

INTERVIEW



JUAN ESTAPÉ ARNAU President of the SNE



The Spanish Nuclear Society is celebrating its "silver anniversary". Throughout 1999, SNE's magazine, Nuclear España, will review the Society's history through the work of its committees, which are the real engine of a society of professionals with more than 1,200 members and whose activities serve as a reference for similar associations in other countries.

In this international issue, which is distributed to nuclear industry agencies and enterprises throughout the world, Juan Estapé takes stock of his two years as President of the SNE, analyzing the history that has led up to this commemoration and forecasting a future full of challenges for this key world energy source.

The Spanish Nuclear Society was founded in 1974, at a time when nuclear power in Spain and the rest of the world was an energy source with a very promising future. It was precisely that year when the European Nuclear Society was also created, with the SNE as a founding member, and the optimism for the prospects of this energy source was obvious.

As Juan Estapé recalls, «that was the era of intense development of nuclear power in Spain, when the first-generation nuclear power plants were beginning to operate and construction of the second generation plants was well underway. Also, prospects for future projects were very optimistic.»

In this atmosphere, in which nuclear was on the leading-edge of technology and its professionals were renowned for their training and innovative capacity, many enterprises became involved in this energy source of the future: electric utilities, service companies, equipment manufacturers, universities, research centers.

It was then that the Spanish Nuclear Society was born. «In my opinion, it has played its rightful role throughout these years as a point of contact for professionals from all areas

connected with this energy source. After 25 years, I believe the SNE is one of the most prestigious nuclear societies in the world in terms of number of members and the activities it carries out.

»When we hold international meetings, representatives of other societies, such as the president of the ENS, are truly surprised on seeing our capacity to bring so many people together. In my opinion, this is because the Society has known how to adapt to the needs of its professionals at all times and to encourage the exchange of information. In this respect, there are two activities that have achieved a very significant projection and are actively supported by members. One is the Annual Meeting, which throughout 24 editions has become a major point of encounter for Spanish nuclear professionals and an increasingly recognized reference in other countries. The enormous success of this event in terms of number of papers presented and the corporate exhibition, as well as the exchange of experiences that it involves, speaks for its prestige. On the other hand, the SNE Magazine, which has published more than 180 monthly issues uninterruptedly for almost

17 years, is a vehicle for communication between our members and also has a growing international projection of great interest to the Spanish nuclear industry.»

The Nuclear Future and Utopia

The SNE reaches its "silver anniversary" at a time when the industry faces major challenges. Deregulation of the electric system, market globalization, the defense of the environment and global warming are all factors that have an influence on energy production. Nuclear power must address all these factors with clear approaches to safety, competitiveness, waste management and concern for the environment.

The SNE is not unaware of these challenges for its future. According to Juan Estapé, «we are witnessing a "utopian" reactivation of nuclear power, and when I use the word "utopia" I mean in the short run, because in the mid- and long-term I believe there will be a real recovery.

»To believe that in the Western world there is going to be a short-term reactivation is utopian, which does not mean that it cannot



happen. But it would also be an error to be pessimistic about this, because the main goal of all major movements in the world has been utopian, from Christianity to Marxism. Why can't we nuclear professionals believe that we must strive for a utopia, especially when this will become a reality in the mid-term?

»In order for this utopia to shift more towards the short rather than the long-term, a series of conditions are required. One of them is good operation of our plants, which is the issue I would like to focus on. If current plants, which account for a third of electric energy production, did not have – as they in fact do have – good operating quality as regards use, hours, costs, etc., this utopia would move towards the long-term.»

Generational Change and Training

For Juan Estapé, it seems obvious that «we must make an effort to maintain the good operating quality of our plants, and here it is very important to account for generational change. During the thirty-year period from the early 70's to the year 2000, an entire generation, which began working with nuclear power and was professionally trained for it, has achieved positions of responsibility in plant management but at the same time is reaching the moment for professional retirement.

»In this situation, which is occurring in many producing countries, it is necessary to ensure that the currently good operation of these plants, which is the result of three decades of evolution and experience of professionals trained since before the decade of the 70's with all the excitement of that time, is continued in the future. And this requires clear approaches to the training of new managers and professionals who know how to confront the not so clear future of nuclear power.»

According to Juan Estapé, this is where the Nuclear Society can play a very important role, as «it has a specific weight in this training effort. For several years now, we have been organizing courses for our professionals dealing with nuclear technology as a whole and also with the fuel cycle or radioactive waste and management. I think that the Society, since it is composed of professionals and not societies, has a big advantage in organizing courses, as it can offer subjects

without worrying about economic or technological rivalry. In this sense, it is of utmost importance that people who have training be able to convey it to the new generations, and the Society can and should play a major role in this undertaking by encouraging promotion of younger people and training first-class professionals who can maintain the operating

quality of our plants, engineering firms, manufacturers and service companies, so that all fields of the nuclear industry in Spain can carry on in the future. We must ensure – the goal is clear – that Spanish nuclear professionals continue to lead the energy field in this country, as they have done in the last 25 years.»

Communication

Juan Estapé's extensive experience in managing nuclear projects, and especially as head of the Vandellós II plant, has made him very knowledgeable about the influential, important issue of public opinion and the communication strategies undertaken by the industry.

«Communication is the most difficult issue, not only in Spain but also in many other countries. Any expert in the field will say that the idiosyncrasy of nuclear power is that it offers positive mid-term but not short-term results, and therefore we cannot expect our efforts in this direction to produce immediate changes in society's attitude, but we can hope for progressive change if issues are always dealt with transparently and out in the open.

»The major problem at this time, from the standpoint of public opinion, is the issue of radioactive waste. Although it is not an easy task, we must make society understand that the only industry in which both present and future wastes are controlled is the nuclear industry. There is a large repository in Spain, El Cabril, for medium- and low-level waste, which fully resolves this issue. As regards high-level wastes, they are located in plant pools and they can be put in dry storage while waiting for a definitive solution. There is really no hurry, and although technical solutions already exist, they are still very expensive and it seems obvious that with current research projects, other more economic solutions can eventually be found.»

For Juan Estapé, clarity of information is essential. «We must make society understand that while our industry has controlled its wastes – we can prove this either by visits to El Cabril or our pools and in the future they will also be visible to whoever wants to check them out – industries similar to ours, such as fuel-oil, gas or coal-fired plants, are discharging waste to the atmosphere. While

there are people concerned with what is going to happen to future generations with our wastes, which are fully controlled, visible and monitored, no one is worried about what will happen to these same generations with global warming, acid rain, the greenhouse effect, etc., which everyone knows exist and no-one controls. The experts say that these waste emissions to the atmosphere could be catastrophic for the future »I hope that these issues that are so hard to convey to society can finally be transmitted to public opinion with the forthcoming international meetings on the environment. As I have already pointed out, we should not expect short-term results, but since reactivation of nuclear power is not a short-term affair, we should convey three major messages during this period. First, our plants operate very well. Second, much work is being done to achieve a new generation of nuclear power plants that require less investment, both by reducing required construction time through quality construction and standardization and by establishing clear licensing processes so that potential investors are able to determine time frames and costs. Finally, the third message that we should convey to society is that we can present waste management as an example to be heeded by other industrial activities.»

To these three fundamental messages, Juan Estapé adds another factor that for decades has influenced energy plans in many countries: fuel "fashions". «During the last few years, it has been demonstrated that diversification is the best alternative when trying to cover a country's energy needs. Spain has been a model of failure in the definition of single energy sources. At one point everything had to be coal and it was later seen that this was not the solution; there was another period in which everything had to be fuel-oil, and there are quite a few Spanish plants that have been shut down because they could not compete due to fuel costs; the situation in the 60's was similar with the nuclear power plants. Now the big thing is gas, but here again – and I don't think I'm far off track – it could also undergo a crisis in the years to come. Therefore, the solution for a country seeking energy self-sufficiency is diversification, and this is where nuclear power should have a considerable specific weight.»

Quotations:

- The SNE should play a major role in the efforts to train young professionals.
- The only industry that has controlled its wastes is the nuclear industry.
- The solution for a country that seeks energy self-sufficiency is diversification.