

**John W. Rowe Remarks  
“Exelon 2020 - In Pursuit of More Sustainable Energy”  
Harvard University  
October 6, 2008**

**The creator of my industry, Thomas Edison, once said, “Discontent is the first necessity of progress”**

**We certainly have discontent.**

**Our nation has not had an energy policy in 30 years – except to passively enjoy low cost fossil fuels.**

**We are increasingly dependent on foreign oil and gas, and increasingly estranged from many of the countries that control their production<sup>1</sup>**

**We are all concerned about the role of oil in our policies in Iraq.**

**We have equal reason to be concerned about Russia’s recent incursion into Georgia, and its ever-greater dominance over European gas.<sup>2</sup>**

**Meanwhile each new report on climate change makes the need to act more urgent.**

**The demand for energy must be met**

**And it must be met with the least reliance on unfriendly nations**

**The least impact upon our climate**

**The least burden on the U.S. economy**

**And because the ballot box still drives our nation’s leaders, it must also be met with the least disruption to the lifestyles that voters hold dear**

**We at Exelon have put our best effort to build a program that meets these objectives into Exelon 2020.**

---

<sup>1</sup> According to EIA, in 2007 the top 5 crude oil suppliers to U.S. were: #1 Canada (18.2%); #2 Mexico (11.4%); #3 Saudi Arabia (11%); #4 Venezuela (10.1%); #5 Nigeria (8.4%). Iraq was #6 w/approx. 4%.

<sup>2</sup> According to the European Regulation Forum on Supply Activities, Russia is the largest supplier of natural gas to Europe, accounting for 25.6% of gas imports, up from 24.2% in 2000 and projected to increase to 28.6% by 2025.

**Exelon 2020 is both a roadmap for our own actions and a set of recommendations for policy decisions.**

**In four short weeks we will know who our next president will be.**

**He will inherit a nation with a fragile economy, a war abroad, and a warming climate – and he must deal with all three.**

**I will describe here the 5 elements that one utility executive thinks imperative to an energy policy.**

**First, the next administration must work with Congress to enact mandatory, economy wide climate legislation – and pass it soon**

**The major bills that deal with climate change are all based on cap and trade systems, which can be an effective way to deal with the climate problem.**

**But we must resolve three very vexed issues in the current debate:**

**The first is a cost containment mechanism that is phased out over time.**

**We have a weak economy, and we cannot shock the system.**

**A cost containment mechanism would give political stability to a cap and trade regime and enhance its longevity.**

**It would also allow time for better technological solutions to be developed and implemented.**

**The second is how best to account for offsets**

**Offsets are essential advantages in moderating the near term cost of reducing carbon emissions, but the accounting is very difficult.**

**RFF notes that many potential offset projects present challenges because the emissions reductions they generate are difficult to measure or carry risks of impermanence.**

**Much of Exelon's ability to neutralize our own relatively small carbon footprint is driven by offsets that come from displacing less clean power with new gas, or nuclear.**

**Even customer energy efficiency programs involve offset accounting.**

**The third issue is how to distribute carbon allowances**

**In the electric sector, we support allocating allowances to local distribution companies for the benefit of customers, and phasing them out over time.**

**Pollution simply shouldn't be free forever.**

**Others favor the distribution of free allowances to generators, which would result in economic windfalls, and paradoxically penalize those who have already taken steps to reduce their reliance on oil and coal**

**The second imperative is a commitment to energy efficiency and conservation across our entire economy**

**Simply stated, energy efficiency produces the most cost-effective way to reduce reliance on foreign energy, reduce reliance on fossil fuels, reduce CO2 emissions, and reduce the total cost of energy<sup>3</sup>**

**I see three key drivers of efficiency – new standards, price elasticity, and in our industry, utility programs and investment**

**First, government at all levels must adopt new efficiency building, equipment and appliance standards.**

**Second, customers must see the real cost of energy**

**The whole point of a cap and trade system is to allow customers to see the real cost of energy.**

**Third, utilities can play a significant role, not only through subsidy programs, but also by adopting technologies like smart grid that will enable customers to understand the economic impacts of their usage and to manage that impact.**

**Exelon 2020 contains an internal goal of reducing energy-consumption in our buildings by 25%, as well as \$175 million in customer programs.**

**Range from things as simple as providing free CFL bulbs to things as complex as giving incentives to large**

---

<sup>3</sup> In some states, well-designed energy efficiency programs are saving energy at an average cost of about one-half of the typical cost of new power sources. (EIA 2006)

**industrial customers for implementing efficiency overhauls in their operations.**

**The third imperative is for the next administration to make a long-term commitment to production tax credits for low carbon energy sources – the on-again-off-again PTC is untenable**

**Renewables are the favored solution of most politicians, both left and right**

**28 states and the District of Columbia have now adopted so-called renewable portfolio standards, and there is strong support for enacting a federal standard.**

**In contrast, the federal government has been grudging in extending financial support for renewables.**

**And the extensions they are considering are the same 1-2.5 years credits previously enacted – hardly the longer-term certainty needed to support significant investment.**

**Recent work by RFF suggests that our citizens prefer renewable portfolio standards in the misguided belief that this is the cheapest way to go.**

**Our own analysis, the heart of 2020, found that without subsidies, it is three times as expensive to displace a metric tonne of carbon with wind as it is with natural gas, and 50% more than with new nuclear.**

**And at its current cost, solar is more than 10 times as expensive as wind, although we do expect costs to contract in coming years.**

**And the intermittent operation of most renewable resources means that we must install backup generation, usually gas fired, for when the wind doesn't blow or the sun doesn't shine.**

**Let me be very clear – renewables must be a part of the solution – but a prudent part of that solution.**

**The Brattle Group's recent study for the Edison Foundation projected close to a \$2 trillion investment will be needed between now and 2030 to replace carbon-intensive infrastructure while meeting growing demand.**

**We must keep our eye on the economics of each option.**

**Which is why my fourth imperative for the next administration is to make a firm financial commitment to new low-carbon base load generation**

**The federal government must fund research and development of carbon capture and sequestration**

**Globally, we cannot successfully address climate change unless we develop technologies that will enable us to capture and sequester GHG emissions from existing coal plants**

**But the technology remains elusive, the costs will be very high, and MIT's 2007 Future of Coal report poses serious unanswered questions about geological sequestration**

**Federal support for research and development is essential**

**In like fashion, the federal government must enact loan guarantees for new nuclear**

**Now I say this as the CEO of the largest nuclear generator in the US, and with some understandable bias**

**But I also say it as someone who is 63 years old, and therefore not likely to get rich from operating the next nuclear unit**

**Nuclear power today supplies the vast majority of US low carbon electric energy**

**Existing plants are safe and efficient, and the next generation promises to be more safe, and more efficient**

**We will need at least 25 – 30 new reactors by 2030 if we are to succeed in limiting greenhouse gases and improving our energy security**

**The cost of developing those reactors, particularly the initial 6 – 8 units, will be staggering, but still less than renewables.**

**And Energy Secretary Bodman noted just last week the construction of new nuclear plants worldwide is at risk because of the global financial crisis**

**We must have substantial federal support, in the form of loan guarantees, if we are to invest in that next generation of new nuclear plants**

**With effective carbon legislation, those loan guarantees will be transitional**

**Our work with our Exelon 2020 Low Carbon Plan demonstrates that a carbon price of \$40 per metric tonne will make new nuclear cost competitive without subsidy.**

**That's half the price of carbon needed to make wind competitive**

**And while there is much debate about what the overall cost of carbon will have to be to address climate change, there is an emerging consensus that that price will have to exceed \$50 per tonne**

**Nuclear will be cost competitive in a carbon-constrained world**

**Yet the federal government has failed to adequately fund the loan guarantee program.**

**On Thursday, the DOE reported it has received loan guarantee applications totaling \$122 billion to finance the construction of 14 plants, far exceeding the DOE's \$18.5 billion in funding.**

**Finally, the next administration must remain committed to competitive energy markets, particularly in electricity**

**Not a popular sentiment in these troubled times, which are characterized by rekindled regulatory fervor.**

**I agree that you cannot have good property rights and good markets without good rules.**

**But the cure for the sins of Lehman Brothers is not the policies of the German Democratic Republic – nor is it a return to the monopoly utility industry that failed in the 1980s and 1990s.**

**Competition in the electricity sector has delivered an impressive record of new, environmentally preferred investment, dramatically improved the operating performance of existing generation, and has helped contain wholesale price increases**

**Paul Joskow makes the point beautifully in a recent talk he gave at Resources for the Future, where he argued that rather than abandoning competition in those regions of the country that have adopted it, an effective cap and trade regime for carbon will require extending competition across the country**

**Unpopular though it may be, we must recognize that ours is a national industry, living in a global energy market, dealing with a global environmental crisis**

**And so, we return to Edison's admonition**

**There is great discontent about energy today, and great provocation for it**

**The question is whether we allow that discontent to push us forward, or push us backwards**

**The answer to me in energy policy is self-evident**

**We must meet the clear and present danger of climate change**

**We must pursue the potential of energy efficiency**

**We must move forward on renewables, ever mindful of the cost**

**We must move forward on clean coal and next generation nuclear**

**And we must have the discipline and innovative drive of competitive markets**

**We must channel our current discontent toward progress**

**In Exelon 2020 we have put forward a plan to address these essentials – You can find the full document it at [www.exeloncorp.com](http://www.exeloncorp.com). I commend it to your attention.**