



Ignacio ARALUCE

PRESIDENT OF THE SPANISH NUCLEAR INDUSTRY FORUM

Last March Ignacio Araluce was named president of the Spanish Nuclear Industry Forum, the business association that represents all electrical production from nuclear origin and 85% of the major companies in the sector at the national level.

The organization brings together more than 55 companies which carry out commercial activity in 40 countries worldwide and that employ more than 27,500 people directly or indirectly. Araluce acknowledges that it is an honor to represent the Spanish companies from the nuclear sector through an organization that will celebrate the 55th anniversary of its establishment this year.

Ignacio Araluce studied Physical Sciences and has a Management Development Program degree from the IESE at the University of Navarra. He also holds a degree in Nuclear Engineering from the previous Nuclear Energy Board.

He began his professional career fully connected to the nuclear energy sector in 1979 as an instructor for operating licenses for PWR power plants at Tecnatom. In 1981, he was named head of operations at the Almaraz nuclear power plant, and later, production manager. In 1988, he became the plant director.

In 2005, he began his international experience in Slovakia. For the last ten years, he has directed the WANO team (World Association of Nuclear Operators) from Paris, a worldwide organization of nuclear operators dedicated to increasing the safety and reliability of all nuclear power plants in the world.

Ignacio Araluce assumed presidency of the Spanish Nuclear Industry Forum on March 23, 2017 after the Assembly for the Association Board of Directors was held, "a phase that will be the culmination of my career in the field of nuclear energy," he pointed out.



THE ROLE OF THE FORUM IN THE ENERGY AND NUCLEAR SECTORS IN SPAIN

The Association is celebrating the 55th anniversary of its establishment. What are the main challenges that the Nuclear Forum is currently facing?

We are at a crucial time for nuclear energy. Not only in Spain, but in the world in general. On the one hand,

because of the challenge of climate change, and on the other hand, because of the economic crisis that we are going through that is expanding too much throughout the world.

In addition, we are living in a special time where everything is being questioned, among other things, what the sources of electricity production should be that society wants for the future.

We find ourselves in an open debate where there is increasing social



awareness for a cleaner world. Currently, individuals are trying to be more respectful to the environment, and in this regard, nuclear energy has a very important role to play.

What are the Association's objectives regarding communication with political parties?

It is a fundamental relationship, and for that reason, we are working to have better interconnectedness. Political parties, which channel all of their activities through having citizen representation in Parliament and according to the balance of majorities for the formation of government, are the ones in charge of making general decisions for our country. One of these decisions is determining what the outline for the nation's energy composition should be.

As representatives of the citizens, parties have a very important influ-

ence on issues of this caliber. Therefore, the dialogue of the nuclear industry, and of any sector with them, is fundamental.

And what has your experience **been like during your first months as president?**

A few months ago, we were at the Congress of Deputies, invited by political parties, to debate about the Spanish nuclear industry with certain players in the political field that we consider important.

We do not want to pressure them, but rather our desire is to show what the nuclear industry is, so that any person who has to make a decision can do so in a balanced and knowledgeable manner.

That is a role that you are also working on with social agents, right?

Without a doubt, because it is necessary to interact with all social representatives, not just in the political field. Social agents, especially the unions, are fundamental players, because they represent the workers, and therefore should have all of the information possible.

It should be acknowledged that union representatives usually have a good level of knowledge, but it is good to insist on information, always without any type of pressure.

The Spanish nuclear industry is present in 40 different countries

THE FORUM'S STRATEGIC PILLARS

Two of the fundamental axes for the Nuclear Forum's activities are communication and training. What do each of them represent?

They are two very important activities for us. Therefore, the idea is to maintain them and enhance them as much as possible for us. Both are closely related although the target groups are different. Communication is directed to society as a whole and to social players who must make decisions about energy policies in our country.

On the other hand, with training we seek to value the role of nuclear energy without putting down other sources of energy. We think that it is important for teachers, who play an important role in the training of future generations, to have neutral knowledge about what nuclear energy is. Therefore, we must convey the benefits and potential negative aspects of this technology, so that future generations make their own decisions when the time comes. We want a society that is free and knowledgeable.

Another key pillar of the Nuclear Forum's activities is support for the industry. What are the short- and medium-term objectives for this area?

The Nuclear Forum supports the industry through the development and opening of channels to create commercial activities in our sector. Some of our partners are already working in this direction and have made significant progress due to the high level of qualification of our companies and of the people who work there.

Spain has a very extensive nuclear tradition, both in experience as in the amount of work developed, so that our companies have become leaders in the sector, which is what allows them to open markets throughout the world.

The Spanish nuclear industry is present in 40 different countries. Exporting technology, products, and services to so many countries is very complicated and is only accessible for industries with recognized global prestige, as is the case with companies from the nuclear sector.

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The Nuclear Forum supports international expansion through our contacts with embassies and national and international commercial organizations. It must be acknowledged that, since we have an industry with a very high level of qualification, it practically sells itself, so it is a very gratifying activity that we are going to continue to enhance.

THE NUCLEAR SECTOR IN SPAIN

One of the government decisions that worries the sector is the one related **to the fiscal measures that came into effect in 2013.** How is this affecting the nuclear sector?

The tax issue has an important impact on the viability of nuclear electricity generation. In fact, the tax burden accounts for 40 percent of the gross revenues of operating companies, if national, regional, and local companies are combined. In this manner, the margins are considerably reduced since it is necessary to generate profit for the remaining 60 percent.

It is important to clarify that, whether there are more or less profits, nuclear power plants are always going to function with an excellent level of safety. A sine qua non condition for nuclear facilities is that they are safe at any time, for any operator. Therefore, there comes a time when there are no margins for profit. Some of the plants have already communicated that there are at a loss.

What activity does the Forum carry out in this regard?

From the Nuclear Forum, we convey this information to the government, and we hope that it is sensitive to this circumstance.

The sector has its doors open to anyone who must make decisions to check the figures, which are available. We hope that it will be acknowledged that the continuation of nuclear facilities is going to be very difficult with these conditions.

THE GAROÑA PLANT

This August, the Ministry of Energy, Tourism, and Digital Agenda,

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MINETAD, announced the refusal to renew the operating license for the Santa María de Garoña plant. What is the position of the Nuclear Forum related to this issue?

Despite the favorable opinion from the Nuclear Safety Council to renew the permit, the Ministry has made the decision, which we understand as a concrete and one-time decision, which does not predetermine the continuity of operations for other Spanish nuclear power plants.

What I want to point out from the SNE magazine is that we conveyed our acknowledgement for the professionals at the plant, which as with all Spanish nuclear facilities, has always had excellent performance.

A few months ago, MINETAD developed the reform for the system of renewal operations authorizations

for nuclear power plants which was approved by the Nuclear Safety Council. What do you think about that decision?

It is a change that seems reasonable, since it facilitates decision-making with greater awareness without causing any changes in the current scenario. Up until now, when a request for an operations permit was required, it had to be completed three years before the expiration date of the current license by sending all necessary documentation to the Nuclear Safety Council to be analyzed.

Currently, the process is practically the same. The only new thing is that the timeframe for completing the formal request license to renew or not has been changed to a maximum of two months after the new Energy Transition Law came into effect from the Government, which will determine the future energy mix for our country.

What is the current situation for this Energy Transition Law?

There are several initiatives from the Government, which has not yet announced any timeframe for defining the Law. The formation of an Expert Commission was required, composed of representatives from the Government, Parliament Groups, Unions, and the

CEOE in order to create a report to assist the Government and Parliament in decision-making. The Government has also called on various social agents to share their positions.

We are faced with a Law about climate change and energy transition that intends to determine the compatibility of this transition with the environment, not limited only to the generation of electricity and energy sources.

As for the timeline, I think that it could be ready for mid-2018.

What does the Nuclear Forum ask from those responsible for developing this Law?

From the sector, we request ideological and political neutrality. The analysis must be completed from the sustainability perspective for the generation of electricity, presenting the advantages and disadvantages of each of the energy sources.



Collaborating much more closely with the Spanish Nuclear Society is one of the objectives that I brought up since my arrival at the Nuclear Forum

And once the mix of energy is determined, the necessary mechanisms must be established to make each of the sources that compose it viable. It will not do any good to determine the energy panorama for the country if the rules of the game for making each of the generation sources viable are not determined.

Do you think that it is necessary **to send more specific messages** about the advantages of maintaining nuclear generation in the energy mix?

The contribution of nuclear energy within the future energy mix is so important that we are sure that, if there is truly serious technical analysis, it will play a significant role.

And we are sure for many reasons. Nuclear energy provides exceptional stability to the system as we have been the main source of electricity generation in Spain during recent years, and an energy that does not emit greenhouse gases. Some of fundamental pillars for maintaining this source of energy for the future.

The management of nuclear wastes is another recurring theme currently in the sector. What is the current situation for our country in this regard?

In Spain, the management mechanisms are already established. We have a government company, Enresa, in charge of managing radioactive wastes and the decommissioning of nuclear facilities in our country. The mechanism for funding this is also established. At this time it is primarily the nuclear operator who assume the cost for all activities completed and to be completed by Enresa.

On the other hand, the solutions that are being sought are internationally recognized. In the long term, we are talking about Deep Geological Storage for high activity wastes, where countries like Finland and Sweden are



making significant progress. Spain is moving in this direction, and meanwhile, we are developing Centralized Temporary Storage, which is facing a series of obstacles that are getting in the way of costs and execution times for the project.

With the occupancy level of the pools for used fuel from nuclear power plant and with the delayed Centralized Temporary Storage construction, it has been necessary to make the decision to establish Individualized Temporary Storage in each of the nuclear power plants in our country. We understand that the more appropriate solution for the future is to have a centralized system which allows for optimization of costs and safety.

A clearer prediction for the total cost of waste management and decommissioning would be desirable.

SNE AND THE NUCLEAR FORUM. COLLABORATING FROM THE BEGINNING

What initiatives have you planned related to the collaboration between the Nuclear Forum and the Spanish Nuclear Society?

Collaborating much more closely with the Spanish Nuclear Society is one of

the objectives that I brought up since my arrival at the Nuclear Forum. Although our groups are different, the Spanish Nuclear Society includes, in addition to business and social agents, professionals related to the field of nuclear technology in all its scope, and we have a very large connection.

We are taking steps in this direction. There is a group within the Society that we think is very interesting: the Nuclear Youth. They represent the future of our sector; they are pleasant and charming. We see an interesting synergy in the training field and we believe that we must integrate with the Spanish Nuclear Society on these issues. As an example, a few weeks ago we held a Training Day for Teachers in Barcelona along with Enresa, where the Nuclear Youth participated.

Also, we have other specific actions, such as the "Nuclear Technology and Its Applications in Daily Life" course for teachers in the province of Malaga, with accredited training credits from the CEP of Malaga, which will be held as part of the 43rd Annual Meeting of the Spanish Nuclear Society.

Ultimately, the collaboration between both entities is necessary and we will forge ahead to improve it even more. ■