



XAVIER COLL

**WESTINGHOUSE MANAGING DIRECTOR
AND VICE PRESIDENT SOUTHERN EUROPE – EMEA REGION**



Xavier Coll Sugrañes is a young professional with a long career, who takes on the greatest responsibility for the Southern European region of Westinghouse at a time of major transition.

With him we review the current situation of the company and the sector in Spain and the world, recognizing the achievements and looking to the future from the reality and at the same time from a mature optimism.

Xavier Coll is an Industrial Engineer from the Polytechnic University of Catalonia, and has specialized in quality and project management.

He started his activity in the nuclear sector in 2001, at the Ascó nuclear power plant, with Enwesa Operaciones, S.A. (a subsidiary of Westinghouse), and joined Westinghouse Technology Services, S.A., at its headquarters in Tarragona in 2005, as Engineering Services Project Manager, subsequently assuming different responsibilities in the company.

In 2011 he was appointed Director of the European Field Services Operations, moving to Belgium. He returned to Tarragona in 2015 to take over the management of the European Fuel Group, until his appointment in February 2018 as Vice President and Managing Director of Westinghouse for Southern Europe.

WESTINGHOUSE IN SPAIN. A LONG HISTORY

On the 50th anniversary of the start-up of Jose Cabrera NPP, the first Spanish nuclear power plant, Westinghouse's participation in the nuclear history of our country is unmistakable.

From your top responsibility at the head of the company, how do you summarize these five decades of collaboration?

For me it is a pleasure to recap this period. Although I have only participated in the last thirteen years, I know it well thanks to the professionals who have succeeded in making it possible for the history of our company to advance in parallel with that of the sector.

Along these 50 years journey Westinghouse Electric Company has been and continues to be the pioneer in the nuclear industry and a leader in providing nuclear technology and equipment to power companies, with a clear focus on safety, quality of service and innovation.

Westinghouse began its activity in the Spanish nuclear sector in the 1960s, when it was awarded the turnkey contract for the construction of the first Spanish nuclear power plant, José Cabrera, with the then Unión Eléctrica Madrileña.

In 1972 the company already had an office in Spain, and since then its presence has been permanent and active.

In 2001, Westinghouse acquired the Nuclear Division of Initec, expanding its business in Spain, where it now has 257 employees in three locations: Madrid, Vandellós and Hospitalet del Infante, Tarragona. If we add workers from contractor companies with whom we have stable long-term agreements, the figure reaches 400 people.

Today, Westinghouse technology is the basis for approximately half of the world's operating nuclear power plants. The new state-of-the-art AP1000® reactor (III+), the result of more than 50 years of experience in the market, is currently being commercialized, with outstanding results in the USA (Vogtle) and China, where



the reactors are about to be put into operation. The Sanmen 1 plant has reached initial criticality and Haiyang is refueling. We are proud of the Spanish contribution to that success.

A DIFFICULT YEAR

In the last year, Westinghouse has undergone a Chapter 11 process - what was the origin of this problem?

Westinghouse has subsidiaries all over the world, being the parent company the North American one.

It was precisely the United States entity that was forced to request the suspension of payments, which occurred on March 31, 2017, due to a specific problem in the AP1000® investments in the construction plants in the United States. The rest of the entities and the business, what we call the core business, did not have any problems, but this failure in a large investment conditioned the whole company.

What is the current situation of the company?

The suspension of payments in the United States requires the use of the so-called Chapter 11, a process that establishes the required milestones, and which is regulated by an Ameri-

can court. All the targets to return to a healthy business were met. A year later, on March 27, 2018, an agreement was reached with the Canadian company Brookfield for an acquisition commitment that was favorably closed last August. We are now in the threshold of the next phase in the long and storied history of Westinghouse, as the transaction with Brookfield Business Partners is now complete and we have successfully emerged from Chapter 11.

How was the communication of this process with customers?

The values that govern our communication policy are very clear: we advocate transparent, fluid and timely communications, both internally and externally.

From the very beginning when Westinghouse filed with Chapter 11, the plan was shared with all the stakeholders: customers, suppliers and employees and the information has been maintained on an ongoing basis as the scheduled milestones were met.

It is important to stress out that customers have continued to place their trust in Westinghouse, this is very much appreciated. Although it is true that we have very strategic contracts, our

clients have maintained their confidence in our company, and it has been clear to them that we would get out of this situation, so they have not altered the contracts in progress in practically any way.

Now that process is complete, we sincerely thank our Spanish clients for their understanding and trust.

THE COMPANY INSIDE

What is the structure of the company?

Westinghouse is a company with a matrix organization, structured by regions and products.

Geographically it is divided into three regions: Americas, EMEA (which encompasses what we call the central region, with Europe, the Middle East, and Africa) and Asia.

Within each region there are sub-regions. Specifically in EMEA there are five sub-regions, and I am responsible for one of them, the Southern European region which includes Spain, Italy, Slovenia, Bulgaria and Romania. Spain accounts for around 60% of the region's turnover.

In addition, a subsidiary of our Spanish company has been established in Slovakia.

And what are the product lines?

We have six product lines that work matrix-wise with the regions, which are: fuel, engineering services, plant services -including refueling support-, instrumentation and control, dismantling and waste management, and new plants.

Each region has a director, as well as sub-regional managers, who are responsible for managing the product lines in their geographical area.

MAIN ACTIVITIES IN SPAIN

What are the main projects carried out by Westinghouse at the Spanish nuclear power plants?

Our goal is to develop products in a global way, so that they are technologically superior and cutting-edge, but at the same time implement them in a local manner, very close to the customer, to customize and execute them in the most efficient way possible.

To answer your question, in Spain we work with all six of the company's product lines.

Referring to engineering support services, we have two very important strategic contracts with ANAV and CNAT. In addition, we perform services in the plant by actively participating in the refuels.



In the case of ANAV, we have a group of more than 120 people working exclusively for the customer, and that gives us a very important local presence. In addition, both Ascó and Vandellós as well as Almaraz 1 and 2 are Westinghouse design plants and, therefore, when there are plant problems, we feel they are our own. The whole team has a great sense of customer support and is highly committed.

Westinghouse is a customer focus organization that always try to serve its clients' needs. This contributes to the overall success of our business and involves ensuring we maintain an effective customer relations and service program prioritizing quality above all.

Let's stay in Catalonia: What work is being done at the training center in Tarragona?

It is a very useful center that allows us to maintain qualified personnel for the plant services activities and reloads support. There we hold reactor training programs, maintenance of generators and cranes, fuel movement, etc.

In addition, we have an important workshop for mock up construction, demonstrations and training, which allows us to undertake emergency work such.

What are the main actions in the other product lines?

One of the company's most important contracts is for the supply of fuel to the five PWR groups, which we execute through a license agreement with ENUSA under which Westinghouse provides the fuel assembly components and conversion services and ENUSA manufactures the pellets and ENSA assembles the fuel element, in addition to other complementary engineering services.

This license has been extended, forming the European Fuel Group, with which we serve the European market by customers and countries. In some countries, ENUSA has the commercial leadership and in others Westinghouse; in some countries the engineering development is ENUSA and in others Westinghouse.

In addition, we have another fuel supply contract with Sweden for the Cofrentes nuclear power plant.

In the Instrumentation & Control area, we work with Ovation, the digital platform for the modernisation of I&C systems, mainly in Almaraz, Ascó and Vandellós.

You mentioned the license agreement with ENUSA, with which other Spanish companies do you have lines of collaboration?

Westinghouse has reached very important collaboration agreements with the three major Spanish nuclear industries: ENSA, ENUSA and Tecnatom, to tackle specific projects. These are agreements that have produced very good results, and that is why we want to extend and strengthen them for the future.

For example, we have specific agreements with ENSA, such as the current contract with EdF for the supply of steam generators. It is important to note that in France we have a significant market share in some product lines. For example, we supply 30% of the fuel, and we perform 40% of steam generator inspections. In fact, France is the main customer of EMEA, and has a considerable weight in the company as a whole.

DECOMMISSIONING, A GROWING AREA

You mention that you are also involved in the Dismantling and Waste Management activities? Which are the most relevant ones?

We participated in all phases of the dismantling of José Cabrera plant, which is a very special project for us

as it is the first Spanish nuclear power plant, and of Westinghouse design.

Based on the Zorita successful experience along with Westinghouse Electric Spain capabilities in Main Engineering; Site Remediation; Waste Storage Design: High, Medium and Low level; Westinghouse is well placed to provide solutions for Decommissioning, Dismantling, Remediation and Waste Management projects worldwide.

Let me add that more than 30 years of national and international experience endorse the new DDR&WM business unit being remarkable: El Cabril and Radiana Waste Repository Design, Zorita Internals and Vessel segmentation, as well as Vandellós I, Oskarshamn, Chin-Shan and JEN-1 Decommissioning Plans. Based in the experience of Zorita and Barsebäck, right now Westinghouse Europe has contracts for 13 reactors internals segmentation (8 in Germany, 2 in Sweden, 2 in Slovakia and 1 in France).

This experience along with our capabilities in Waste Management Engineering and Vessel and Internal segmentation capabilities, Westinghouse provides solutions for a wide range of Decommissioning, Dismantling, Remediation and Waste Management projects.





And what can you tell us about the Bohunice's contract?

In fact, we have signed a capital contract for the next five years for the dismantling of the two Russian VVER 440 reactors at the Bohunice plant in Slovakia.

The most important thing is that this country is not in our business area. We have achieved this because the company's experience in plant decommissioning has been recognised, together with our Swedish colleagues who have a lot of cutting technology.

This contract helps us to further strengthen our position in Europe in the field of decommissioning. We have worked in Zorita, Bulgaria, now in Slovakia, and we will be on the lookout when the Garoña opportunity arises.

SPAIN IN THE WORLD. THE AP1000®

The new generation of power plants with AP1000® design reactors has projects in different countries most notably the one developed in Sanmen, in the province of Zhejiang, China, which has already been connected to the grid.

What is the activity of the Spanish headquarters in this project?

In relation to the AP1000®, our Madrid office professionals have played an important role in projects in the United States, especially in the two Vogtle units, which are still under construction and in which we continue to collaborate. We have also worked on the first reactor at the Chinese SANMEN plant, which has already been connected to the grid.

Can there be job opportunities in other countries?

No doubt. Many people are considering NPP new buildings. For example, we are looking forward to other opportunities in India and Saudi Arabia.

In addition, the AP1000® opens up a line of work related to the optimisation of this type of reactor.

In Madrid there are about 120 professionals dedicated 100% to the AP1000®. It is a large and highly qualified team, which we hope to continue to maintain.

Can we say that these collaborations are an example of the quality and recognition of our country's professionals in the international arena?



In fact, in these projects we compete with internal and external engineering firms as well as with contractors. For example, we could outsource some of the engineering to Indian companies, but the company still has Spanish engineering for the AP1000® because we are extremely efficient and competitive, and we do high quality work.

In the collaboration agreements with Spanish companies, are there any related to this area?

Yes, we have two very important agreements with Tecnatom, one for the training of personnel for the AP1000® control room, and the other for the Non-Destructive Testing (NDT), which we develop mainly in Europe.

Westinghouse's collaboration with Spanish companies, highly qualified and recognized throughout the world, is very positive for everyone.

PRESENT AND FUTURE

This interview is published in the international issue of NUCLEAR ESPAÑA, dedicated to the long-term operation: How can Westinghouse support this trend in Spain?

In the United States, more than 70% of the nuclear fleet has been approved for life extension up to 60 years, and Westinghouse has a lot of experience in helping customers in this process,

especially in the United States; an experience that is perfectly saleable in Spain when customers require it.

From your international perspective, what is your vision for the future of the sector?

The future vision of nuclear energy is very different in different countries and continents. The United States, for example, is at a delicate time, as gas and coal are extremely competitive.

Other markets such as Eastern Europe, China, India, Saudi Arabia, the United Arab Emirates and the United Kingdom continue with their construction plans, as well as the Czech Republic, Poland, Russia and some African countries.

There will certainly be new opportunities. In my opinion, we must be patient, especially in Europe, because before we talk about the construction of new plants, we must have a serious and rigorous debate on the long-term operation.

What does not make sense is to put an expiry date on nuclear energy, because, like in any other cutting-edge technologies, it also evolves. The evolution of other energies in ten years' time is often compared with the nuclear energy of the 60's, when to be fair it should be compared at least with the AP1000® or the SMR (Small Modular Reactor) of nowadays.

Personally, I remain optimistic about the future of the nuclear industry. ■