Markets Gateway

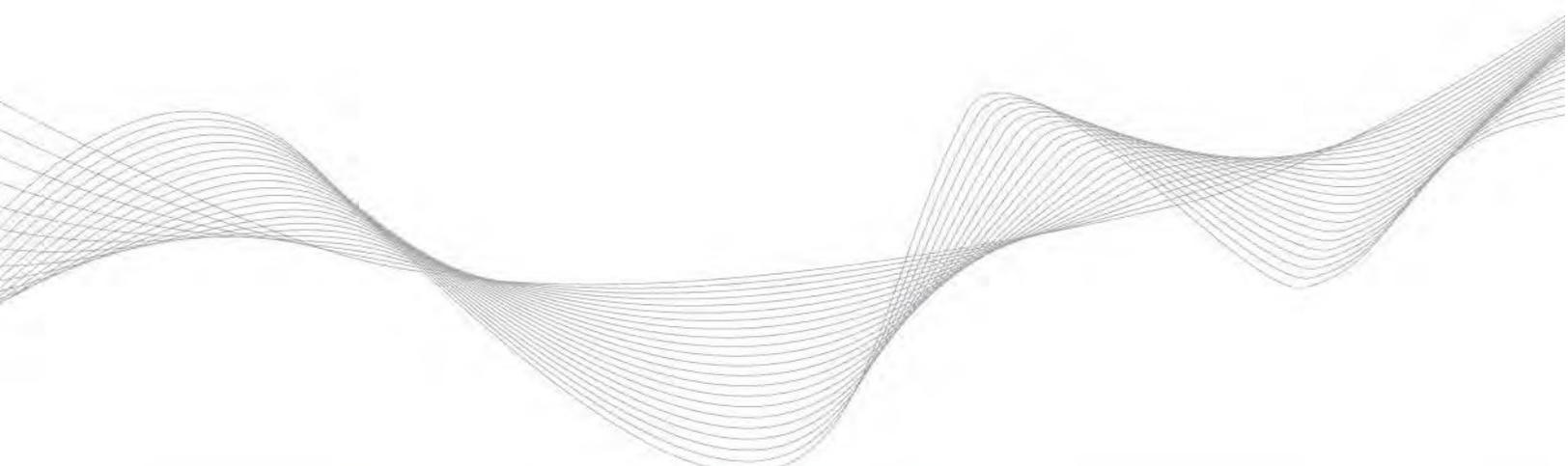## Quick Start Guide

Revision History

1/29/15 –

- **Updated production Authentication steps and cookie name**
- **Added FAQ regarding updates to the Production WSDL**
- **Incorporated the link to the Copy/Paste & Entering Data tutorial in section II**

Table of Contents

I. **FAQ:** *What you need to know about the eMKT to Markets Gateway transition*

- **How do I access Markets Gateway in the Sandbox?**

    o Markets Gateway can be accessed via PJM Tools or by following the Sign In or Register links on the PJM website at Markets & Operations > PJM Tools > Markets Gateway.

        ▪ Production URL: https://marketsgateway.pjm.com/marketsgateway/pages/secure/

        ▪ Production Web Service URL : https://marketsgateway.pjm.com/marketsgateway/xml/query or https://marketsgateway.pjm.com/marketsgateway/xml/submit

        ▪ Sandbox URL: https://marketsgatewaytrain.pjm.com/marketsgateway/pages/secure/

        ▪ Sandbox Web Service URL : https://marketsgatewaytrain.pjm.com/marketsgateway/xml/query or https://marketsgatewaytrain.pjm.com/marketsgateway/xml/submit

- **Will users need to request additional access to Markets Gateway in the Sandbox and Production or will those who already have access to eMKT in the Sandbox and Production be able to access Markets Gateway in the Sandbox and Production?**

    o Users that have eMKT Sandbox access will automatically have Markets Gateway Sandbox access.

    o Users with existing production eMKT Access will automatically have access to Markets Gateway on the day the application goes live.

- **Did any business rules change in the implementation of Markets Gateway?**

    o No. No changes to the business rules were implemented with the development of Markets Gateway.

- **Are there changes to browserless access?**

    o While the core functionality has not changed, there is an additional authentication step that will be required to access browserless functionality in Markets Gateway.

        ▪ This new browserless authentication method is being implemented in part to adhere to security standards at PJM that benefit the end users and provide an enhanced level of security.

        ▪ This authentication method is **not specific** to Markets Gateway but is part of a larger security initiative at PJM that will ultimately affect all PJM Tools.

        ▪ Browserless requests need to be authenticated at least every 8 hours in order to use the Web services. *(failure to adhere to this standard will result in a failure of your request).

            *Note - if a token remains unused for more than 30 minutes the token becomes inactive and a new one will need to be requested.

- Detailed instructions on how to incorporate the new authentication method are available in the Java Browserless Authentication Guide: http://www.pjm.com/~/media/etools/pjm-browserless-authentication-guide.ashx . This must be completed before you are able to call the Web service.

- Once authenticated and a token received, you need to incorporate that token into the service calls. *(Example of the POST/Response below, Username/Password fields highlighted to add your own, Token field incorporation in the 2nd step of the process highlighted.)

1) Authenticate:
*(For Sandbox)
curl -X POST -H "X-OpenAM-Username: username " -H "X-OpenAM-Password: password " -H "Content-Type: application/json" -d '{}' 'https://ssotrain.pjm.com/access/authenticate/'

**(For Production)
curl -X POST -H "X-OpenAM-Username: username " -H "X-OpenAM-Password: password " -H "Content-Type: application/json" -d '{}' 'https://sso.pjm.com/access/authenticate/'

1b) Response:
*(Response format same for Sandbox & Production)
```
{
  "tokenId": "( TOKEN )",
  "successUrl": "/openam/console"
}
```

2) Send XML Document to Markets Gateway:
*(Note – Cookie parameter for Sandbox = *pjmauthtrain*, for production = *pjmauth*)
*(Note – url at the end of the query is the Sandbox url. For production replace "marketsgatewaytrain" with "marketsgateway")

```
curl -X POST -H "Content-Type: text/xml" -H "Cookie: pjmauthtrain= "( TOKEN )"-d
'<Envelope xmlns="http://schemas.xmlsoap.org/soap/envelope/">
    <Body>
        <QueryRequest xmlns="http://emkt.pjm.com/emkt/xml">
                <QueryDispatchLambda day="2014-01-07">
                        <LocationName>96915103</LocationName>
                </QueryDispatchLambda>
        </QueryRequest>
    </Body>
</Envelope>'
'https://marketsgatewaytrain.pjm.com/marketsgateway/xml/query'
```

2b) Response:

```
<?xml version='1.0' encoding='UTF-8'?>
<Envelope xmlns="http://schemas.xmlsoap.org/soap/envelope/">
```

```
        <Body>

            <QueryResponse xmlns="http://emkt.pjm.com/emkt/xml">
                <DispatchLambdaSet/>
            </QueryResponse>
        </Body>
    </Envelope>
```

- o To minimize impacts to existing customer code, the namespace referenced in all XML calls has not changed.

- o The application should use the same emkt namespace (the xmlns part of the XML) for the query. In other words the emkttrn.pjm.com designation should only be specified in the POST and HOST commands and not changed in the xmlns string within the XML itself.

- **Are there changes to the production WSDL?**
  - o **Yes, You will need to update the** "soap:address location" **in the section defined below:**

```xml
<!-- Define service for the web service using the soap binding. -->
    <service name="MarketSubmitService">
        - <port name="MarketSubmitService" binding="tns:MarketSubmitSoapBinding">
                <soap:address location="https://marketsgateway.pjm.com/marketsgateway/xml/submit"/>
        </port>
    </service>
    <service name="MarketQueryService">
        - <port name="MarketQueryService" binding="tns:MarketQuerySoapBinding">
                <soap:address location="https://marketsgateway.pjm.com/marketsgateway/xml/query"/>
        </port>
    </service>
</definitions>
```

- **What browsers does Markets Gateway support?**

  - o Markets Gateway supports
    - Internet Explorer 9 & forward
    - Current version of Chrome
    - Current version of Firefox
    - Current version of Safari

- **Who should I contact if problems arise?**

  - o Please contact Markets Gateway Support (MarketsGatewaySupport@pjm.com) or the Member Support Hotline at 610-666-8980 or 866-400-8980 and they will transfer your question or issue to the appropriate organization and ensure you receive a reply.

II. Operation: *How to perform basic application functions*

Markets Gateway maintains the same functionality as eMKT, but users will notice some differences when navigating the application:

1) The "Add" button found on various screens has been replaced with a menu accessed via a right click. When on a screen that requires a new record to be entered, right click in the data section to access the menu displayed below.

For more information on the new right click functionality please review the following Tutorial:

[Tutorial: Copy/Paste or Entering Data](#)

2) The "Get Report" and "Get CSV Report" buttons that allow users to download CSV or XML files of the screen's data have been replaced with "CSV" and "XML" icons respectively.

3) The "Submit" button used to save changes has been renamed to "Save."

III.   Navigation Map: *Where it was in eMKT and where it is now*

Markets Gateway is organized into sections featuring primary and secondary level menus on a left side navigation bar. While the functionality of the four major components utilized in eMKT—Public, Generator, Demand, and Administration—is inherent in Markets Gateway, the new structure better groups together market tasks. Similar to eMKT, Markets Gateway also uses tabs for each menu item.

IV. Content Path Reorientation: *Where can I locate moved content?*

The following listed paths are content areas that have moved to different locations within the applicationor received a more noticable name change. Items that have remained on the same navigation path that may have had a slight name change are excluded from this list (e.g. previous abbreviations now extended and some content becoming abbreviated such as "DA" now being "Day Ahead"). This primarily impacts the Public section which remains most similar to the eMKT version. The information below has been categorized by access role. Items that are shared across multiple roles are listed first, the remaining content is role-specific:

	Functions that have either moved locations or been renamed	
	eMKT Path	**Markets Gateway Path**
Generator OR Demand	Regulation Market -> Regulation Bilaterals	Bilaterals -> Regulation Bilaterals
	Synchronized Reserve Market ->Synchronized Reserve Bilaterals	Bilaterals -> Synchronized Reserve Bilaterals
	Nonsynchronized Reserve Market -> Nonsynchronized Reserve Bilaterals	Bilaterals -> Non-synchronized Reserve Bilaterals
	DA Scheduling Reserve Market -> DA Scheduling Reserve Bilaterals	Bilaterals -> Day-Ahead Scheduling Reserve Bilaterals

Generator	Generator -> Weather Forecast	Weather Forecast *(content moved to its own primary menu)*
	Generator -> DA Scheduling Reserve Market -> DA Scheduling Reserve Offers	Generator -> Day-Ahead Scheduling Reserve Market
	Generator -> Parameter Limits *(content and sub-navigation included)*	Parameter Limits *(content moved to its own primary menu)*
	Generator -> Interface Pricing *(content and sub-navigation included)*	Interface Pricing *(content moved to its own primary menu)*
	Generator -> Opportunity Cost Calculator *(content and sub-navigation included)*	Opportunity Cost Calculator *(content moved to its own primary menu)* -> Future Fuel Delivery *(New Content Section)*

Load	Demand -> DSR -> Offers & Parameters	Demand Response -> Demand Response -> Offers Demand Response -> Demand Response -> Parameters
	Demand -> Market Results -> Demand Market Results Demand -> Distribution Factors -> Distribution Factors Demand -> Day Ahead Demand -> Demand Bids	Demand -> Market Results Demand -> Distribution Factors Demand -> Day-Ahead Demand Bids *(Navigation simplified/combined under "Demand" Menu*

	Demand -> PRD
	    -> Response Curve
	    -> Hourly Data
		Price Responsive Demand
		    -> Response Data
		    -> Hourly Data

	Demand->DSR *(content and sub-navigation included)*	Demand Response -> Demand Response *("Offers" & "Parameters" separated as individual content)*

Admin	Admin -> XML
	    -> Query Upload
	    -> Submit Upload
	    -> Query by Transaction Upload
	    -> Transaction Log
	Admin -> Portfolio Manager
	    -> Portfolios
	Admin -> User Setup
	    -> Configure Parameters
		Utilities
		    -> XML Upload
		    -> Portfolios
		    -> Threshold Settings
		    -> Transaction Log
		
		(All Administrative functions moved to "Utilities" menu)