

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Increasing Market and Planning Efficiency through
Improved Software

Docket No. AD10-12-008

NOTICE OF TECHNICAL CONFERENCE:
INCREASING REAL-TIME AND DAY-AHEAD MARKET EFFICIENCY
THROUGH IMPROVED SOFTWARE

(March 9, 2017)

Take notice that Commission staff will convene a technical conference on June 26, 27, and 28, 2017 to discuss opportunities for increasing real-time and day-ahead market efficiency through improved software. A detailed agenda with the list of and times for the selected speakers will be published on the Commission's website¹ after April 28, 2017.

Staff has held seven similar conferences in this docket. As in past conferences, this conference will bring together experts from diverse backgrounds and experiences, including electric system operators, software developers, government, research centers and academia for the purposes of stimulating discussion, sharing information, and identifying fruitful avenues for research concerning the technical aspects of improved software for increasing efficiency. This conference is intended to build on the discussions initiated in the previous Commission staff technical conferences on increasing market and planning efficiency through improved software. As such, staff will be facilitating a discussion to explore research and operational advances with respect to market modeling that appear to have significant promise for potential efficiency improvements. Broadly, such topics fall into the following categories:

- (1) Improvements to the representation of physical constraints that are either not currently modeled or currently modeled using mathematical approximations (e.g., modeling voltage and reactive power through alternating current (AC) optimal power flow modeling, modeling contingencies or events beyond first contingencies);
- (2) Consideration of uncertainty to better maximize expected market surplus (e.g., stochastic modeling, or other improved modeling approaches to energy and reserve dispatch that efficiently manage uncertainty);

¹ <http://www.ferc.gov/industries/electric/indus-act/market-planning.asp>.

- (3) Improvements to the ability to identify and use flexibility in the existing systems (e.g., optimal transmission switching, active or dynamic transmission ratings, transmission constraint relaxation practices, and modeling ramping capability needs);
- (4) Improvements to the duality interpretations of the economic dispatch model, with the goal of enabling the calculation of prices which represent better equilibrium and are more incentive-compatible;
- (5) Limitations of current electricity market software due to its interaction with hardware; and
- (6) Other improvements in algorithms, model formulations, or hardware that may allow for increases in market efficiency.

Within these or related subject areas, we encourage presentations that discuss best modeling practices, existing modeling practices that need improvement, any advances made since last year's conference, or related perspectives on increasing market efficiency through improved power systems modeling.

The technical conference will be held at the Federal Energy Regulatory Commission headquarters, 888 First Street NE, Washington, DC 20426. All interested participants are invited to attend, and participants with ideas for relevant presentations are invited to nominate themselves to speak at the conference.

Speaker nominations must be submitted on or before April 7, 2017 through the Commission's website² by providing the proposed speaker's contact information along with a title, abstract, and list of contributing authors for the proposed presentation. Proposed presentations should be related to the topics discussed above. Speakers and presentations will be selected to ensure relevant topics and to accommodate time constraints.

Although registration is not required for general attendance by United States citizens, we encourage those planning to attend the conference to register through the Commission's website.³ We will provide nametags for those who register on or before June 16, 2017.

² The speaker nomination form is located at <https://www.ferc.gov/whats-new/registration/real-market-6-26-17-speaker-form.asp>.

³ The registration form is located at <https://www.ferc.gov/whats-new/registration/real-market-6-26-17-form.asp>.

We strongly encourage attendees who are not citizens of the United States to register for the conference by June 2, 2017, in order to avoid any delay associated with being processed by FERC security.

The Commission will accept comments following the conference, with a deadline of July 31, 2017.

There is an “eSubscription” link on the web site that enables subscribers to receive email notification when a document is added to a subscribed docket(s). For assistance with any FERC Online service, please email FERCOnlineSupport@ferc.gov, or call (866) 208-3676 (toll free). For TTY, call (202) 502-8659.

A WebEx will be available. Off-site participants interested in listening via teleconference or listening and viewing the presentations through WebEx must register at <https://www.ferc.gov/whats-new/registration/real-market-6-26-17-form.asp>, and do so by 5:00 PM EST on June 16, 2017. WebEx and teleconferencing may not be available to those who do not register.

FERC conferences are accessible under section 508 of the Rehabilitation Act of 1973. For accessibility accommodations please send an email to accessibility@ferc.gov or call toll free (866) 208-3372 (voice) or (202) 502-8659 (TTY), or send a fax to (202) 208-2106 with the required accommodations.

For further information about these conferences, please contact:

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