

**“Exelon 2020 - In Pursuit of More Sustainable Energy”
Economic Club of Chicago
Oct. 14, 2008**

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

We certainly have discontent.

On the economic front, the market continues to wobble.

Since hitting its peak last October, the total value of stocks covered by the Dow Jones Wilshire 5000 had dropped 43% as of the end of the day yesterday -- from \$19.1 trillion to \$10.9 trillion – a loss of \$8.2 trillion.

In three 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.

Responding to all of these challenges requires an effective energy policy.

Our nation has not had one in 30 years – except to passively enjoy low-cost fossil fuels.

As a result, our nation gets about 50% of its electricity from coal, and 20% from natural gas, which generates about half the CO₂ of coal.

Nuclear, which generates virtually no GHGs, makes up about 20% of our nation’s power supply.

And renewables account for less than 10%, with three-quarters of that coming from hydro-electric power.

You may be surprised to know that nearly all new generation capacity built in the last 15 years has been natural gas¹.

Gas is more climate-friendly than coal, but we are putting ever-more of our energy eggs in a volatile basket.

We are increasingly dependent on foreign oil and may become dependent on foreign gas.

¹ Source: NEI Nuclear Policy Overview Nov/Dec 2007

We are increasingly estranged from many of the countries that control their production.²

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.³

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

Tonight, I will share the five key elements I believe are imperative to such a policy.

I will also share with you the actions Exelon is taking while we await policy.

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

With the nation's attention on the economy, action to fight climate change appears to be stalled in Washington.

Despite warnings from the scientific community that a discernible warming of the planet's climate system is now "unequivocal."⁴

The science is overwhelming

Reports by the Intergovernmental Panel on Climate Change and the National Academy of Sciences persuade all but the most skeptical

² 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%.

³ 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.

⁴ Source: United Nations Intergovernmental Panel on Climate Change

Global average temperatures are rising, and human activity, specifically the burning of fossil fuels, is a major contributor

Less certain is the long range effect that increased temperatures will have on the world's ecosystem.

Predictions range from the inconvenient to the catastrophic

We must act – but that is not easy, particularly in these economic times.

We are carbon-based organisms living in a carbon-based economy.

Reducing our carbon footprint will be one of the most difficult challenges of the 21st Century.

Electricity production accounts for 40% of US greenhouse gas emissions.

We at Exelon are not waiting for government action.

We recently launched Exelon 2020: A Low-Carbon Roadmap.

Our goal is to reduce, offset, or displace more than 15 million tones of GHGs per year by 2020 – the equivalent of our entire carbon footprint.

Exelon 2020 is both a roadmap for our own actions and a set of recommendations for policy decisions, recommendations that we are actively advocating on Capitol Hill

The major bills that deal with climate change are all based on cap and trade systems.

These systems would effectively deal with the climate problem by providing economic incentives to reduce GHG emissions, and have proven effective in the fight to limit NOx and SOx emissions.

Only by incorporating the cost of carbon into the marketplace will we get the innovation we need to drive effective solutions.

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

The first is how to ensure cost increases are phased in gradually.

We have a weak economy, and we do not want to shock the system

A cost containment mechanism would give political stability to a cap and trade regime, enhance its longevity, and allow time for better technological solutions to be developed and implemented.

The second vexed issue is how best to account for offsets

Offsets come in many varieties, but the concept is basically that one can pay to reduce emissions elsewhere instead of reducing one's own emissions.

Examples in my own company include ComEd's energy efficiency programs and Exelon's support for the Field Museum's avoided deforestation work with the Cordillera Azul National Park in Peru.

Exelon's ability to neutralize our own relatively small carbon footprint is also driven by offsets that come from displacing less clean power in the marketplace with new gas or nuclear.

It is clear that a mix of actions by one market participant that impacts the emissions of others will play a role.

Offset projects, at times, can be difficult to measure, and carry risks of impermanence⁵,

But offsets will be essential to moderate the near term cost of reducing carbon emissions.

The third issue is how to distribute carbon allowances – Do you auction? Do you give them out for free?

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

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

⁵ According to RFF.

Let me be clear – Carbon legislation is essential, but it is not sufficient.

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 GHG emissions, and reduce the total cost of energy⁶

I see three fundamentals of efficiency.

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

Second, customers must see the real cost of energy so that price elasticity can drive efficiency.

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.

We recently redesigned our Chicago headquarters, reducing electricity consumption by 50% and earning a LEED Platinum certification – but we are not stopping there.

Exelon 2020 contains an internal goal of reducing energy-consumption in our buildings by 25% within the next 5 years, and we take this goal very seriously.

Tonight, I say to all of you, the best thing you can do for your business in energy is adopt a goal like this and live with it.

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.

⁶ 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)

Unfortunately, renewables tend to be a very expensive way to reduce carbon impacts.

Our own analysis, the heart of 2020, found that without subsidies, it is three times as expensive to displace a metric tonne of carbon in our service territories than with wind than 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.

A recent poll suggests that most voters think climate is a real problem and want action.⁷

But they don't like a tax – they know it costs money; they don't like cap & trade – they think it costs money; and they DO like RPS – because they think it's free.

It is actually more expensive.

Let me be very clear – renewables must be a part of the solution.

Exelon will buy wind and invest in solar.

But renewables are only a part of the solution.

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

⁷ Source: Resources for the Future

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.

Nuclear power today supplies the vast majority of US low carbon electric energy, and does so both safely and efficiently.

If we are serious about improving our energy security and addressing climate change, we will need at least 25 – 30 new reactors by 2030.

The cost of developing those reactors, particularly the initial 6 – 8 units, will be staggering -- \$4,000/kw or \$4B to \$6B per plant -- but it is still less than renewables.

Nuclear will be cost competitive in a carbon-constrained world, and economic solutions like this one simply cannot be ignored.

Our work with Exelon 2020 demonstrates that a carbon price of \$40/tonne will make new nuclear cost competitive without subsidy, half the cost of unsubsidized wind.

Although Exelon's generating capacity is 80% nuclear, on the margin we can build anything.

We are currently evaluating a new two-unit facility in Texas, but the ultimate cost of that facility over the 10+ years it will take to build it puts the project's viability in question.

As all of you know, the last generation of nuclear plants almost killed my company before we started to make money on it.

We deeply believe in nuclear as a policy issue, but as a business decision this may be more than even the largest utility can bear.

Now construction of new nuclear plants worldwide is at risk because of the global financial crisis.

We cannot lead in this next generation without federal support.

With effective carbon legislation, these loan guarantees will be transitional.

But so far, the federal government has failed to adequately fund the loan guarantee program.

The DOE 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.

Left to our own devices, utility executives would build nothing but coal and nuclear – Competition allows richer and more complex solutions to come in.

Competition has also dramatically improved the operating performance of existing generation, and has helped contain wholesale electricity price increases

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. I commend it to your attention.