



## State of Idaho Strategic Energy Alliance Board of Directors Meeting

**Date:** Monday, August 8, 2016

**Time:** 1:00 PM to 5:00 PM

**Location:** Energy Innovation Laboratory (EIL, Room # A111-A113), 775 University Boulevard, Idaho Falls, ID 83401

### Participants

#### ISEA Board Members

Jackie Flowers, Idaho Falls Power – Chair

Paul Kjellander, Idaho Public Utilities Commission – Vice Chair

Dr. Steve Aumeier, Idaho National Laboratory

John Chatburn, Idaho Governor’s Office of Energy Resources

Don Sturtevant, J.R. Simplot Company (phone)

Jeff Larsen, Rocky Mountain Power

Jay Larsen, Idaho Technology Council

Mark Duffin, Food Producers of Idaho

Karl Bokenkamp, Idaho Power Company

Robert Neilson, retired, Idaho National Laboratory

#### Presenters

Stacey Crowley-Vice President, Regional and Federal Affairs at California ISO

Mike McGough-UAMPS Carbon Free Power Project/NuScale Small Module Reactor Technology

Doug Hunter-UAMPS Carbon Free Power Project/NuScale Small Module Reactor Technology

#### Others

Neil Colwell, Avista

Matthew Weaver, Idaho Department of Water Resources

Jerry Peterson, Idaho Division of Building Safety

Scott Pugrud, Idaho Governor’s Office of Energy Resources

Jennifer Pope, Idaho Governor’s Office of Energy Resources

Shannon Graham, Idaho Governor’s Office of Energy Resources

Matt Wiggs, Idaho Governor’s Office of Energy Resources

Tyler Mallard, Idaho Governor’s Office of Energy Resources

Steve Piet

Robin Piet

Craig Jones

John Snyder

### Meeting Agenda

**Welcome/Introductions - Jackie Flowers**

## Approval of Board Meeting Notes August 2015

- Board Meeting Notes August 2015 approved
  - Paul Kjellander moved to approve minutes. Jeff Larson seconded. Motion carried.

## ISO Expansion - Stacey Crowley

Stacey Crowley, Vice President, Regional and Federal Affairs at California ISO, gave an overview on regional integration of EIM and ISO expansion. See pdf presentation *Regional Integration-EIM and ISO Expansion 8-8-16* for slide details. Highlights included:

- Slide 2: Not an agency of state, created through statute, operated as nonprofit; 66 mw of capacity, 30 million customers.
- Slide 3: EIM was a product ISO offered when renewable portfolio standards started to penetrate resource plans of utilities in the West... small but important piece of ISO... 88 million dollars' worth of benefits since November 2014. Benefits on a number of levels (1) reduced renewable energy curtailment (2) displaced greenhouse gas emitting resources (3) reduced flexible ramping requirements across footprint.
- Slide 4: Tracking benefits
- Slide 5: Is full participation in full market a benefit? You can set schedule day ahead in market; efficiencies are gained because of that. Worked with other ISOs to understand value (1) cost effective way to help comply with federal state energy and environmental policies (2) enhances coordination/reliability of the larger system (3) larger geographic foot print aids renewable integration, aggregate renewable energy's variability, and reduce the need for flexibility reserves, saving money.
- Slide 6: This map shows how interconnected we are. Deals with our reliability and all utilities in the west are connected to each other. After PacifiCorp and California ISO signed a memo of understanding, began to explore potential benefits/costs of creating a regional ISO.
- To do this must change California state statute to amend governance and build board to represent members appropriately. Brown intends to pursue legislative change in January 2017. Other processes need to take place need to seek approval by PacifiCorp state regulatory bodies and federal, approval by FERC on changes to PacifiCorp and ISO tariffs for a range of market process issues.
- Slide 7: We started process to provide information on information on regional market in California. Signed Senate Bill 350 analysis indicates significant benefits of a regional market. Study honed in on California and ratepayers. Generally lowers fuel costs...and optimizes transmission planning...in study identified 3.5 percent reduction.
- Questions:
  - Bob Nielson: Any implications for future with increase in renewables?
    - Within the EIM continue to optimize those resources.
  - Jeff Larson: Phasing in plants (see question above)?
    - Seasonal
  - Jackie Flowers: What is causing the savings? Is it a projection from what you are already seeing?
    - Study looked at renewable energy procurement, emissions impact, jobs impact, reliability impact, procurement in general.
    - An ISO can essentially optimize resources for larger area; each utility only needs to procure less because of diversity across. Building less, procuring cheaper.
    - Created scenarios.
  - Jackie Flowers: Are all resources bidding in?
    - Analysis, where the best resources for wind and solar... all resources were considered including nuclear, coal, and natural gas.
  - Jackie Flowers: Concerned about retaining model?
    - Balance improves with regional market. The larger footprint allows utilities around the west to capture unneeded resources in California to eat up a cold spell in the northwest.
  - Karl Bokenkamp: Effective way to deal with duck curve?
    - The most effective way to deal with curve. Looked at all possible ways to raise the belly of the duck.
  - Steve Aumeier: Target for storage capacity?
    - 1250 MW, current legislative bill in California seeking to increase over time.
  - Jackie Flowers: Challenges associated with path forward for PacifiCorp, the divergence in portfolio standards and goals, what kind of political tango with different rate cases, etc.

- The ISO is not engaged in retail ratemaking that is left to the states. ISO charges a grid management charge, cost of using system; must make sure utilities are serving own load and have resources need, serve on economic basis, don't choose preference power.
- John Chatburn: Low cost power from a coal fire plant going into California, extra charge for carbon?
  - Green charge adder, California cap and trade, can put a flag on bid to not bid into California market. For example, Washington and Oregon are developing own standards.
- Jackie Flowers: Greenhouse gas adder?
  - Applied to everything with carbon.
- Jackie Flowers: REC market?
  - Not sure.
- Jackie Flowers: Is it on track?
  - We were pushing to get legislation this fall but we need more time to do that. We intend to submit studies but need to continue work on governance, transmission access charges. Plan to do that through end of ISO through end of 2017 without having to reset clock.
- Jackie Flowers: Clean Power Plan (CPP)?
  - Sensitivity, if CPP were to take place, what would that look like? Certainly believed regional ISO could benefit CPP and facilitate tracking mechanisms. Something that we are thinking about.

### **Idaho Energy Plan – John Chatburn**

John Chatburn, Administration, Idaho Office of Energy Resources (OER), gave an update on the Idaho Energy Plan. Highlights included:

- TASKSFORCES: Representative Thompson asked that OER and ISEA begin updating Idaho Energy Plan. Initial draft updates will come to OER to be edited and incorporated uniformly. Has been awhile since taskforces have been active. Proposing to send to the board with a very short turn around time, like two days, a membership list for each of the task forces with individual names, we will send out invitations for folks to participate on task forces and then we will assign chapters in the Idaho State Energy Plan. New task forces storage and transportation (kind of new), asking for volunteers for storage task force. Hoping to have draft completed so ISEA Board can look at complete draft and provide final edits by mid-November. With hope to deliver to legislature by mid-December, to share with germane committees.
- Questions:
  - Jackie Flowers: Same directive as 2012?
    - OER and ISEA have been asked to update factual basis of the plan. Policy legislature will take up early in session or possibly in public meeting prior to session. OER and ISEA would not be asked to recommend policy positions at this point in time. That could change, we may be asked to evaluate policy recommendations but have not been asked yet.
  - Steve Aumeier: Assess new risks and opportunities?
    - Yes, in fact when you start going through the chapters that we are going to make assignments for the initial work later today, there will be several chapters involving emerging technologies, new technologies, those kind of things.
    - CHAPTER 2: EIA never have new data, some data we have not been able to get so some data goes back further. If we can't get recent data then we are probably going to suggest that we don't include in the energy plan. Anything 2012 or older not useful in plan.
  - Jackie Flowers: Should we note missing data?
    - Scott Pugrud: Some EIA and other sources stopped reporting.
    - Matt Wiggs: Some was subscription based that we no longer had access to.
    - John Chatburn: Page 63, RTF chart may not be in format any longer.
  - Steve Aumeier: Consider brief section on what has changed substantially in that time frame. For example page 28, electricity rates, increases in rooftop solar. Pull out in short paragraph.
    - John: We will have an executive summary too.
  - Robert Neilson: If you are looking updating data from last time, but it may not make sense with narrative anymore. For example, page 25 overview, first line. Similar correlation on page 51, "energy demand growth upward pressure." We have to be careful re statements we make.
    - John Chatburn: Maybe but send data.
    - Robert Neilson: Will give changes to Jennifer Pope.

- Steve Aumeier: The way changes come out, page 52 it would be curious, it is important to assess changes and trajectories.
- Karl Bokenkamp: I would suggest if there was a piece of data that seemed important, still using it... quality important.
- Jay Larsen: We need to understand the trajectory, direct correlation to economic status of the state. There should be conclusions that we are able to draw.
- Steve Aumeier: CAES can help with quantitative analyses.

### **Idaho Energy Plan update continued – John Chatburn**

Idaho Energy Plan update tentative assignments handed out. See pdf document *Idaho Energy Plan Sections 072516* for more detail. Highlights included:

- John Chatburn: We think this will be a helpful list in the assignment of tasks for the Idaho Energy Plan.
- Steve Aumeier: We look at... principally from standpoint of ... can cover the business of energy. Should we track trends and what energy companies are coming to Idaho? Maybe Jay Larsen could do this. Is business of energy outside the scope or would it add some texture to the rest of the ...
- John Chatburn: This list is a suggestion on who should take the lead on each topic. Bobbi-Jo can work with people, through Commerce who is part of ISEA and they should be the part of ISEA that leads the discussion
- Jackie Flowers: Touching on Stevens 2012 three principals, inventory informs the direction.
- Karl Bokenkamp: If there are regional issues, it needs to be integrated into the broader discussion.
- Jeff Larsen: ISO is too detailed, but maybe wholesale v. resale. It seems like we are missing consumer impact. What are consumers responding to?
- John Chatburn: Is there a chapter that board members think that they ought to be the lead on?

### **UAMPS Carbon Free Power Project/NuScale Small Module Reactor Technology Update – Mike McGough and Doug Hunter**

Mike McGough, Chief Commercial Officer of NuScale, gave an overview on the NuScale Carbon Free Power Project. Doug Hunter, General Manager of Utah Associated Municipal Power Systems (UAMPS), gave an overview of UAMPS. See pdf presentation *Intermountain Energy Summit 080916R2* for slide details. Highlights included:

- Western initiative for nuclear...UAMPS Siting.
- Power point will be available and will be presented at Intermountain Energy Summit.
- Slide 2: NuScale power module diagram and explanation.
- Slide 3: Size comparison - similar to Vogtle nuclear power plant
- Slide 4: Coolant flow driven by physics.
- Questions
  - Robert Neilson: Refuels?
    - Mike McGough: Party of 260 staff will be refuelers...
  - Jay Larsen: Who is on the board of UAMPS?
    - Doug Hunter: 45 members, 7 western states. Project based. Power pool market place, largest project. Just like muni, no eminent domain, Title 11.

### **Public Comment Period**

Public comment

- John Snyder, citizen: What is the benefit of CAISO to Utah/Idaho?
  - Jeff Larsen: Benefits flow through power costs to customers, lowered costs by reducing operating costs. The regional ISO reduces new generation you have to build in the future, still looking for the net benefit.
  - Karl Bokenkamp: Concept of taking to larger market is helpful versus a smaller market, take advantage of diversity, better markets.
  - Jeff Larsen: EIM short bursts of time. ISO full benefit of second day and real time markets.
  - Doug Hunter: EIM hasn't worked for UAMPS, mechanical thing...ISO, larger markets are better, right now contract based and limited, moving to flow market.

- Robin Piet, Citizens' Climate Lobby, carbon fee at the sources
  - Jeff Larsen: What kind of tax?
  - Jackie Flowers: What sectors?
- Steve Piet, private citizen: (1) encourage/address what happens and who pays when power plants are taken off line in energy plan (nuclear addresses this-not true with anything else) all those windmills east of town when they start coming to the end of their lives the lawsuits are going to fly-everyone needs to pay for retirement (2) anytime Californians talk about water/electricity...beware of Greeks bringing gifts.
  - Jeff Larsen: Power plan generations...have retirement plan; assets and poles retirement...there are funds being built to take them down.

### **Wrap up and Adjournment - Jackie Flowers**