

2015 IRP Contemporary Issues Technical Conference
hosted by the Indiana Utility Regulatory Commission

The IRP Contemporary Issues Technical Conference is scheduled for **Tuesday, September 1, 2015, 9:00 a.m. – 4:00 p.m., in Conference Room C, Indiana Government Center South, 302 W. Washington Street, Indianapolis, Indiana 46204**. Note that this is a different room from where the technical conference was held last fall. Please provide suggested **topics to be included on the agenda and possible speakers by Monday, July 20, 2015** – see information below.

As you are aware, the Integrated Resource Plan (IRP) rulemaking was on hold due to the rulemaking moratorium. The Indiana Utility Regulatory Commission (IURC or Commission) is starting the rulemaking process in response to P.L. 246-2015 (SEA 412-2015). We have appreciated the efforts of Indiana utilities to comply with the draft Proposed Rule (from October 2012 – see this document at [ADD LINK to website]) and until such time as a new rule is in effect. To that end, Duke Energy Indiana (Duke), Indiana Michigan Power Company (I&M), Indiana Municipal Power Agency (IMPA), and Wabash Valley Power Association (WVPA) filed IRPs in 2013 and Hoosier Energy Rural Electric Cooperative (Hoosier Energy), Indianapolis Power & Light Company (IPL), Northern Indiana Public Service Company (NIPSCO), and Southern Indiana Gas & Electric Company (SIGECO or Vectren) submitted IRPs in 2014.

In keeping with the spirit of compliance with the draft Proposed Rule, and pursuant to Section 2.2 of that Rule, the IURC and its staff will be hosting the third annual Contemporary Issues Technical Conference to help identify timely issues and encourage the identification and adoption of best practices. The agenda of the technical conference will be set by the commission staff with input from interested parties and utilities. We look forward to receiving your suggestions of specific contemporary issues for the agenda and possible speakers.

To refresh your memory, here is the list of speakers and a general description of their topic from last year's Contemporary Issues meeting:

1. *The Smart Grid's Role in Integrated Resource Planning* - Paul Alvarez (Wired Group)

Indiana Senate Bill 560 encourages Indiana's electric utilities to upgrade their distribution infrastructures. Many if not most utility proposals will include smart grid capabilities that offer significant potential value through enhanced customer efficiency, demand response, and accommodation of distributed generation. This presentation will cover IRP-related smart grid capabilities -- including time-of-use rates, prepayment, integrated volt-VAr control, and distributed energy resource management -- with a focus on how they work, issues that limit value creation, and options available to address the limiters.

2. *DSM on a Comparable Basis with other Resources* - Dr. Marty Kushler (American Council for an Energy-Efficient Economy - ACEEE)

This presentation provided an overview of the concept and demonstrated experience with energy efficiency as a utility system resource. Drawing on successful examples in other states, suggestions for 'best practices' approaches for Indiana were offered. This included the areas of program evaluation, resource planning, and regulatory policy.

3. *A Customer Balanced DSM Cost Perspective and Methodology* – Tate Ayers (IPL)

Energy Efficiency Demand Side Management (DSM) has been trying to find its place in Indiana's electric utility resource planning for over 25 years. Its unique characteristics make for a difficult comparison to supply side resources, yet that economic comparison needs to be made to the benefit of all utility customers. This presentation looked at the key customer-focused resource planning objectives, cost effectiveness and rate impacts, and worked to derive a single DSM metric to balance those objectives. While there is no right answer, the intent is to provide both perspective and methodologies to assist in finding a balanced DSM solution that is both "consistent and comparable" and meets the same key objectives as supply-side resources.

4. *Load Forecasting* - Dr. Doug Gotham (SUGF)

What is the appropriate method of forecasting? What drivers should be used? What about the assumptions behind the future values of those drivers? Is there an appropriate level of granularity? How much historical data should be used in formulating a model? The discussion will include these considerations, along with the relative advantages and disadvantages of different forecasting methods.

5. *Economic Trends Influencing Future Load Growth* - Chad Burnett (AEP)

It's easy to say that load isn't growing as fast as it used to. It's probably more important to understand the reasons why. This presentation exposed the underlying economic and demographic forces occurring today that help explain why forecasts of future load growth tend to be slower than historical experience.

Distributed Energy Technologies in a Modernized Grid: Benefits, Costs, and Issues - Stan Hadley (Oak Ridge National Laboratory)

Recent and projected advances in distributed energy technologies (photovoltaics, wind, storage, demand response, smart meters) have expanded the interest and growth in power generation "at the edge of the grid". As costs have come down, more customers and third parties have looked to add this capacity. The technologies have benefits for the grid and customer, but also added costs or other difficulties. How do these benefits and costs get measured and addressed by the grid owners?

The presentations for the 2014 Contemporary Issues meeting can be found on the Electricity Division portion of the Commission's website at: <http://www.in.gov/iurc/2809.htm>

A good place for potential agenda ideas might be the Electricity Division Director Final Report on the four 2014 IRPs prepared pursuant to the draft IRP rule. The report can also be found on the Commission website at: <http://www.in.gov/iurc/2630.htm>

To jump start the discussion of potential agenda items, staff puts forward the following for your consideration:

1. How to improve the IRP stakeholder process
 - o Utility expectations ("it's our plan")
 - o Stakeholder expectations
 - o How to broaden participation

- How to elicit input
 - Is additional education needed? If so, what?
 - Basic definition of terms and concepts such as “base case,” “portfolio,” “scenario,” “sensitivities”
 - How should scenarios and sensitivities be constructed?
 - More information about RTOs and how utility planning integrates with RTO planning?
 - Load forecasting concepts (e.g., forecasting industrial usage, incorporating price elasticity...)
2. How can we treat energy efficiency, demand response, and other customer-owned resources (e.g., CHP) on as comparable a basis as possible to traditional resources? To what, extent does the lack of comparability affect the analysis? Some utilities have remarked that, once the low-hanging fruit has been captured, additional energy efficiency will be much more expensive. However, are there lessons to be learned from other regions that continue to increase EE and apparently on a cost-effective basis?
 3. What is the appropriate inclusion of probabilistic analysis into the IRP process to augment current scenario and, often, deterministically based analysis?
 4. What is the current state-of-the-art in long-term planning models (e.g., co-optimization, greater use of probabilistic analysis, modeling more discrete time frames to better model EE, DR, customer-owned generation, energy storage).
 5. What can be done to improve load forecasting processes?
 - a. Especially with the increased concerns for Resource Adequacy and the potential CPP regulations, what is the value to improved load forecasting?
 - b. What can be done to improve the treatment of price elasticity in the forecast?
 - c. Should EE, DR, Customer-owned generation be treated as a load reduction or a resource? What are the implications of either treatment?
 6. What can be done to improve planning data bases (e.g., AMI / Smart Grid, more use of public data...)?
 7. While there is still likely to be considerable uncertainty regarding Clean Power Plan (CPP) compliance, what are the initial thoughts regarding changes, if any, that need to be made to energy efficiency programs, demand response initiatives, and including customer-owned generation in response to the CPP? For example, if energy efficiency, demand response, and customer-owned generation are compliance measures, will we need to make improvements to EM&V?

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Please provide suggested **topics to be included on the agenda and possible speakers by Wednesday, July 20, 2015**. If you think one or more of the topics listed above has merit, please recommend a speaker. The suggestions can be sent by regular mail or e-mail to:

Bradley Borum
Director of Electricity
Indiana Utility Regulatory Commission
101 West Washington Street, Suite 1500 E.
Indianapolis, IN 46204-3407

e-mail: bborum@urc.in.gov

Thank you for your interest and continued participation!