

# Happy New Year 2010!!

As usual at this time of year I find myself asking "Where did the time go?" Seems like just yesterday the year was beginning. And in this case, it was a very busy year. I am thankful to have been busy as we have been going through the worst economic times in recent history.

There have been a number of events that have defined the year in the nuclear sector. And it was a decision at the very end of the year that clearly demonstrated the nuclear industry strength moving from west to east. The announcement that the Koreans have won the bid for four new nuclear units in the UAE was HUGE. With an estimated value of \$40 billion (\$20 billion for construction of 4 units and \$20 billion for their operation), this is an absolute "game changer" in the nuclear industry. The Koreans have now achieved their desire to become a global nuclear player exporting their domestic designed APR 1400. Of more importance it shows that commercial issues have won out over political strength in this case. The Korean bid was reported to be significantly less costly than the alternatives from Areva and GEH. So far I have not seen any mention of the commercial conditions, so I cannot comment on if or how much the actual commercial conditions (i.e. how much risk the Koreans were willing to take) impacted the decision.

Never under estimate the capability of Korea!! The nature of international nuclear competition has changed! Of course, they still have to deliver. Given my own long experience in Korea, I would expect them to succeed.

This caps a year where nuclear growth in the east was substantial. Sticking with Korea for a moment, in addition to winning their first nuclear export, their new electricity plan calls for a large increase in nuclear capacity within the country to 2030. Korea also made a big investment in uranium

as KEPCO purchased 17% of Denison Mines this year.

In China, nuclear growth exploded! With 11 units in operation, China now has 18 under construction. They have increased their target for 2020 from 20 GW to 60 GW or more and growing even faster after that. With construction under way for AP1000 units and EPR units as well as the existing CPR1000 units, their program is as broad as it is large. As domestication of the industry continues, the first CAP1400 – a Chinese derivation of the AP1000 was announced this year to be launched in 2013. China also continued its entry into international uranium development. CNNC bought Western Prospector with a property in Mongolia this past year and CGNPC bought a 70% interest in Energy Metals in Australia.

And of course, there is India. In 2009 India truly joined the international nuclear community. With just under 4,000 MW in operation, India is now on track to meet its target of 20,000 MW in service by 2020 and more than 60,000 MW by 2030. With new agreements from Russia for VVER units, agreements to build the EPR from France and new agreements anticipated to build US designed units, the PWR program is expanding quickly to supplement their home grown PHWR program.

Of more importance, India now has access to international supplies of uranium to meet its domestic fuel needs. So far there have been arrangements made with Russia, France and Kazakhstan to import uranium and agreements are in place to enable uranium importation from Mongolia and Namibia. Towards the end of the year, India also concluded a Nuclear Cooperation Agreement with Canada opening the door for uranium imports. Cameco has opened an office in India and has big plans for this country.

With all this activity in Asia, how about the west? Well, while there was progress with projects in the USA and the UK program is continuing to develop, there have been no new firm commitments this year. Hopefully 2010 will see the continued

growth with a new build project formally starting in the US. In the UK government support for new build nuclear has continued to grow while EDF concluded its purchase of British Energy. In the US, there was progress in a number of states. The DOE has announced that it will provide its first loan guarantee when a utility receives a COL from the NRC. Activity is increasing in both markets.

In Canada, the year started with a bang. Ontario looked to be leading North America with its international bidding process for new units. This fizzled later in the year when the project was suspended. The other three provinces with nuclear ambitions also had major decision points. In New Brunswick, the government is proposing to sell its utility NB Power to Hydro Quebec, Saskatchewan has decided against nuclear power in the short term and Alberta has stated that it is open to keeping nuclear as an option for implementation by the private sector.

Definitely a busy year for the nuclear industry. Of course, 2009 was also an important year for the climate change issue. I think that this posting is already long enough so I will comment on Copenhagen and the move to reduce green house gases in a subsequent posting. There were also many developments with renewables that deserve attention. More to come.

One thing is for sure, energy continues to be high on the agenda. With the economy starting to recover, energy issues are expected to continue to be of importance going into 2010.