**MISUG External Web Services (EWS) Modification**

**Workshop II**

**AGENDA**

**MISUG External Web Services (EWS)**

**Modification Workshop II**

**March 30, 2015;** **1:00 PM - 4:00 PM**

**ERCOT Austin**

Room 206

7620 Metro Center Dr.

Austin, TX 78744

[**WebEx Conference**](https://ercot.webex.com/ercot)

Teleconference: 877-668-4493

Meeting number: 657 149 302

Meeting password: Workshop

Attendees

Julie Thomas – Luminant

Kaci Jacobs – TXU Energy

Daniel Spence – DME

Michael Juricek – Oncor

Paari Sivaprakasam – Austin Energy

Jim Lee – AEP

Carolyn Reed – CenterPoint

Tru Robertson – Garland P&L

Jamie Lavas – ERCOT

Lloyd Prichard – ERCOT

Susan Jinright – ERCOT

Ted Hailu – ERCOT

Brian Brandaw – ERCOT

WebEx Attendees

Amanda Gendke – TPIC

Alfonso Dafonseca – TRWD

Arturo Madrid - TNMP

Brandi Marshall – Infigen

Brett Turner – Yes Energy

Brian – Gungston Power

Brock Carter – Austin Energy

Brett David – CPS Energy

Dave Pagliai – ERCOT

David DeFazio – CPS Energy

David Detelich – CPS Energy

David Fimble – CenterPoint

David Talley – CPS Energy

Debbie McKeaver – Oncor

Enrique Colet – Third Planet Wind Power

Gary N. – Fayette Electric Co-op

Girisha Sivaraman – EFH

Haibo You – Austin Energy

Hemant Tailor – Luminant

J Peguero – Great Bay Energy

Jaclyn Hodge – EFH

James Bostwick – ERCOT

Jane Cates – ERCOT

Janet Peck – BHE Renewables

Jason Wright– Ambit Energy

Jayasree Kannala - CenterPoint

Jen Davis – ConEd Energy

Jeremy Hunter – Duke

Jesse Reyes – Luminant

Joe Dan Wilson – GSEC

Johannes Eggers - Konektiv

John McIver – CPS Energy

John Shewchuk – APX  
Josh Adams – TRWD

Justin Mercier – Denton

Karen Farley - ERCOT

Lakshmi Gorantla – Direct Energy

Lindsay Butterfield – ERCOT

Lori Williams – BT Utilites

Luis Moux – Great Bay Energy

M.A. - BHE Renewable

Madjid Zehani - LCRA

Michael Goldstein - Invenergy

Mick Morton – CapGemini

Mike Perterson - LCRA

Ming Shen – LCRA

Monica Mitchell - Midamerican

Murali Sithuraj – Austin Energy

Naga Raju – ERCOT

Nan Swan – Freepoint

Patrick Coon – ERCOT

Paulette Heuer – LS Power

Phyllis Castillo – Konektiv

Priya Raj – ABB

Rene Colon – Great Bay Energy

Rob Watson - Purenergy

Ruwan Rodrigo – Tenaska Power Services

Sachin Jasani – Red Wolf Energy Trading

Sasi – Vitol

Sharon Higgins – Duke

Sherry Looney – Luminant

Stephen Jun – Crescent Power

Steven Schultz – LCRA

Suma Rani – CenterPoint

Susan Jinright - ERCOT

Thayil Thomson – PCI

Tim Van Hooser – Verdeenergyusa

Todd Oliver – Brazos Electric

Tom Paff – Duke

Tony Kroskey – Brazos Electric

Tracy Richter – ERCOT

Tyson Boatler – GSEC

Utpal Dhar – Vitol

Yan Zhang - CCI

Young Chen – OATI

1. Recap and Overview (15 min) –
   1. There were several problematic reports identified and change requests have been opened to address those issues. These proposed changes are not fully functional but in general ERCOT could open an SCR for that effort.
   2. Purpose is to continue to stimulate the discussion for what the Market wants to see and what is viable for Market Participants. An open source version of client software could be made available to general public and would be leveraged if API available or not and coding would still be required through an interactive interface for registered Market Participants. All public reports are also available on MIS.
   3. These potential solutions would be available for all reports, with different options for public and secure.
2. Demonstrations – Current solution reviewed, process flow on slide 8 of deck presentation with 3 ways to access the integration, Public, MIS User, and EWS User.
   1. A new service to return the last report date/time for a requested Report ID (30 min) –slide 9
      * Reflects with a payload of a single element that works for public, secure and certified content; currently built and would require caching data for performance in order to roll out into production; logic validates DUNS against content for authorized users; report shows a date time stamp of the last report that was retrieved/published for the client to keep track. This does not tell you there is a new report available. JMS would be the source for this data and would live behind a transaction broker. ERCOT could expose JMS queues for managing traffic inbound, if MPs are interested. ERCOT does have a question to their vendor on licensing impact to ERCOT but TIBCO shops would be able to connect easily. MPs without TIBCO can use JAVA and .Net clients available to perform the same way.
      * Web service. This service will live behind a transmission broker, they could expose JMS queues for traffic rather than HTTP
   2. Notifications for publication of a report (30 min) – slide 10, 13
      * This model supports “Push” content of any report ID that exists in MIS, use the EMIL document and filter every EMIL report number to identify the reports that could be obtained this way. The MIR database has been replaced with ICE and is the backend repository for many reports on MIS and ERCOT.com.
      * A notification would be provided, for all current day reports, as well as post-DAM report. Some listeners are over separate servers with MPs. A listener for general notifications creates a new URL might be an option. Uses REST/JSON over HTTP or XML over JMS Topic. Does not work well especially with email delays and time sensitive data that is being expected on pricing.
      * Does this have to come back through the ListServe? Email is not a good data transport and ERCOT would not want to go through this option of delivery.
      * How do MPs want the data?
      * Do MPs want to see reports delivered this way?
      * How large of a report would MPs want? Certain data sets are unrealistic for pushing
   3. Management of Public report content via Amazon S3 (30 min) – slide 14
      * Public content in public cloud – unregulated traffic to obtain report content has opportunities. This would be for public read only data bucket with no change to secured model. No functional change to registered MPs, to retrieve contact the same way, but it would come from AmazonS3 which notifies via “push” when report is published using HTTP, HTTPS, and SNS. The unconstrained load can be off loaded and easy retrievable, not limited to ERCOT services to retrieve.
      * Notifications via Amazon SNS could have a subscription service where reports are funneled into Amazon S3, obtained through a public site, which can be used by general public to create subscription for notification of report being published without having to interfere in MP behaviors. This would not substitute internal notifications.
      * Notifications may be obtained through either email, Amazon or other communication user prefers. This supports HTTP/HTTP, email, and SMS messages and allows for integration with other Amazon components pushing into queues.
      * Existing MPs would continue to obtain reports the same way for public content and there would be no change. The change would be on ERCOT’s side to place content in Amazon allowing content to be pushed to MP instead of retrieving from ERCOT except for an Amazon account if the MP chose.
      * What kind of protection is built into this to prevent bad actors obtaining information though this Amazon service? ERCOT would be pushing content into a data bucket and is secured in a similar way Web Services is secured to Market Participants. There would be no mechanism for Amazon to reach in and pull out information.
      * What about protection from viruses? Bucket would be read only and no one would be able to modify the outbound data. Data would not be retrieved from ERCOT. There is face value trust that there would not be viruses into the data pushed out.
      * What is the cost to MPs for this public solution? Cost Benefit Analysis is yet to be done, but it would be a net benefit and less expensive to maintain than constantly spinning discs and running CPU.
      * Whose budget would this come out of? It would come out of ERCOTs operating budget if not pushed through as a Market project. If put in through an ERCOT project it would go through the stakeholder services process. ERCOT would be required to come back with Impact Analysis and included in Troy’s discussions for PPL. ERCOT has an internal budget to maintain if O&M driven.
      * Could there be challenges using the Amazon vendor? This was to create a new set of interfaces for public data and no change for MPs.
      * Would pushing data out to Amazon be a challenge for ERCOT stakeholders to accept? It is not expected that this would cause dispute. All content would still be made available on ERCOT.com and MIS.
   4. **Streaming solution** - in the works, ERCOT will be able to demonstrate in the future.
3. Consensus of options to obtain reports
   * JMS to subscribe to a topic
   * Notification push subscription for only the ones an MP requires
   * EMIL reports available through MIS and ERCOT .com would be made available through these services
   * Amazon S3 for public reports only
4. Next Steps and Action Items –
   * A survey will be sent out to all attendees at both workshops. ERCOT will review survey results and come forward with recommendations and options based on communications received.
   * Presentation material to be compiled regarding what is being discussed today for the next meeting.

All questions regarding this workshop and potential solutions should be sent to Marketinfoservices@ERCOT.com

Future External Web Services Modification discussion to be held at the next MISUG meeting scheduled April 29, 2015.