

## Nuclear Pull-outs, Rumours, Threats

### Briefing (3<sup>rd</sup> Edition): November 2013

Date	Utility/Company	Country	Pull-out, rumour or threat
Early 2009	Entergy	US	Suspends applications for Grand Gulf (Mississippi) and River Bend (Louisiana)
April 2009	Ameren UE	US	Cancels plans to build Callaway 2 (Missouri)
December 2009	Unistar Nuclear	US	Suspends application for Nine Mile Point 3 (New York)
October 2010	Constellation Energy	US	Pulls out of joint venture with EDF to build Calvert Cliffs 3 (Maryland)
March 2011	Commerzbank	Germany	Pulls out of Jaitapur nuclear project in Maharashtra, India
May 2011	Swiss Government	Switzerland	The Swiss Government announces plans to phase-out nuclear power by 2034.
May 2011	German Government	Germany	German Government announces plans to phase-out nuclear power by 2022.
June 2011	Italian Government	Italy	More than 94% of voters in a referendum opposed the government's plans to resume nuclear power generation.
August 2011	Tennessee Valley Authority	US	Suspends plans for 2 reactors at Bellefonte (Alabama)
September 2011	Siemens	Germany	Quits nuclear industry
September 2011	SSE	Scotland	Pulls out of UK NuGen consortium
September 2011	Shaw	US	Announces sale of 20% share in Westinghouse
November 2011	Belgian Government	Belgium	Belgium's main political parties have agreed on a plan to shut down the country's two nuclear power stations by 2025, with the oldest reactors closing by 2015.
January 2012	Progress Energy	US	Expects to pull-out from planned Levy 1 and 2 reactors (Florida)
March 2012	E.ON	Germany	Announces pull-out from UK Horizon
March 2012	RWE nPower	Germany	Announces pull-out from UK Horizon
April 2012	Centrica	UK	Threatens pull-out from UK Hinkley consortium without UK Gov't assurances on future price of nuclear electricity.
July 2012	General Electric	US	States new reactors "really hard to justify" due to high costs
August 2012	Fennovoima	Finland	Six investors pull out of planned new reactor
August 2012	Exelon	US	Withdraws permit application for reactor construction at Victoria County, Texas
September 2012	Iberdrola	Spain	Denies pull-out from UK NuGen, but exit still suspected
September 2012	Hydro Quebec	Canada	Quebec Gov't announces end of Gentilly-2
October 2012	Areva	France	Fails to make expected bid for UK Horizon
October 2012	CGNPC	China	Fails to make expected bid for UK Horizon

October 2012	CNPTC	China	Pulls out of Westinghouse-led consortium bidding to buy UK Horizon
October 2012	Toshiba	Japan	Announces intention to sell Westinghouse and exit nuclear
October 2012	Rosatom	Russia	Fails to make expected bid for UK Horizon
October 2012	GDF Suez	France	GDF Suez expected to pull out of UK NuGen
October 2012	EDF Energy	France	Demands special UK legislation to guarantee £ billions of subsidies
October 2012	EON	Finland	EON plans to withdraw from the Fennovoima Oy nuclear reactor in Finland.
December 2012	Enel	Italy	Enel pulls out of Flamanville EPR.
February 2013	Duke Energy	US	Duke Energy pulls the plug on Crystal River after botched repairs.
February 2013	Centrica	UK	Centrica withdraws from UK new nuclear programme.
February 2013	Polish Government	Poland	Treasury Minister says it is not possible for government to support the construction of a nuclear power plant.
February 2013	Bulgarian Parliament	Bulgaria	Confirmed decision to abandon the Belene nuclear power plant project despite recent referendum.
March 2013	United States	US	The United States is on course to all but exit the commercial nuclear power industry - market forces will all but phase out the US nuclear fleet by midcentury.
June 2013	Edison International	US	Edison International said it would permanently close two reactors at its San Onofre plant in California.
October 2013	OPG	Canada	Ontario's government has shelved plans for two new reactors.
October 2013	Iberdrola/GDF Suez	UK	Iberdrola and possibly GDF Suez reported to be keen to sell their controlling interest in NuGen which is planning to build new reactors near Sellafield.
October 2013	BKW	Switzerland	Mühleberg to close in 2019, as Switzerland phases out nuclear power by 2034.

### **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 31<sup>st</sup> 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 23<sup>rd</sup> April 2009

<http://www.columbiatribune.com/news/2009/apr/23/amerenue-pulls-plug-callaway-2/>

Wikipedia accessed 12<sup>th</sup> October 2012

[http://en.wikipedia.org/wiki/Callaway\\_Nuclear\\_Generating\\_Station](http://en.wikipedia.org/wiki/Callaway_Nuclear_Generating_Station)

### **Unistar December 2009**

On 1<sup>st</sup> 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 12<sup>th</sup> October 2012

<http://www.unistarnuclear.com/projects/nmp3.html>

The Post-Standard 7<sup>th</sup> December 2009

[http://www.syracuse.com/news/index.ssf/2009/12/application\\_reivew\\_for\\_buildin.html](http://www.syracuse.com/news/index.ssf/2009/12/application_reivew_for_buildin.html)

### **Constellation Energy 10<sup>th</sup> 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 10<sup>th</sup> October 2010

[http://articles.baltimoresun.com/2010-10-10/business/bs-bz-constellation-calvert-1009-20101010\\_1\\_france-s-edf-group-constellation-energy-group-constellation-and-edf](http://articles.baltimoresun.com/2010-10-10/business/bs-bz-constellation-calvert-1009-20101010_1_france-s-edf-group-constellation-energy-group-constellation-and-edf)

### **German Banks pull out of Indian Reactor 15<sup>th</sup> 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 15<sup>th</sup> March 2011

<http://www.deccanherald.com/content/145949/german-bank-pulls-jaitapur-nuclear.html>

### **Swiss Government May 2011**

The Swiss government has decided to phase out nuclear power, amid growing public hostility to the industry. The government announced it would not replace the country's five ageing plants after they reached the end of their lifetimes between 2019 and 2034.

BBC 25<sup>th</sup> May 2013

<http://www.bbc.co.uk/news/world-europe-13549985>

### **German Government May 2011**

Germany announced plans to close all of its nuclear power plants over the next 11 years, the latest aftershock from the Japanese earthquake and partial meltdown it set in motion at the Fukushima Daiichi nuclear complex.

Washington Post 30<sup>th</sup> May 2011

[http://articles.washingtonpost.com/2011-05-30/business/35232902\\_1\\_nuclear-power-fukushima-daiichi-three-mile-island](http://articles.washingtonpost.com/2011-05-30/business/35232902_1_nuclear-power-fukushima-daiichi-three-mile-island)

### **Italian Referendum**

Italian Prime Minister Silvio Berlusconi has accepted the rejection of his nuclear power plans in a popular referendum. More than 94% of voters opposed the government's plans to resume nuclear power generation. Italy's nuclear power plants were all shut down following a referendum in the wake of the 1986 Chernobyl accident.

BBC 14<sup>th</sup> June 2011

<http://www.bbc.co.uk/news/world-europe-13741105>

### **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 19<sup>th</sup> 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](http://www.world-nuclear.org/info/inf41aiii_COL_applications.html)

US NRC website accessed 12<sup>th</sup> October 2012

<http://www.nrc.gov/reactors/new-reactors/col/bellefonte/review-schedule.html>

### **Siemens 19<sup>th</sup> 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 19<sup>th</sup> September 2012

<http://www.ft.com/cms/s/0/681a050e-e2d2-11e0-93d9-00144feabdc0.html>

BBC 18<sup>th</sup> September 2012

<http://www.bbc.co.uk/news/business-14963575>

### **SSE 23<sup>rd</sup> 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 23<sup>rd</sup> September 2011

<http://www.reuters.com/article/2011/09/23/us-britain-nuclear-see-idUSTRE78M60S20110923>

This implies that for providers not already operating nuclear reactors the business case does not stack up.

Independent 23<sup>rd</sup> September 2011

<http://www.independent.co.uk/news/business/news/sse-ditches-nuclear-power-for-gas-wind-and-biomass-2360140.html>

### **Shaw 28<sup>th</sup> 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<sup>th</sup> September 2011

<http://www.ft.com/cms/s/0/765c917c-e836-11e0-9fc7-00144feab49a.html>

Washington Post 10<sup>th</sup> October 2012

[http://www.washingtonpost.com/business/toshiba-raises-stake-in-nuclear-westinghouse-despite-falling-demand-in-japan-after-disaster/2012/10/10/b0fc04c0-12ce-11e2-9a39-1f5a7f6fe945\\_story.html](http://www.washingtonpost.com/business/toshiba-raises-stake-in-nuclear-westinghouse-despite-falling-demand-in-japan-after-disaster/2012/10/10/b0fc04c0-12ce-11e2-9a39-1f5a7f6fe945_story.html)

### **Belgian Government November 2011**

Belgium's political parties have reached a consensus on nuclear power. The oldest reactors are to be shut down by 2015 and all nuclear reactors at both sites will be shut down by 2025. The plan is conditional on Belgium finding enough energy from alternative sources to prevent power shortages.

Environmental News Network 2<sup>nd</sup> November 2011

<http://www.enn.com/energy/article/43502>

### **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<sup>th</sup> February 2012

<http://www.simplyinfo.org/?p=4826>

Tampa Bay Times 26<sup>th</sup> January 2012

<http://www.tampabay.com/news/progress-energy-looking-to-cancel-main-construction-contract-for-building/1212332>

Duke Energy website accessed 12<sup>th</sup> October 2012

<http://www.duke-energy.com/about-us/electric-transmission-projects/FEP-main.asp>

### **US Projects February 2012**

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 4<sup>th</sup> February 2012

<http://www.simplyinfo.org/?p=4826>

### **E.On & RWE 29<sup>th</sup> 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

<http://pressreleases.eon-uk.com/blogs/eonukpressreleases/archive/2012/03/29/1802.aspx>

RWE Press Release 29th Mar 2012

<http://www.npowermediacentre.com/Press-Releases/RWE-npower-announces-strategic-review-of-Horizon-Nuclear-Power-1137.aspx>

Guardian 15<sup>th</sup> May 2012

<http://www.guardian.co.uk/environment/2012/may/15/energy-companies-abandonment-nuclear-plans?newsfeed=true>

Guardian 19<sup>th</sup> July 2012

<http://www.guardian.co.uk/environment/2012/jul/19/emails-nuclear-power>

### **Centrica 20<sup>th</sup> April 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.

FT 20<sup>th</sup> April 2012

<http://www.ft.com/cms/s/0/bb7f393c-8af0-11e1-912d-00144feab49a.html>

### **General Electric 30<sup>th</sup> July 2012**

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.

FT 30<sup>th</sup> July 2012

<http://www.ft.com/cms/s/0/60189878-d982-11e1-8529-00144feab49a.html>

### **Fennovoima 29<sup>th</sup> August 2012**

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.

Fennovoima 29<sup>th</sup> August 2012

<http://www.fennovoima.fi/en/news/news/changes-in-fennovoima-ownerships-as-project-enters-new-phase>

Helsingin Sanomat 30<sup>th</sup> August 2012

<http://www.hs.fi/english/article/Investor+pullout+delivers+blow+to+nuclear+plant+project/1329104707920>

### **Exelon 30<sup>th</sup> 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 30<sup>th</sup> August 2012

<http://www.powermag.com/nuclear/4937.html>

World Nuclear News 1<sup>st</sup> July 2009

<http://www.world-nuclear-news.org/newsarticle.aspx?id=25547>

### **Iberdrola 30<sup>th</sup> 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 7<sup>th</sup> 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 30<sup>th</sup> Sept 2012

[http://www.thesundaytimes.co.uk/sto/business/energy\\_and\\_environment/article1136794.ece](http://www.thesundaytimes.co.uk/sto/business/energy_and_environment/article1136794.ece)

Independent 7<sup>th</sup> October 2012

<http://www.independent.co.uk/news/business/analysis-and-features/clouds-are-gathering-over-britains-new-nuclear-dawn-8200600.html>

### **Areva & CGNPC 3<sup>rd</sup> October 2012**

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

Telegraph 3<sup>rd</sup> Oct 2012

<http://www.telegraph.co.uk/finance/newsbysector/energy/9583167/Favourite-for-UK-nuclear-reactor-contract-ends-bid.html>

### **Toshiba & CNPTC 4<sup>th</sup> 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 4<sup>th</sup> October 2012

<http://www.thetimes.co.uk/tto/business/industries/naturalresources/article3557665.ece>

Guardian 3<sup>rd</sup> Oct 2012

<http://www.guardian.co.uk/business/2012/oct/03/british-nuclear-china-investors-pull-out>

### **Rosatom 3<sup>rd</sup> 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 3<sup>rd</sup> October 2012

<http://www.i-nuclear.com/2012/10/03/rosatom-drops-bid-for-horizon-after-studying-uk-reactor-licensing-process/>

Telegraph 9<sup>th</sup> Oct 2012



<http://www.telegraph.co.uk/finance/newsbysector/energy/9594476/Russia-eyes-stake-in-UK-nuclear-plants.html>

### **Chinese may invest in Hinkley instead 7<sup>th</sup> 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 7<sup>th</sup> October 2012

<http://www.independent.co.uk/news/business/analysis-and-features/clouds-are-gathering-over-britains-new-nuclear-dawn-8200600.html>

### **GDF Suez 7<sup>th</sup> 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 7<sup>th</sup> October 2012

<http://www.independent.co.uk/news/business/analysis-and-features/clouds-are-gathering-over-britains-new-nuclear-dawn-8200600.html>

### **EDF Energy 8<sup>th</sup> 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.

Times 8<sup>th</sup> October 2012

<http://www.thetimes.co.uk/tto/business/industries/utilities/article3561250.ece>

### **Fennovoima 24<sup>th</sup> October 2012**

E.ON has announced it is leaving the Finnish nuclear new build company Fennovoima! This means it is very likely the whole project will collapse. The Fennovoima project was composed of E.ON with 34% ownership + almost 70 small investors. No-one else believes the small investors could finance an NPP by themselves but it's possible another big investor will be found. However, this is not so likely as the construction works should start in less than three years or the permission will be withdrawn.

Bloomberg 24th Oct 2012

<http://www.bloomberg.com/news/2012-10-24/eon-to-withdraw-from-finnish-fennovoima-nuclear-reactor-project.html>

### **Enel 4<sup>th</sup> December 2012**

Enel announced it has pulled out from a project to build a next-generation nuclear reactor in northern France. EDF said Enel would receive about 700 million euros, including interest, to cover expenses the Italian group had already paid in relation to its 12.5 percent stake in the Flamanville 3 project. Enel signed a strategic partnership agreement with EDF in 2007 giving it a stake in the EPR nuclear power plant. EDF said stricter regulation in the wake of Japan's Fukushima disaster has forced it to revise up the construction cost of its European Pressurized Reactor built in Flamanville, northern France, to 8.5 billion euros (\$11.12 billion). In 2005, EDF estimated the reactor's cost at 3.3 billion euros. The agreement also envisaged at the time the building of five other power plants using the

same EPR technology with an option for Enel to buy a 12.5 percent stake in each plant. Enel said a referendum in 2011 banning the development of nuclear energy in Italy had undermined the strategic importance of the partnership.

Reuters 4<sup>th</sup> December 2012

<http://www.reuters.com/article/2012/12/04/enel-edf-idUSL5E8N4DIJ20121204>

### **Duke Energy - Crystal River 6<sup>th</sup> February 2013**

After three year outage and \$1.3 billion, Duke Energy pulls plug on Florida's cracked Crystal River 3. After landing consumers with a \$1.3 billion bill for a botched power upgrade that broke the reactor and a three year outage in replacement power costs, the new owner, Duke called it quits February 5, 2013.

Beyond Nuclear 6<sup>th</sup> February 2013

<http://www.beyondnuclear.org/the-nuclear-retreat/2013/2/6/after-three-year-outage-and-13-billion-duke-energy-pulls-plu.html>

### **Centrica 4<sup>th</sup> February 2013**

Centrica has withdrawn from the UK's nuclear re-building programme because of increasing costs and delays. Centrica, which owns British Gas, had the option of taking a 20% stake in four new reactors in a partnership with EDF, the French state-owned utility.

BBC 4<sup>th</sup> February 2013

<http://www.bbc.co.uk/news/business-21319031>

### **Poland 20<sup>th</sup> February 2013**

The Treasury Minister has thrown Poland's nuclear power plant plans into confusion after saying that the state cannot afford it due to the economic slowdown. He said "In today's circumstances it is not possible for the government to support the construction of a nuclear power plant".

Polskie Radio 20<sup>th</sup> February 2013

<http://www.thenews.pl/1/12/Artykul/127645,Minister-cools-power-plant-plans>

### **Bulgaria 27<sup>th</sup> February 2013**

Bulgaria's Parliament confirmed Wednesday the country's decision to abandon the Belene nuclear power plant project. The vote was prompted by a recent referendum on the construction of a new nuclear power plant in the country. Under the law, the recent referendum results imposed for the Belene NPP to be put back on the Parliament's agenda, as voter turnout slightly exceeded 20%.

Novinite 27th Feb 2013

[http://www.novinite.com/view\\_news.php?id=148250](http://www.novinite.com/view_news.php?id=148250)

### **United States March/April 2013**

The United States is on course to all but exit the commercial nuclear power industry - market forces will all but phase out the US nuclear fleet by midcentury, according to the Bulletin of Atomic Scientists. In November 2013 Forbes reported that the closure of five nuclear reactors had been announced in the last year in addition to the cancellation of development plans. Forbes listed five

more plants vulnerable to closure soon: Indian Point, New York; Ginna, New York; James A. Fitzpatrick, New York, Three Mile Island, Pennsylvania; Davis Besse, Ohio; Pilgrim, Massachusetts.

Bulletin of Atomic Scientists March/April 2013

<http://bos.sagepub.com/content/69/2/12.full>

Forbes 7th November 2013

<http://www.forbes.com/sites/jeffmcmahon/2013/11/07/6-nuclear-plants-that-may-be-next-to-shut-down/>

Even though the American government has done everything possible to encourage nuclear power – by wholly subsidizing nuclear power, reducing safety standards after Fukushima, forcing Japan to re-start its nuclear program, covering up the severity of the Fukushima accident raising acceptable radiation limits and agreeing to buy radioactive Japanese seafood – the so-called “nuclear renaissance” is over in the U.S.

Washingtons Blog 4<sup>th</sup> Aug 2013

<http://www.washingtonsblog.com/2013/08/the-american-nuclear-industry-suffers-a-meltdown.html>

### **San Onofre 7<sup>th</sup> June 2013**

In a new setback for the U.S. nuclear power industry, Edison International said it would permanently close two reactors at its San Onofre plant in California, ending a contentious battle over whether the units could be repaired and operated safely after a Jan. 31, 2012, steam leak revealed cracks in the steam generator system.

Washington Post 7<sup>th</sup> June 2013

[http://www.washingtonpost.com/business/economy/san-onofre-nuclear-power-plant-to-shut-down/2013/06/07/7fe3e88c-cf8c-11e2-8f6b-67f40e176f03\\_story.html](http://www.washingtonpost.com/business/economy/san-onofre-nuclear-power-plant-to-shut-down/2013/06/07/7fe3e88c-cf8c-11e2-8f6b-67f40e176f03_story.html)

### **Ontario 10<sup>th</sup> October 2013**

Ontario’s government has shelved plans for a major new investment in nuclear power. It has decided against spending upwards of \$10-billion to buy two new nuclear reactors, and will commit only to refurbishing existing ones.

Reuters 10th Oct 2013

<http://uk.reuters.com/article/2013/10/10/canada-energy-ontario-idUKL1N0I01S120131010?rpc=401&feedType=RSS&feedName=mnaNewsIndustryMaterialsAndUtilities&rpc=401>

### **Iberdrola and GDF Suez 12<sup>th</sup> October 2013**

Iberdrola and possibly GDF Suez reported to be keen to sell a controlling interest in the NuGen project. The two companies set up the Nugen joint venture in 2009, agreeing an option with the state-owned Nuclear Decommissioning Authority to make progress by October 2014, but the companies now want to sell the option. (SSE pulled out of the consortium in September 2011).

Times 12<sup>th</sup> October 2013

<http://www.thetimes.co.uk/tto/business/industries/utilities/article3892885.ece>

### **Switzerland 30<sup>th</sup> October 2013**

Mühleberg nuclear station, near Bern, owned State energy firm BKW will go offline in 2019. The Swiss Government approved a phase-out of the country's nuclear plants by 2034 and scrapped plans to build new reactors.

Reuters 30th Oct 2013

<http://uk.reuters.com/article/2013/10/30/swissnuclear-idUKL5NOIK0VL20131030?rpc=401&feedType=RSS&feedName=swissMktRpt&rpc=401>