

Step-by-Step REST Examples for Compliance

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About this Document

The purpose of this document is to provide examples of the web service functionality available for retrieving and validating compliance records.

The information is provided for learning and demonstration only and does not represent actual compliance records or other factual event or account information.

An associated collection of sample XML files is available for download on the [DR Hub](#) home page.

The below examples are demonstrated using the PJM provided CLI tool.

Release History

Release	Date	Description
1.0.0	June 26, 2017	Initial Document Created

Retrieving Compliance Records by Registration Id

The below request retrieves compliance records by Registration ID.

PJM CLI Command File: Required for Authentication via CLI

```
%CLIENT% -s %APP_URL% -a /rest/secure/download/compliance -q registrationId=12345
```

The HTTP Equivalent (Requires Browser login to the DR Hub UI)

```
https://drhub.pjm.com/drhub/rest/secure/download/compliance?registrationId=12345
```

The response will include compliance record detail as shown below in this example.

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ns2:compliances xmlns:ns2="http://drhub.pjm.com/">
  <compliances>
    <id>1815932</id>
    <complianceDetail>
      <registrationId>1625149</registrationId>
      <zone>PSEG</zone>
      <CSP>
        <name>MYCSP</name>
      </CSP>
      <EDC>
        <name>MYEDC</name>
      </EDC>
      <startDate>2017-06-23T14:52:00.000-04:00</startDate>
      <endDate>2017-06-23T18:00:00.000-04:00</endDate>
      <eventDate>2017-06-23T00:00:00.000-04:00</eventDate>
      <dueDate>2017-08-14T23:59:59.000-04:00</dueDate>
      <status>NEW</status>
      <complianceType>LOAD_MANAGEMENT</complianceType>
      <comments/>
    </complianceDetail>
    <complianceValidation>
      <measurementMethod>Firm Service Level</measurementMethod>
    </complianceValidation>
  </compliances>
</ns2:compliances>
```

Retrieving Compliance Records with Parameters

The below request retrieves Compliance Records using additional parameters to filter the response results. We use the registration id, start date, end date and status to filter the results. You may use one or all parameters to filter the search and tailor the results.

Note : If no parameter is sent with the request, the results will default to a 100 day history.

PJM CLI Command File: Required for Authentication via CLI

```
%CLIENT% -s %APP_URL% -a /rest/secure/download/compliance/ -q registrationId=12345 -q
startDate=01-01-2016 stopDate=12-31-2016 -q status=NEW
```

When complete, a response will be returned with the compliance record details.

Here is a sample response.

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ns2:compliances xmlns:ns2="http://drhub.pjm.com/">
  <compliances>
    <id>1815932</id>
    <complianceDetail>
      <registrationId>1625149</registrationId>
      <zone>PSEG</zone>
      <CSP>
        <name>MYCSP</name>
      </CSP>
      <EDC>
        <name>MYEDC</name>
      </EDC>
      <startDate>2017-06-23T14:52:00.000-04:00</startDate>
      <endDate>2017-06-23T18:00:00.000-04:00</endDate>
      <eventDate>2017-06-23T00:00:00.000-04:00</eventDate>
      <dueDate>2017-08-14T23:59:59.000-04:00</dueDate>
      <status>NEW</status>
      <complianceType>LOAD_MANAGEMENT</complianceType>
      <comments/>
    </complianceDetail>
    <complianceValidation>
      <measurementMethod>Firm Service Level</measurementMethod>
    </complianceValidation>
  </compliances>
</ns2:compliances>
```

The above pattern will repeat for each compliance record in the search result.

Compliance Records with Errors

If a compliance record is marked incomplete and has errors, error information will be provided in the response. Pay special attention to the message in the summary section shown below. A 200 OK response viewed from the PJM CLI client window does not necessarily mean that the compliance record is valid. Always check the actual response file in the download directory.

Before a compliance record may be validated and confirmed, all dependent information and meter data must be uploaded.

Note: The uploading of Meter Data is completed via the meter data endpoints contained within the DR Hub Web Service API. Please see the DR Hub home page on information concerning Meter Data operations and examples.

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ns2:compliances xmlns:ns2="http://drhub.pjm.com/">
  <compliances>
    <id>1979154</id>
    <complianceDetail>
      <registrationId>12345</registrationId>
      <zone>DUQ</zone>
      <CSP>
        <name>MYCSP</name>
      </CSP>
      <EDC>
        <name>MYEDC</name>
      </EDC>
      <startDate>2017-03-21T19:01:00.000-04:00</startDate>
      <endDate>2017-03-21T19:45:00.000-04:00</endDate>
      <eventDate>2017-03-21T00:00:00.000-04:00</eventDate>
      <dueDate>2017-05-15T23:59:59.000-04:00</dueDate>
      <status>INCOMPLETE</status>
      <complianceType>LOAD_MANAGEMENT</complianceType>
      <comments/>
    </complianceDetail>
    <complianceValidation>
      <measurementMethod>Guaranteed Load Drop</measurementMethod>
      <summary>Meter data missing to complete compliance check for
account: 12345
Meter data missing to complete compliance check for account: 12345</summary>
      <valid>false</valid>
    </complianceValidation>
  </compliances>
</ns2:compliances>
```

Validating Compliance Records

Once a compliance record has been updated with the appropriate information and meets the requirements to confirm, a CSP may validate and confirm one or more compliance records through web services.

In the below example we validate a single compliance record. Successful validation of a compliance record will update the status of the record from Incomplete to Confirmed

REM Validating Compliance Records by Compliance Record Id

```
%CLIENT% -s %APP_URL% -a /rest/secure/download/compliance/validate -q ids=12345
```

To validate multiple Compliance Records. Ids=A comma-separated list of Compliance IDs to validate.

```
%CLIENT% -s %APP_URL% -a /rest/secure/download/compliance/validate -q ids=12345,67899,55783
```

The PJM CLI Command Window response you will receive in the PJM CLI looks like the below. Note the validate url path as it would be used in a browser window to perform the same request.

```
{  
VALIDATE URL: https://drhub.pjm.com/drhub/rest/secure/download/compliance/validate?ids=1815040  
HTTP Status = 200 OK
```

```
Output File: C:\SomeDirectory\MyPath\download\compliance_2017-XX-XX-182508.xml  
Output Size: 1 KB
```

```
Logging out...
```

```
SUCCESS (00:00:04.326)  
}
```

Always check the PJM CLI .\download directory for the actual server response as errors or additional information may be required.

When validated, the XML response for a confirmed Compliance Record will be similar to the below example.

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>  
<ns2:compliances xmlns:ns2="http://drhub.pjm.com/">  
  <compliances>  
    <id>1815516</id>  
    <complianceDetail>  
      <registrationId>12345</registrationId>  
      <zone>PPL</zone>  
      <CSP>  
        <name>MYCSP</name>
```

```
</CSP>
<EDC>
  <name>MYEDC</name>
</EDC>
<startDate>2017-06-20T17:38:00.000-04:00</startDate>
<endDate>2017-06-20T17:47:00.000-04:00</endDate>
<eventDate>2017-06-20T00:00:00.000-04:00</eventDate>
<dueDate>2017-06-22T23:59:59.000-04:00</dueDate>
<status>CONFIRMED</status>
<complianceType>SYNCHRONIZED_RESERVE</complianceType>
<comments/>
</complianceDetail>
<complianceValidation>
  <measurementMethod>AS - Sync Reserve</measurementMethod>
  <summary>All Locations have sufficient meter data.</summary>
  <valid>true</valid>
  <validAsOf>2017-06-21T16:21:36.000-04:00</validAsOf>
</complianceValidation>
</compliances>
</ns2:compliances>
```

[End of Document](#)