

INDIANA SUMMIT ON ENERGY EFFICIENCY

Monday, February 12, 2007

*Westin Indianapolis
Indianapolis, Indiana*

Meeting Summary

OVERVIEW

The Indiana Summit on Energy Efficiency was held on February 12th, 2007 in Indianapolis, Indiana. The summit brought together over 200 stakeholders representing a broad range of interests – electric and gas utilities, regulators, legislators, consumer and environmental advocates, industry, universities, schools, and regional transmission organizations (please see Appendix A for full list of participants). The goals of the summit were:

- To augment and promote the Governor's Hoosier Homegrown Energy Plan through Energy Efficiency;
- To learn about and discuss why energy efficiency makes economic and environmental sense for Indiana, including benefits to utilities, consumers (residential, commercial, and industrial), the state economy, and the environment; and
- To share information on the key challenges to increased energy efficiency and consumer awareness in the state.

Over the course of the day three panels of stakeholders and experts addressed: 1) why energy efficiency makes economic and environmental sense for Indiana; 2) the challenges to increased energy efficiency and consumer awareness in Indiana; and 3) energy efficiency cost recovery mechanisms. This document summarizes the discussion following each of these panels, as well as the remarks presented by the summit's two keynote speakers. For the full agenda, please see Appendix B. For copies of the PowerPoint slides from the panel presentations, please visit the Indiana Office of Energy and Defense Development website at www.in.gov/energy.

WELCOMING REMARKS

Ed Simcox, President, Indiana Energy Association

John Clark, Director, Indiana Office of Energy and Defense Development

Representatives of the summit sponsors, the Indiana Energy Association (IEA) and the Indiana Office of Energy and Defense Development (OED), welcomed participants to the conference. Ed Simcox, president of IEA, opened the meeting with the observation that the environment, and consequently energy conservation and efficiency, are of great importance in the energy industry. He highlighted questions for the summit to address, including the following:

- How can consumers be educated on the issue and made aware of energy efficiency tools?
- What is the role of government in fostering energy efficiency?
- What is the role of the utility industry? How it can be encouraged?

Mr. Simcox also noted that the Governor's Hoosier Homegrown Energy Plan, crafted with the collaboration of the energy industry and other groups, incorporates energy efficiency concepts and holds the promise of helping to promote the use of energy efficiency in Indiana.

John Clark, the director of OED, corroborated Mr. Simcox's statements on the importance of energy efficiency and the Hoosier Homegrown Energy Plan to the state of Indiana, noting that the energy plan and the agriculture plan would be critical to the state's economic development. In his view, the theme of the summit is how to better enable energy providers to have a more robust partnership with customers, both residential and commercial. Progress on decoupling in Indiana has so far been encouraging. Working in partnership with the IEA and the Indiana Utility Regulatory Commission (IURC), the OED intends to lend momentum to an issue that has not traditionally been at the forefront and is committed to pursuing future dialogues as necessary to promote the expansion of energy efficiency in Indiana.

KEYNOTE ADDRESS: WHY ENERGY EFFICIENCY AND WHY NOW?

Brian Castelli, Executive Vice President and COO, Alliance to Save Energy

Brian Castelli of the Alliance to Save Energy launched the summit, addressing the rationale for and urgency of promoting energy efficiency programs. He also offered suggestions for policies and programs that could benefit Indiana in particular.

Mr. Castelli framed his talk by illustrating the U.S. energy situation with the "2-3-5-25 conundrum," pointing out that the United States has 2% of the world's oil reserves, 3% of its natural gas reserves, and 5% of the world's population, but consumes 25% of the world's oil and gas and emits 25% of its greenhouse gases. Furthermore, production capacity is not keeping pace with the growing demand for energy. With more countries around the world contributing to increased energy demand, there will be a large increase in fossil-fuel based plants, whose emissions will have a major impact on climate change.

Climate change, in turn, will be a driving issue that will cause many countries to turn to energy efficiency as a means of stabilizing greenhouse gas emissions. Energy efficiency is a resource with the advantages of being cheaper, quicker to take effect, and cleaner than other energy sources, and, as a domestic resource, it enhances national security by reducing dependence on foreign suppliers. In comparison to other U.S. sources of energy, energy efficiency has proven America's greatest energy resource, providing more quads of energy than any other source since 1973. The savings from energy efficiency can be quantified as having avoided the production of approximately 2.5 billion tons of carbon emissions annually and saved approximately \$400 billion per year.

As the country's sixth highest-ranked state in per capita energy consumption, the context of the nation's energy situation is particularly relevant in Indiana. While some energy efficiency initiatives have already been undertaken in Indiana, such as the Indiana Industrial Energy Efficiency Fund and several utilities' demand-side management (DSM) programs, there are many more opportunities to advance energy efficiency in Indiana. On the policy side, the Hoosier Homegrown Energy Plan has already identified some key areas for action, including building name recognition for Energy Star products and practices and updating the state's building codes for public housing. Other opportunities for action that could be pursued in Indiana include establishing a statewide energy efficiency program and an initiative to increase energy efficiency in buildings. Mr. Castelli emphasized that it is important for the state to act as a leader on energy efficiency, pointing to the successful experience of California.

Policies that have been implemented in other states could serve as models for Indiana, and several organizations have issued guides to creating energy efficiency policies. Although Indiana does not currently meet the minimum residential energy code standards adopted in other states, some states have achieved success in reducing energy consumption through tax incentives or other programs aimed at motivating consumers. On the utility side, elements of a successful state energy efficiency policy should include: planning for energy efficiency as a priority resource; funding and incentives for programs; adopting performance requirements; and breaking the sales-profit link. To confront the challenge of increasing utility investment in energy efficiency, Indiana could consider adopting the tools of a public benefits charge or a performance standard.

Discussion and Observations on the Keynote Address

Moderator: *Abby Arnold, RESOLVE, Meeting Facilitator*

Summit participants followed up with questions on several of Mr. Castelli's suggested programs or policies for Indiana. In response to the building industry's potential concerns, Mr. Castelli acknowledged that the industry has often voiced concern that too much stress will be placed on its small profit margins, but asserted that those fears have not materialized in states that have upgraded their codes. Instead, the revised codes help to move the industry in the right direction; however, consumers also need to be better informed about the issues when buying a home.

On the subject of tax incentives, Mr. Castelli noted that the National Energy Policy Act of 2005 included a tax credit to builders of energy efficient homes, which helps to reduce the cost of their construction. States can build upon such programs by allowing state tax credits to provide further incentives, which can be a useful tool when negotiating new building codes. State regulation and voluntary energy efficiency programs should work hand-in-hand. Concurring with a participant who commented on the need for steady funding of energy efficiency initiatives, Mr. Castelli speculated that future Congressional legislation on a national public benefits fund or extended tax credits may serve to alleviate such concerns. He also acknowledged that many of the states that have created public benefits funds did so in response to deregulation of the industry.

Finally, a member of the audience added that Indiana is one of the few states that provided for a mandatory set-aside on energy efficiency.

DISCUSSION OF PANEL 1: WHY ENERGY EFFICIENCY MAKES ECONOMIC AND ENVIRONMENTAL SENSE FOR INDIANA

Moderator: *Ryan Brown, Program Manager, Renewables and Energy Efficiency, Indiana Office of Energy and Defense Development*

Panelists

Nathan Bruins, Specialist, Toyota Indiana

Elizabeth Martin, Climate Policy Specialist, Natural Resources Defense Council

Kay Pashos, Vice President, Regulatory Strategy, Duke Energy

Ron Christian, Executive Vice President, Chief Administrative Officer, and General Counsel, Vectren Corporation

After the panel presentations had concluded, panel moderator Ryan Brown initiated the discussion and addressed the first question to the panel, soliciting their opinions on the policy changes that would be needed to advance energy efficiency in Indiana. As examples, he cited a systems benefit charge, energy efficiency portfolio standards, tax incentives, and building codes. While the panelists concurred on the need for upgraded building code standards, they had varying opinions on some of the other policies. Mr. Bruins and Ms. Pashos expressed opposition to a systems benefit charge on the grounds that it could be a burden to business or lead to a loss of innovation and customer focus on the part of utilities. Ms. Martin offered a different perspective, stating that such a charge can be an investment in lower bills through reduced energy use, which would decrease customers' overall bills. Mr. Christian added that a systems benefit charge, if properly configured so as not to disproportionately impact large-volume users, could play a useful role. He also favored focusing government policy on renewables and energy efficiency through portfolio standards, and he and Ms. Pashos both favored of tax incentives as a way to motivate investment.

When the floor was opened to the audience, a participant commented on the advantages of the joint Duke Energy-NIPSCO Integrated Gasification Combined Cycle (IGCC) project underway in Indiana, asserting that gasification was a less carbon-intensive and more efficient process. In response, Ms. Martin reminded the group of the importance of reducing the climate impacts of greenhouse gases. Asked about utilities' efforts to increase efficiencies in power plants, Ms. Pashos answered that plants are always working to make such improvements and noted heat recovery and steam generators will be a component of the IGCC plant, leading to significant savings.

The group discussed the question of the length of the payback period that industries require in order to invest in energy efficiency. Mr. Bruins asserted that, at Toyota, while most projects require a two-year payback to be implemented, that period can be extended to three years for environmental initiatives. Ms. Pashos cited a necessary payback threshold of five years or less.

Asked what types of cost recovery programs utilities would prefer, Ms. Pashos and Mr. Christian agreed that targets qualified by cost-effectiveness would be appropriate. In addition, they would favor shareholder incentives based on performance.

Panelists responded to additional questions as follows:

- Considering combined heat and power is very efficient, and energy efficiency should be looked at on a combined electric and gas basis.
- With a rate case, if a utility's margin declines, it experiences a shortfall and it needs to encourage its customers to use more. In the case of decoupling, however, the margin is maintained at the level deemed appropriate by the commission and reconciled to prevent such a shortfall.
- Operational changes, such as turning off unneeded lights or reducing oven temperatures, are "low-hanging fruit" that large customers can easily implement.

DISCUSSION OF PANEL 2: CHALLENGES TO INCREASED ENERGY EFFICIENCY AND CONSUMER AWARENESS IN INDIANA

Moderator: *Steve Corwell, Senior Vice President of Corporate Affairs, Indianapolis Power & Light*

Panelists

Jack Wickes, Executive Director and Counsel, Indiana Industrial Energy Consumers

David Ziegner, Commissioner, Indiana Utility Regulatory Commission

Marty Kushler, Director, Utilities Program, American Council for an Energy-Efficient Economy

Mark Jansen, President, Energy Efficient Homes Midwest

Susan Macey, Utility Consumer Counselor, Office of Utility Consumer Counselor

Marc Lewis, Vice President, Indiana Michigan Power Company

Steve Corwell, the panel moderator, summarized the key challenges that he heard in the panelists' presentations, which included: focusing on customer education; continuing to foster industry, which has been the lifeblood of Indiana's economy; developing "serious" energy efficiency programs; dealing with price volatility; creating a global, rather than utility-by-utility approach; collaborating on energy efficiency programs; developing metering verification; using real-time pricing as a signal; and determining Indiana's potential. He then turned to the panelists with a question – should new building codes focus on the residential or consumer market? Mark Jansen responded that the key to promoting energy efficiency in construction is to educate both builders and consumers and to reach the point where energy efficient choices are the customer's choice.

Summit participants pursued the theme of customer education, asking whether the effect of education campaigns had been measured. According to Marty Kushler, states have not quantified programs that are only educational in nature. He stressed that customer education is an enabling tool to help effective energy efficiency programs and is not sufficient in itself. Education represents a small percentage of the overall costs and should play a supporting role as part of a comprehensive program that provides incentives and involves collaboration with trade partners.

Asked how to reach the public on a large scale, Ms. Macey replied that a coordinated approach on a policy level was necessary, rather than a utility-by-utility approach. Mr. Wickes and Mr. Lewis expressed concern at the idea of a coordinated approach, emphasizing the wide diversity of utilities confronting an array of issues as well as the need for innovation and creativity in response to varying challenges. Ms. Macey clarified that she was suggesting devoting effort and money to a full-court press on energy efficiency in order to achieve significant results within a changing policy context.

Participants also had questions on the role of technology, such as metering, cable, and other options to convey pricing to consumers in an understandable manner. Mr. Kushler responded that studies of real-time pricing have shown that it works best for larger customers with a staff that monitors energy consumption. It is not clear that it would be a useful tool for the mass market. Susan Macey added that there are some pilots underway to test smart metering technology, which will help to determine whether people will be responsive.

Finally, panelists offered the following responses to participants' questions:

- Mr. Jansen offered the opinion that energy improvement mortgages and energy efficiency mortgages are both ineffective financing mechanisms, while VA loans (although not widely available), 203 k streamline loans, and title 1 mortgages could be more helpful.
- Mr. Wickes stated that energy costs are a significant factor in determining whether manufacturers locate their facilities in Indiana.

LUNCH KEYNOTE ADDRESS

Angela Beehler, Director of Energy Regulation, Wal-Mart

Angela Beehler described the energy efficiency initiatives undertaken by Wal-Mart and outlined the policies to encourage energy efficiency that the company supports. Its energy efficiency program forms a part of the company's sustainability goals, which are:

- To be supplied with 100% renewable energy;
- To create zero waste; and
- To sell environmentally sustainable products.

Ms. Beehler observed that, in pursuing these goals, the company often identified changes that were beneficial to the company. When working to reduce packaging on Wal-Mart products, for example, the company found it could fit more products on trucks, improving logistics and reducing shipping costs, among other things, resulting in the ability to maintain low prices for the customer.

Asserting that energy efficiency is smart business, Ms. Beehler noted that Wal-Mart spends \$1.8 billion annually on utilities, which constitutes the company's second biggest operating expense. Managing those expenses is a key feature of its business; accordingly, for the past 20 years Wal-Mart has maintained an extensive, centralized system that can monitor various aspects of energy usage within its stores. In its Texas stores, it has

implemented an advanced metering project that allows it to monitor on the sub-circuit level and respond quickly if a problem occurs.

As a result, the company has been able to put several programs in place to respond to its actual energy needs. For its lighting needs, it has instituted “daylight harvesting” in 90% of its stores, with computer-controlled daylight sensors that dim the electric lights in response to sunlight. This program is estimated to save 600 million kilowatt hours annually over the company’s 2100 stores that have the system installed. Where feasible and in coordination with store operations, the lights are also dimmed in the evening hours and are set on occupancy sensors to turn off when the space is unoccupied. In one supercenter, LED lights in the refrigeration cases are activated by occupancy sensors that light the cases when people are present. In the Sam’s Club Optimization projects, stores are currently examining their nighttime lighting needs, with the goal of eliminating unnecessary lights.

In terms of the HVAC system, Wal-Mart has implemented high-efficiency air conditioning and heating units. Wal-Mart has also installed white membrane roofs in stores in certain parts of the country, lowering its cooling load by 8%.

Furthermore, Wal-Mart seeks to market sustainable products to its customers; its compact fluorescent bulb (CFL) program, for example, aims to sell 100 million CFL bulbs this year.

On a policy level, Wal-Mart encourages policymakers to reward, or at least not penalize, customers who early action on energy efficiency (such as in regulatory rate structures), as well as to remove barriers to that investment.

Discussion and Observations on the Lunch Keynote Address

Moderator: *Michael Goldenberg, Director, Products & Services, Duke Energy*

Michael Goldenberg invited participants’ questions to Ms. Beehler, and she made the following comments in response:

- The preferred threshold payback level for Wal-Mart is two years. The lighting project fell within that timeframe.
- In its CFL program, the company is open to working with all those stakeholders who express interest in collaborating on the project.
- Of the energy efficiency projects Wal-Mart has implemented, the top three with the highest payoff are the lighting project, its Sam’s Club optimization project, and its work in sharing knowledge with its suppliers. In one case, a supplier was able to reduce their monthly energy bills by 70%.

DISCUSSION OF PANEL 3: ENERGY EFFICIENCY COST RECOVERY MECHANISMS

Moderator: *Abby Arnold, RESOLVE, Meeting Facilitator*

Panelists

Dalton Perras, CERA

Claudia Earls, Barnes & Thornburg

Matthew Parsell, Director, Energy Planning and Development, OUCC

Frank Shambo, Director, Regulatory and Governmental Policy, Northern Indiana Public Service Company, Northern Indiana Fuel & Light, Kokomo Gas & Fuel

Drawing on the panelists' observations, panel moderator Abby Arnold noted that under the current system, price signals are not sending the right messages to customers and the potential tools that exist in Indiana to rectify this problem have not yet been fully utilized. As some panelists had mentioned, in any cost recovery program there is a need to align the needs of customers and utilities. Various speakers had offered differing models of how to arrive at this alignment, so Ms. Arnold turned the question to the panelists -- whose responsibility it is to take the leadership role in changing the current structure?

According to Dalton Perras, it is the government's role, acting as a proxy for market forces such that producers are motivated to invest in the appropriate, lowest-cost mix of energy conservation and production. Frank Shambo added that the regulators had taken on a good leadership role in Indiana and that the next step would require collaboration on complex issues, especially on the electricity side. Although Claudia Earls agreed that collaboration might be effective on the verification issue, given the diversity among utilities, she said a uniform approach would not be effective and individual utilities are best suited to respond to their customers' needs.

A participant asked for clarification on the notion of funding a "negawatt," or a unit of power that is not generated. Mr. Perras responded that one could track the savings from conservation efforts, and then compensate the producer based on the marginal cost of producing a "negawatt." The goal is to place conservation and production of energy on equal footing, to the point where the utility is indifferent between producing a megawatt or a "negawatt." (Mr. Shambo pointed out that while utilities can estimate a percentage return on investment a new power plant, "producing" the same amount of energy through efficiency measures currently yields no earnings, so there is a bias toward building.) A participant noted that energy efficiency measures can also help ratepayers by avoiding added costs of building new plants and transmission.

Responses to other participant questions included:

- The role of regional transmission organizations (RTOs) and independent system operators (ISOs) is to send correct price signals; other than that, they do not directly participate in fostering energy efficiency.
- With a decoupled system, customers will still have an incentive to reduce their energy consumption because savings on decoupling are subject to periodic adjustments, so it would cost the customer more if they became inefficient.

CLOSING REFLECTIONS

Ryan Brown, Program Manager, Renewables and Energy Efficiency, Indiana Office of Energy and Defense Development

Stan Pinegar, Vice President, Indiana Energy Association

Ryan Brown thanked the participants for their attendance at the summit and expressed appreciation for the quality of the discussion and the multiplicity of viewpoints. He encouraged attendees to take advantage of the opportunity to get involved in shaping energy efficiency policy in Indiana by making their voices heard on Senate bills 410 and 525, as well as on the commission's generic open dockets on energy efficiency.

Stan Pinegar also thanked the participants, as well as the members of the planning committee and representatives from OED and RESOLVE involved in organizing the summit. He said that the summit was a success and accomplished its goals with contributions from a diverse and dynamic set of panelists and participants.

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Meeting Agenda

Meeting Objectives:

- To augment and promote the Governor's Hoosier Homegrown Energy Plan through Energy Efficiency;
- To learn about and discuss why energy efficiency makes economic and environmental sense for Indiana, including benefits to utilities, consumers (residential, commercial, and industrial), the state economy, and the environment; and
- To share information on the key challenges to increased energy efficiency and consumer awareness in the state.

7:30 – 8:30

Arrival and Registration

- Coffee and Refreshments

8:30 – 8:45

Welcoming Remarks

- Welcome from Summit Sponsors
Ed Simcox, President, Indiana Energy Association
John Clark, Director, Indiana Office of Energy and Defense Development
- Overview of Meeting Objectives and Agenda
Abby Arnold, RESOLVE, Facilitator

8:45 – 9:30

Keynote Address

Brian Castelli, Executive Vice President and COO, Alliance to Save Energy

- Facilitated Discussion and Group Q&A
Abby Arnold, RESOLVE, Facilitator

9:30 – 11:00

Panel and Discussion: Why Energy Efficiency Makes Economic and Environmental Sense for Indiana

- Panel Presentations
Nathan Bruins, Specialist, Toyota Indiana

Elizabeth Martin, Climate Policy Specialist, Natural Resources Defense Council
Kay Pashos, Vice President, Regulatory Strategy, Duke Energy
Ron Christian, Executive Vice President, Chief Administrative Officer, and General Counsel, Vectren Corporation

- Panel Discussion and Group Q&A
Ryan Brown, Program Manager, Renewables and Energy Efficiency, Indiana Office of Energy and Defense Development

11:00 – 11:15 Break

11:15 – 1:00 Panel and Discussion: Challenges to Increased Energy Efficiency and Consumer Awareness in Indiana

- Panel Presentations:
Business/Industry Perspective: *Jack Wickes, Executive Director and Counsel, Indiana Industrial Energy Consumers*
Regulatory/Legal Perspective: *David Ziegner, Commissioner, Indiana Utility Regulatory Commission*
State Policy Experience Perspective: *Marty Kushler, Director, Utilities Program, American Council for an Energy-Efficient Economy*
Buildings Perspective: *Mark Jansen, President, Energy Efficient Homes Midwest*
Consumer Perspective: *Susan Macey, Utility Consumer Counselor, Office of Utility Consumer Counselor*
Utility Perspective: *Marc Lewis, Vice President, Indiana Michigan Power Company*
- Panel Discussion and Group Q&A
Moderator: Steve Corwell, Senior Vice President of Corporate Affairs, Indianapolis Power & Light

1:00 – 1:15 Break to pick up boxed lunch (provided)

1:15 – 2:00 Lunch Keynote
Angela Beehler, Director of Energy Regulation, Wal-Mart

- Group Q&A
Moderator: Michael Goldenberg, Director, Products & Services, Duke Energy

2:00 – 2:15	Break
2:15 – 4:00 <u>Mechanisms</u>	<p><u>Panel and Discussion: Energy Efficiency Cost Recovery</u></p> <p>Overview of Cost Recovery: <i>Dalton Perras, CERA</i> Indiana’s Cost Recovery Regulatory Framework: <i>Claudia Earls, Partner, Barnes & Thornburg</i> Challenges and Opportunities of the Current Scheme</p> <ul style="list-style-type: none"> • Consumer Representative: <i>Matthew Parsell, Director, Energy Planning and Development, OUCC</i> • Utility Representative: <i>Frank Shambo, Director, Regulatory and Governmental Policy, Northern Indiana Public Service Company, Northern Indiana Fuel & Light, Kokomo Gas & Fuel</i> <p>Facilitated Discussion (<i>Abby Arnold, RESOLVE</i>)</p>
4:00 – 4:30	<p><u>Closing Reflections</u></p> <p><i>Ryan Brown, Program Manager, Renewables and Energy Efficiency, Indiana Office of Energy and Defense Development</i> <i>Stan Pinegar, Vice President, Indiana Energy Association</i></p>
4:30	Adjourn