



# Weir proves a global footprint is key to success

**Weir has been a key player in the nuclear industry for many years, supplying valves to projects around the globe. Following on from its successful bid for a contract at the Shin Ulchin project in South Korea last year, the company recently secured a landmark contract for the Barakah project in the United Arab Emirates. It's a challenging time to be in the nuclear industry but continuing to invest in high quality products and people is proving to be a successful strategy for the Scottish-based global valve manufacturer.**

*By Joanne McIntyre*

**T**he Weir Group reported a very positive result in its interim 2012 report, which included the award of a landmark nuclear control valve contract for a power plant in the Middle East. "This contract for all four units at the Barakah site in the United Arab Emirates follows the award to supply

control valves to two units of the Shin Ulchin project in South Korea," explains Mr. Benko, Global Nuclear Director at Weir. "Both the Shin Ulchin and the Barakah orders represent a significant opportunity to have Weir control valves installed in a nuclear island." Weir will manufacture 70 valves for each of the

four units being constructed at Barakah. As the valves are still to undergo final nuclear qualification, the large order reflects the client's confidence that Weir will deliver to the qualification required. "In the nuclear industry it is not unusual to receive an order before testing has been completed, because the cost of





Walter Benko: "We're entering exciting times for the nuclear industry in the UK."

investment in obtaining qualification is so high. We went through a similar process a couple of years ago with another major nuclear reactor manufacturer for our triple offset butterfly valves, which are now qualified to the ASME QME-1 standard.

### **UK - opportunities and challenges**

"The UK market is going through some interesting and encouraging developments," continues Mr. Benko. We are estimating that it is 90% certain that the Hinkley site is going to move forward, however we are still awaiting a final announcement from EDF which we expect towards the end of the year. Hitachi has recently announced the acquisition of Horizon Nuclear Power from RWE and E.ON and will be leading

a programme of nuclear new build in the UK. There will be an enormous nuclear market opportunity and Hitachi has already set out what the potential benefits of its programme could be for the UK.

For many years Weir has been actively involved in the UK nuclear fleet. "We have a very high level of content installed across operational nuclear power stations in the UK and each year we provide significant levels of service, maintenance and upgrades. Weir has also supplied significant engineered valves to ABWR power plants, both operational and under construction. Weir wants to continue its significant contribution in the future, as part of a broader UK manufacturing industry that delivers to the UK nuclear new build programme. The opportunity for both Weir specifically and the UK supply chain in general is to continue to demonstrate its capabilities within the global nuclear market and to promote those capabilities to international nuclear players who want to build in the UK. Despite what may be viewed by some

as recent setbacks, we're entering exciting times for the nuclear industry in the UK. For UK manufacturing to be at the forefront of what could be a sizeable market, it's vital that investment is made in the skills and resources of the UK supply chain."

### **Opportunities in Asia**

Weir expects to ship the control valves for Shin Ulchin and Barakah during the period 2013-17. For both orders the company will provide control valves and bleeder trip check valves. "Shin Ulchin is a great opportunity for us because it's not easy to participate in the South Korean market," continues Mr. Benko. "The country has pushed localization and they now have good local suppliers. However there are still some gaps in the valve market, including control valves and main steam isolation valves, for which they are still reliant on imports. In general, however, they favour local suppliers and the market is very competitive. The South Korean government has worked hard to develop a local supply chain to support their nuclear





*There is every indication that EDF will continue to move ahead with plans to build new reactors at Hinkley Point in the UK. Photo courtesy of EDF Energy.*

industry in a similar fashion to China.”

In 2011 Weir formed a joint venture with a South Korean valve manufacturing facility now called Weir International. The plant, based in Ansan, South Korea, will work in combination with Weir’s UK valve facility to fulfil the Shin Ulchin order. “The nuclear island valves for both Barakah and Shin Ulchin will be built at the UK plant and qualification and testing will be carried out at our facility in South Korea. The Ansan facility has recently been awarded a ‘K’ stamp qualification, which qualifies it to produce nuclear island control valves for the Korean market place. Ultimately, the goal is to be able to produce nuclear island control valves for the global market.”

Like many suppliers to the nuclear industry, Weir is looking expectantly to China in anticipation of renewed life in new build activities. “There seems to be a lot of discussion around completing the existing sites, and we expect those opportunities to start to come to fruition by 2013. There is also a lot of activity within Chinese nuclear companies. They are continuing to develop their existing technologies to produce a third generation reactor. The existing CPR1000 is based on a Framatone design and a lot of work is being done to upgrade that. We don’t know if some of the EPR or AP1000 safety features will be incorporated into the re-design. China

may be waiting on the development of the first AP1000 before it commits to building more nuclear power plants. Sites have been named with the intention of moving forward, but it is probable that nothing will happen until 2014.”

### **Ongoing investment and opportunities**

Weir continues to invest in its nuclear product offerings and its current focus is on control valves. “Going through the qualification process takes a significant investment in time, energy and money, taking around 18 months,” explains

Mr. Benko. “While our number one priority right now is control valves we are also working on other opportunities, such as developing Main Steam Isolation Valves for the global market. Our French facility will also have gained its ASME ‘N’ stamp by the end of the year. It has been accredited for the European marketplace with the French RCCM code for many years, and adding the ASME stamp will open up opportunities to supply valves to the North American and South Korean markets. However these developments are not just focussed on the product, it’s also all about quality development, systems development, and people development. That is what will help us to continue to position ourselves for when the market returns to its pre-Fukushima status.” Last year Weir’s valves business announced its intention to double the size of the business by 2016, focusing on the four key areas of market expansion, product development, sales focus and resources. Mr. Benko explains further: “The development of our nuclear control valves are a perfect example of driving growth, as specification by a customer and qualification opens up



*Weir’s new nuclear valves facility in Saint Victoret, France, will have gained its ASME ‘N’ stamp by the end of the year, to complement its existing French RCCM code accreditation.*





Weir's contract to supply control valves to Barakah in the UAE follows a simply contact for the Shin Ulchin project in South Korea (pictured).

further market opportunities. We take a global approach to ensure that we are adequately covering all geographies. We have teams in the North-American, European and Asian markets to support our nuclear customers there and the combination of people and product development will open up new opportunities, not just in the nuclear market but in all sectors."

"Looking to the future, the opportunities in the UK are critical for us and indeed for any valve manufacturer. There is certainly some activity starting up again in Europe, for instance in the Czech Republic and in Scandinavian countries which hopefully will support continued growth in the industry. The industry still has some concerns as to whether financing will be in place

to support these opportunities, regardless of whether we are talking about Eastern Europe or Scandinavia or the Middle East. Will new plants be delivered on time and on budget, so the customer feels that they will be able to meet their cost targets, and produce power at a profitable rate? The eyes of the world are looking to see whether current projects will be successfully delivered on time and to cost. If successful, there could be significant nuclear business in the decade ahead."



Weir's TRICENTRIC® triple offset butterfly valve.



Weir's nuclear control valve.

## Facts & Figures

<b>Name:</b>	The Weir Group PLC
<b>Founded:</b>	1871
<b>Headquarters:</b>	Glasgow, Scotland
<b>Main markets:</b>	Power generation, oil & gas, mining and minerals
<b>Nuclear manufacturing sites:</b>	Ansan, South Korea; Elland, United Kingdom; Saint Victoret, France; and Ipswich, USA
<b>Nuclear valves:</b>	Gate, globe and check, butterfly, control and safety valves: Main Steam Isolation; Main Feedwater Isolation; Compact Integrated Safety; Isolation, Safety & Relief
<b>Turnover 2011:</b>	£2.2bn
<b>Employees:</b>	14,000

