Body>
    <mes:InformationRequest>
      <mes:Header>
        <mes:Verb>get</mes:Verb>
        <mes:Noun>process</mes:Noun>
        <mes:Revision>001</mes:Revision>
        <mes:Source>123</mes:Source>
        <mes:UserID>User ID for organization</mes:UserID>
      </mes:Header>
      <mes:Request>
        // ----- Choose an option
        <mes:Option>process</mes:Option>
        <mes:ID>Process ID e.g. 5465</mes:ID>
        Or
        <mes:Option>process</mes:Option>
        <mes:Match>Settlement</mes:Match>
        <mes:AlternateID>Object ID e.g. 3000</mes:AlternateID>
        // ----- End of option choice
      </mes:Request>
    </mes:InformationRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

4.2 Get Active Processes for Registration or Settlement

This request performs a similar operation to “Search Processes” in the GUI. It returns details of active tasks available to the user. The result set will be restricted in accordance with the user’s permissions for the processes.

```xml
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Body>
    <mes:InformationRequest>
      <mes:Header>
        <mes:Verb>get</mes:Verb>
        <mes:Noun>process</mes:Noun>
        <mes:Revision>001</mes:Revision>
        <mes:Source>123</mes:Source>
        <mes:UserID>User ID for organization</mes:UserID>
      </mes:Header>
      <mes:Request>
        <mes:Match>Options: Settlement or Registration</mes:Match>
        <mes:Option>process</mes:Option>
      </mes:Request>
    </mes:InformationRequest>
  </soapenv:Body>
</soapenv:Envelope>
```
4.3 Get Active Processes (aka My Tasks)

This request performs a similar operation to “My Tasks” in the GUI. It returns details of tasks available to the user. The result set will be restricted in accordance with the user’s permissions for the processes.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
 <soapenv:Body>
  <mes:InformationRequest>
   <mes:Header>
    <mes:Verb>get</mes:Verb>
    <mes:Noun>process</mes:Noun>
    <mes:Revision>001</mes:Revision>
    <mes:Source>123</mes:Source>
   </mes:Header>
   <mes:Request>
    <mes:Option>task</mes:Option>
   </mes:Request>
  </mes:InformationRequest>
 </soapenv:Body>
</soapenv:Envelope>
```

4.4 Get Active Processes by Date Range

See section 2 above for the limit on the maximum date range that can be used to retrieve results. A date range specified beyond the limit will result in an error in your web service response.

All of the Get Processes scenarios specified in the table in section 3 above where ID or AlternateID is not supplied can support the use of date ranges simply by adding the following parameters.

```
<mes:StartTime>2011-01-01T00:00:00-05:00</mes:StartTime>
<mes:EndTime>2011-01-18T00:00:00-05:00</mes:EndTime>
```

As an example, scenario 2 in the table can be modified with the following date range:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
 <soapenv:Header>
  <mes:Header>
   <mes:Verb>get</mes:Verb>
   <mes:Noun>process</mes:Noun>
   <mes:Revision>001</mes:Revision>
   <mes:Source>123</mes:Source>
   <mes:UserID>User ID for organization</mes:UserID>
  </mes:Header>
  <mes:Request>
   // ----- Optional
   <mes:StartTime>2011-01-01T00:00:00-05:00</mes:StartTime>
   <mes:EndTime>2011-01-18T00:00:00-05:00</mes:EndTime>
   // ----- End
  </mes:Request>
 </soapenv:Header>
</soapenv:Envelope>
```
5 Locations

5.1 Get Location by ID

This request returns details of the location with the specified Location ID. The result set will be restricted in accordance with the user’s permissions for the location.

```xml
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
 <soapenv:Header/>
 <soapenv:Body>
  <mes:InformationRequest>
   <mes:Header>
    <mes:Verb>get</mes:Verb>
    <mes:Noun>location</mes:Noun>
    <mes:Revision>001</mes:Revision>
    <mes:Source>123</mes:Source>
    <mes:UserID>User ID for organization</mes:UserID>
   </mes:Header>
   <mes:Request>
    <mes:ID>Location ID</mes:ID>
   </mes:Request>
  </mes:InformationRequest>
 </soapenv:Body>
</soapenv:Envelope>
```

5.2 Get Location by Name

This request returns all locations that contain the search string anywhere in the location name. DRBizNet will return all records that contain the string in any position. So a search string of “st” will return records for “Storm sidings”, “Bleeker Street” and “Best Buy”. The character “%” can be used as a wild card.

The result set will be restricted in accordance with the user’s permissions for the location.

```xml
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
 <soapenv:Header/>
 <soapenv:Body>
  <mes:InformationRequest>
   <mes:Header>
    <mes:Verb>get</mes:Verb>
    <mes:Noun>location</mes:Noun>
    <mes:Revision>001</mes:Revision>
    <mes:Source>123</mes:Source>
    <mes:UserID>User ID for organization</mes:UserID>
   </mes:Header>
   <mes:Request>
    <mes:Match>Search String</mes:Match>
   </mes:Request>
  </mes:InformationRequest>
 </soapenv:Body>
</soapenv:Envelope>
```
5.3 Create Location

This request can only be initiated by a user who is a CSP with “Manage Registrations” or “Manage All” permissions.

```xml
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/
  <soapenv:Header/>
  <soapenv:Body>
    <mes:TransactionRequest>
      <mes:Header>
        <mes:Verb>create</mes:Verb>
        <mes:Noun>location</mes:Noun>
        <mes:Revision>001</mes:Revision>
        <mes:Source>123</mes:Source>
        <mes:UserID>User ID for organization</mes:UserID>
      </mes:Header>
      <mes:Payload>
          <p:Location>
            <p:summaryInfo>
              <p:name>Registration Name</p:name>
              <p:CSP>
                <p:name>CSP Short Name e.g. AEP</p:name>
              </p:CSP>
              <p:EDC>
                <p:name>EDC Short Name e.g. APS</p:name>
                <p:ICP>ICP e.g. 123456</p:ICP>
              </p:EDC>
              <p:GridZone>Zone e.g. GZ02</p:GridZone>
              <p:status>Active</p:status>
            </p:summaryInfo>
            <p:siteInfo>
              <p:address>
                <p:address1>Address Line 1</p:address1>
                <p:address2>Address Line 2</p:address2>
                <p:city>City</p:city>
                <p:Region>Three Letter State Code e.g. AUK</p:Region>
              </p:address>
              <p:businessSegment>See Table</p:businessSegment>
            </p:siteInfo>
            <p:profileInfo>
              <p:energyLossFactor>Energy Loss Factor e.g. 1.002</p:energyLossFactor>
              <p:capacityLossFactor>Capacity Loss Factor e.g. 0.996</p:capacityLossFactor>
              <p:retailRate>Retail Rate e.g. 65.8</p:retailRate>
              <p:peakLoadContribution>PLC e.g. 500.0</p:peakLoadContribution>
              <p:loadMultiplier>Load Multiplier e.g. 1</p:loadMultiplier>
              <p:generationFuelType>See Table</p:generationFuelType>
              <p:priceNode>Pricing Point e.g. CPK0111</p:priceNode>
            </p:profileInfo>
            <p:reductionInfo>
              <p:reductionType>See Table</p:reductionType>
              <p:reductionValue>Reduction Value e.g. 74.9</p:reductionValue>
            </p:reductionInfo>
          </p:Location>
          <p:Location>
            <p:summaryInfo>
              <p:name>Registration Name</p:name>
              <p:CSP>
                <p:name>CSP Short Name e.g. AEP</p:name>
              </p:CSP>
              <p:EDC>
                <p:name>EDC Short Name e.g. APS</p:name>
                <p:ICP>ICP e.g. 123456</p:ICP>
              </p:EDC>
              <p:GridZone>Zone e.g. GZ02</p:GridZone>
              <p:status>Active</p:status>
            </p:summaryInfo>
            <p:siteInfo>
              <p:address>
                <p:address1>Address Line 1</p:address1>
                <p:address2>Address Line 2</p:address2>
                <p:city>City</p:city>
                <p:Region>Three Letter State Code e.g. AUK</p:Region>
              </p:address>
              <p:businessSegment>See Table</p:businessSegment>
            </p:siteInfo>
            <p:profileInfo>
              <p:energyLossFactor>Energy Loss Factor e.g. 1.002</p:energyLossFactor>
              <p:capacityLossFactor>Capacity Loss Factor e.g. 0.996</p:capacityLossFactor>
              <p:retailRate>Retail Rate e.g. 65.8</p:retailRate>
              <p:peakLoadContribution>PLC e.g. 500.0</p:peakLoadContribution>
              <p:loadMultiplier>Load Multiplier e.g. 1</p:loadMultiplier>
              <p:generationFuelType>See Table</p:generationFuelType>
              <p:priceNode>Pricing Point e.g. CPK0111</p:priceNode>
            </p:profileInfo>
            <p:reductionInfo>
              <p:reductionType>See Table</p:reductionType>
              <p:reductionValue>Reduction Value e.g. 74.9</p:reductionValue>
            </p:reductionInfo>
          </p:Location>
        </p:Locations>
      </mes:Payload>
    </mes:TransactionRequest>
  </soapenv:Body>
</soapenv:Envelope>
```
The Location ID will typically be retrieved from the response for use in subsequent operations e.g. creating a registration.

# 5.4 Change Location

This request can only be initiated by a user who is a CSP with “Manage Registrations” or “Manage All” permissions, or by the LSE or EDC if they have been granted Approved As Modified status by the CSP. The EDC and LSE can only update attributes that they have update privileges for. The status of the location also affects what changes may be made – see the web services design document for details.

```xml
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/
  <soapenv:Header/>
  <soapenv:Body>
    <mes:TransactionRequest>
      <mes:Header/>
      <mes:Verb>change</mes:Verb>
      <mes:Revision>001</mes:Revision>
      <mes:Source>123</mes:Source>
      <mes:Request/>
      <mes:Payload>
          <p:Location>
            <p:id>Location ID e.g. 5720</p:id>
            <p:summaryInfo/>
            <p:BusinessSegment>Industrial/Manufacturing</p:BusinessSegment>
            <p:GenerationFuelType>Coal</p:GenerationFuelType>
            <p:ReductionType>Backup Gen\(^1\)</p:ReductionType>
            <p:InterestType>Security Only</p:InterestType>
            <p:MeterOwner>EDC/LSE Meter</p:MeterOwner>
            ...\(\ldots\)
          </p:Location>
        </p:Locations>
      </mes:Payload>
    </mes:TransactionRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Table 1: Location codes

<table>
<thead>
<tr>
<th>Business Segment</th>
<th>Generation Fuel Type</th>
<th>Reduction Type</th>
<th>Interest Type</th>
<th>Meter Owner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial/Manufacturing</td>
<td>Coal</td>
<td>Backup Gen(^1)</td>
<td>Security Only</td>
<td>EDC/LSE Meter</td>
</tr>
<tr>
<td>Residential</td>
<td>Gas</td>
<td>HVAC</td>
<td>Any Dispatch</td>
<td>Third Party</td>
</tr>
<tr>
<td>School</td>
<td>Oil</td>
<td>Refrigeration</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Hospital</td>
<td>Diesel</td>
<td>Lighting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retail</td>
<td>Other</td>
<td>Motor Load</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office Building</td>
<td>None</td>
<td>Water heating</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food Service</td>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Warehouse</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 If Backup Gen is specified, the load reduction amount must be greater than zero and the generation fuel type must be supplied.
See the “Create Location” section for details of codes.

6 Registrations

6.1 Use Cases

1. The CSP Creates location(s) using the “Create Location” request. The result set returns the Location ID for each location created, which is stored for use when creating the registration.

2. The CSP Creates a new registration using the Location IDs from step 1 and the appropriate “Create Registration” request to specify the locations for the registration. The result set returns the Registration ID, which is stored for future use.

3. The CSP submits the registration for review by the EDC, LSE and optionally ISO using the “Submit Registration” request. The result set returns the Process ID for the workflow process, which is stored with the Registration ID for future use.

4. The LSE and EDC issue the “Get Active Processes” request. The result set contains a summary of all processes for the supplied userid. Iterate through all the records in the result set and retrieve the <id> (Process ID) and <objectID> (Registration ID) for every record with <processName> = “RegistrationApproval”. For each record of interest execute steps 5 and 6 as required.

5. If they have been granted “Approved as modified” status by the CSP, the LSE, EDC and optionally ISO may update data they have permissions for using the “Change Registration” request. The result set returns details of the registration (for which they have permissions) which may be stored for future use.
6. The LSE, EDC and optionally ISO confirm the registration using the “Confirm Registration” request. The result set returns details of the registration (for which they have permissions) which may be stored for future use.

**Alternate Path 1: EDC or LSE denies Registration**

Repeat steps 1 – 4 of the happy path scenario:

1. The EDC or LSE denies the registration using the “Deny Registration” request, supplying relevant denial reasons and a comment. The registration is routed back to the CSP for review.
2. The CSP makes corrections to the Registration, and resubmits it using the “Resubmit Registration” request.
3. The Registration returns to step 5 in the happy path scenario.

**Alternate Path 2: CSP disputes Registration**

Repeat steps 1 – 4 of the happy path scenario:

1. The EDC or LSE denies the registration using the “Deny Registration” request, supplying relevant denial reasons and a comment. The registration is routed back to the CSP for review.
2. The CSP disputes the Registration using the “Dispute Registration” request. The Registration is routed to ISO for review.

### 6.2 Get Registration by ID

This request returns details of the Registration with the specified Registration ID. The result set will be restricted in accordance with the user’s userid and permissions for the registration.

```xml
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/
  <soapenv:Header/>
  <soapenv:Body>
    <mes:InformationRequest>
      <mes:Header>
        <mes:Verb>get</mes:Verb>
        <mes:Noun>registration</mes:Noun>
        <mes:Revision>001</mes:Revision>
        <mes:Source>123</mes:Source>
      </mes:Header>
      <mes:Request>
        <mes:ID>Registration ID e.g. 2001</mes:ID>
      </mes:Request>
    </mes:InformationRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

### 6.3 Get Registration by Date Range

This request returns details of all registrations whose effective and termination dates fall within the specified date range. The result set will be restricted in accordance with the user’s userid and permissions for the registration.

Please see section 2 above for details on the limits on the maximum date range that can be used to retrieve results. A date range specified beyond the limit will result in an error in your web service response.
6.4 Create Economic Registration

This request can only be initiated by a user with “Manage Registrations” or “Manage All” permissions for the organization specified in the <ns2:CSP> tag.
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<p:loadReduction>308.0</p:loadReduction>
<p:peakLoadContribution>400.0</p:peakLoadContribution>
<p:siteMultiplier>1.0</p:siteMultiplier>
<p:generationFuelType>Coal</p:generationFuelType>
<p:generationQualificationDate>2012-09-28T00:00:00.000-00:00</p:generationQualificationDate>
<p:regionQualificationDate>2012-12-31T00:00:00.000-00:00</p:regionQualificationDate>

// ----- End of Repeated section

<p:energyInfo>
<p:energyType>Economic</p:energyType>
<p:priceNode>Pricing Point e.g. CPK0111</p:priceNode>
<p:CBLMethod>See Table</p:CBLMethod>
</p:energyInfo>

<p:otherInfo>
<p:allowEDCtoModify>true or false</p:allowEDCtoModify>
<p:allowLSEtoModify>true or false</p:allowLSEtoModify>
<p:holdScheduling>true or false</p:holdScheduling>
<p:holdSettlements>true or false</p:holdSettlements>
</p:otherInfo>

<p:ordinance>
<p:ordinanceName>RRA Name e.g. Franklin District Plan Part 15: Activities throughout the District</p:ordinanceName>
<p:agencyName>RRA Agency Name e.g. Auckland Council</p:agencyName>
<p:Region>RRA Region e.g. AUK</p:Region>
</p:ordinance>

</p:Registration>
</mes:Payload>
</soapenv:Body>
</soapenv:Envelope>

<table>
<thead>
<tr>
<th>p:CBLMethod</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard with SAA (3 day types)</td>
</tr>
<tr>
<td>Standard with SAA (5 day types)</td>
</tr>
<tr>
<td>Maximum Baseline Load (MBL)</td>
</tr>
<tr>
<td>Meter Before Meter After (MBMA)</td>
</tr>
</tbody>
</table>

Table 2: Economic Registration codes

Note that the Pricing Point specified must belong to the specified Zone otherwise an error will be generated.

6.5 Create Security Registration – Security DR Full

This request can only be initiated by a user who is a CSP with “Manage Registrations” or “Manage All” permissions. The CSP must also be an ISO full member to participate in the capacity markets.

Note that the Pricing Point specified must belong to the specified Zone otherwise an error will be generated.

6.5 Create Security Registration – Security DR Full

This request can only be initiated by a user who is a CSP with “Manage Registrations” or “Manage All” permissions. The CSP must also be an ISO full member to participate in the capacity markets.

Note that the Pricing Point specified must belong to the specified Zone otherwise an error will be generated.
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<p:Registration>
  <p:summaryInfo>
    <p:name>Registration Name</p:name>
    <p:program>Security DR Full</p:program>
    <p:startDate>Requested Effective Date e.g. 2009-06-01</p:startDate>
    <p:endDate>Requested Termination Date e.g. 2010-05-31</p:endDate>
    <p:CSP>
      <p:name>CSP Short Name e.g. ECS</p:name>
    </p:CSP>
    <p:EDC>
      <p:name>EDC Short Name e.g. AEP</p:name>
    </p:EDC>
    <p:LSE>
      <p:name>LSE Short Name e.g. APS</p:name>
    </p:LSE>
    <p:zone>Zone e.g. APS</p:zone>
    <p:status>New</p:status>
  </p:summaryInfo>

  // ----- Repeated section
  <p:locationInfo>
    <p:locationID>Location ID e.g. 3985</p:locationID>
    <p:ICP>ws1355961543502</p:ICP>
    <p:energyLossFactor>1.035</p:energyLossFactor>
    <p:capacityLossFactor>1.028</p:capacityLossFactor>
    <p:retailRate>30.0</p:retailRate>
    <p:loadReduction>308.0</p:loadReduction>
    <p:energyType>Security</p:energyType>
    <p:priceNode>CPK0111</p:priceNode>
    <p:CBLMethod>See Table</p:CBLMethod>
  </p:locationInfo>

  // ----- Repeated section
  <p:energyInfo>
    <p:strikePrice>3.4</p:strikePrice>
    <p:shutdownCosts>4.5</p:shutdownCosts>
    <p:priceNode>Pricing Node e.g. CPK0111</p:priceNode>
    <p:CBLMethod>See Table</p:CBLMethod>
  </p:energyInfo>

  <p:fourthInfo>
    <p:longLeadTime>true</p:longLeadTime>
    <p:GSCResourceID>See Table</p:GSCResourceID>
    <p:measurementMethod>See Table</p:measurementMethod>
    <p:fslTarget>Required line only if using an FSL type measurementMethod e.g. 535.0</p:fslTarget>
    <p:capacityLossFactor>1.5</p:capacityLossFactor>
    <p:peakLoadContribution>120.0</p:peakLoadContribution>
    <p:multiplier>2.0</p:multiplier>
  </p:fourthInfo>

  <p:otherInfo>
    <p:allowEDCtoModify>true or false</p:allowEDCtoModify>
    <p:allowLSEtoModify>true or false</p:allowLSEtoModify>
  </p:otherInfo>

  <p:ordinance>
    <p:ordinanceName>RRA Name e.g. Franklin District Plan Part 15: Activities
  </p:ordinance>

// ----- Repeated section
  <p:locationInfo>
    <p:locationID>Location ID e.g. 3985</p:locationID>
    <p:ICP>ws1355961543502</p:ICP>
    <p:energyLossFactor>1.035</p:energyLossFactor>
    <p:capacityLossFactor>1.028</p:capacityLossFactor>
    <p:retailRate>30.0</p:retailRate>
    <p:loadReduction>308.0</p:loadReduction>
    <p:energyType>Security</p:energyType>
    <p:priceNode>CPK0111</p:priceNode>
    <p:CBLMethod>See Table</p:CBLMethod>
  </p:locationInfo>

// ----- Repeated section
  <p:energyInfo>
    <p:strikePrice>3.4</p:strikePrice>
    <p:shutdownCosts>4.5</p:shutdownCosts>
    <p:priceNode>Pricing Node e.g. CPK0111</p:priceNode>
    <p:CBLMethod>See Table</p:CBLMethod>
  </p:energyInfo>

// ----- Repeated section
  <p:fourthInfo>
    <p:longLeadTime>true</p:longLeadTime>
    <p:GSCResourceID>See Table</p:GSCResourceID>
    <p:measurementMethod>See Table</p:measurementMethod>
    <p:fslTarget>Required line only if using an FSL type measurementMethod e.g. 535.0</p:fslTarget>
    <p:capacityLossFactor>1.5</p:capacityLossFactor>
    <p:peakLoadContribution>120.0</p:peakLoadContribution>
    <p:multiplier>2.0</p:multiplier>
  </p:fourthInfo>

// ----- Repeated section
  <p:otherInfo>
    <p:allowEDCtoModify>true or false</p:allowEDCtoModify>
    <p:allowLSEtoModify>true or false</p:allowLSEtoModify>
  </p:otherInfo>

// ----- Repeated section
  <p:ordinance>
    <p:ordinanceName>RRA Name e.g. Franklin District Plan Part 15: Activities
  </p:ordinance>

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6.6 Change Registration

This request can only be initiated by a user who is a CSP with “Manage Registrations” or “Manage All” permissions, or by the LSE or EDC if they have been granted Approved As Modified status by the CSP. The EDC and LSE can only update attributes that they have update privileges for. The status of the registration also affects what changes may be made—see the web services design document for details. The example below is for an economic registration—appropriate payload values should be provided for emergency registrations. See the relevant “Create Registration” sections for details. This request only changes registration details; “Change Location” should be used to modify location details.
6.7 Submit Registration

This request submits the specified Registration (identified by the Registration ID) for review by the EDC, LSE and optionally ISO. It can only be initiated by a user who is a CSP with “Manage Registrations” or “Manage All” permissions.

The registration ID will typically be retrieved from the response for use in subsequent operations.

6.8 Confirm Registration

This request can only be initiated by a user who is an EDC or LSE with “Manage Registrations” or “Manage All” permissions.
6.9 Deny Registration

This request denies the specified Registration (identified by the Process ID) and routes it back to the CSP for review.

It can only be initiated by a user who is an EDC or LSE with “Manage Registrations” or “Manage All” permissions.
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```xml
<mes:TransactionRequest>
  <mes:Header>
    <mes:Verb>change</mes:Verb>
    <mes:Noun>process</mes:Noun>
    <mes:Revision>001</mes:Revision>
    <mes:Source>123</mes:Source>
  </mes:Header>
  <mes:Request>
    <mes:Option>completetask</mes:Option>
  </mes:Request>
  <mes:Payload>
      <p:Process>
        <p:id>Process ID e.g. 5503</p:id>
        <p:summaryInfo>
          <p:processName>RegistrationApproval</p:processName>
        </p:summaryInfo>
        <p:taskInfo>
          <p:taskName>See Table</p:taskName>
          <p:comments>Denial Comment</p:comments>
          <p:decisionInfo>
            <p:decisionName>Deny</p:decisionName>
            <p:decisionReasons>See Table</p:decisionReasons>
          </p:decisionInfo>
        </p:taskInfo>
      </p:Process>
    </p:Processes>
  </mes:Payload>
</mes:TransactionRequest>
</soapenv:Body>
</soapenv:Envelope>
```

<table>
<thead>
<tr>
<th>EDC Task</th>
<th>EDC Denial Reasons</th>
<th>LSE Denial Reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDC Review</td>
<td>WrongICP</td>
<td>ContractualObligation</td>
</tr>
<tr>
<td>LSE Review</td>
<td>WrongLineLosses</td>
<td>WrongRate</td>
</tr>
<tr>
<td>LSE_EDC Review</td>
<td>WrongEDC</td>
<td>WrongLSE</td>
</tr>
<tr>
<td></td>
<td>IncorrectMeter</td>
<td></td>
</tr>
</tbody>
</table>

Table 5: Deny Registration codes

6.10 Resubmit Registration

This request resubmits the specified denied Registration (identified by the Process ID) and routes it back to the LSE, EDC and optionally ISO for review.

It can only be initiated by a CSP for the Registration who has “Manage Registrations” or “Manage All” permissions.

```xml
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/
  <soapenv:Header/>
  <soapenv:Body>
    <mes:TransactionRequest>
      <mes:Header/>
      <mes:Verb>change</mes:Verb>
      <mes:Noun>process</mes:Noun>
      <mes:Revision>001</mes:Revision>
      <mes:Source>123</mes:Source>
    </mes:Header>
    <mes:Request>
      <mes:Option>completetask</mes:Option>
    </mes:Request>
    <mes:Payload>
        <p:Process>
6.11 Dispute Registration

This request disputes the specified Registration (identified by the Process ID) and routes it to ISO for review and a final decision on the status.

This request can only be initiated by a CSP for the Registration who has “Manage Registrations” or “Manage All” permissions.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
    <soapenv:Header/>
    <soapenv:Body>
        <mes:TransactionRequest>
            <mes:Header>
                <mes:Verb>change</mes:Verb>
                <mes:Noun>process</mes:Noun>
                <mes:Revision>001</mes:Revision>
                <mes:Source>123</mes:Source>
            </mes:Header>
            <mes:Request>
                <mes:Option>completetask</mes:Option>
            </mes:Request>
            <mes:Payload>
                    <p:Process>
                        <p:id>Process ID e.g. 5503</p:id>
                        <p:summaryInfo>
                            <p:processName>RegistrationApproval</p:processName>
                        </p:summaryInfo>
                        <p:taskInfo>
                            <p:taskName>CSP Review Denial</p:taskName>
                            <p:decisionInfo>
                                <p:decisionName>Resubmit</p:decisionName>
                            </p:decisionInfo>
                        </p:taskInfo>
                    </p:Process>
                </p:Processes>
            </mes:Payload>
        </mes:TransactionRequest>
    </soapenv:Body>
</soapenv:Envelope>
```

6.12 Withdraw Registration
This request withdraws the specified Registration (identified by the Registration ID). This request can only be initiated by a CSP for the Registration who has “Manage Registrations” or “Manage All” permissions.

6.13 Change Registration Termination Date

This request changes the termination date of the specified Registration. This request can only be initiated by a CSP for the Registration who has “Manage Registrations” or “Manage All” permissions. If the requested termination date is earlier than the current termination date, the change is made immediately. If the requested date is later than the current date a process is initiated for the EDC, LSE and optionally ISO to review the request, and the process ID of the newly generated process is returned in the response message. The requested date will not become effective until all parties have confirmed.

7 Events

7.1 Get Event by ID

This request returns details about a specific event (subject to the user’s permissions).


7.2 Get Events by Date Range

This request returns all events for a specified date range restricted in accordance with the user’s permissions for the events.

Please see section 2 above for details on the limits on the maximum date range that can be used to retrieve results. A date range specified beyond the limit will result in an error in your web service response.

7.3 Get Events by Event type

This request returns all events of the specified type and date range.

Please see section 2 above for details on the limits on the maximum date range that can be used to retrieve results. A date range specified beyond the limit will result in an error in your web service response.
7.4 Get Unacknowledged events

The get unacknowledged events web service will pull all unacknowledged events of the following types [RT, Economic, Security DR Full] for the CSP organization

- All the Scheduled or Active events of supported event types are available for acknowledgement, whose end time hasn't passed. Only CSP and OPR (as CSP role) are authorized to this request.
- CSP must have one of the following permissions in order to query for unacknowledged events (similar to existing getEvent WS functionality)
  - View/Manage location and registration
  - View/Manage event and settlement
  - View/Manage all data
  - Manage All

This request returns unacknowledged events for a CSP

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
 <soapenv:Header/>
 <soapenv:Body>
  <mes:InformationRequest>
   <mes:Header>
    <mes:Verb>get</mes:Verb>
    <mes:Noun>event</mes:Noun>
    <mes:Revision>001</mes:Revision>
    <mes:Source>ISO</mes:Source>
   </mes:Header>
   <mes:Request>
    <mes:Option>unack</mes:Option>
   </mes:Request>
  </mes:InformationRequest>
 </soapenv:Body>
</soapenv:Envelope>
```
7.5 Acknowledge Events

- The OPTION tag value is ‘ack’
- Only CSP and OPR (as CSP role) is authorized to this request.
- The change:event WS needs one of the following user permissions:
  - Manage location and registration
  - Manage all data
- Inputs: Event Id and ack amount. Multiple events can be acknowledged in the same request in separate event tag blocks.
- Output: Event detail for input Event Id(s)

<table>
<thead>
<tr>
<th>Verb</th>
<th>Noun</th>
<th>Input Field</th>
<th>Input Value</th>
<th>Description</th>
<th>Input Type</th>
<th>Req'd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change</td>
<td>Event</td>
<td>Id</td>
<td>&lt;eventId&gt;</td>
<td>Multiple Event ids provided in the request</td>
<td>Number</td>
<td>Y</td>
</tr>
<tr>
<td>AckAmount</td>
<td></td>
<td>&lt;amount in kW&gt;</td>
<td>The acknowledge amount</td>
<td>Number</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>AckPrice</td>
<td></td>
<td>&lt;price in $/MW&gt;</td>
<td>The acknowledgement price</td>
<td>Number</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Option</td>
<td></td>
<td>ack</td>
<td>Acknowledge</td>
<td>String</td>
<td>Y</td>
<td></td>
</tr>
</tbody>
</table>

- The AckAmount value is optional.
  - The Ack Amount of less than or equal to the target amount or the reduction capacity can be provided.
  - If the Ack Amount is not provided (the <ackAmount> tag should be absent in the request and an empty tag should not be provided) then it will be set to the target amount of the event, which by default is the reduction capacity of the registration unless it was specifically provided during the event creation
  - CSP can provide Ack Amount of 0 which can be used to indicate denial to participate in the event.
- The AckPrice value is optional.
  - The Ack Price of less than or equal to the Event Price can be provided.
  - If the Ack Price is not provided (the <ackPrice> tag should be absent in the request and an empty tag should not be provided) then it will be set to the Event price amount of the event.
- The event acknowledgeDate will be set to system time when the acknowledgement is received. The acknowledgeDate and ackAmount values are displayed in the output Event detail.
- Events can be acknowledged by CSP or OPR via the UI on the registration level event detail page. CSP can enter an acknowledge amount and mark the event as acknowledged.

```xml
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/
  <soapenv:Header/>
  <soapenv:Body>
    <mes:TransactionRequest>
      <mes:Header/>
      <mes:Verb>change</mes:Verb>
      <mes:Noun>event</mes:Noun>
  </soapenv:Body>
</soapenv:Envelope>
```
7.6 Create Zonal Test Event

This request creates a zonal test event by a CSP user.

```xml
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/
  <soapenv:Header/>
  <soapenv:Body>
    <mes:TransactionRequest>
      <mes:Header>
        <mes:Verb>create</mes:Verb>
        <mes:Noun>event</mes:Noun>
        <mes:Revision>001</mes:Revision>
        <mes:Source>123</mes:Source>
        <mes:userID>rmick</mes:userID>
      </mes:Header>
      <mes:Request/>
    </mes:TransactionRequest>
  </soapenv:Body>
</soapenv:Envelope>
```
7.7 Create Zonal ReTest Event

This request creates a zonal re-test event by a CSP user.

```
<mes:TransactionRequest>
  <mes:Payload>
      <p:Event>
        <p:summaryInfo>
          <p:eventDate>2013-07-19-00:00</p:eventDate>
          <p:eventType>Zonal Retest</p:eventType>
          <p:notifyTime>2013-07-19-01:00</p:notifyTime>
          <p:endTime>1 hour after start time, e.g. 2013-07-19-02:00</p:endTime>
          <p:description>OPTIONAL description</p:description>
          <p:shortLead>true</p:shortLead>
          <p:longLead>true</p:longLead>
          <p:status>Scheduled</p:status>
        </p:summaryInfo>
        <p:zoneInfo>
          <p:zone>Zone name, e.g. GL08</p:zone>
        </p:zoneInfo>
      </p:Event>
    </p:Events>
  </mes:Payload>
</mes:TransactionRequest>
```
8 Alerts

8.1 Get Alert by Date Range

This request returns a list of alerts in a specified date range subject to the user’s permissions.

```xml
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Header/>
  <soapenv:Body>
    <mes:InformationRequest>
      <mes:Verb>get</mes:Verb>
      <mes:Noun>alert</mes:Noun>
      <mes:Revision>D01</mes:Revision>
      <mes:Source>123</mes:Source>
      <mes:Request>
        <mes:StartTime>Start Date e.g. 2012-10-01T00:00:00</mes:StartTime>
        <mes:EndTime>End Date e.g. 2012-12-31T00:00:00</mes:EndTime>
      </mes:Request>
    </mes:InformationRequest>
  </soapenv:Body>
</soapenv:Envelope>
```
9 Meter Data

Daily meter data is the only supported format for submission of meter data.

Daily data must always have 48 HE values (except on the long day when it must have 50 HE values – see below).

A registration that contains more than one location (aggregate) must have meter data for every location.

The rules for submitting daily meter data on the long and short days are as follows:

1. On the short day the CSP must submit meter readings for 48 intervals; those for TP5 and TP6 will be ignored.
2. On the long day the CSP must submit meter readings for 50 intervals; those for TP5 and TP7 will be averaged and assigned to TP5, and those for TP6 and TP8 will be averaged and assigned to TP6.

9.1 Get Daily Data for Location

This request returns all daily meter data readings for the specified location and date range. The result set will be restricted in accordance with the user’s permissions for the location.

Please see section #2 above for the limit on the maximum date range that you can use to retrieve results. A date range specified beyond the limit will result in an error in your web service response.

```xml
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/
  <soapenv:Header/>
  <soapenv:Body>
    <mes:InformationRequest>
      <mes:Header>
        <mes:Verb>get</mes:Verb>
        <mes:Noun>dailydata</mes:Noun>
        <mes:Revision>001</mes:Revision>
        <mes:Source>123</mes:Source>
      </mes:Header>
      <mes:Request>
        <mes:StartTime>Start date e.g. 2009-05-01T00:00:00</mes:StartTime>
        <mes:EndTime>End date 2009-06-30T00:00:00</mes:EndTime>
        <mes:ID>Location ID e.g. 2005</mes:ID>
      </mes:Request>
    </mes:InformationRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

9.2 Get Daily Data for Registration

This request returns all daily meter data readings for the specified registration and date range. If the registration is an aggregate, meter data for each location associated with the registration will be returned.

The result set will be restricted in accordance with the user’s permissions for the registration.

Please see section #2 above for the limit on the maximum date range that you can use to retrieve results. A date range specified beyond the limit will result in an error in your web service response.
9.3 Submit Daily Data

This request can only be initiated by a user who is a CSP with “Manage Registrations” or “Manage All” permissions, or by the EDC or LSE if the CSP has granted permission for them to submit meter data. 24 Hour Ending interval values must be provided as a comma delimited string in the measurement info for the start and end time of each measurement. Measurements must not span midnight.
10 Settlements

10.1 Use Cases

1. At the end of the Operating Day DRBizNet creates a settlement record for each valid registration / event combination of the operating day.

2. The CSP issues the “Get Active Processes” request. The result set contains a summary of all processes available for the supplied user id. Iterate through all the records in the result and retrieve the <id> (Process ID) and <objectID> (Settlement ID) for every record with <processName> = “SettlementApproval”. For each record execute the following steps as required:
   a. Update the Settlement details using the “Change Settlement” request. The result set returns details of the Settlement which may be stored for future use.
   b. Submit meter data using the appropriate “Submit Interval / Daily Data” request for the Settlement Registration.
   c. Execute the “Calculate CBL” request to calculate the CBL and reduction for the Settlement. The result set contains details of the calculation and status which may be stored for future use.
   d. The CSP submits the settlement for review by the EDC, LSE and optionally ISO using the “Submit Settlement” request. The result set returns the Process ID for the workflow process, which may be stored with the Settlement ID for future use.

3. The LSE and EDC issue the “Get Active Processes” request. The result set contains a summary of all processes for the supplied user id. Iterate through all the records in the result and retrieve the <id> (Process ID) and <objectID> (Settlement ID) for every record with <processName> = “SettlementApproval”. For each record of interest execute the following steps as required:
   a. If they have been granted “Approved as modified” status by the CSP, the LSE and EDC may update data they have permissions for using the “Change Settlement” request. The result set returns details of the Settlement (for which they have permissions) which may be stored for future use.
   b. The LSE, EDC and optionally ISO confirm the Settlement using the “Confirm Settlement” request. The result set returns details of the Settlement (for which they have permissions) which may be stored for future use.

Alternate Path 1: EDC or LSE denies Settlement

Repeat steps 1 and 2 of the happy path scenario:

1. The EDC or LSE denies the Settlement using the “Deny Settlement” request, supplying relevant denial reasons and a comment. The Settlement is routed back to the CSP for review.
2. The CSP makes corrections to the Settlement, and resubmits it using the “Resubmit Settlement” request.
3. The Registration returns to step 5 in the happy path scenario.

Alternate Path 2: CSP disputes Settlement

Repeat steps 1 and 2 of the happy path scenario:

1. The EDC or LSE denies the Settlement using the “Deny Settlement” request, supplying relevant denial reasons and a comment. The Settlement is routed back to the CSP for review.
2. The CSP disputes the Settlement using the “Dispute Settlement” request. The Settlement is routed to ISO for review.

10.2 Get Settlement by ID

This request returns details of the Settlement with the specified Settlement ID. The result set will be restricted in accordance with the user’s userid and permissions for the settlement.

```xml
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/
  <soapenv:Header/>
  <soapenv:Body>
    <mes:InformationRequest>
      <mes:Header>
        <mes:Verb>get</mes:Verb>
        <mes:Noun>settlement</mes:Noun>
        <mes:Revision>001</mes:Revision>
        <mes:Source>123</mes:Source>
      </mes:Header>
      <mes:Request>
        <mes:ID>Settlement ID e.g. 4401</mes:ID>
      </mes:Request>
    </mes:InformationRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

10.3 Get Settlement by Date Range

This request returns details of all Settlement within the specified date range. The result set will be restricted in accordance with the user’s userid and permissions for the settlement.

Please see section #2 above for the limit on the maximum date range that you can use to retrieve results. A date range specified beyond the limit will result in an error in your web service response.

```xml
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/
  <soapenv:Header/>
  <soapenv:Body>
    <mes:InformationRequest>
      <mes:Header>
        <mes:Verb>get</mes:Verb>
        <mes:Noun>settlement</mes:Noun>
        <mes:Revision>001</mes:Revision>
        <mes:Source>123</mes:Source>
      </mes:Header>
      <mes:Request>
        <mes:StartTime>Start date e.g. 2009-06-02T00:00:00</mes:StartTime>
        <mes:EndTime>End date e.g. 2009-06-02T00:00:00</mes:EndTime>
      </mes:Request>
    </mes:InformationRequest>
  </soapenv:Body>
</soapenv:Envelope>
```
10.4 Calculate CBL

This request calculates the CBL and reduction for the specified Settlement, and returns the status and results of the CBL calculation. The CBL calculation is valid for one hour.

This request can only be initiated by a user who is the CSP for the Settlement and has “Manage Settlements” or “Manage All” permissions

```xml
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  <soapenv:Header/>
  <soapenv:Body>
    <mes:TransactionRequest>
      <mes:Header>
        <mes:Verb>action</mes:Verb>
        <mes:Noun>settlement</mes:Noun>
        <mes:Revision>001</mes:Revision>
        <mes:Source>123</mes:Source>
      </mes:Header>
      <mes:Request>
        <mes:Option>validate</mes:Option>
        <mes:ID>Settlement ID e.g. 4401</mes:ID>
      </mes:Request>
    </mes:TransactionRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

10.5 Change Settlement

This request can only be initiated by a user who is a CSP with “Manage Registrations” or “Manage All” permissions, or by the LSE or EDC if they have been granted Approved As Modified status by the CSP. The EDC and LSE can only update attributes that they have update privileges for.

If the `<p:reductionHour>` tag is used to select or deselect hours from a settlement, the business rules must be adhered to e.g. all Self Scheduled hours must be submitted or none. An error will be generated if an attempt is made to deselect some SS hours, but not others.

```xml
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  <soapenv:Header/>
  <soapenv:Body>
    <mes:TransactionRequest>
      <mes:Header>
        <mes:Verb>change</mes:Verb>
        <mes:Noun>settlement</mes:Noun>
        <mes:Revision>001</mes:Revision>
        <mes:Source>123</mes:Source>
      </mes:Header>
      <mes:Payload>
          <p:Settlement>
            <p:id>Settlement ID e.g. 5531</p:id>
          </p:Settlement>
        </p:Settlements>
      </mes:Payload>
    </mes:TransactionRequest>
  </soapenv:Body>
</soapenv:Envelope>
```
10.6 Submit Settlement

This request submits the specified Settlement (indicated by the process ID) for review by ISO, the EDC and LSE. The CBL calculation is only valid for one hour, so the “Calculate CBL” request must be issued less than one hour before issuing this request.

This request can only be initiated by a user who is the CSP for the Settlement and has “Manage Settlements” or “Manage All” permissions.
10.7 Approve Settlement

This request is issued by the EDC, ISE or ISO to approve a settlement. This request can only be initiated by a user who is a valid user for the settlement and type of organization specified in the "<Task Name>" tag, and who has "Manage Settlements" or "Manage All" permissions.

```xml
  <soapenv:Header/>
  <soapenv:Body>
    <mes:TransactionRequest>
      <mes:Header>
        <mes:Verb>change</mes:Verb>
        <mes:Noun>process</mes:Noun>
        <mes:Revision>001</mes:Revision>
        <mes:Source>123</mes:Source>
      </mes:Header>
      <mes:Request>
        <mes:Option>completetask</mes:Option>
      </mes:Request>
      <mes:Payload>
          <p:Process>
            <p:id>Process ID e.g. 2541</p:id>
            <p:summaryInfo>
              <p:processName>SettlementApproval</p:processName>
              <p:summaryInfo>
                <p:taskId>See Table</p:taskId>
                <p:comments>Comment</p:comments>
                <p:decisionInfo>
                  <p:decisionName>Approve</p:decisionName>
                  <p:decisionReasons>Approved</p:decisionReasons>
                </p:decisionInfo>
            </p:summaryInfo>
          </p:Process>
        </p:Processes>
      </mes:Payload>
    </mes:TransactionRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

<table>
<thead>
<tr>
<th>&lt;p:taskId&gt;</th>
<th>EDC Review</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LSE Review</td>
</tr>
<tr>
<td></td>
<td>LSE_EDC Review</td>
</tr>
<tr>
<td></td>
<td>OPR Review (ISO only)</td>
</tr>
</tbody>
</table>

Table 6: Confirm Settlement codes

10.8 Deny Settlement

This request denies the specified Settlement (indentified by the Process ID) and routes it back to the CSP for review.

It can only be initiated by a user who is a valid user for the settlement and type of organization specified in the "<Task Name>" tag, and who has "Manage Settlements" or "Manage All" permissions.
This request resubmits the specified denied Settlement (identified by the Process ID) and routes it back to the LSE, EDC and ISO for review. It can only be initiated by a CSP for the Settlement who has “Manage Settlments” or “Manage All” permissions.

### Table 7: Deny Settlement codes

<table>
<thead>
<tr>
<th>Task Name</th>
<th>LSE</th>
<th>EDC</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDC Review</td>
<td>WrongMeteredLoad</td>
<td>WrongMeteredLoad</td>
</tr>
<tr>
<td>LSE Review</td>
<td>WrongLosses</td>
<td>WrongLosses</td>
</tr>
<tr>
<td>LSE_EDC Review</td>
<td>CBLIncorrect</td>
<td>PlantOutage</td>
</tr>
<tr>
<td>OPR Review (ISO only)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 10.9 Resubmit Settlement

The 10.9 Resubmit Settlement section is detailed, explaining how the resubmission process works for denied Settlements. It includes XML code snippets to illustrate the SOAP request structure, where the `<soapenv:Body>` contains the `<mes:TransactionRequest>` with detailed `<mes:Header>` and `<mes:Payload>` elements. The `<mes:Header>` includes `<mes:Verb>` and `<mes:Noun>` elements, specifying the operation and type. The `<mes:Payload>` contains `<p:Processes>` blocks for each process, which have `<p:Process>` elements with attributes like `<p:taskId>`, `<p:processName>`, and `<p:summaryInfo>`. The `<p:comment>` and `<p:decisionInfo>` are used to provide additional details and decision reasons, respectively. The table at the bottom of the page lists the denied Settlement codes for EDC Review and LSE Review, with corresponding reason codes for EDC and LSE. The code snippets and explanations are precisely detailed, including the use of XML namespaces and elements, illustrating the SOAP request structure for resubmitting denied Settlements.
10.10 Dispute Settlement

This request disputes the specified Settlement (identified by the Process ID) and routes it to ISO for review and a final decision on the status. This request can only be initiated by a CSP for the Settlement who has “Manage Settlements” or “Manage All” permissions.
10.11 Withdraw Settlement

This request withdraws the specified Settlement (identified by the Settlement ID). It can only be initiated by a CSP for the Settlement who has “Manage Settlements” or “Manage All” permissions.

```xml
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/
  <soapenv:Header/>
  <soapenv:Body>
    <mes:TransactionRequest>
      <mes:Header>
        <mes:Verb>action</mes:Verb>
        <mes:Noun>settlement</mes:Noun>
        <mes:Revision>001</mes:Revision>
        <mes:Source>123</mes:Source>
      </mes:Header>
      <mes:Request>
        <mes:Option>withdraw</mes:Option>
        <mes:ID>Settlement ID e.g. 4021</mes:ID>
      </mes:Request>
    </mes:TransactionRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

10.12 Reopen Settlement

This request re-opens a withdrawn Settlement (identified by the Settlement ID). It can only be initiated by a CSP for the Settlement who has “Manage Settlements” or “Manage All” permissions.

```xml
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/
  <soapenv:Header/>
  <soapenv:Body>
    <mes:TransactionRequest>
      <mes:Header>
        <mes:Verb>action</mes:Verb>
        <mes:Noun>settlement</mes:Noun>
        <mes:Revision>001</mes:Revision>
        <mes:Source>123</mes:Source>
      </mes:Header>
      <mes:Request>
        <mes:Option>reopen</mes:Option>
        <mes:ID>Settlement ID e.g. 4021</mes:ID>
      </mes:Request>
    </mes:TransactionRequest>
  </soapenv:Body>
</soapenv:Envelope>
```
## 11 Error Codes and Messages

<table>
<thead>
<tr>
<th>Properties</th>
<th>Error Codes and Messages</th>
</tr>
</thead>
<tbody>
<tr>
<td>contact.firstName</td>
<td>3001 - Please enter a valid First Name for (0).</td>
</tr>
<tr>
<td>contact.lastName</td>
<td>3002 - Please enter a valid Last Name for (0).</td>
</tr>
<tr>
<td>contact.phoneNumber</td>
<td>3003 - Please enter a valid Phone Number for (0).</td>
</tr>
<tr>
<td>contact.emailAddress</td>
<td>3004 - Please enter a valid Email Address.</td>
</tr>
<tr>
<td>contact.invalid.phonenumber</td>
<td>3005 - Phone Number (0) is not valid. Please enter a valid Phone Number for (1).</td>
</tr>
<tr>
<td>contact.phonenumber.or.email</td>
<td>3006 - Please enter a valid Phone Number or Email for (0).</td>
</tr>
<tr>
<td>contact.firstname.required</td>
<td>3007 - First Name is required, please enter a valid value for (0).</td>
</tr>
<tr>
<td>contact.lastname.required</td>
<td>3008 - Last Name is required, please enter a valid value for (0).</td>
</tr>
<tr>
<td>contact.firstName.min.max</td>
<td>3009 - First name should contain between 1 and (0) characters for (1).</td>
</tr>
<tr>
<td>contact.lastName.min.max</td>
<td>3010 - Last name should contain between 1 and (0) characters for (1).</td>
</tr>
<tr>
<td>contact.emailAddress.min.max</td>
<td>3011 - Email address should contain between 1 and (0) characters for (1).</td>
</tr>
<tr>
<td>locationProfile.loadReduction</td>
<td>3020 - Load Reduction should be greater than 0.</td>
</tr>
<tr>
<td>locationProfile.peakLoad</td>
<td>3021 - Peak Load Contribution should be greater than 0.</td>
</tr>
<tr>
<td>locationProfile.energyLossFactor</td>
<td>3022 - Energy Loss Factor should be greater than 0 and less than 2.</td>
</tr>
<tr>
<td>locationProfile.capacityLossFactor</td>
<td>3023 - Capacity Loss Factor should be greater than 0 and less than 2.</td>
</tr>
<tr>
<td>locationProfile.no.energyLossFactor</td>
<td>3024 - Energy Loss Factor is required, please enter a valid value.</td>
</tr>
<tr>
<td>locationProfile.no.capacityLossFactor</td>
<td>3025 - Capacity Loss Factor is required, please enter a valid value.</td>
</tr>
<tr>
<td>locationProfile.no.retailRate</td>
<td>3026 - Retail Rate is required, please enter a valid value.</td>
</tr>
<tr>
<td>locationProfile.no.peakLoad</td>
<td>3027 - Peak Load Contribution is required, please enter a valid value.</td>
</tr>
<tr>
<td>locationProfile.retailRate</td>
<td>3028 - Retail Rate should be greater than 0.</td>
</tr>
<tr>
<td>locationProfile.genfueltype.oid</td>
<td>3029 - Fuel Type is required, Please select a value.</td>
</tr>
<tr>
<td>location.locationName.min.max</td>
<td>3030 - Location Name should contain between 1 and (0) characters.</td>
</tr>
<tr>
<td>location.edcAccountNumber.min.max</td>
<td>3031 - EDC Account Number should contain between 1 and (0) characters.</td>
</tr>
<tr>
<td>location.locationName</td>
<td>3032 - Location Name should not contain special characters</td>
</tr>
<tr>
<td>location.edcAccountNumber</td>
<td>3033 - EDC Account Number is required, please enter a valid value.</td>
</tr>
<tr>
<td>location.status</td>
<td>3034 - Status is required, please enter a valid value.</td>
</tr>
<tr>
<td>location.locprofile.loadreduction.message</td>
<td>3035 - Load Reduction value (0) kW should be greater than (1) kW and less than (2) kW.</td>
</tr>
<tr>
<td>location.csp.organization.required</td>
<td>3036 - CSP organization is required, please select a value.</td>
</tr>
<tr>
<td>location.edc.organization.required</td>
<td>3037 - EDC organization is required, please select a value.</td>
</tr>
<tr>
<td>location.zone.not.belongs.edc</td>
<td>3038 - Zone (0) is not belongs to (1) organization.</td>
</tr>
<tr>
<td>location.zone.required</td>
<td>3039 - Zone is required, please select a value.</td>
</tr>
<tr>
<td>location.state.not.belongs.edc</td>
<td>3039 - State (0) not belongs to selected EDC organization.</td>
</tr>
<tr>
<td>location.state.required</td>
<td>3039 - State is required, please select a value.</td>
</tr>
<tr>
<td>location.locationName.required</td>
<td>3040 - Location name is required.</td>
</tr>
<tr>
<td>location.meterowner.required</td>
<td>3041 - meter owner name is required, please select a value.</td>
</tr>
<tr>
<td>location.business.segment.required</td>
<td>3042 - Business segment is required, please select a value.</td>
</tr>
<tr>
<td>location.contact.interest.required</td>
<td>3043 - Contact interest is required, please select a value for (0).</td>
</tr>
<tr>
<td>Location / Name</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>location.contact.email.invalid</td>
<td>Email [0] has invalid domain, Please enter valid email address for [1].</td>
</tr>
<tr>
<td>location.reductionprofile.contribution.message</td>
<td>Reduction per site for method [0], value [1] should be between [2] and [3].</td>
</tr>
<tr>
<td>location.csp.same.organization</td>
<td>User Organization [0] must be the same as the CSP or EDC Organization.</td>
</tr>
<tr>
<td>location.no.permission.lse.organization</td>
<td>LSE organization has no permissions to edit Location.</td>
</tr>
<tr>
<td>location.edcaccountno.min.length</td>
<td>Number of characters in EDC Account Number is [0], minimum length should be [1].</td>
</tr>
<tr>
<td>location.edcaccountno.max.length</td>
<td>Number of characters in EDC Account Number is [0], maximum length should be [1].</td>
</tr>
<tr>
<td>location.edcaccountno.pattern</td>
<td>EDC Account Number [0] must follow pattern [1].</td>
</tr>
<tr>
<td>address.zipCode</td>
<td>Please Enter a valid Zip code (E.g. 12345 or 12345-6789 or 123456789).</td>
</tr>
<tr>
<td>address.addressLine1.min.max</td>
<td>Address Line 1 should contain between 1 and [0] characters.</td>
</tr>
<tr>
<td>address.addressLine2.min.max</td>
<td>Address Line 2 should contain between 1 and [0] characters.</td>
</tr>
<tr>
<td>address.city.min.max</td>
<td>City should contain between 1 and [0] characters.</td>
</tr>
<tr>
<td>address.no.zipCode</td>
<td>Zip Code is required, Please enter a valid value.</td>
</tr>
<tr>
<td>address.zipCode.nospecial</td>
<td>Zip Code should not contain special characters (except hyphen for 5-4 format)</td>
</tr>
<tr>
<td>address.addressLine1.no.oneword</td>
<td>Address Line 1 is required, Please enter a valid value.</td>
</tr>
<tr>
<td>address.city</td>
<td>City name is invalid. Please enter a valid value.</td>
</tr>
<tr>
<td>location.address.city</td>
<td>City is required, Please enter a valid city.</td>
</tr>
<tr>
<td>address.zipCode.notvalid</td>
<td>ZipCode [0] is not valid, Please enter a valid zip code with 5 or 9 digits.</td>
</tr>
<tr>
<td>location.locprofile.no.loadreduction</td>
<td>Location reduction profile should not be null.</td>
</tr>
<tr>
<td>location.locprofile.multiplier.is.not.integer</td>
<td>Multiplier should be whole number.</td>
</tr>
<tr>
<td>location.locprofile.no.multiplier</td>
<td>Multiplier should not be null.</td>
</tr>
<tr>
<td>location.locprofile.no.contribution</td>
<td>Reduction per site should not be null for method [0].</td>
</tr>
<tr>
<td>address.busPNode</td>
<td>Bus PNode [0] not found in zone [1].</td>
</tr>
<tr>
<td>address.busPNode.null.id</td>
<td>BusPnode [0] Id should be defined.</td>
</tr>
<tr>
<td>address.details.less.than.minsize</td>
<td>Address Details is less than [0] bytes</td>
</tr>
<tr>
<td>address.details.greater.than.maxsize</td>
<td>Address Details is greater than allowed [0] bytes</td>
</tr>
<tr>
<td>address.details.invalid.filetype</td>
<td>Address Details File type is not allowed.</td>
</tr>
<tr>
<td>registration.customerName.required</td>
<td>Registration name is required.</td>
</tr>
<tr>
<td>registration.customerName</td>
<td>Registration name should not contain special characters.</td>
</tr>
<tr>
<td>registration.customerName.min.max</td>
<td>Registration name should contain between 1 and [0] characters.</td>
</tr>
<tr>
<td>registration.RegistrationLocations</td>
<td>The Registration must contain at least one Location.</td>
</tr>
<tr>
<td>regCapacity.nominatedLoad</td>
<td>Nominated ICAP for Registration Capacity must be greater than 100.</td>
</tr>
<tr>
<td>regCapacity.multiplier</td>
<td>Minimum value for multiplier is 1.</td>
</tr>
<tr>
<td>registration.capacity.managedload.invalid</td>
<td>Minimum value for Managed Load is [0].</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>regCapacity.managedLoad</td>
<td>Minimum value for Managed Load is 2.</td>
</tr>
<tr>
<td>regEnergy.totalLoadReduction</td>
<td>Total Load Reduction [0] should be greater than [1].</td>
</tr>
<tr>
<td>regEnergy.energyLossFactor</td>
<td>Energy Loss Factor should be greater than 0 and less than 2.</td>
</tr>
<tr>
<td>regEnergy.strikePrice</td>
<td>Strike Price should be greater than 0.</td>
</tr>
<tr>
<td>regEnergy.shutdownCost</td>
<td>Shut down cost should be greater than 0.</td>
</tr>
<tr>
<td>regEnergy.retailRate</td>
<td>Retail rate should be greater than 0.</td>
</tr>
<tr>
<td>registration.alterregcbl.weatherstation</td>
<td>Weather Station is required, Please select a value.</td>
</tr>
<tr>
<td>registration.alterregcbl.cblmethod</td>
<td>CBL Method is required, Please select a value.</td>
</tr>
<tr>
<td>regCblParameter.setPoint</td>
<td>CBL Set Point is required. Please enter a value.</td>
</tr>
<tr>
<td>regCblParameter.factor</td>
<td>CBL Factor is required. Please enter a value.</td>
</tr>
<tr>
<td>object.validation.failed.user</td>
<td>Cannot Validate the Object of class [{0}] for the unknown User.</td>
</tr>
<tr>
<td>registration.location.id</td>
<td>A Registration must have at least one Location Please select a Location.</td>
</tr>
<tr>
<td>registration.location.different</td>
<td>The CSP, EDC or Zone in this registration are different than the ones in location</td>
</tr>
<tr>
<td>registration.location.profileName</td>
<td>Registration Location Profile cannot be NULL.</td>
</tr>
<tr>
<td>registration.location.inactive</td>
<td>Status of Registration Location is Inactive.</td>
</tr>
<tr>
<td>registration.location.duplicate</td>
<td>Location has already been added to the Registration.</td>
</tr>
<tr>
<td>registration.location.zone</td>
<td>Zone is required, Please select a value.</td>
</tr>
<tr>
<td>registration.location.csp</td>
<td>CSP is required, Please select a value.</td>
</tr>
<tr>
<td>registration.location.edc</td>
<td>EDC is required, Please select a value.</td>
</tr>
<tr>
<td>registration.location.organization</td>
<td>User does not belong to the same Organization as the CSP.</td>
</tr>
<tr>
<td>registration.program.startdate.after</td>
<td>Effective date cannot be later than the program end date.</td>
</tr>
<tr>
<td>registration.program.startdate.earlier</td>
<td>Effective date cannot be earlier than the program start date.</td>
</tr>
<tr>
<td>registration.program.enddate.before</td>
<td>Termination date cannot be earlier than the program start date.</td>
</tr>
<tr>
<td>registration.program.enddate.after</td>
<td>Termination date cannot be later than program end date.</td>
</tr>
<tr>
<td>registration.program.enddate.earlier</td>
<td>Termination date cannot be earlier than the program start date.</td>
</tr>
<tr>
<td>registration.regEnergy.cblMethod</td>
<td>Unknown Weather Station for CBLMethod.</td>
</tr>
<tr>
<td>registration.regEnergy.cblMethod.sensitive</td>
<td>Weather Station is required, please select a value.</td>
</tr>
<tr>
<td>registration.regEnergy.weatherStation</td>
<td>Selected Weather Station does not belong to the Registration zone.</td>
</tr>
<tr>
<td>registration.regEnergy.no.CblMethod</td>
<td>Unknown CBL Method.</td>
</tr>
<tr>
<td>registration.regEnergy.cblMethod.approvalRequired</td>
<td>CBL Method requires Approval.</td>
</tr>
<tr>
<td>registration.no.program</td>
<td>Program is required. Please select a value.</td>
</tr>
<tr>
<td>registration.unknown.program</td>
<td>The selected Program is not valid.</td>
</tr>
<tr>
<td>registration.regEnergy.shutdownCost</td>
<td>Shutdown Cost is required. Please enter a value.</td>
</tr>
<tr>
<td>registration.regEnergy.strikePrice</td>
<td>Strike Price is required. Please enter a value.</td>
</tr>
<tr>
<td>registration.startdate.after</td>
<td>Effective date is required. Please select a value.</td>
</tr>
<tr>
<td>registration.enddate.earlier</td>
<td>Termination date is required. Please select a value.</td>
</tr>
<tr>
<td>registration.cblmethod.required</td>
<td>Undefined or Unspecified CblMethod, CBLMethod required.</td>
</tr>
<tr>
<td>registration.unknown.weatherstation.cblmethod</td>
<td>Unknown Weather Station for selected CBLMethod.</td>
</tr>
<tr>
<td>registration.capacity.cblmethod.not.resolved</td>
<td>CBLMethod selected for registration capacity is not resolved.</td>
</tr>
<tr>
<td>registration.capacity.cblmethod.required</td>
<td>Undefined or Unspecified CBLMethod for registration capacity,</td>
</tr>
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<td>DRBizNet Web Services User Guide</td>
<td></td>
</tr>
<tr>
<td>----------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>CBLMethod required for</strong></td>
<td></td>
</tr>
<tr>
<td>registration.capacity.zonearea.required</td>
<td>3147 - Undefined or Unspecified zone area, Zone area required.</td>
</tr>
<tr>
<td>registration.capacity.resource.not.found</td>
<td>3148 - Resource ID [0] not found.</td>
</tr>
<tr>
<td>registration.capacity.resource.incorrect</td>
<td>3148 - Selected resource [0] is not valid for this registration.</td>
</tr>
<tr>
<td>registration.capacity.resource.required</td>
<td>3148 - Undefined or Unspecified Resource, Resource required.</td>
</tr>
<tr>
<td>registration.program.required</td>
<td>3149 - Undefined or Unspecified Program, Program required.</td>
</tr>
<tr>
<td>registration.pricingpoint.required</td>
<td>3150 - Undefined or Unspecified Pricing Point, Pricing Point required.</td>
</tr>
<tr>
<td>registration.contracttype.required</td>
<td>3151 - Undefined or Unspecified contract Type, contract Type required.</td>
</tr>
<tr>
<td>registration.energy.weatherstation.required</td>
<td>3152 - Undefined or Unspecified Weather station, Weather station required.</td>
</tr>
<tr>
<td>registration.lse.organization.required</td>
<td>3153 - Undefined or Unspecified LSE organization, LSE organization required.</td>
</tr>
<tr>
<td>organization.organizationShortName</td>
<td>3154 - Short name is required. Please enter a value</td>
</tr>
<tr>
<td>organization.accountlength.min</td>
<td>3155 - Account number minimum length should be greater than 1.</td>
</tr>
<tr>
<td>organization.accountlength.max</td>
<td>3156 - Account number maximum length should be greater than 1.</td>
</tr>
<tr>
<td>organization.invalid.accountlengths</td>
<td>3157 - Account number maximum length ([0]) should be greater than minimum Length ([1]).</td>
</tr>
<tr>
<td>organization.contact.email.invalid</td>
<td>3158 - Email [0] is not valid, Please enter valid email address.</td>
</tr>
<tr>
<td>organization.contact.contactinterest.required</td>
<td>3159 - Undefined or Unspecified contact interest type, Contact interest type required.</td>
</tr>
<tr>
<td>registration.capacity.zonearea.notvalid</td>
<td>3160 - Zone area [0] not belongs to zone [1].</td>
</tr>
<tr>
<td>registration.program.not.valid</td>
<td>3161 - Program [0] is not available.</td>
</tr>
<tr>
<td>registration.capacity.managedload.required</td>
<td>3162 - Managed Load is required. Please enter a value.</td>
</tr>
<tr>
<td>registration.capacity.multiplier.required</td>
<td>3163 - Sites Multiplier is required. Please enter a value.</td>
</tr>
<tr>
<td>registration.resource.name.load.name.diff</td>
<td>3164 - Demand resource [0] has Load resource [1] different than registration Load resource [2].</td>
</tr>
<tr>
<td>registration.resource.name.parent.notfound</td>
<td>3164 - Load resource was not found for Demand Resource [0].</td>
</tr>
<tr>
<td>registration.resource.notfound</td>
<td>3165 - Please select a valid Resource</td>
</tr>
<tr>
<td>registration.pdr.notfound</td>
<td>3164 - Please select a valid PDR</td>
</tr>
<tr>
<td>registration.pdr.or.resource.notfound</td>
<td>3164 - Please select a valid PDR or Resource</td>
</tr>
<tr>
<td>registration.resource.name.notfound.as.demand</td>
<td>3164 - Resource name [0] was not found in Demand resources</td>
</tr>
<tr>
<td>registration.lrs.notfound</td>
<td>3165 - Please select a valid DLA</td>
</tr>
<tr>
<td>registration.agency.required</td>
<td>3166 - Agency is required for the Registration</td>
</tr>
<tr>
<td>settlement.averageLoss</td>
<td>3201 - Average Loss Factor should be greater than 0 and less than 2.</td>
</tr>
<tr>
<td>locationprofile.genfueltype.backupgen.nonzero</td>
<td>3201 - Backup gen load reduction must contain a value &gt; 0 if backup gen fuel type is selected.</td>
</tr>
<tr>
<td>locationprofile.genfueltype.backupgen.zero</td>
<td>3202 - Backup gen fuel type must contain a valid value if backup gen load reduction &gt; 0.</td>
</tr>
<tr>
<td>settlementHour.eventHour</td>
<td>3202 - Event Hour should be between 1 and 24.</td>
</tr>
<tr>
<td>settlementHour.lossFactor</td>
<td>3203 - Loss Factor should be greater than 0 and less than 2.</td>
</tr>
<tr>
<td>settlementHour.rate</td>
<td>3204 - Retail rate should be greater than 0.</td>
</tr>
<tr>
<td>cblSummaryData.nocbl</td>
<td>3205 - No CBL data. Please calculate CBL.</td>
</tr>
<tr>
<td>cblSummaryData.invalidcbl</td>
<td>3206 - CBL calculation status is invalid.</td>
</tr>
<tr>
<td>cblSummaryData.obsoletecbl</td>
<td>3207 - CBL results have expired. Please recalculate CBL.</td>
</tr>
<tr>
<td>cblSummaryData.recomputecbl</td>
<td>3208 - Please recalculate CBL.</td>
</tr>
<tr>
<td>Code</td>
<td>Message</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>cblSummaryData.nocompliance</td>
<td>3209 - No compliance data. Please upload meter data.</td>
</tr>
<tr>
<td>cblSummaryData.invalidcompliance</td>
<td>3210 - Compliance data validation failed.</td>
</tr>
<tr>
<td>cblSummaryData.loadmeterdata</td>
<td>3211 - Please reload meter data.</td>
</tr>
<tr>
<td>cblSummaryData.obsoletecompliance</td>
<td>3212 - Compliance validation has expired. Please revalidate.</td>
</tr>
<tr>
<td>event.zones</td>
<td>3301 - Please select at least one Zone</td>
</tr>
<tr>
<td>event.Confirmed.endtime</td>
<td>3302 - Confirmed zonal event should have end time.</td>
</tr>
<tr>
<td>event.Confirmed.hours.minutes</td>
<td>3304 - Confirmed zonal event should have hours and minutes.</td>
</tr>
<tr>
<td>event.Confirmed.endtime</td>
<td>3305 - Load Time is required.</td>
</tr>
<tr>
<td>event.Confirmed.startdate</td>
<td>3307 - End Date cannot be before Start Date (0).</td>
</tr>
<tr>
<td>event.Confirmed.enddate</td>
<td>3308 - Start Date cannot be before Present Date (0).</td>
</tr>
<tr>
<td>event.starttime.grater.currenttime</td>
<td>3310 - Event start time (0) should be grater than current time (1).</td>
</tr>
<tr>
<td>event.Confirmed.endtime</td>
<td>3311 - Event start time (0) should be less than end time (1).</td>
</tr>
<tr>
<td>event.eventdate.after.today</td>
<td>3312 - Event date should be after the Today (0).</td>
</tr>
<tr>
<td>event.zonal.warning</td>
<td>3313 - A zonal event exists for date (0) with start Time (1) with End Time (2).</td>
</tr>
<tr>
<td>event.outage.warning</td>
<td>3314 - An out-age event exists for date (0) with start Time (1) with End Time (2).</td>
</tr>
<tr>
<td>readingsvalidation.user.invalid</td>
<td>3401 - Unknown user name (0), or user (1) not valid.</td>
</tr>
<tr>
<td>readingsvalidation.input.invalidcontent</td>
<td>3402 - Cannot read file. Please check spreadsheet.</td>
</tr>
<tr>
<td>readingsvalidation.input.sheetnotfound</td>
<td>3403 - Cannot find the first worksheet. Please check spreadsheet.</td>
</tr>
<tr>
<td>readingsvalidation.input.invalidcolumns</td>
<td>3404 - Uploaded file should contain 29 columns.</td>
</tr>
<tr>
<td>readingsvalidation.input.invalidnoofrows</td>
<td>3405 - Uploaded file should contain at least 2 rows.</td>
</tr>
<tr>
<td>readingsvalidation.user.notfound</td>
<td>3406 - Unknown user (0), user (1) not found</td>
</tr>
<tr>
<td>readingsvalidation.submission.invalidreadingtype</td>
<td>3407 - Reading type (0) is invalid for this submission.</td>
</tr>
<tr>
<td>readingsvalidation.dailyreading.number.invalid</td>
<td>3408 - (0) readings were expected. (1) readings were found.</td>
</tr>
<tr>
<td>readingsvalidation.dailyreading.hours.has.nulls</td>
<td>3408 - Hours (0) should not be null.</td>
</tr>
<tr>
<td>readingsvalidation.intervalreading.number.invalid</td>
<td>3409 - ??</td>
</tr>
<tr>
<td>readingsvalidation.hourlyreadings.intervalminutes.no.support</td>
<td>3409 - Interval Minutes should be more than 5 and less than 60.</td>
</tr>
<tr>
<td>readingsvalidation.hourlyreadings.no.intervalminutes</td>
<td>3409 - Interval Minutes should not be null.</td>
</tr>
<tr>
<td>readingsvalidation.dailyreading.readings</td>
<td>3410 - 24 daily readings were expected, No readings were found, Please check the file.</td>
</tr>
<tr>
<td>readingsvalidation.hourlyreadings.has.extrareadings</td>
<td>3410 - hourly data has (0) readings, (1) readings expected .</td>
</tr>
<tr>
<td>readingsvalidation.no.hourlyreadings.readings</td>
<td>3411 - No hourly readings were found, Please check the file.</td>
</tr>
<tr>
<td>readingsvalidation.no.intervalreading.readings</td>
<td>3411 - No interval readings were found, Please check the file.</td>
</tr>
<tr>
<td>submission.hourlyreading.reading.missing</td>
<td>3412 - This Reading is missing or incomplete to complete the day.</td>
</tr>
<tr>
<td>submission.no.hourlyreading.readings</td>
<td>3412 - Uploaded file is missing some hourly readings. Please check the file.</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
</tr>
<tr>
<td>submission.no.hourlyreadings.readings</td>
<td>3412 - Uploaded file is missing some hourly readings. Please check the file.</td>
</tr>
<tr>
<td>submission.no.intervalreadings.readings</td>
<td>3412 - Uploaded file is missing some interval readings. Please check the file.</td>
</tr>
<tr>
<td>submission.no.dailyreadings.readings</td>
<td>3413 - Uploaded file is missing some daily readings. Please check the file.</td>
</tr>
<tr>
<td>readingsvalidation.submissiontype.unavalible</td>
<td>3414 - Submission type is not supported. Please check the file.</td>
</tr>
<tr>
<td>readingsvalidation.date.notsuport</td>
<td>3415 - The Date format is not supported. Please use mm/dd/yyyy.</td>
</tr>
<tr>
<td>readingsvalidation.past.date</td>
<td>3416 - Dates for uploaded meter data must be between (0) and (1) .</td>
</tr>
<tr>
<td>readingsvalidation.no.date</td>
<td>3417 - Date for reading has not been specified. Please check the file.</td>
</tr>
<tr>
<td>readingsvalidation.hourlyreadings.readinghour.invalid</td>
<td>3417 - Reading hour (0) is not valid.</td>
</tr>
<tr>
<td>readingsvalidation.hourlyreadings.no.readinghour</td>
<td>3417 - Reading hour should not be null.</td>
</tr>
<tr>
<td>readingsvalidation.reference.invalid</td>
<td>3418 - Meter data submitted is not for registration (0).</td>
</tr>
<tr>
<td>readingsvalidation.meterdata.invalid</td>
<td>3419 - Meter data is invalid. Please check the file.</td>
</tr>
<tr>
<td>readingsvalidation.no.locationid</td>
<td>3420 - The Location (0) cannot be found.</td>
</tr>
<tr>
<td>readingsvalidation.no.accountnumber</td>
<td>3421 - Account Number is required. Please enter a value.</td>
</tr>
<tr>
<td>readingsvalidation.no.reference</td>
<td>3422 - Registration object has no reference, Please check.</td>
</tr>
<tr>
<td>readingsvalidation.no.auth.location</td>
<td>3423 - User (1) is not authorized to submit meter data for Location (0)</td>
</tr>
<tr>
<td>readingsvalidation.no.auth.registration</td>
<td>3424 - User (1) is not authorized to submit meter data for Registration (0)</td>
</tr>
<tr>
<td>readingsvalidation.duplicate.record</td>
<td>3425 - This reading is duplicate.</td>
</tr>
<tr>
<td>readingsvalidation.download.meterdata.not.authorized</td>
<td>3426 - User (0) is not authorized to download meter data for location with location ID (1) .</td>
</tr>
<tr>
<td>readingsvalidation.download.meterdata.no.location</td>
<td>3427 - Location not found with location ID (0) .</td>
</tr>
<tr>
<td>submission.hourlyreadings.warnings</td>
<td>3428 - Hourly readings have errors or warnings. Please check.</td>
</tr>
<tr>
<td>submission.intervalreadings.warnings</td>
<td>3428 - Interval readings have errors or warnings. Please check.</td>
</tr>
<tr>
<td>submission.intervalreadings.no.auth.location</td>
<td>3429 - Interval readings have unauthorized location(s). Please check.</td>
</tr>
<tr>
<td>submission.hourlyreadings.no.auth.registration</td>
<td>3429 - Interval readings have unauthorized registration(s). Please check.</td>
</tr>
<tr>
<td>submission.dailyreadings.warnings</td>
<td>3430 - Daily readings have errors or warnings. Please check.</td>
</tr>
<tr>
<td>submission.dailyreadings.no.auth.location</td>
<td>3431 - Daily readings have unauthorized location(s). Please check.</td>
</tr>
<tr>
<td>meterdata.startdate.missing</td>
<td>3432 - Start Date for Meter Data is required. Please select a value.</td>
</tr>
<tr>
<td>meterdata.enddate.missing</td>
<td>3433 - End Date for Meter Data is required. Please select a value.</td>
</tr>
<tr>
<td>meterdata.no.locations.found</td>
<td>3434 - No Locations were found for the given Registration.</td>
</tr>
<tr>
<td>meterdata.no.registration.found</td>
<td>3435 - The given Registration cannot be found. Please check.</td>
</tr>
<tr>
<td>meterdata.no.edcaccount.found</td>
<td>3436 - EDC account number (0) not found for the given registration</td>
</tr>
<tr>
<td>meterdata.no.permissions</td>
<td>3437 - User (0) does not have permission to download meter data for registration (1) .</td>
</tr>
<tr>
<td>meterdata.no.registrationref</td>
<td>3438 - Registration (0) not found.</td>
</tr>
<tr>
<td>meterdata.enddate.earlier.startdate</td>
<td>3439 - Start date (0) should be earlier than end date (1).</td>
</tr>
<tr>
<td>meterdata.download.registrations.limit.exceded</td>
<td>3440 - Download meter data for more than (0) registrations not supported.</td>
</tr>
<tr>
<td>settlement.settlementhour.settleflag.invalid</td>
<td>3451 - Values for settle flags are different for settlement hour. Value should be same for all self schedule market type.</td>
</tr>
<tr>
<td>readingsvalidation.dailyreading.values.invalid.decimal</td>
<td>3452 - Daily readings have invalid decimal values for input (0). Allowed decimal places is (1). Please check.</td>
</tr>
</tbody>
</table>
| readingsvalidation.intervalreadings.values.invalid | 3453 - Interval readings have invalid decimal values for input (0). Allowed
<table>
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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>d.decimal</td>
<td>decimal places is {1}. Please check.</td>
</tr>
<tr>
<td>readingsvalidation.cbl.ongoing</td>
<td>3454 - CBL process is running for this date. Please try again later.</td>
</tr>
<tr>
<td>webservice.messages.common.unableToProcess</td>
<td>4001 - Unable to process your request</td>
</tr>
<tr>
<td>webservice.messages.common.invalid.user</td>
<td>4002 - Invalid or undefined user</td>
</tr>
<tr>
<td>webservice.messages.common.missing.verb</td>
<td>4003 - Verb missing or unknown.</td>
</tr>
<tr>
<td>webservice.messages.common.notfound.id</td>
<td>4004 - ID requested is not found.</td>
</tr>
<tr>
<td>webservice.messages.common.nodata.search</td>
<td>4005 - Unable to fetch data or Search returns no data.</td>
</tr>
<tr>
<td>webservice.messages.common.missing.noun</td>
<td>4006 - Missing Noun or unknown.</td>
</tr>
<tr>
<td>address.buspnode.required</td>
<td>4007 - BusPnode is required for (0).</td>
</tr>
<tr>
<td>webservice.messages.common.missing.payload</td>
<td>4008 - Missing Payload or unknown.</td>
</tr>
<tr>
<td>webservice.messages.common.unauthorized</td>
<td>4009 - User is not authorized</td>
</tr>
<tr>
<td>webservice.messages.common.invalid.id</td>
<td>4009 - Invalid id</td>
</tr>
<tr>
<td>webservice.messages.common.invalid.alternateId</td>
<td>4010 - Invalid alternate Id</td>
</tr>
<tr>
<td>webservice.messages.common.error.validation</td>
<td>4011 - Validation error</td>
</tr>
<tr>
<td>webservice.messages.common.invalid.userOrg</td>
<td>4012 - Invalid User Organization</td>
</tr>
<tr>
<td>webservice.messages.common.invalid.cspOrg</td>
<td>4013 - Invalid CSP Organization</td>
</tr>
<tr>
<td>webservice.messages.common.notfound.requestType</td>
<td>4014 - Request not found.</td>
</tr>
<tr>
<td>webservice.messages.common.missing.requestType</td>
<td>4015 - Request Type is unknown or missing.</td>
</tr>
<tr>
<td>webservice.messages.common.required.objectId</td>
<td>4016 - Object Id required</td>
</tr>
<tr>
<td>webservice.messages.common.invalid.dateRange</td>
<td>4017 - Invalid Date Range: Start date should be before end date</td>
</tr>
<tr>
<td>webservice.messages.common.invalid.option</td>
<td>4018 - Invalid option</td>
</tr>
<tr>
<td>webservice.messages.common.notavailable.feature</td>
<td>4019 - Feature is not available</td>
</tr>
<tr>
<td>webservice.messages.common.notfound.match</td>
<td>4020 - Match not found</td>
</tr>
<tr>
<td>webservice.messages.common.organization.source.notSpecified</td>
<td>4021 - Please specify a Organization you would like represent in Source tag</td>
</tr>
<tr>
<td>webservice.messages.common.organization.source.invalid</td>
<td>4022 - Organization specified in Source tag is not valid or User does not belong to that Organization.</td>
</tr>
<tr>
<td>webservice.messages.common.error</td>
<td>4023 - Error:</td>
</tr>
<tr>
<td>webservice.messages.location.duplicate.reduction.types</td>
<td>4024 Duplicate load reduction type - TYPENAME - in Location - LOCATIONNAME</td>
</tr>
<tr>
<td>webservice.messages.alert.required.dateRange</td>
<td>4025 - Invalid Date Range: startTime and endTime are required</td>
</tr>
<tr>
<td>webservice.messages.alert.transactionNotSupported</td>
<td>4100 - Alert Transactions currently not supported.</td>
</tr>
<tr>
<td>webservice.messages.process.required.processName</td>
<td>4200 - Process name is required.</td>
</tr>
<tr>
<td>webservice.messages.process.required.processId</td>
<td>4201 - Process Id is required.</td>
</tr>
<tr>
<td>webservice.messages.process.required.decisionReason</td>
<td>4202 - Decision Reason required.</td>
</tr>
<tr>
<td>webservice.messages.process.invalid.decisionReason</td>
<td>4203 - Invalid Decision Reason:</td>
</tr>
<tr>
<td>webservice.messages.process.invalid.processName</td>
<td>4204 - Invalid Decision Name.</td>
</tr>
<tr>
<td>webservice.messages.process.invalid.processId</td>
<td>4205 - Invalid Process Name.</td>
</tr>
<tr>
<td>Code</td>
<td>Message</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>webservice.messages.process.invalid.taskName 4206</td>
<td>Invalid Task Name.</td>
</tr>
<tr>
<td>webservice.messages.process.invalid.objectType 4207</td>
<td>Invalid Object Type.</td>
</tr>
<tr>
<td>webservice.messages.process.invalid.object 4208</td>
<td>Invalid object</td>
</tr>
<tr>
<td>webservice.messages.process.notfound 4209</td>
<td>No such process</td>
</tr>
<tr>
<td>webservice.messages.process.notenough.ordina-nces 4210</td>
<td>Not Enough RERRA Evidences Provided</td>
</tr>
<tr>
<td>webservice.messages.process.notenough.objectTy pe 4211</td>
<td>Object Type Not Found.</td>
</tr>
<tr>
<td>webservice.messages.registration.invalid.id 4300</td>
<td>Registration Id required for fetching Registration</td>
</tr>
<tr>
<td>webservice.messages.registration.extension.req- uired.date 4301</td>
<td>Missing registration extension date</td>
</tr>
<tr>
<td>webservice.messages.registration.update.invalid.id 4301</td>
<td>Registration Id required for updating Registration</td>
</tr>
<tr>
<td>webservice.messages.registration.extension.inva- lid.date 4302</td>
<td>Invalid registration extension date</td>
</tr>
<tr>
<td>webservice.messages.registration.shouldbenull.id 4302</td>
<td>Registration Id must be null for creating Registration</td>
</tr>
<tr>
<td>webservice.messages.registration.invalid.ordi- nance 4303</td>
<td>Ordinance Cannot be assigned to Registration</td>
</tr>
<tr>
<td>webservice.messages.registration.extension.not Permitted 4303</td>
<td>Registration extension not permitted</td>
</tr>
<tr>
<td>webservice.messages.registration.extension.bef- oreMin 4304</td>
<td>Registration extension date is earlier than minimum</td>
</tr>
<tr>
<td>webservice.messages.registration.extension.afterMax 4305</td>
<td>Registration extension date is later than maximum</td>
</tr>
<tr>
<td>webservice.messages.registration.extension.inP- rogress 4306</td>
<td>Registration extension already in progress</td>
</tr>
<tr>
<td>webservice.messages.settlement.invalid.id 4400</td>
<td>Settlement Id required for fetching Settlement</td>
</tr>
<tr>
<td>webservice.messages.settlement.update.invalid.id 4401</td>
<td>Settlement Id required for updating Settlement</td>
</tr>
<tr>
<td>webservice.messages.settlement.adjustment.invalid.id 4402</td>
<td>Settlement Id must be provided in order to create a Settlement Adjustment</td>
</tr>
<tr>
<td>webservice.messages.settlement.invalid.cbl 4403</td>
<td>Invalid CBL summary</td>
</tr>
<tr>
<td>webservice.messages.settlement.inconsistent.set- tlementHour 4404</td>
<td>Invalid Settlement Hour</td>
</tr>
<tr>
<td>webservice.messages.settlement.inconsistent.selfSchedule 4405</td>
<td>Inconsistent self schedule hours</td>
</tr>
<tr>
<td>webservice.messages.event.invalid.id 4500</td>
<td>Event ID or Date Range required. Please check your message and try again.</td>
</tr>
<tr>
<td>webservice.messages.event.notsupported.transaction 4501</td>
<td>Event Transactions currently not supported.</td>
</tr>
<tr>
<td>webservice.messages.location.shouldbenull.id 4600</td>
<td>Location Id must be null for creating location</td>
</tr>
<tr>
<td>webservice.aggregateresource.notsupported.transaction 4700</td>
<td>Aggregate Resource Transactions are not supported.</td>
</tr>
<tr>
<td>webservice.aggregateresource.required.match.o r.alternateid 4701</td>
<td>Either Match or alternateID are required.</td>
</tr>
<tr>
<td>webservice.aggregateresource.onlyone.match.o r.alternateid 4702</td>
<td>One of Match or alternateID are Required. But not both.</td>
</tr>
<tr>
<td>webservice.maximum.days.get.dailydata.error- message 4800</td>
<td>The date range must be less than</td>
</tr>
<tr>
<td>webservice.maximum.days.get.intervaldata.error- message 4801</td>
<td>The date range must be less than</td>
</tr>
<tr>
<td>Error Code</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>webservice.maximum.days.get.process.errormessage 4802</td>
<td>The date range must be less than</td>
</tr>
<tr>
<td>webservice.maximum.days.get.registration.errormessage 4803</td>
<td>The date range must be less than</td>
</tr>
<tr>
<td>webservice.maximum.days.get.event.errormessage 4804</td>
<td>The date range must be less than</td>
</tr>
<tr>
<td>webservice.maximum.days.get.settlement.errormessage 4805</td>
<td>The date range must be less than</td>
</tr>
<tr>
<td>webservice.maximum.days.get.compliance.errormessage 4806</td>
<td>The date range must be less than</td>
</tr>
<tr>
<td>readingsvalidation.header.missing 6001</td>
<td>First Row can not be blank.</td>
</tr>
<tr>
<td>readingsvalidation.header.numcolumns 6002</td>
<td>Number of Columns (0) provided is less than minimum number of columns (1) for this reading type.</td>
</tr>
<tr>
<td>readingsvalidation.header.columnorder 6003</td>
<td>Incorrect column order - Expected (0) instead of (1) at column position (2).</td>
</tr>
</tbody>
</table>