**Nuclear Pull-outs, Rumours, Threats**

**Briefing: October 2012**

<table>
<thead>
<tr>
<th>Date</th>
<th>Utility/Company</th>
<th>Country</th>
<th>Pull-out, rumour or threat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early 2009</td>
<td>Entergy</td>
<td>US</td>
<td>Suspends applications for Grand Gulf (Mississippi) and River Bend (Louisiana)</td>
</tr>
<tr>
<td>April 2009</td>
<td>Ameren UE</td>
<td>US</td>
<td>Cancels plans to build Callaway 2 (Missouri)</td>
</tr>
<tr>
<td>December 2009</td>
<td>Unistar Nuclear</td>
<td>US</td>
<td>Suspends application for Nine Mile Point 3 (New York)</td>
</tr>
<tr>
<td>October 2010</td>
<td>Constellation Energy</td>
<td>US</td>
<td>Pulls out of joint venture with EDF to build Calvert Cliffs 3 (Maryland)</td>
</tr>
<tr>
<td>March 2011</td>
<td>Commerzbank</td>
<td>Germany</td>
<td>Pulls out of Jaitapur nuclear project in Maharashtra, India</td>
</tr>
<tr>
<td>August 2011</td>
<td>Tennessee Valley Authority</td>
<td>US</td>
<td>Suspends plans for 2 reactors at Bellefonte (Alabama)</td>
</tr>
<tr>
<td>September 2011</td>
<td>Siemens</td>
<td>Germany</td>
<td>Quits nuclear industry</td>
</tr>
<tr>
<td>September 2011</td>
<td>SSE</td>
<td>Scotland</td>
<td>Pulls out of UK NuGen consortium</td>
</tr>
<tr>
<td>September 2011</td>
<td>Shaw</td>
<td>US</td>
<td>Announces sale of 20% share in Westinghouse</td>
</tr>
<tr>
<td>January 2012</td>
<td>Progress Energy</td>
<td>US</td>
<td>Announces pull-out from UK Horizon</td>
</tr>
<tr>
<td>March 2012</td>
<td>E.ON</td>
<td>Germany</td>
<td>Announces pull-out from UK Horizon</td>
</tr>
<tr>
<td>March 2012</td>
<td>RWE nPower</td>
<td>Germany</td>
<td>Threatens pull-out from UK Hinkley consortium without UK Gov’t assurances on future price of nuclear electricity.</td>
</tr>
<tr>
<td>April 2012</td>
<td>Centrica</td>
<td>UK</td>
<td>States new reactors “really hard to justify” due to high costs</td>
</tr>
<tr>
<td>July 2012</td>
<td>General Electric</td>
<td>US</td>
<td>Six investors pull out of planned new reactor</td>
</tr>
<tr>
<td>August 2012</td>
<td>Fennovoima</td>
<td>Finland</td>
<td>Withdrow permits application for reactor construction at Victoria County, Texas</td>
</tr>
<tr>
<td>September 2012</td>
<td>Iberdrola</td>
<td>Spain</td>
<td>Denies pull-out from UK NuGen, but exit still suspected</td>
</tr>
<tr>
<td>September 2012</td>
<td>Hydro Quebec</td>
<td>Canada</td>
<td>Quebec Gov’t announces end of Gentilly-2</td>
</tr>
<tr>
<td>October 2012</td>
<td>Areva</td>
<td>France</td>
<td>Fails to make expected bid for UK Horizon</td>
</tr>
<tr>
<td>October 2012</td>
<td>CGNPC</td>
<td>China</td>
<td>Fails to make expected bid for UK Horizon</td>
</tr>
<tr>
<td>October 2012</td>
<td>CNPTC</td>
<td>China</td>
<td>Pulls out of Westinghouse-led consortium bidding to buy UK Horizon</td>
</tr>
<tr>
<td>October 2012</td>
<td>Toshiba</td>
<td>Japan</td>
<td>Announces intention to sell Westinghouse and exit nuclear</td>
</tr>
<tr>
<td>October 2012</td>
<td>Rosatom</td>
<td>Russia</td>
<td>Fails to make expected bid for UK Horizon</td>
</tr>
<tr>
<td>October 2012</td>
<td>GDF Suez</td>
<td>France</td>
<td>GDF Suez expected to pull out of UK NuGen</td>
</tr>
<tr>
<td>October 2012</td>
<td>EDF Energy</td>
<td>France</td>
<td>Demands special UK legislation to guarantee £ billions of subsidies</td>
</tr>
</tbody>
</table>
**Entergy early 2009**

Entergy submitted a combined construction and operating licence (COL) application to build an Enhanced Simplified Boiling Water Reactor (ESBWR) at its Grand Gulf site in Mississippi in February 2008 and made a similar application in September 2008, for its River Bend site in Louisiana. However, early in 2009, Entergy announced it was reviewing its choice of reactor technology and asked the NRC to suspend its review of its COL applications until it had re-evaluated alternative technologies. The projects are now suspended.

World Nuclear Association 31st August 2012  
[http://www.world-nuclear.org/info/inf41aiii_COL_applications.html](http://www.world-nuclear.org/info/inf41aiii_COL_applications.html)

**Ameren UE April 2009**

On July 28, 2008, Ameren Missouri submitted an application to the U.S. Nuclear Regulatory Commission (NRC), seeking a Combined Construction and Operating License (COL) for a potential EPR reactor at Callaway, Missouri. In April 2009, the proposal was cancelled. A key stumbling block was a law barring utilities from charging customers for the interest accrued on the loan required to build the plant prior to it producing electricity.

Colombia Daily Tribune 23rd April 2009  
Wikipedia accessed 12th October 2012  

**Unistar December 2009**

On 1st December 2009, UniStar requested that the Nuclear Regulatory Commission (NRC) temporarily suspend the COLA review for Nine Mile Point 3 in New York State. A letter to the commission states Nine Mile Point 3 was not selected as one of four finalists for federal loan guarantees. Without the federal loan guarantee, the company cannot invest in new nuclear energy projects at the same pace it planned.

Unistar Nuclear website accessed 12th October 2012  
The Post-Standard 7th December 2009  

**Constellation Energy 10th October 2010**

Constellation Energy Group pulled out of federal financing negotiations for a proposed third nuclear reactor at Calvert Cliffs in a move that casts the project into doubt. Known as Calvert Cliffs 3, the new nuclear plant was to have been a joint venture between Baltimore-based Constellation and France's EDF Group, though the relationship between the two companies has been strained in recent months.

Baltimore Sun 10th October 2010  
German Banks pull out of Indian Reactor 15th March 2011

"Commerzbank, the second largest bank in Germany, has pulled out of the proposed Jaitapur nuclear power project in Maharashtra citing "sustainability and reputational risk". The decision was made prior to the Japan disaster.

Deccan Herald 15th March 2011
http://www.deccanherald.com/content/145949/german-bank-pulls-jaitapur-nuclear.html

Tennessee Valley Authority (TVA) August 2011

In 2005 TVA's site was selected by the NuStart Energy Development consortium as a potential location for two new Westinghouse AP1000 units, referred to as Bellefonte 3 and 4. TVA filed an application for a combined construction and operating licence (COL) for the units with NRC in October 2007. In August 2011 TVA decided to go ahead with the completion of one of two unfinished reactors on the site rather than building a new AP1000 unit. TVA wrote to the Nuclear Regulatory Commission on 19th December 2011 reaffirming that the Bellefonte Units 3 and 4 COLA continues to be deferred indefinitely.

World Nuclear News August 2012
http://www.world-nuclear.org/info/inf41aiii_COL_applications.html
US NRC website accessed 12th October 2012

Siemens 19th September 2011

When Siemens launched a joint nuclear venture with Rosatom, Russia’s state nuclear company, in March 2009 it estimated by 2030 there would be 400 new nuclear plants around the globe requiring a total investment of more than €1,000bn. Two and a half years later things look a little different and Siemens is quitting the nuclear industry. “From a shareholder point of view, nuclear is a risky business and the margins are now potentially lower,” says James Stettler at UniCredit. “The US [nuclear] market is going to be difficult and Siemens wasn’t going to be doing any business in France either. That just left the emerging markets.” Siemens’ continued involvement in the nuclear business also risked undermining its efforts to become a “green infrastructure pioneer” by selling products ranging from wind turbines to trains and smart electricity grids.

FT 19th September 2012
http://www.ft.com/cms/s/0/681a050e-e2d2-11e0-93d9-00144feabdc0.html
BBC 18th September 2012
http://www.bbc.co.uk/news/business-14963575

SSE 23rd September 2011

Utility Scottish and Southern Energy said it has pulled out of its UK nuclear new build consortium, raising concerns investors may see the British nuclear industry as unattractive despite government efforts to provide incentives. The Scotland-based utility, which operates around 2,500 megawatts (MW) of renewable energy assets, said it wanted to focus on green energy and gas-fired power plants -- technologies with which it has more experience. SSE’s partners in the NuGen consortium, France’s GDF Suez and Spain’s Iberdrola, said in a separate statement they intended to buy SSE’s 25 percent share in the consortium, leaving both companies with an equal share of 50 percent.

Reuters 23rd September 2011
This implies that for providers not already operating nuclear reactors the business case does not stack up.

Independent 23\textsuperscript{rd} September 2011

Shaw 28\textsuperscript{th} September 2011
Shaw, the US civil engineering company, has decided to sell its 20\% stake in Westinghouse, the nuclear engineering group, to Toshiba which is itself considering selling on part of its holding – which will be 87 per cent once the Shaw deal has gone through – to another investor.

FT 28\textsuperscript{th} September 2011
http://www.ft.com/cms/s/0/765c917c-e836-11e0-9fc7-00144feab49a.html

Washington Post 10\textsuperscript{th} October 2012

Progress Energy January 2012
In January, 2012, Progress Energy looking to cancel its Levy 1+2 nuclear projects in Florida because their construction costs ballooned to $22.5 billion. According to the company major construction on the Levy project has been postponed until after the federal licensing process is complete, which is expected in late 2012 at the earliest.

Simply Info 4\textsuperscript{th} February 2012
http://www.simplyinfo.org/?p=4826

Tampa Bay Times 26\textsuperscript{th} January 2012

Duke Energy website accessed 12\textsuperscript{th} October 2012

E.On & RWE 29\textsuperscript{th} March 2012
Following a strategic review, separately carried out by both parent companies, RWE Npower and E.On UK said that they would not proceed to develop new nuclear power projects in the UK through the Horizon joint venture. Investing billions in new reactors would have forced a credit-rating downgrade on RWE, said Volker Beckers, CEO at RWE npower in May 2012 and Tony Cocker, CEO of E.ON UK said E.ON lacks the "financial firepower". NB: In July internal emails revealed how UK Government officials worked closely with E.ON and RWE to soften the impact of their pull-out from Horizon Nuclear - a major blow to the UK planned nuclear programme. Further evidence of how Westminster collaborated with industry to protect nuclear power from bad news, first exposed in the aftermath of the Fukushima accident in March 2011.

EoN Press Release 29th Mar 2012
The only British company in the running to build a new generation of atomic power plants has threatened to pull out due to uncertainty over the government’s energy policy – a move that could imperil the country’s nuclear renaissance. Executives at Centrica, which is planning to build a new nuclear power plant at Hinkley Point in Somerset in a joint venture with EDF Energy, have warned Whitehall officials that the plan hangs by a thread and could be scrapped if the company does not receive assurances about the future price of nuclear-generated electricity.

Nuclear power is so expensive compared with other forms of energy that it has become “really hard” to justify, according to the chief executive of General Electric, one of the world’s largest suppliers of atomic equipment.

Six investors have pulled out of the Fennovoima project, which would be Finland’s sixth commercial nuclear reactor. The investors were to have put up hundreds of millions of euros for the plant. S Group has announced it is leaving the project. In addition, electric utilities Leppäkosken Sähkö, Lankosken Sähkö and Outokummun Energia as well as Atria and Omya have decided not to participate in the project anymore. Boliden is rearranging its ownership and its share will decrease. Altogether these changes cover less than 10 per cent of the shares of Voimaosakeyhtiö SF, one of Fennovoima’s two direct owners with a 66 % share. E.ON has the remaining 34 %. The shares of the two main owners remain unchanged and Fennovoima’s project continues as planned, but the remaining investors will have to put up more of their own money if no new potential shareholders emerge.
Exelon 30th August 2012

Exelon has withdrawn its Early Site Permit (ESP) application for construction of a new reactor at Victoria County, Texas, saying “low natural gas prices and economic and market conditions ... have made construction of new merchant nuclear power plants in competitive markets uneconomical now and for the foreseeable future.” Exelon withdrew its application for a combined construction and operating licence (COL) in July 2009 and opted instead for an early site permit (ESP) – this basically kept open options, but postponed any major decisions.

Power Mag 30th August 2012
http://www.powermag.com/nuclear/4937.html

World Nuclear News 1st July 2009

Iberdrola 30th September 2012

The Sunday Times reports that Iberdrola has pulled out of the NuGen consortium, but this was later denied. Iberdrola, Scottish & Southern Energy (SSE) and France’s GDF Suez set up NuGen to build reactors at Sellafield. The Sunday Times said “It is understood the Spanish company, grappling with energy taxes and deteriorating cashflows at home, told GDF recently that it could not proceed. SSE dropped out last year. GDF is unlikely to go ahead on its own. The companies declined to comment”.

Despite Iberdrola’s denials The Independent reported on 7th October that NuGen is the “developer most shrouded in mystery”. Even a Government source admits he is not certain what is going on.

Sunday Times 30th Sept 2012
http://www.thesundaytimes.co.uk/sto/business/energy_and_environment/article1136794.ece

Independent 7th October 2012

Areva & CGNPC 3rd October 2012

Areva & China Guangdong Nuclear Power Corporation (CGNPC) failed to table a bid for Horizon Nuclear as expected.

Telegraph 3rd Oct 2012
http://www.telegraph.co.uk/finance/newsbysector/energy/9583167/Favourite-for-UK-nuclear-reactor-contract-ends-bid.html

Toshiba & CNPTC 4th October 2012

Toshiba wants to quit the nuclear industry altogether. Toshiba has asked JP Morgan to sell its stake in Westinghouse as part of a restructuring of the group. The investment bank was appointed in the summer to sell a 49 per cent holding but is now being asked to find a buyer for up to 70 per cent of the stake.

Toshiba-Westinghouse had formed a consortium with the Chinese state-controlled group, China Nuclear Power Technology Corporation, and Exelon, the US generation company, to bid for Horizon nuclear, but Toshiba would struggle to find its share of the costs. CNPTC had committed to provide almost half of the costs of the project but recently pulled out.
It is understood that JP Morgan has not received any expressions of interest. If it does not find a buyer, Toshiba is unwilling to pay a significant portion of the estimated £30 billion required for the reactors planned by Horizon.

**Times 4th October 2012**
http://www.thetimes.co.uk/tto/business/industries/naturalresources/article3557665.ece

**Guardian 3rd Oct 2012**
http://www.guardian.co.uk/business/2012/oct/03/british-nuclear-china-investors-pull-out

**Rosatom 3rd October 2012**

Russian state-owned nuclear power company Rosatom failed to submit a bid to buy the UK nuclear joint venture Horizon Nuclear Power after detailed study of licensing requirements for new reactors in the UK. Rosatom had previously expressed interest in licensing its Generation III+ VVER, pressurised water reactor, the 1200-MWe “NPP 2006” design as part of its interest in Horizon.

Although Rosatom could yet offer financial backing to one of the other Horizon bids or may buy a share in EDF Energy’s planned project at Hinkley Point.

**i-Nuclear 3rd October 2012**

**Telegraph 9th Oct 2012**

**Chinese may invest in Hinkley instead 7th October 2012**

EDF is in talks with two Chinese energy giants about selling them a stake in Hinkley, a move that would spread some of the risk of the project – particularly if Centrica does decide to pull out.

**Independent 7th October 2012**

**GDF Suez 7th October 2012**

Industry insiders are, in fact, more concerned that Iberdrola’s partner, GDF Suez, might eventually be the one which chooses not to proceed with NuGen.

**Independent 7th October 2012**

**EDF Energy 8th October 2012**

EDF Energy is demanding that the British Government draw up special legislation to guarantee billions of pounds worth of taxpayer-funded subsidies in exchange for building the country’s first nuclear reactor for decades. The company wants hefty subsidies, paid for by levies on consumers’ electricity bills for at least 25 years, to make its £14 billion reactor project at Hinkley Point in Somerset viable after construction costs soared.
US Projects

Five out of seven cancelled US nuclear projects were ended by the operator because of increasing costs or concerns about power demand being too low for them to be able to sell power at a profitable rate.

Simply Info 4th February 2012
http://www.simplyinfo.org/?p=4826