

# ELECTRIC ENERGY

A PUBLICATION OF **EMEL**

Issue 2 | 2009

## Gambling with the Industry's Future

**Obama's "Change" Headed to the Industry**

**CO<sub>2</sub> Restrictions: Costly & Pointless**

**Human Capital: A New Generation**

**Peaking Facility: Integrating Wind with Natural Gas**

**Beginning of a New Interstate Electricity System**

**Opportunities in the New Energy Economy**

**Renewable Energy Potential Studies**



# Obama's "Change" Headed for the Electric Utility Industry

By Sam Sundstrom, Manager of Marketing & Communications, RMEL & Paul Dickerson, Partner, Haynes and Boone, LLP

Will the electric utility industry be better off eight years from now than it is today? As we enter the second half of President Obama's first year, it's apparent that the industry will not look the same once he leaves office. Using wind and other renewable technologies as the featured job growth mechanism as he signed the American Recovery and Reinvestment Act in February, the President gave very early signals that energy policy change was going to be a pillar of his legacy.

One could argue that there are more developments taking place in the realm of the energy sector today than ever before. From rapid breakthroughs in Smart Grid, to integration of renewables, to regulatory changes including the possible classification of carbon as a pollutant, change is sweeping through the industry.

An argument could also be made that it was clear these drastic changes were eventually coming. The push for "cleaner" and a more efficient grid has been building for decades. Since the 1970s, the nation's collective opinion has been slowly moving to an understanding that national security, our economy, and distributed generation are all inter-related and that diversity is required to ensure long term security.

Energy policy and the electric energy industry has avoided the public and media's spotlight for quite some time. The turn of the century appears to have been the tipping point for change and this change is developing rapidly, for better or worse, under President Barack Obama.

RMEL asked Paul Dickerson, Partner at Haynes and Boone, LLP, to share his insight on the "state-of-the-industry" under the current Administration and where we might be headed in the coming years. According to Dickerson, several trends are starting to emerge from President Obama's first months in office.

**Finance, Tax & Economic Policy**

2008 was a groundbreaking year for clean technology and the industry as a whole. Dickerson states that "venture capital money was flowing, we saw the early stages of major solar and wind installations, consumer demand for green energy was increasing in response to staggering fuel prices. We saw rapid movement in the development of new technologies." On the contrary, "2009 has been a drastically different year and the shortage of capital is causing problems. Many companies that were investing are sitting on the cash they have, waiting to see if the Wall Street IPO markets will open and raise some capital or if the Federal or State governments will come in and bail them out."

**Finance, Tax & Economic Policy**

Dickerson believes that "on the Federal side, the American Recovery and Reinvestment Act appears to be giving the industry what the industry desperately needs: long term durable policy." He states, "For years, the energy industry has been really held back by the erratic short term policy fixes coming from Congress." In his opinion, the policies coming out of Congress today will provide a healthier and more stable economic climate for the electric utility industry in the long term.

Specifically, Dickerson points to tax policy as one area that is seeing drastic change. "The Treasury is getting in the game with 30% grants in lieu of tax credits. That's good on the tax policy, but also we need to address the encouragement of scale of

*Continued on next page*

capital from moving from venture style money to commercial and large scale projects.”

## Environmental Policy & Regulation

On the horizon, in the area of environmental policy, there appears to be the potential for landmark and monumental legislation. The EPA’s possible classification of carbon dioxide as a pollutant and the Waxman-Markey Bill with its variation on a “cap and trade” system will impact every utility. Dickerson points out that it is crucial that the public and utilities “need to make sure that legislators are aware of the benefits and burdens of each provision in the energy bill.” He puts the responsibility on the public and the industry to make sure politicians and legislation correctly balance environmental responsibility vs. providing a stable and financially viable power system.

Another trend to watch is “whether Obama is going to go truly all renewables and focus on all efficiency instead of trying to use all available energy technologies.” Dickerson explains the energy technology integration scenario as he might explain taking a test to a student. “Sometimes it is best that you don’t circle a, b, c or d. Rather, you circle e’ all of the above’ – in that we need wind, solar, nuclear, coal, and fossil fuels. There isn’t a silver bullet. When you have politicians saying you don’t need coal or fossil fuels, you have extreme misunderstandings of current technologies and capacities.”

It’s clear that President Obama believes our world has changed and we are to the point of not turning back on bringing renewables on the grid. Dickerson believes many new policies will emerge promoting the deployment and integration of renewables and new technologies, further expediting bringing them to market. “If anyone questions whether we are moving to a diversified energy grid, the answer is absolutely yes. When, is the unknown question. The great thing is the diversity of options is what makes our nation strong.”

## Positive Reinforcement

Dickerson believes President Obama is taking the lead in positive reinforcement on the demand side of the energy formula. Much more focus has been placed on conservation in tackling increased energy consumption. “Obama has been fantastic about giving consumers positive reinforcement in changing their behaviors. An example is the \$3,500 trade in credit for your ‘old clunker’ for a new more energy efficient (car) model.”

He also emphasized that this positive reinforcement needs to be extended not just to consumers, but to the industry as well. “Find ways to bring

utilities to the table and help. Utilities are the solution, not the problem.” Positive reinforcement for utilities would be “additional incentives to the incumbent energy players in the industry. He needs to further incent them to step up to the table on a massive scale.”

## Other Issues for Utilities to Keep an Eye On

Several large legislative developments are unfolding in the area of employment that may directly impact utilities. The “Employee Free Choice Act” or “Card Check” and future immigration policy changes may have impacts on the utility industry workforce. Terrorism and cyber security is likely to become a “hot” topic as our grid and technologies become every-increasingly digitized. Developments in water legislation must also be watched, especially for those utilities operating in the West.

## Trends for Fuel Sources

Paul Dickerson provided further insight into technology trends and how these various fuel sources are faring this far under the Obama Administration.



### Solar

“The reviews coming out of the solar industry are pretty positive. I think the industry is encouraged by the Administration’s efforts to streamline the loan guarantee process, the greater availability of manufacturing investment credits, and the ability to trade in tax credits for grants that can help cover up to 30% of the costs for initiating new projects. This optimism should begin to translate into more projects being initiated – we’re seeing this in solar-rich states like Arizona and California, where companies are rushing to buy up big swaths of land to begin building extensive solar plants.

Some, though, have begun to express some concern that the stimulus package, by increasing the availability of financing for and demand for solar projects, will push up solar prices, which could squeeze utilities. They would have liked to have seen some provisions worked into the stimulus package that would have helped them monetize bonus and accelerated depreciation.”



### Geothermal

“The Administration’s recent commitment of \$350 million of new investment for geothermal energy projects is a huge step in the right direction. It was particularly helpful because it covered so many bases – from demonstration projects to enhanced geothermal systems to developing innovative exploration techniques.

*Continued on page 12*



*Continued from page 11*

Right now, there are about 126 new geothermal projects underway in this country, with the potential to power more than 5 million homes – that's more than we've ever had before. The more attention we can bring to the potential of geothermal power the better, because I don't think average Americans really understand how much this prolific power source can help us meet our energy and environmental goals."



**Biomass**

"The hope in the biomass industry is that the stimulus' additional financing support, loan guarantees and tax incentives will help the industry ride the storm of the economic downturn, allowing projects to continue developing until more private capital becomes available. The extension of the production tax credit (PTC) through 2013 is a major boost.

This level of support for biomass is great to see, because when corn-based ethanol hit the snags, there was a real risk that we were going to throw the baby out with the bathwater. Not only do we now know that a lot of that criticism was ill-conceived, but the next generation of biofuels – from cellulosic to algae – are a lot further along than most people projected, and they hold real promise for putting a dent in our oil addiction.

One area that will be critical for the Administration to get right in biofuels development is indirect land use calculations. They should really take their time to get this right, because some of the methodology they're employing to date is out-of-touch with reality. While it is critically important that we hold all companies accountable for the totality of their carbon emissions, there is still a lot of guesswork in coming up with these figures, and we need to address that."



**Nuclear**

"The nuclear energy industry has definitely taken its share of knocks here in the first six months of the new Administration. First, they had \$50 billion in additional loan guarantees pulled from the stimulus package, and then funding for Yucca Mountain was pulled. The issue there is a lot of states have moratoriums on adding new nuclear capacity until the waste storage issue is solved on a national level.

But there is also some good news. Cap-and-trade, if it makes it through the Senate, is immediately going to improve the cost competitiveness of nuclear power, compared with coal and natural gas. And states across the land are pushing through some innovative policies to help gird the way for a nuclear renaissance, either by doing away with moratoriums or by helping utilities to use pay-it-forward approaches to recover their construction costs up front.

Both Obama and Dr. Chu have been careful to say that they support expanding America's nuclear power capabilities, and that's the right approach. It would be unwise for us to turn our back on the power source that contributed almost three-quarters of our emissions-free electricity last year."



**Fossil Fuels**

"The administration has regretfully positioned the oil and gas industry more as an adversary than an ally. Obama's proposed budget, for instance, would pay for a slew of clean energy projects on the backs of oil producers, including \$5 billion for a new excise tax on oil and gas exploration in the Gulf of Mexico.

Taxing oil and gas companies without engaging them as partners is a mistake. The clean tech industry is entering a phase of its development that oil and gas producers know all too well. Having proven their technologies in the laboratory, clean tech entrepreneurs are now looking to "scale up," or move to the production phase of their development.

As any seasoned venture capitalist will tell you, clean tech's success will largely be decided by companies' ability to partner with experts in managing large-scale, capital-intensive projects – the skills that oil and gas producers have developed and displayed over the past 120 years. They have a long track record of planning, financing and overseeing large projects – and coming in under budget and on time. There are many areas for potential technical collaboration as well. In Europe, for example, oil companies have already begun partnering with renewable energy developers to bring their deepwater infrastructure expertise to offshore wind farms.

The bottom line here is we need oil companies on board for this clean energy revolution, not with their backs up against the wall."



**Wind**

"With wind energy, I think leading industry participants would tell you that they're seeing more of a mixed bag of support from the White House. They would applaud the tax credits and other stimulus incentives that are giving the solar industry a boost, but they would argue that policy needs to go further in order to create a durable, long-term signal to help stoke

*Continued on next page*

private financing.

One of their latest concerns is that the proposed Renewable Electricity Standard in the House energy bill does not go far enough. American manufacturers are facing tremendous competitive pressure from places like China and Europe, and they are worried that, as proposed, the bill would simply create jobs in those countries. I saw a recent report out of HSBC that estimated the US could add 6,700 megawatts of wind power generation this year if we put an ambitious renewable energy mandate in place. But if we're going to achieve that kind of penetration, we also have to help wind farm developers solve local siting and permitting issues. I can't tell you how many times wind project developers came to my office at the Energy Department to complain about lengthy delays in getting their siting applications approved. T. Boone Pickens, who is building the world's largest wind farm in Texas, has some ideas on this. He thinks we should follow Texas's example in creating National Renewable Energy Zones, which would give public utility commissions the power to build high voltage transmission lines to connect wind farms with urban areas.

### Only Time Will Tell

The winds of change are definitely blowing in the electric utility industry under the

Obama Administration. It's becoming clear that this change will be expensive and expansive at least in the short term. When asked what this means in the long term, Paul Dickerson quickly commented that "only time will tell." RMEL will continue to watch and provide forums to discuss these industry issues as trends and changes continue to develop. ■

---

*Sam Sundstrom (samsundstrom@rmel.org), RMEL's Manager of Marketing & Communications interviewed Paul Dickerson, Partner, Haynes and Boone, LLP for this article. Paul Dickerson (paul.dickerson@haynesboone.com) is a recognized leader and speaker on issues of clean tech and energy efficiency, launching Haynes and Boone's Clean Tech practice group in 2008. Dickerson served as Chief Operating Officer of the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy from 2006 until his return to Haynes and Boone, where he is now a Partner. He also served as Chief of Staff for the United States and Foreign Commercial Service at the U.S. Department of Commerce. Paul, who is also a certified public accountant, has published numerous articles and frequently appears on the media circuit discussing politics, business, taxation, financing and other issues relevant to international trade and business.*

# PowerQuip

## REPRESENTING THE LEADERS

Salt Lake City, Utah  
Denver, Colorado

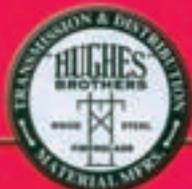
Babcock & Wilcox  
Howden Buffalo Inc.  
United Conveyor Corp.  
Vogt Power International  
Stock Equipment  
Diamond Power/ASI  
KSB Pumps  
Pacific Valves  
Alfa Laval  
Copes Vulcan Valves  
Air Monitor  
NeuCo  
Crane Valve Services  
EvapTech Inc.  
Conval  
Holtec International

801-546-6262

powerquip@earthlink.net  
www.powerquip.net

60 East Gentile Street  
Layton, Utah 84041

*Areas of representation may vary*



**Hughes Brothers**

**Transmission & Distribution Materials**  
**Aslan FRP**  
**Timber Bridges**

**402 643 2991**  
**www.hughesbros.com**