

## **Iowa's Energy Resources – Working Group Meeting #5**

**June 23, 2016; 2:00 pm – 5:00 pm**

### **Meeting Summary**

#### **I. Meeting Objectives**

- To **finalize development of draft objectives and strategies** for recommendation to the energy plan leadership team.

#### **II. Development of Objectives and Strategies**

During the meeting working group members participated in a facilitated exercise to continue refining the objectives and strategy recommendations that were first developed during the fourth working group meeting. The working group members completed, consolidated, and to some extent prioritized the objectives and strategies, under the “Iowa’s Energy Resources” pillar.

Attached is a summary of the draft objectives and strategies that were discussed during the session. The draft reflects the input provided by working group members. This input will be compiled with other stakeholder input received, and previous data analysis completed to finalize the recommendations that will be analyzed for economic and environmental inputs.

The summary does NOT represent the final recommendations that will be included in the energy plan.

#### **III. Comments and Questions Received from the Public**

- N/A

## TOPIC AREA: RENEWABLE ENERGY

Objective		Strategy	Priority
<b>I. Increase the amount of clean energy generation in the state.</b>	1.1	Adopt voluntary goals for a given amount of renewable energy generation in the state, covering various types of renewable energy technologies. The goals should encourage only the most efficient and demonstrated cost-effective resources, while being sensitive to the risk of leakage.  Furthermore, the goals should allow for export of renewable energy resources to other states.	1
	1.2	Institute a net metering policy, common across all utilities in the state, that fairly compensates for their distributed renewable power generation.	1
	1.3	Encourage utilities to continue using long-term integrated resource plans (IRP) encompassing all aspects of generation, transmission and distribution functions in a way that reflects present and reasonably anticipated regulations affecting energy on both the state and federal level.	3
	1.4	Acknowledge the phenomenon of "Leakage*" and periodically assess energy and environmental policies and regulations in Iowa to insure they are not contributing to any unintended consequences.	3
	1.5	Ensure Iowa's tax policy broadly supports significant wind and solar development in Iowa. <ul style="list-style-type: none"> <li>Includes expanding the existing 476C state tax credit program to support additional solar photovoltaic (PV), wind, storage (pumped storage, electric vehicle battery storage, compressed air storage), hydropower, and any other emerging clean energy technologies that may develop in the near future. Furthermore, the tax credit would expand or eliminate dollar caps on certain projects.</li> <li>Expand the Physical Plant and Equipment Levy (PPEL) and Secure and Advanced Vision for Education (SAVE) language to allow investment in renewable power generation.</li> <li>Institute an income tax credit for distributed generation systems including micro-hydro, biomass, and biogas.</li> <li>Establish a PACE financing program that provides funding for homeowners to install renewable energy technologies.</li> </ul>	1
	1.6	Educate property assessors on correct valuation of renewable energy technologies so that they are being taxed fairly.	3
	1.7	Establish a renewable energy credits program by leveraging the Midwest Renewable Energy Tracking System (M-RETS).	3
	1.8	Establish a collaborative effort with local governments to discuss potential for standardization of local policies that would allow for clean energy growth in wind, solar, and hydropower across Iowa.	1
	1.9	Identify potential sites for cost-effective hydropower in Iowa—especially opportunities to power existing non-powered dams.	2
	1.10	Investigate roadblocks to consumer choice in self-generation, including rate design, and tariff barriers.	2
	1.11	Allow 28E sharing agreements between schools and other nonprofits to include wind turbines, solar panels, and other renewable power generation sources.	2

## TOPIC AREA: ENERGY TRADE

Objective		Strategy	Priority
<b>II. Reduce Iowa's energy trade imbalance.</b>	2.1	Leverage farmland that is currently sub-profitable to grow energy crops.	2
	2.2	Create a market for energy crops in ethanol, bio-oil, bio-gas or pellet production.	2
	2.3	Dedicate funding to support large scale integration of Iowa native biomass into Iowa's agricultural sector resulting in production of biomass (Prairie STRIPS, prairie restoration, stream buffers, cover crops, etc.)	3
	2.4	Establish a renewable energy portfolio standard for building and transportation energy with "at least % (minimum) carve outs" for specific energy sources such as biogas, solar, wind, etc.	3
	2.5	Implement an Energy Efficiency Resource Standard of 1.5% for all utilities.	3

## TOPIC AREA: CARBON EMISSIONS

Objective		Strategy	Priority
<b>III. Reduce carbon emissions over time.</b>	3.1	Continue the Clean Power Plan stakeholder process headed by the Iowa Department of Natural Resources for development of a state implementation plan.	1
	3.2	Support the Iowa's Department of Natural Resources process to compile greenhouse gas emission information from point sources, including Iowa utilities, and make it publically available through an annual report.	3
	3.3	Identify opportunities to develop carbon negative/carbon removal strategies including: <ul style="list-style-type: none"> <li>• Biomass energy systems operated in combination with carbon sequestration.</li> </ul>	3
	3.4	Educate the public and state officials on decision-making approaches that consider a full fuel cycle or lifecycle basis, thus accounting for emissions and other lifetime costs.	3
	3.5	The Iowa Department of Natural Resources will work with facilities to comply the requirements of the Clean Air Act. (This may not be the correct name of the federal law.)	3
	3.6	Educate state officials on opportunities to use Combined Heat and Power as a means of lowering greenhouse gases.	3

## TOPIC AREA: RESEARCH AND DEVELOPMENT

Objective		Strategy	Priority
<b>IV. Position Iowa as a national leader in clean energy research and development.</b>	4.1	Dedicate funding to advancing university research in the areas of advanced renewable energy, biofuels, and energy storage technology. Identify opportunities to leverage federal dollars.	2
	4.2	Increase funding to the Iowa Energy Center, which supports renewable energy research at non-profit organizations in the state of Iowa.	2
	4.3	Ensure dollars invested in Iowa on research and development have appropriate oversight and establish coordination between entities performing such research to minimize duplication of services.	1
	4.4	Leverage work being conducted by National laboratories and U.S. Department of Energy.	2
	4.5	Develop valuation studies of different utility models for energy resources (wind, solar, etc.). The study would consider market, environmental and operational externalities and focus on differentiating the benefits of locally-owned solar to the utilities, grid, and society.	3
	4.6	Focus research on utilization of bi-products such as carbon.	2
	4.7	Create a task force to inventory research being performed in Iowa and at the national level on energy storage, and identify areas of additional research that may be needed. For example, the purpose of the research could be to address the intermittency of some resources, to determine how storage increases the value and penetration of renewables, address reliability during electrical outage, and what characteristics of storage are adequate for Iowa.	2
	4.8	Establish an incentive program for research, demonstration, and applied projects involving new technologies.	2
	4.9	Invest in research and development that makes Iowa resources (wind, solar and biomass) cost competitive with outside resources.	3

## TOPIC AREA: RESILIENCY RELIABILITY

Objective		Strategy	Priority
<b>V. Enhance reliability and availability of energy to Iowans.</b>  <b>Provide Iowans and the general public with safe energy sources and safe delivery infrastructures.</b>	5.1	Establish appropriate levels of redundancy and infrastructure guidelines to support increases in renewable energy.	2
	5.2	Develop statewide standards to address power quality issues. Power Quality includes changes in frequency and amplitude of electricity affecting modern electronic equipment and advanced manufacturing processes.	2
	5.3	Educate Iowa policy makers in regional and federal policy issues that could impact the availability of energy or the reliability of energy in Iowa.	1
	5.4	Provide economic and technical resources for the Iowa Utilities Board and staff to coordinate with Iowa utilities and advocate for adequate planning with Regional Transmission Organizations.	1
	5.5	Institute criminal background checks for contractors working in utility programs.	2
	5.6	Establish appropriate planning for emergencies and disasters so as to ensure the flow of fuels and reliability of energy during emergency situations.	2
	5.7	<p>Iowa Utilities Board and the Attorney General should have primary responsibility to supervise distributed generation developers and installers to ensure that consumers are protected from unscrupulous claims (including inflated representations of generation, requiring 20 year contracts with escalating rates, etc.), and that installers/owners to observe security protocols to protect against cyber security threats.</p> <ul style="list-style-type: none"> <li>○ This could be done by developing a program that certifies sellers and installers of distributed generation systems.</li> <li>○ Monitor and inspect interconnections of electric generation resources connected to the grid.</li> </ul>	1
	5.8	Enhance Iowa's One Call Program for the safety of Iowans.	3
	5.9	Educate first responders on electric and other alternative fuel vehicles.	2
	5.10	Expand the reporting requirement of safety incidents to the Iowa Utilities Board to customer side of the meter which would include distributed generation.	2