

Bruce A. Measure
Chair
Montana

Rhonda Whiting
Montana

W. Bill Booth
Idaho

James A. Yost
Idaho



Dick Wallace
Vice-Chair
Washington

Tom Karier
Washington

Bill Bradbury
Oregon

Joan M. Dukes
Oregon

February 24, 2011

MEMORANDUM

TO: Council Members

FROM: Shirley Lindstrom

SUBJECT: Panel on Idaho energy policy

Paul Kjellander, Idaho Office of Energy Resources: Idaho Strategic Energy Alliance – By Executive Order 2007-2, Governor C.L. “Butch” Otter established the Idaho 25x25 Renewable Council. This mandate was assigned to the Office of Energy Resources (OER). The original 25x25 effort was focused primarily upon using agricultural and forestry resources to meet 25% of the state’s energy needs by 2025. The OER expanded this initial concept to include sustainable resources, energy efficiency and conservation, and energy development in accordance with the Idaho Energy Plan. In response to this broader agenda, the Governor changed the name of this effort to the Idaho Strategic Energy Alliance. The structure of the Alliance allows a wide variety of stakeholders to have representation and play a role in developing energy plans and strategies for Idaho’s energy future.

Ric Gale, Idaho Power Company: Energy Efficiency Research Institute - The Center for Advanced Energy Studies (CAES) launched an initiative to build an Energy Efficiency Research Institute (EERI). The goals of EERI include developing energy efficiency concepts through research in applied technology and consumer behavior; providing specialized education for energy efficiency technicians, engineers and architects; evaluating existing energy-saving technologies; and creating infrastructure for the accelerated transfer of ideas from the institute to the marketplace. The EERI will be housed at Boise State University. CAES, a public-private partnership, includes Boise State University, University of Idaho, Idaho State University, Idaho Power, J.R. Simplot Co., Micron Technology, Natural Resources Defense Council, Boise Metro Chamber of Commerce, Idaho Office of Energy Resources, U. S. Department of Energy and Battelle Energy Alliance.

Overview of the Idaho Strategic Energy Alliance

February 2011



The ways we produce and consume energy are headed for fundamental changes

The ways in which Idaho responds to these changes could have a profound impact on all Idahoans

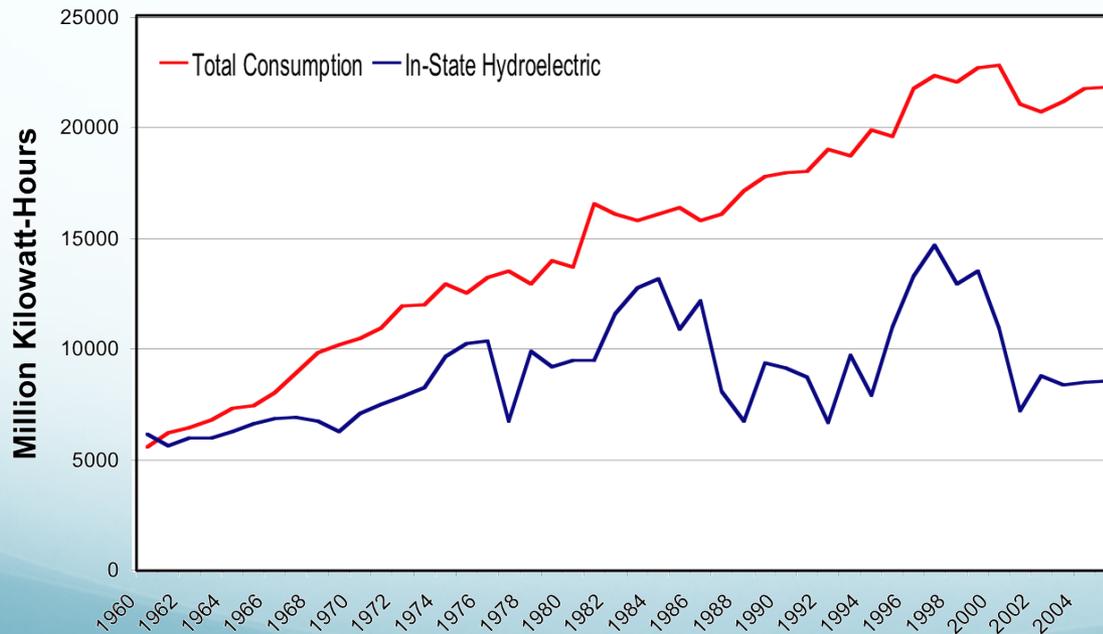


So where are we now?

Many Idahoans think we get all our electricity from in-state hydro...

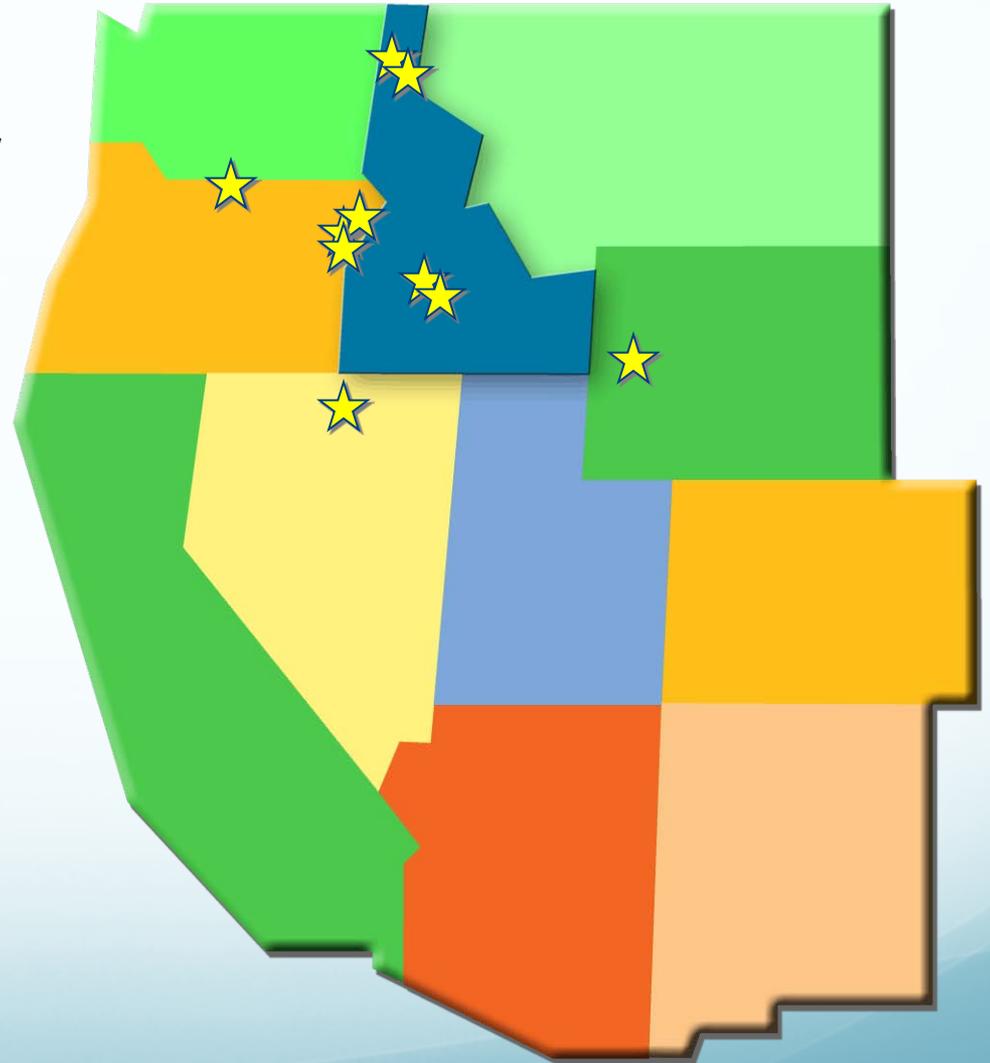
...AS YOU KNOW, WE DON'T

Idaho's Electricity



So where does Idaho get its electricity?

- **Of our largest sources of electricity, most are located outside the state of Idaho or on the border with Oregon**
- **Among the largest sources of Idaho electricity are:**
 - Bennett Mountain gas plant
 - Boardman coal plant (OR)
 - Jim Bridger coal plant (WY)
 - Brownlee dam (ID/OR)
 - Cabinet Gorge dam
 - Danskin gas plant
 - Hells Canyon dam (ID/OR)
 - Oxbow dam (ID/OR)
 - Rathdrum gas plant
 - Valmy coal plant (NV)

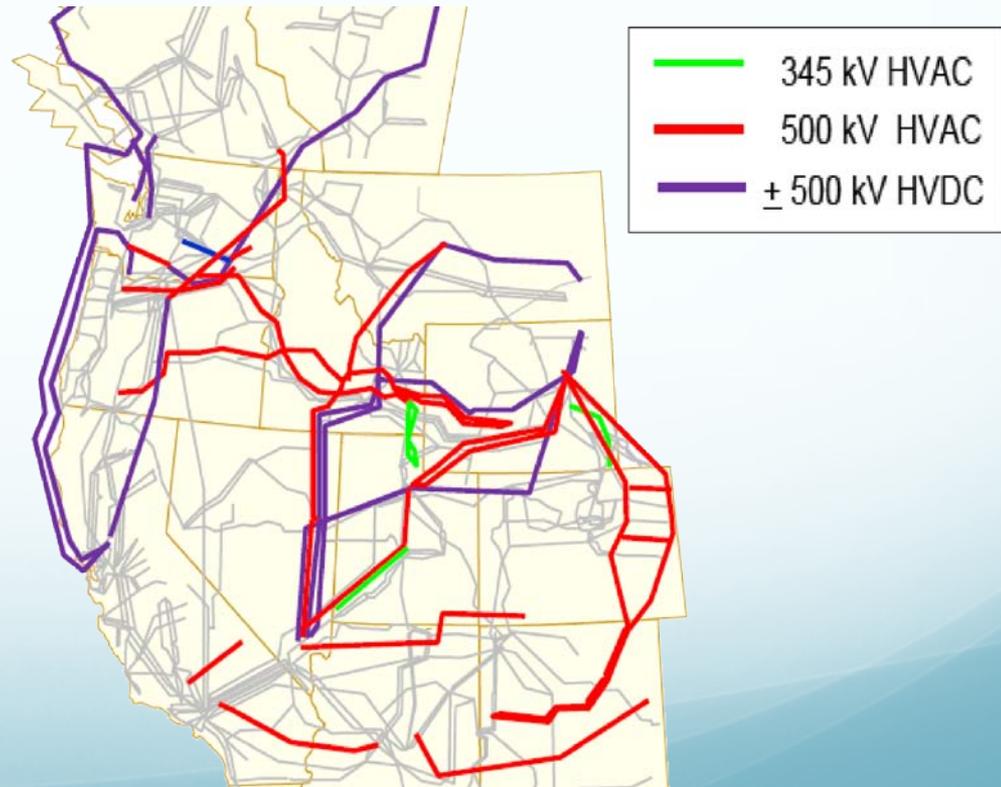


Idaho – Crossroads of Energy Transmission

The ability to transmit electricity into and through Idaho is becoming constrained...

- **Proposals for several new transmission lines into and through Idaho will test our ability to update our energy infrastructure**

.... As is the volume of transportation fuels



Idaho's Energy Imports

- We rely on other states and other nations to meet most of our energy needs...



**Gasoline/
Diesel**

100%



Natural Gas

100%



Electricity

~50%

~80% TOTAL

U.S. avg. ~ 30-35%

Despite our heavy reliance on imports, Idaho's energy prices are generally quite low...

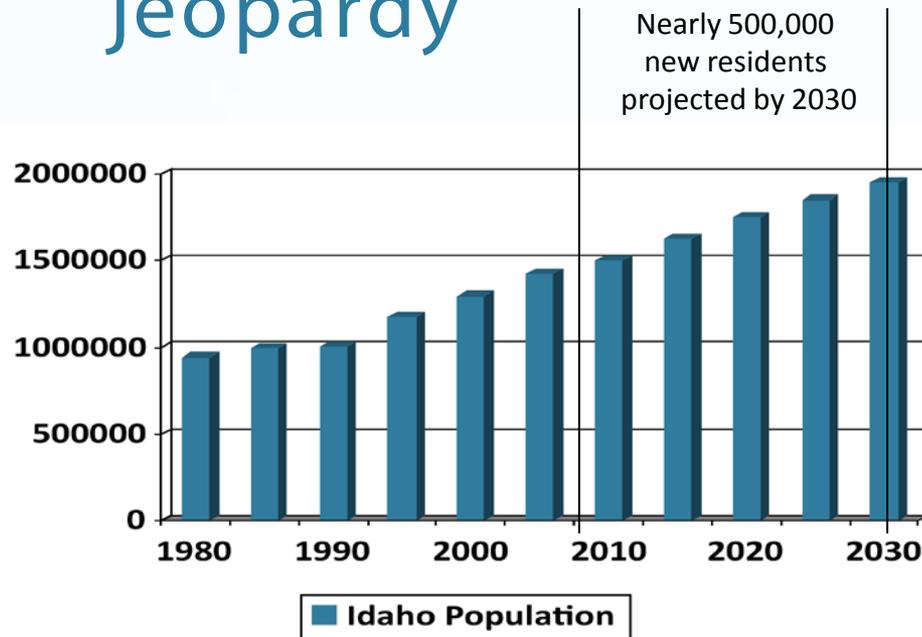
We're number one in lowest electricity prices, thanks in part to our neighbors...

Rank	State	Cents per kWh
1.	Idaho	7.41
2.	West Virginia	7.57
3.	Nebraska	7.94
4.	North Dakota	8.24
5.	Missouri	8.25
6.	Utah	8.31
7.	Oregon	8.59
8.	Kentucky	8.60
9.	Wyoming	8.95
10.	South Dakota	9.01
11.	Kansas	9.02
12.	Montana	9.32
13.	Arkansas	9.92
14.	Indiana	9.97
15.	Oklahoma	10.02
16.	Minnesota	10.07
17.	Tennessee	10.13
51.	Hawaii	35.74
U.S. Average		11.86

SOURCE: U.S. Department of Energy

Rank	State	Average Price \$/Thou Cu Ft
1	Hawaii	34.05
2	Florida	20.61
3	Alabama	18.13
20	Oregon	14.65
24	Nevada	14.17
25	Washington	13.86
36	New Mexico	11.99
38	California	11.57
39	Idaho	11.47
46	Montana	9.91
47	Utah	9.44
48	North Dakota	9.13
49	Colorado	8.84
50	Wyoming	8.84
51	Alaska	8.68

...but our energy future could be in jeopardy

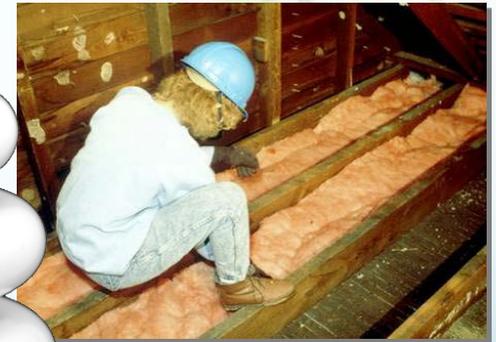
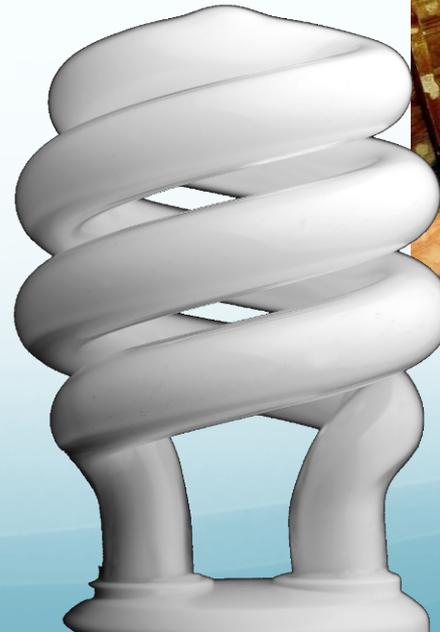


- Population growth
- Increases in energy use per capita
- National climate change policies
- Aging energy infrastructure
- Who will benefit from investment?



What can Idahoans do to manage through this inevitable change?

- **Inform and educate ourselves**
- **Meet the challenges**
 - Conserve our resources
 - Accommodate climate regulation
 - Carefully manage the costs of new resources
- **Capitalize on the opportunities for new investment – could include:**
 - Further development of Idaho's renewable energy resources (e.g. wind, geothermal, biomass)
 - Retrofits and new construction that result in increased energy conservation and efficiency
 - New transmission/ pipeline capacity to bring in low-cost energy from out-of-state





The ISEA was formed to address these energy challenges and help the state capitalize on the opportunities they present



The ISEA builds on the Legislature's 2007 Idaho Energy Plan and Idaho's 25x'25 initiative



The Mission

- **Analyze, inform and educate**
- **Help position the state to capitalize on opportunities**
 - Jobs
 - Exports
 - Partnerships
- **Anticipate challenges**



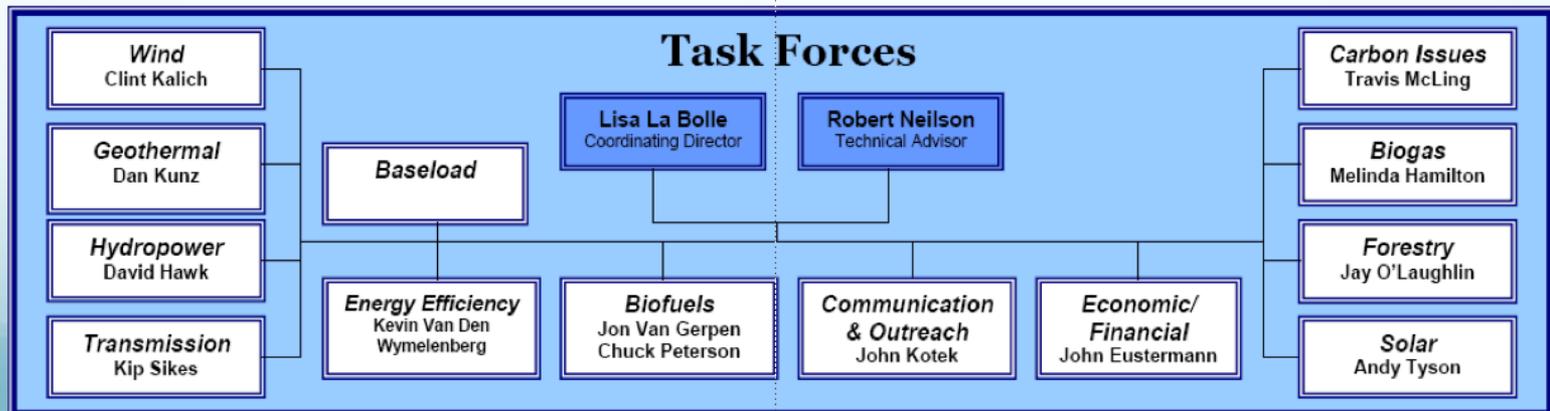
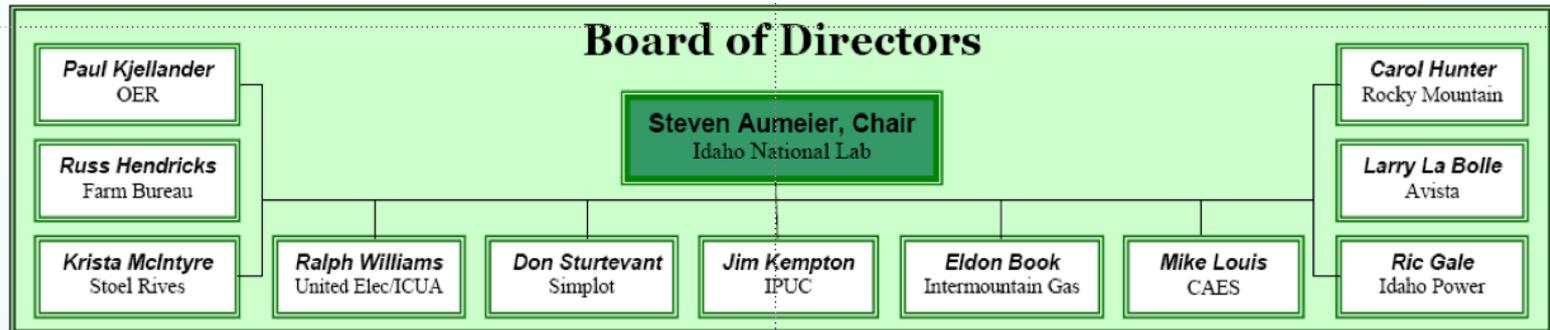
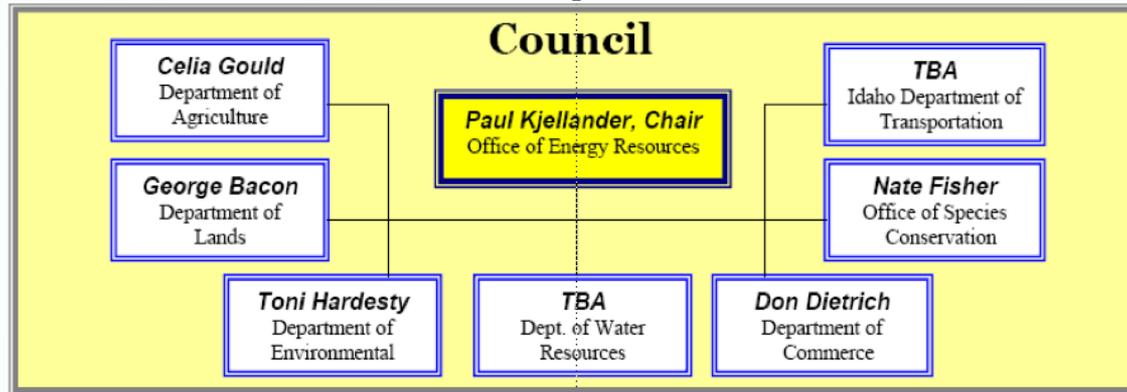


How Does the ISEA Work?

- The main work of the ISEA is performed by small teams with expertise in specific fields
- These teams analyze the pros and cons and make recommendations on energy options based upon credible data which are presented to the Board
- If approved by the Board, options are presented to the Council for recommendation to the Governor and/or Legislature as appropriate
- Work is transparent, posted on Web site as a public and decision-maker resource —

<http://www.energy.idaho.gov/idahostrategicenergyalliance/>

Idaho Strategic Alliance



ISEA Task Forces

- Well over 100 volunteers serve on the Task Forces
- Groups include policy experts, industry representatives, university and laboratory reps, law firms, environmentalists and others
- **Task forces cover:**
 - Wind
 - Geothermal
 - Hydropower
 - Transmission
 - Biofuels
 - Carbon issues
 - Conservation/efficiency
 - Biogas
 - Solar
 - Forestry
 - Economics
 - Communications



Task Force Reports - Status

- **Geothermal – completed and posted to ISEA web site**
- **Energy Efficiency – completed and posted to ISEA web site**
- **Forestry – completed and posted to ISEA web site**
- **Hydropower – completed and posted to ISEA web site**
- **Wind – draft under review by ISEA BOD**
- **Solar – Task Force still working on report**
- **Biogas – draft under review by ISEA BOD**
- **Transmission – Task Force still working on report**
- **Biofuels – draft under review by ISEA BOD**
- **Carbon Issues – draft under review by ISEA BOD**
- **Baseload – Task Force being formed**
- **Economics – Task Force still working on report**



The Bottom Line

- **The ways we produce and consume energy in this country are headed for fundamental changes**
- **Idaho can take advantage of the changing national and global energy landscape to help our state prosper**
- **The vision of a clean, smart and secure energy future for Idaho, and the economic development and diversification that goes with it, can be realized – but we've got a lot of work to do today to make it happen. Idaho's destiny is in our hands.**