

# IESO Report Access and Interfaces

Demand Response Working Group

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# Purpose

- To provide an overview of existing IT capabilities of IESO systems
- This presentation in response to the 2017 DRWG work plan item on Automated Standby/Activation Notice for HDR resources

# Background

- Under the Capacity Based Demand Response (CBDR) program, which transitioned DR3 resources into the IESO market, the IESO continued the DR3 program's practice of issuing standby and activation notices through email
  - CBDR program is a transitional program that is set to terminate in 2018
- For the HDR resource, the IESO moved away from notifying participants by email to publishing private reports for participants on the IESO site
  - Consistent treatment for other IESO market participants
  - Publishing private reports on the IESO site is more secure and reliable than sending email

# Background

- Over 2016, DRWG members identified automated push of standby and activation notices as helpful to manage the day-to-day operation of their HDR resource(s)
  - Added as a 2017 DRWG work plan item
- Previously, IESO responded to this stakeholder feedback by advising that IESO systems do allow the flexibility for participants to build their own custom solutions to meet their needs
- This presentation provides an overview of the capabilities available from the IESO systems

# Access to Public Reports

- IESO publishes public reports to provide participants with public information on the energy market
- Reports that may interest DRMPs include:
  - Adequacy report
    - Publishes the forecast supply and demand conditions on an hourly basis
  - Pre-dispatch Market Price report
    - Displays the pre-dispatch unconstrained Ontario price on an hourly basis
  - Pre-dispatch Shadow Price report
    - Displays the pre-dispatch constrained prices for various pricing nodes including the HDR resources
- Reports can be downloaded in XML format, some reports can be downloaded as a CSV file
- Available through <http://reports.ieso.ca/>

# Access to Private Reports

- IESO publishes confidential reports for each participant to provide private market information
- IESO private reports include:
  - Post-Auction Participant report
    - Publishes the participant's results from the DR Auction
  - DR Standby report
    - Signals to the participant whether they are issued a Standby Notice
  - DR Activation report
    - Notifies the participant if their resource is activated
- These reports can be downloaded in XML format
- These reports are available through:  
<https://reports.ieso.ca/private/>

# Remote Access to Private Reports

- In addition to accessing private participant reports through the IESO website, The IESO provides the following remote access options:

## 1. Web API

- Assist participants in building programmatic access for the retrieval of confidential/private reports
- The production URL is: <https://reports.ieso.ca/>
- The sandbox URL is: <https://reports-sandbox.ieso.ca/>

## 2. SFTP

- Requires software which uses the SFTP protocol to transfer files securely to and from a computer
- The production URL is: [reports.ieso.ca/](https://reports.ieso.ca/)
- The sandbox URL is: [reports-sandbox.ieso.ca/](https://reports-sandbox.ieso.ca/)

# Access Interface - Web API

- Allows for programmatic retrieval of confidential/private reports
- API is provided by the SecureTransport product from Axway
  - Based on RESTful API queries
  - Takes both JSON and XML as input, and can output either JSON or XML
- Must have a valid user name and password
  - upon request the IESO shall provide the market participant with a machine account
- Basic concepts of the HTTP/HTTPS access protocol will need to be understood



# Access Interface - Web API

- Example of Commands
  - List all directories and files in user's home folder
  - List all directories and files in user's subfolder
  - Get Properties of a file
    - lastModifiedTime
    - lastAccessTime
    - isSymbolicLink
    - Size
    - fileKey
    - isDirectory
    - Filename
    - creationTime
  - Download a file

# Access Interface - SFTP

- Does not require programming to retrieve reports
- Can use third party SFTP application
- Must have a machine account to access the IESO Reports Sandbox
- Download and install the software which uses the SFTP protocol to transfer files securely to and from a computer
- Configure your firewalls to allow SFTP connections

# Questions?

- For more information on IESO participant interfaces, please see:

<http://www.ieso.ca/en/sector-participants/technical-interfaces>

- Questions can be sent to IESO Customer relations: [customer.relations@ieso.ca](mailto:customer.relations@ieso.ca)