





MSRS Roadmap

As of September 18, 2018

Product - Action Required	Deadline	Who May Be Affected
MSRS - Update processes to use basic authentication	December	MSRS Browserless Users
MSRS - Org parameter added for SUMA requests via browserless	December	MSRS Browserless SUMA Users
		

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Browserless Authentication							●		◆ Train: Sept 20			◆ Production
SUMA Functionality										◆ Train: Oct 1		

Legend

- Start Date
- ◆ End Date



- The MSRS browserless reporting interface requires username and password in the URL. Example:

<https://msrs.pjm.com/msrs/browserless.do?report=billingreport&version=L&format=C&start=08/01/2018&stop=08/31/2018&username=YourUsername&password=YourPassword>

- Current format fully encrypted via HTTPS in transport
- However -- deprecated practice due to security issues
 - Any visible passwords create a risk

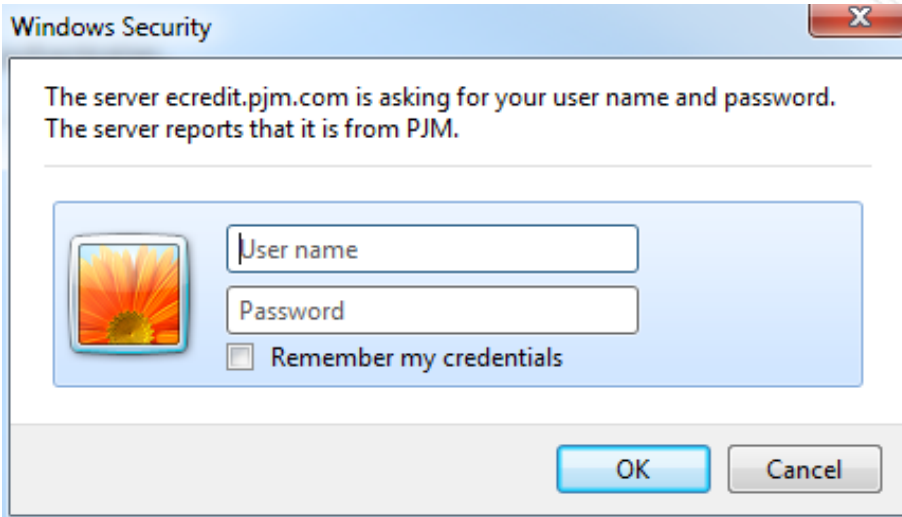
- Browserless requests must post credentials using basic authentication
- The filetransfer.jar interface will no longer work for MSRS

```
java -cp oreilly.jar;filetransfer.jar; com.pjm.FileTransfer debug=true  
username="YourUsername" password="YourPassword" app=msrs action=download  
format=x version=l report="Billing" start=01/01/2012 stop=01/31/2012 result="billing.csv"
```
- Browserless documentation will be enhanced to include more examples and FAQs

- Change will NOT be backward compatible
- Members will need to update their processes to use basic authentication
- No change to user interface logins from PJM.com and PJM Tools
- Implemented with Single User Multi-Account (SUMA) changes to allow users to make changes for both at the same time.

Impact	Action Required	Outage
User Interface	n/a	n/a
Browserless	Members will need to update their processes to use basic authentication	1 hour

Browser Popup (IE, Chrome, Firefox)



Java Code Snippet

```
public static void main(String args[]) throws IOException {
    String webURL = "https://msrs.pjm.com/msrs/browserless.do?report=arrtargetcredits&version=L&format=C&start";
    String username = "MyUsername";
    String password = "MyPassword";

    String authString = username + ":" + password;
    String basicAuth = "Basic " + javax.xml.bind.DatatypeConverter.printBase64Binary(authString.getBytes());

    URL url = new URL(webURL);
    URLConnection urlConnection = url.openConnection();
    urlConnection.setRequestProperty("Authorization", basicAuth);
    InputStream is = urlConnection.getInputStream();
    InputStreamReader isr = new InputStreamReader(is);

    int numCharsRead;
    char[] charArray = new char[2048];
    StringBuffer sb = new StringBuffer();
    while ((numCharsRead = isr.read(charArray)) > 0) {
        sb.append(charArray, 0, numCharsRead);
    }
    String result = sb.toString();

    System.out.println("**** Report Request ****");
    System.out.println(result);
    System.out.println("**** END ****");
}
```

Command Line using curl

```
$ curl -u MyUsername "https://msrs.pjm.com/msrs/browserless.do?report=billingreport&version=L&format=C&start=08/01/2018&stop=08/31/2018"
Enter host password for user 'MyUsername':
```

MSRS - SUMA Functionality

- Customer dropdown
 - Displays customer accounts in which the SUMA user has active MSRS access
- Shopping cart functional across multiple customer accounts



MSRS Report Catalog

Customer Account: PJM Test

Customer:

Report Category:

- PJMTST
- PJMT2
- PJMT3

Report

Select Report Category

File Type Start Date End Date Version View

File Type Start Date End Date Version

Select 09/13/2018 09/13/2018 Latest Apply

Apply To All Selected Reports

Download Selected Reports

Add Selected to Cart

View Shopping Cart

Shopping Cart Contains: 0 Reports

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[Feedback](#)

- Username/Password removed from the browserless request
 - All requests are impacted, not just SUMA
- Org parameter added for SUMA requests
 - Single org shortname, or “ALL”

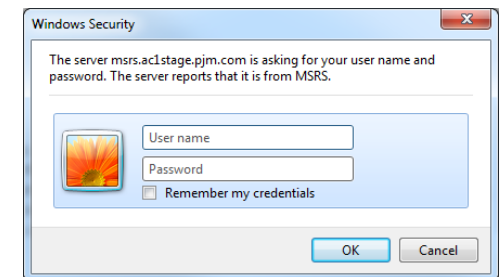
- Currently:

https://msrs.pjm.com/msrs/browserless.do?report=deferredtaxadjustmentchargesummary&version=L&format=C&start=07/01/2018&stop=07/01/2018&username=_____&password=_____

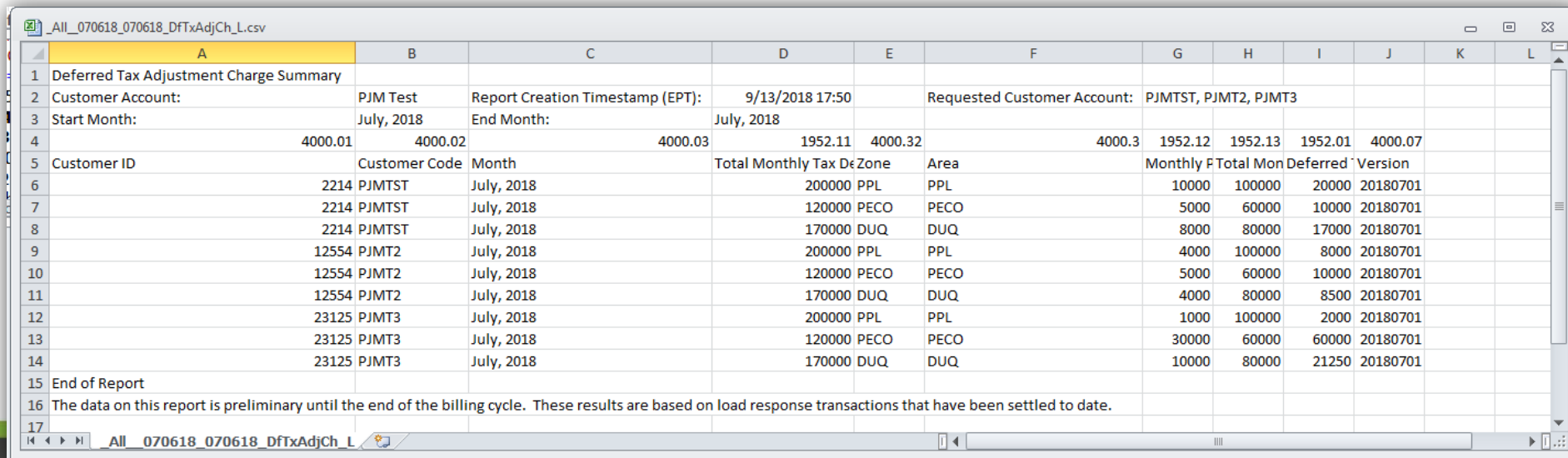
- Updated:

<https://msrs.pjm.com/msrs/browserless.do?report=deferredtaxadjustmentchargesummary&version=L&format=C&start=07/01/2018&stop=07/01/2018&org=PJMTST>

- Log in prompt



- No change to non-SUMA CSV format
- Requested Customer Account will display a comma separated list of the orgs in which the SUMA user has MSRS access
- Employer (from Account Manager) is displayed in the header as Customer Account
- Data for the requested customer accounts will appear in the body of the CSV in the sort order specified in the report documentation



Customer ID	Customer Code	Month	Total Monthly Tax De Zone	Area	Monthly F Total Mon Deferred	Version
2214	PJMTST	July, 2018	200000	PPL	10000	20180701
2214	PJMTST	July, 2018	120000	PECO	5000	20180701
2214	PJMTST	July, 2018	170000	DUQ	8000	20180701
12554	PJMT2	July, 2018	200000	PPL	4000	20180701
12554	PJMT2	July, 2018	120000	PECO	5000	20180701
12554	PJMT2	July, 2018	170000	DUQ	4000	20180701
23125	PJMT3	July, 2018	200000	PPL	1000	20180701
23125	PJMT3	July, 2018	120000	PECO	30000	20180701
23125	PJMT3	July, 2018	170000	DUQ	10000	20180701

```

<?xml version="1.0" encoding="UTF-8"?>
<MSRS xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <HEADER>
    <REPORT_NAME>Deferred Tax Adjustment Charge Summary</REPORT_NAME>
    <CUSTOMER_ACCOUNT>PJM Test</CUSTOMER_ACCOUNT>
    <REPORT_CREATION_TIMESTAMP_EPT>2018-09-13T17:57:53</REPORT_CREATION_TIMESTAMP_EPT>
    <START_DATE INTERVAL="MONTH">2018-07</START_DATE>
    <END_DATE INTERVAL="MONTH">2018-07</END_DATE>
    <REQUEST_CUSTOMER_ACCOUNT>
      <ORG>PJMTST</ORG>
      <ORG>PJMT2</ORG>
      <ORG>PJMT3</ORG>
    </REQUEST_CUSTOMER_ACCOUNT>
  </HEADER>
  <ROWSET>
    <ROW>
      <CUSTOMER_ID COL_ID="4000.01">2214</CUSTOMER_ID>
      <CUSTOMER_CODE COL_ID="4000.02">PJMTST</CUSTOMER_CODE>
      <MONTH COL_ID="4000.03">2018-07</MONTH>
      <TOT_MONTHLY_TAX_DEF_AMOUNT COL_ID="1952.11" UOM="$">200000.00</TOT_MONTHLY_TAX_DEF_AMOUNT>
      <ZONE COL_ID="4000.32">PPL</ZONE>
      <AREA_NAME COL_ID="4000.30">PPL</AREA_NAME>
      <MONTHLY_PEAK_LOAD COL_ID="1952.12" UOM="MW-days">10000.000</MONTHLY_PEAK_LOAD>
      <TOT_MONTHLY_PEAK_LOAD COL_ID="1952.13" UOM="MW-days">100000.000</TOT_MONTHLY_PEAK_LOAD>
      <DEF_TAX_ADJUSTMENT_CHARGE COL_ID="1952.01" UOM="$">20000.00</DEF_TAX_ADJUSTMENT_CHARGE>
      <VERSION COL_ID="4000.07">20180701.000</VERSION>
    </ROW>
    <ROW>
      <CUSTOMER_ID COL_ID="4000.01">2214</CUSTOMER_ID>
      <CUSTOMER_CODE COL_ID="4000.02">PJMTST</CUSTOMER_CODE>
      <MONTH COL_ID="4000.03">2018-07</MONTH>
      <TOT_MONTHLY_TAX_DEF_AMOUNT COL_ID="1952.11" UOM="$">120000.00</TOT_MONTHLY_TAX_DEF_AMOUNT>
      <ZONE COL_ID="4000.32">PECO</ZONE>
      <AREA_NAME COL_ID="4000.30">PECO</AREA_NAME>
      <MONTHLY_PEAK_LOAD COL_ID="1952.12" UOM="MW-days">5000.000</MONTHLY_PEAK_LOAD>
      <TOT_MONTHLY_PEAK_LOAD COL_ID="1952.13" UOM="MW-days">60000.000</TOT_MONTHLY_PEAK_LOAD>
      <DEF_TAX_ADJUSTMENT_CHARGE COL_ID="1952.01" UOM="$">10000.00</DEF_TAX_ADJUSTMENT_CHARGE>
      <VERSION COL_ID="4000.07">20180701.000</VERSION>
    </ROW>
    <ROW>
      <CUSTOMER_ID COL_ID="4000.01">2214</CUSTOMER_ID>
      <CUSTOMER_CODE COL_ID="4000.02">PJMTST</CUSTOMER_CODE>
      <MONTH COL_ID="4000.03">2018-07</MONTH>
      <TOT_MONTHLY_TAX_DEF_AMOUNT COL_ID="1952.11" UOM="$">170000.00</TOT_MONTHLY_TAX_DEF_AMOUNT>
      <ZONE COL_ID="4000.32">DUQ</ZONE>
      <AREA_NAME COL_ID="4000.30">DUQ</AREA_NAME>
      <MONTHLY_PEAK_LOAD COL_ID="1952.12" UOM="MW-days">8000.000</MONTHLY_PEAK_LOAD>
      <TOT_MONTHLY_PEAK_LOAD COL_ID="1952.13" UOM="MW-days">80000.000</TOT_MONTHLY_PEAK_LOAD>
      <DEF_TAX_ADJUSTMENT_CHARGE COL_ID="1952.01" UOM="$">17000.00</DEF_TAX_ADJUSTMENT_CHARGE>
      <VERSION COL_ID="4000.07">20180701.000</VERSION>
    </ROW>
    <ROW>
      <CUSTOMER_ID COL_ID="4000.01">12554</CUSTOMER_ID>
      <CUSTOMER_CODE COL_ID="4000.02">PJMT2</CUSTOMER_CODE>
      <MONTH COL_ID="4000.03">2018-07</MONTH>
      <TOT_MONTHLY_TAX_DEF_AMOUNT COL_ID="1952.11" UOM="$">200000.00</TOT_MONTHLY_TAX_DEF_AMOUNT>
      <ZONE COL_ID="4000.32">PPL</ZONE>
      <AREA_NAME COL_ID="4000.30">PPL</AREA_NAME>
      <MONTHLY_PEAK_LOAD COL_ID="1952.12" UOM="MW-days">4000.000</MONTHLY_PEAK_LOAD>
      <TOT_MONTHLY_PEAK_LOAD COL_ID="1952.13" UOM="MW-days">100000.000</TOT_MONTHLY_PEAK_LOAD>
      <DEF_TAX_ADJUSTMENT_CHARGE COL_ID="1952.01" UOM="$">8000.00</DEF_TAX_ADJUSTMENT_CHARGE>
      <VERSION COL_ID="4000.07">20180701.000</VERSION>
    </ROW>
  </ROWSET>
</MSRS>

```

- No change to non-SUMA XML format
- <REQUEST_CUSTOMER_ACCOUNT> tag added to header for SUMA requests
- Rows for requested customer accounts will appear in the <ROWSET> of the XML in the sort order specified in the report documentation

- Some reports will not be SUMA enabled
 - Non-org specific reports
 - CSV/XML for Weekly and Monthly Invoice
 - PJM will create new versions with normalized report formats, similar to other reports
- Some reports will have a limit to the maximum number of accounts tied to the user
- MSRS Report Dictionary will be updated to display relevant SUMA information

- Target 10/1 for Train environment for participants
 - Documentation will be available before 10/1
- Education Session(s) in October



Product Details

[Market Settlements Reporting System](#) (MSRS) is a tool used by market participants to retrieve market settlements reports and monthly billing statements.

Key Product Features

- 200+ settlement reports
- Provide settlement and billing details
- Viewable in the browser
- CSV and XML download capability