



March 28, 2011

UPFRONT Newsletter

Title: Looking at Iowa's Energy Future

Nuclear energy generation and safety issues have been in the headlines ever since Japan's tragic earthquake and tsunami that followed. The threat of a meltdown of one of the reactors and exposure to radiation has the entire world watching and re-examining the safety and security of their own nuclear power facilities.

Upon closely examining the Japanese failure that was affected by the disaster, two things, one good and one bad, have come to light. The first is that the reactors survived the earthquake itself. No structural damage was detected as a result of one of the most severe earthquakes ever recorded, 9.0.

The shock waves created by movement resulting in an overlap of over 13 feet of the earth's geo plates did not affect the nuclear plant. The engineering design had successfully addressed the shock waves.

What the engineers failed to address was protecting the facility from the tsunami, the 31 foot wall of water that rushed ashore wiping out entire cities resulting in 10,000 persons dead and 19,000 still missing

As the water surged into the nuclear facility shutting down its power, the emergency generators needed to continue to cool the water in which the radioactive rods are stored were suddenly under water and unable to function.

Suddenly the nuclear reactors were at risk. If those generators had been installed on the roof of the plant out of danger, rather than on the ground, we wouldn't be confronted with the potential disaster.

In the wake of the event in Japan, the Iowa Legislature is re-examining the feasibility of building a next-generation nuclear power plant in Iowa. Safety concerns are utmost in the mind of this legislature. Even though we have no threat of a tsunami here in Iowa, water is still an issue in the safety of the plant. Nuclear power plants are always built near water that provides cooling needs of the facility. Protection from floods is imperative in the design of a new nuclear facility in our state.

The Iowa House will debate House File 561 which is the next step in the process to see if bringing new technology to Iowa is the right approach for meeting the state's needs for electricity over the next 50 years.

Why nuclear rather than other forms of power generation being considered? Coal, which has been our major producer of electricity in the past, will eventually be phased out over the long term. Federal regulations will require the use of clean coal technology in 2015. Eleven coal fired plants will close across the country. A new coal fired plant for Iowa is out of the question. Solar power at 33 cents per kwh is over three times the cost of nuclear's ten cents per kwh. The cost of natural gas is 15 to 32 cents per kwh, but would serve our citizens better if used for heating our homes, rather than the production of electricity. Wind is the cheapest at nine cents per kwh but they only produce electricity 30 percent of the time. The form of energy production that we choose must be able to consistently produce power at all times to sustain the power grid.

In the 2010 legislative session, the democratic controlled House voted 91 to seven to direct MidAmerican Energy to do a study of the feasibility of building a next generation nuclear power plant in Iowa. House File 561 is the next step in the process to see if bringing new technology to Iowa is the right approach for meeting the state's need for electricity for the next 50 years. House File 561 **DOES NOT** direct MidAmerican Energy to build a new power plant. The bill authorizes the Iowa Utilities Board to do an analysis of such a project to

determine if it is in the best interest of Iowa's today and in the future. The state's top officials governing our utilities will make the final decision, not the Legislature.

The Board would oversee the cost of the project and how customers would pay for it if it were to be constructed. The bill requires MidAmerican Energy to implement a rate structure that would pay for a plant during the development and construction phase and also during the life of the plant. That means that the cost to MidAmerican Energy rate payers could be spread out over 50 years. Only rate payers of MidAmerican Energy and those companies who may partner with the new plant would be subject to the cost.

The estimated time to construct and develop a facility is ten years. MidAmerican Energy estimates that the potential cost impact to rate payers over the next ten years would be approximately a ten percent increase in rates. While that number is not insignificant it may be less than other alternatives. MidAmerican Energy hasn't had an increase in rates since 1995, more than 15 years.

If a utility were to build a next generation nuclear plant in Iowa and they had other plants using coal or natural gas, the utility could retire those plants early and thus switch to a non-carbon fuel source for electrical power.

As I have said before, safety is the ultimate concern whenever talking about nuclear power. New technology and new designs represent a major advance in how nuclear power is generated and how the environment is protected. New designs of safety systems would be a major step forward and would address many of the issues currently faced in Japan.

People are going to have to understand that the cost of power will increase, no matter what happens. With the federal government making it very difficult to build new coal-fired plants and reluctance to use natural gas as a fuel source, we are going to have to find other ways to generate power. The nuclear bill gives us an option for the Utilities Board to consider.

Visitors to the Capitol this week were: Dr. Steve, Ally and Isaac Davis of Mount Pleasant; the Steven Burden family from Mount Pleasant; the Yeager family, Bob, Susan, Jassmin, Brooke, Rose and William of West Point; Henry County Supervisors and a delegation for Southeast Iowa Days; and a group of students representing the Leed Group from southeast Iowa.

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If you have any issues or concerns, please contact me.

Be sure to include your name and address with any communication to my office.

State Rep. Dave Heaton, R-Mount Pleasant, represents the 91st House District, which includes all of Henry County and the northern half of Lee County.