

Remarks as written

“Do What You Can, Where You Are, With What You’ve Got:” Tackling Climate Change Amid Economic Uncertainty

National Governor’s Association

Plenary Session: Energy Infrastructure for the 21st Century
February 21, 2009

John W. Rowe, Chairman & CEO, Exelon Corporation

Thank you for that kind introduction, Governor Rendell.

Mark Twain said over a century ago that everybody talks about the weather and nobody ever does anything about it.

The same could be said about our nation’s energy policy.

Recent events, however, are at last compelling us to seriously address the issue

Concerns about climate, concerns about our energy security, and more recent concerns about the very foundations of our economic order compel us to consider a comprehensive plan.

There are many competing ideas about what that plan should look like

Mr. Pickens has outlined his plan

President Obama’s approach contains three critical components.

Infrastructure investments in energy efficiency, transmission, and distribution;

Federal support for the deployment of renewable electricity resources;

And a cap-and-trade program to put a cap and a price on carbon.

My own views are grounded in the 125-page report published in 2004 by the bipartisan National Commission on Energy Policy, entitled “Ending the Energy Stalemate”

I was pleased to co-chair the Commission, along with Bill Reilly, EPA Administrator in Bush I, and John Holdren, recently appointed as President Obama’s Science Advisor

We found, among other things, that concerns about our future energy security and climate change go hand in hand, and that our economic security depends upon adopting pragmatic policies that address both

We found that there is no single technological or policy answer to our continued energy security and climate change challenges

Government and industry, working together, must promote energy efficiency, renewables, clean coal, and nuclear if we are to make a difference.

We strongly recommend a cap-and-trade system with a safety valve to bring the cost of carbon into the marketplace without overburdening the economy.

I commend the report to you – it is still good reading

Today, however, given the audience and the times I thought I would focus most particularly on what governors can do – and what states can do – to address the President’s three components.

One of Governor Paterson’s predecessors, Theodore Roosevelt, once said that when you are confronted with a problem, you must “do what you can, where you are, with what you’ve got.”

In my view, there are two very practical things that state government can and must do with what they’ve got – promote economic infrastructure investment and promote energy efficiency

In terms of infrastructure, a term that is on everyone’s lips these days is “smart grid”

What that means is less clear.

In its most straightforward form, smart grid refers to a suite of technologies that will give consumers and utilities greater information about their power consumption and cost and the overall reliability of the distribution system

But it’s also sometimes used to refer to transmission investment, particularly transmission to deliver renewable generation to market.

What is certain is that the term has captured the imagination of policymakers and the public.

We have even reached a point where a smart grid commercial appeared amidst the potato chip and beer ads during the Super Bowl.

Energy efficiency may not be as sexy as smart grids or other technological answers, but it is in reality the most cost-effective infrastructure investment we can make.

At Exelon, we know this first-hand, because our recently re-designed Chicago headquarters earned LEED Platinum certification and cut our own electricity consumption by 50%.

States can and must promote efficiency by adopting more stringent building standards and by weatherizing the homes of many low-income consumers – those who are hit hardest by increases in the cost of energy.

Not surprisingly, both smart grid and energy efficiency have attracted great attention in the ongoing stimulus debate in Washington

In December, Exelon prepared an economic analysis for the President's transition team on the impact of a \$75 billion federal investment over four years in smart grids and transmission.

Our analysis indicated that such an investment could generate roughly 250,000 jobs per year for that four-year period.

Federal support of these efforts is both needed and welcome.

But many states are already far along in promoting both

In Pennsylvania, for example, Governor Rendell and the state legislature just last year enacted some of the nation's strongest laws to promote the development of renewables and energy efficiency.

Pennsylvania established a \$650 million investment fund to promote wind, solar, geothermal, and other types of renewable energy as well as energy conservation and weatherization projects.

Pennsylvania has also enacted legislation that calls for the installation, over time, of smart meters for all customers.

In addition, under that law, PECO and other local utilities are working with regulators to implement efficiency measures that will reduce energy consumption by 1% in 2011, 3% in 2013, and peak demand reduction by 4.5% in 2013.

PECO anticipates it will spend \$80-\$100 million per year to promote efficiency measures and reduce customer usage.

PECO has also commenced solicitations to purchase renewable power under Pennsylvania's 2004 Alternative Energy Portfolio Standards Act, which requires that utilities purchase 18% of their power from renewable sources.

Illinois has likewise taken aggressive steps.

Governor Quinn has long been an advocate of improved efficiency standards.

Commonwealth Edison will spend about \$200 million over the next two years on efficiency programs

And ComEd is beginning to roll out an Advanced Metering Initiative on the west side of Chicago

ComEd's effort begins with installing up to 200,000 smart meters costing over \$62 million

Smart meters hold great promise for companies like ComEd for improving system reliability, promoting conservation, and improving the efficiency of our operations

There is much here to be encouraged about, but I do want to take this time to share with you a few observations based on my 25 years as a CEO in the electric utility industry.

First, meeting our future energy needs in the least carbon-intensive way will be a very expensive challenge, one best sorted out through market forces and not by government picking winners and losers.

Those needs are great -- the Department of Energy estimates that energy demand will increase 26% between now and 2030.

We all recognize that energy efficiency affords us the most immediate relief at the lowest cost

But efficiency alone will not suffice

The Electric Power Research Institute estimates that 25% of this increase can be realistically eliminated through efficiency improvements, and 38% can be eliminated in the best case

It seems unlikely we could offset all future load growth, and even if we could we will have done nothing to offset our existing carbon emissions

And even energy efficiency can be uneconomic if implemented through expensive subsidy programs rather than through building and appliance standards and price signals

Most agree that gas fired generation affords us the next most efficient option in the electricity sector

But gas prices of late have been very volatile, and while new gas discoveries like the Barnett Shale offer some relief, for the longer term there is great uncertainty about both the availability and cost of gas

50% of our current electricity comes from domestic coal, and I think we all must recognize that will not change overnight

We must redouble our efforts to develop clean coal technologies, and carbon capture and sequestration retrofits for existing plants

But large-scale carbon sequestration technology exists only in theory

Making it a reality may cost even more than a new nuclear plant.

We need to acknowledge that nuclear today affords us the largest source of low-carbon generation

The existing fleet is now extremely efficient, and cost effective

But the cost of new nuclear facilities will be staggering, and there are significant licensing, permitting, and fuel cycle issues yet to be resolved.

And finally, there is a great deal of interest in renewable energy, particularly wind and solar

We share that interest, but we also recognize that renewables are neither cheap nor easy.

Existing subsidies at the federal and state level together make wind an economically-competitive form of generation.

Absent these subsidies, however, our analysis suggests that wind can cost three or four times as much as natural gas to displace a metric tonne of carbon.

Solar subsidies are even larger, particularly at the state level, where they can reach 40 cents or more per kWh.

It no surprise that CO2 reductions from solar are ten times more expensive at current prices, though we expect those costs will contract somewhat in the coming years.

And then we must also invest in backup generation for the times that the wind doesn't blow or the sun doesn't shine.

I am mindful that at some point in the future you all may conclude that these subsidies are too expensive or bad public policy.

And then the electric industry will have invested billions of dollars in generation that simply doesn't make economic sense.

There is no free lunch here.

But our past experience with PURPA and government mandated least-cost planning demonstrates beyond a doubt that market forces, rather than governmental mandates, will ensure that customers get the cheapest lunch possible.

Second, investments in transmission and the grid are sorely needed, but the public and policy-makers at all levels still need to be convinced.

The Edison Foundation estimates that the industry will need to make investments in transmission totaling \$298 billion dollars between now and 2030 to maintain reliable electric service.

This is larger than the combined market capitalization of the top 20 companies in the industry.

Meeting everyone's smart grid desires would easily double that amount.

These investments have come painfully slowly to date.

A colleague of mine at another major utility tells of his company's efforts to build a high-efficiency 90-mile transmission line – and how it took 14 years to get the approvals and 2 years to build it.

ComEd spent \$350 million on an 8-year, 12-circuit mile project to improve transmission into Chicago.

Two factors have inhibited construction of a better, more-efficient electric grid.

Consumers, legislators, and policy makers have balked at the costs, which run in the billions of dollars.

And instincts of NIMBY-ism still run strong – people don't like having transmission lines near them much more than they like having a power plant near them.

Third, to address this and other issues, government at all levels must work together

Both the federal government and state governments have important roles to play

We believe that carbon ultimately must be regulated at the national level – climate change is a global rather than a local or regional issue

We also believe that the federal government has a unique role to play in funding research and development of new low carbon technologies

But as I have outlined, state government also has a critical role to play in promoting efficiency and infrastructure development, particularly the siting of new low carbon generating and transmission infrastructure

States must also ensure that utilities are able to recover their costs and earn a fair return on that infrastructure investment.

For example, in support of the effort to invest in the smart grid, the Illinois Commerce Commission provided in its most recent rate order that the costs can be recovered without the usual lag that comes with the ratemaking process.

And all must acknowledge the important role states are playing, both individually and collectively, in advancing the low carbon debate and prompting federal action

We applaud regional initiatives like RGGI and the more recent Midwestern Greenhouse Gas Accord.

Fourth, industry must demonstrate real leadership

Last year we unveiled Exelon 2020, a low carbon roadmap that will enable us to reduce, offset, or displace more than 15 million tonnes of greenhouse gasses per year by 2020 – an amount greater than our current carbon footprint

We will accomplish our goal through a combination of greening our own operations, helping our customers and communities reduce their emissions, and offering more low-carbon electricity into the marketplace.

But it must be said that we are uniquely able to do this because we are a nuclear utility.

Others must chart their own more-challenging path.

Finally, it is imperative that we impose a price on carbon

This can be done either through a national carbon tax or a national cap-and-trade system of the type being discussed by the Obama Administration

And we cannot afford to wait, even given the current financial crisis

There must be incentives to build low-carbon energy and disincentives to invest in high-carbon energy.

Otherwise, you will not get the cheapest solutions.

Clearly, there is much work to be done

We know that it will not be easy, it will not be cheap, and it will not be fast.

But we all must do what we can, where we are, with what we have – we cannot afford to wait

And Exelon is ready to work with you to make it happen.