Summary

- SNGC members participate in NIC 2016
- Eduardo Aymerich joins SNGC as Managing Director
- ENSA AND GEH sign an agreement on segmentation of nuclear internal components for the international market
- ENSA is preparing for the challenges of vacuum vessel welding
- ENSA gets certificate of Compliance of the ENUN 52B and 32P Casks
- ENSA Partner's with member of the Nuclear Advance Manufacturing Research Centre
- The Nuclear Safety Council approves the renewal of the ENUSA factory permit
- ENUSA present as of today at the China Nuclear Fair
- EDF satisfactorily rates ENUSA manufacturing in 2015
- RINGO Válvulas Control valve delivery
- TECNATOM will maintain the Atucha II simulator
- TECNATOM 14th Inspection, Testing and Maintenance Session
- TECNATOM measurement of electrical conductivity and coating thickness
- TECNATOM valve diagnosis at Los Barrios
SNGC members participate in NIC 2016

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SNGC member companies (ENSA, ENUSA, Ringo Válvulas and Tecnatom) have participated actively in the Nuclear Industry Congress 2016 event, which took place from April 6th to 9th in Beijing (China), thereby consolidating a presence that has been continuous since 2005.

The Chinese market is especially significant for SNGC companies, in the field of the supply of large nuclear valves, heavy equipment (especially steam generators and casks), control rooms and full-scope simulators, inspection services, plant operator training as well as delivery of equipment for the inspection of irradiated fuel and quality control in nuclear fuel manufacturing. Technology transfer has been a must in all these contracts with Chinese companies.

China, with 33 operating reactors producing more than 3% of the country’s electricity, offers great market potential for our industry. Of the 64 reactors that are currently under construction around the world, 43 are on the Asian continent, and China specifically leads the world ranking with 22 plants in the construction phase.

Eduardo Aymerich joins SNGC as Managing Director

Eduardo Aymerich is a graduate from Madrid Polytechnic University with post-graduate studies of Génie Atomique in France and Rensselaer Polytechnic Institute in New York. He has also obtained an Executive MBA at IESE-Madrid.

He has served for more than 35 years in different companies from the consulting and nuclear sector, with a strong focus on international operations.

His main focus in SNGC will be to maintain the existent strong relationships with the Chinese companies as well as to develop new ones in other countries where nuclear new build opportunities are emerging rapidly.
ENSA and GEH sign an agreement on segmentation of nuclear internal components for the international market

www.ensa.es

GE Hitachi Nuclear Energy (GEH), the US BWR technologist with a broad international prestige in the developments of systems for BWR Nuclear Plants, and ENSA, the Spanish company specialized in the supply of large components for Nuclear Plants with a wide experience in the development of special projects for implementation in Nuclear Units, have recently signed an non-exclusive agreement for the international market (excluding Japan) for the technology development of solutions on segmentation of internal components and its implementation in the Nuclear Plants.

That agreement will allow offering to the nuclear operators integral and optimized solutions, which can be used on those cases where it is needed the application of volume reductions through remote cutting tooling.

ENSA is preparing for the challenges of vacuum vessel welding

In 2012, the ITER Organization signed a EUR 74.5 million contract for the welding of the ITER vacuum vessel with the Spanish company Equipos Nucleares SA (ENSA). In addition to on-site welding and testing operations, the contract scope includes the development of specialized welding and testing tools and the qualification of processes and operators. In October 2015, an interim design review was the occasion to visit the ENSA facilities, where testing is underway on prototype welding tools.
ENSA gets Certificate of Compliance of the ENUN 52B and 32P Casks

Recently, Equipos Nucleares S.A (ENSA) has obtained the license approval for the ENUN 52B cask, as type B(U) transportation package for BWR fuel, as the Nuclear Safety Council (CSN, the regulatory body in Spain) approved to favourably inform to the MINETUR (the Ministry of Industry and Energy) of the design of the spent fuel cask ENUN 52B for its use for transportation of spent fuel. The MINETUR had already approved the licensing of the cask for storage of fuel in 2014.

This achievement completes an important milestone in the history of ENSA as it is the first BWR cask completely designed and licensed by a Spanish company.

The ENUN 52B cask design meets the storage and transportation regulations for spent fuel required by the Spanish nuclear authority (CSN). In addition, the ENUN 52B has been also designed to comply with safety standards from the IAEA, regulations from the US Code of Federal Regulations and recommendations from the US NRC.

Additionally, the licensing of ENUN 32P for storage was completed and the certificate of compliance provided by MINETUR on September 2015.

ENSA partners with the Nuclear Advance Manufacturing Research Centre

ENSA has recently signed a partnership agreement with the Nuclear Advance Manufacturing Research Centre (Nuclear AMRC) from Sheffield; both of them are going to participate in R & D programmes. AMRC works with companies to improve production capacity and performance in nuclear power and other innovative energy.

ENSA is progressing their network in the the UK nuclear market, gaining new experiences and engaging in innovative projects. Jointly, they understand areas of collaborative interest in market as supply chain engagement and manufacturing innovation. The agreement will facilitate ENSA’s success in the UK, and in doing so, create opportunities for UK-based companies.
The Nuclear Safety Council approves the renewal of the ENUSA factory permit

www.enusa.es

The Nuclear Safety Council (CSN) has given the go-ahead to renewal of the operating and manufacturing permits of ENUSA's fuel assembly factory in Juzbado, which expire in July 2016, for another ten years. In the plenary session held on Wednesday, the CSN issued a favourable decision for renewal of the operating and manufacturing permit, which was requested by ENUSA in an application to the Ministry of Industry, Energy and Tourism, which the latter in turn submitted to the CSN on July 29, 2015.

The CSN has evaluated the assessment of aspects associated with the Periodic Safety Review (PSR) and with the status of compliance by the factory with the different conditions and Complementary Technical Instructions (ITC) implemented on granting it the current permits and the ITC and Technical Instructions (IT) that have been issued since the permit was granted. The CSN has also evaluated the results of the factory’s Supervision and Follow-up System.

In addition to the operating permit, the CSN Plenary Session has also issued a favourable report on renewal of the physical protection permit and revision of the Juzbado physical protection plan.

EDF satisfactorily rates ENUSA manufacturing in 2015

The French electric utility Electricité de France (EDF), a state-run enterprise that ENUSA has supplied nuclear fuel to since the decade of the 1990s, has recently presented its rating of the 2015 manufacturing process, as part of the EDF periodic follow-up of its suppliers.

The result of this assessment has been “very satisfactory”, even better than the rating obtained in 2014. The French utility has stressed, among other things, the professionalism and implication of operators, inspectors and technicians in the verifications they perform of the activities on the production line and the implementation of constant improvements in the different areas of production. It has also very positively rated the availability, communication and anticipation of the team that supports the follow-up of refuelling for EDF. EDF has also identified issues related to qualification planning and product certification as opportunities for improvement.

Together with Westinghouse, within the European Fuel Group (EFG), ENUSA commercializes nuclear fuel for pressurized water reactors (PWR). In 2015, ENUSA has supplied more than 130 tons of enriched uranium for new plants owned by the French electric utility, making it the country to which it exports the most.
ENUSA present as of today at the China Nuclear Fair

www.enusa.es

ENUSA has travelled to Beijing together with other Spanish nuclear firms to take part in Nuclear Industry China 2016. Participation in this exhibition is an opportunity to display the company’s innovations from over the last year and to establish contacts with companies taking part in the exhibition. In addition, the presence of ENUSA personnel in China will allow the company to carry out an in-situ follow-up of the current projects and negotiating opportunities with Chinese clients.

ENUSA invested in China in 2007 by joining the Spanish Nuclear Group for Cooperation and participating in the China International Nuclear Industry Exhibition held that year in Shanghai. After an early period of contacts and positioning, ENUSA has identified a market niche in the commercialization of nuclear fuel inspection equipment, an area in which Chinese companies have still not achieved the level of technology development found in Europe or the United States, where the world’s leading suppliers of nuclear technology are based. In 2013, ENUSA signed its first equipment supply contract with the local manufacturer CNNC Jianzhong Nuclear Fuel, the leading Chinese fuel manufacturer. This contract was followed by another two signed in 2014 for supplies to the aforesaid fuel factory and the Suzhou Nuclear Power Research Institute (SNPI). It is precisely with the latter and jointly with its partner TECNATOM that ENUSA has signed a new agreement in January 2016, which could be a qualitative leap forward for the Spanish company’s prospects in China. SNPI belongs to the China General Nuclear (CGN) group, which is the main nuclear reactor constructor and operator in China with 14 units in operation and 12 more under construction. The agreement with SNPI enables ENUSA-TECNATOM to be the reference suppliers of nuclear fuel inspection equipment for SNPI, placing the two Spanish partners in a privileged position vis-à-vis CGN’s strategic move: develop its own nuclear fuel design and manufacturing capabilities, an area in which its major competitor – CNNC – is currently the leader.
Ringo Válvulas Control Valve Delivery

www.ringospain.com

Ringo Válvulas has recently delivered eight (8) critical control valves for the Belarus Nuclear Power Plant. Before dispatching, Final Inspection was attended by end user representatives with satisfactory results. Valves are.

The Valve, which are for a critical system (Pressure Regulator in Main Steam Pipeline), characteristics are as follows:

- Valve type: Angle Control
- Nominal diameter: DN300 x DN400
- Class: 900#
- Design Pressure: 8,6 MPa
- Max. pressure drop: 8,6 MPa
- Design temperature: 300ºC
- Working fluid: Steam, water steam mixture, Water on saturation line
- Material: Fully forged valves in A-105
- Nuclear Class: NC 2

Tecnatom measurement of electrical conductivity and coating thickness

Tecnatom has evolved its eddy current equipment with a new system for the measurement of conductivity in metallic materials and of the thickness of non-metallic coatings. With this tool it is possible to measure conductivities in non-ferromagnetic metallic materials simply, quickly and accurately. Furthermore, measurements of the thickness of non-metallic coatings of inspected components may be obtained simultaneously to conductivity measurements, thereby reducing part inspection times and increasing productivity rates.

Tecnatom has developed this new product integrally, from the development of complex algorithms to the design, manufacturing and certification of the conductivity and thickness measurement probes and calibration standards.

This new technology has been validated in accordance with the demanding requirements of the aviation industry standards, although it may also be used in multiple applications in other areas such as the power production and petrochemical industries.
Tecnatom will Maintain the Atucha II Simulator

Nucleoeléctrica Argentina S.A. (NA-SA), the operator of the Dr. Néstor Carlos Kirchner (Atucha) nuclear power plant, has awarded Tecnatom a contract for a maintenance and technical assistance service covering the full-scope simulator, the interactive graphic simulator of the main control room and the emergency control room for Group II of the plant.

The objective of the project is to maintain the physical and functional fidelity of the simulator with respect to the reference plant through compliance with the criteria and requirements established in ANSI/ANS-3.5, the international standard governing simulator operation and maintenance.

Each year a new simulation load will be generated, which will be tested by a joint team of Tecnatom and NA-SA engineers, first on the test platform at the Tecnatom headquarters and subsequently on the simulator in Argentina. This will allow the simulator to be kept updated with the status of the plant, thus maintaining the highest criteria of quality in the plant operator training phases.

This simulator was developed using in-house technology with a joint team of NA-SA and Tecnatom personnel and was delivered in 2013. Since then it has been used within the framework of the operator training plans and was also used as part of the plant start-up process. In 2015 the simulator was transferred to its definitive location in a new building on the Atucha nuclear site.

Tecnatom 14th Inspection, Testing and Maintenance Session

The 14th Annual Inspection, Testing and Maintenance Session was held on April 7th at the Tecnatom headquarters in San Sebastián de los Reyes. The event was attended by numerous representatives of all the Spanish nuclear power plants, Iberdrola and ENUSA.

This traditional session serves as a framework for the presentation of the main technological novelties and technical evolutions in the field of inspection and testing equipment developed by Tecnatom, as well as to gain an in-depth insight into the expectations and needs of the plants.

This edition dealt with a series of highly varied issues, such as the results and indicators of refuelling outages in 2015, the maintenance and setting of pressuriser and other safety valves and the diagnosis of air and motor-operated valves.

In addition, the session included the formal presentation of a new inspection system for the visual and volumetric inspection of reactor vessel internals. Those attending witnessed a practical demonstration of this equipment, known as ROBBIN, as well as of several other inspection equipment developments.
Tecnatom Valve diagnosis at Los Barrios

www.tecnatom.es

Viesgo, the company operating the Los Barrios thermal power plant, has awarded Tecnatom a contract for the diagnosis of the facility’s motor-operated valves.

Tecnatom has an organisation that specialises in the diagnosis of valves (motor and air-operated and check valves) and that continuously renders such services to the nuclear sector. In recent years, Tecnatom has performed valve diagnosis during refuelling outages at the Laguna Verde (Mexico), Angra (Brazil) and Tihange (Belgium) plants and at all the Spanish nuclear power plants, and has also supplied diagnosis technology to the Dukovany (Slovakia) and Loviisa (Finland) plants. Synergies with other sectors allow this kind of intervention to be carried out at facilities of different types, with this being the first campaign in the conventional thermal sector.

The Los Barrios thermal plant is located in the Spanish province of Cádiz and has a rated power output of 567 MWe. Viesgo, the plant owner company, is carrying out an investment project amounting to more than 65 million Euros for maintenance and updating of the plant systems, the aim being to position the facility at the forefront in Europe.

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