

Íñigo de Oriol

CHAIRMAN OF IBERDROLA



Íñigo de Oriol is the Chairman of Iberdrola, Spain's largest private electricity utility and owner of approximately 43% of the installed capacity provided by the country's nuclear power plants.

He began his activity in the electricity sector thirty-seven years ago at Hidroeléctrica Española, becoming a Member of the Board of this company in 1975 and Chairman in 1985. In 1991 the company merged with Iberduero, giving rise to Iberdrola, of which Íñigo de Oriol was appointed Chairman.

To Mr. Oriol's long experience in the electricity industry is added his continuous presence in the world of business as Chairman of the Madrid Chamber of Commerce, Treasurer of the Higher Council of Chambers, Member of the Board of the CEOE (Spanish Employers' Association), as well as Chairman of Asland and Member of the Board of various companies, such as Siemens.

Since 1985 Mr. Íñigo de Oriol has been a Member of the Board of UNESA, the association coordinating and representing the Spanish electricity utilities. He will shortly be appointed Chairman of this association, a post which he already held between 1987 and 1989.

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The figures for electricity consumption in Spain have increased slightly over the last few months. Might this be an indication of economic recovery?

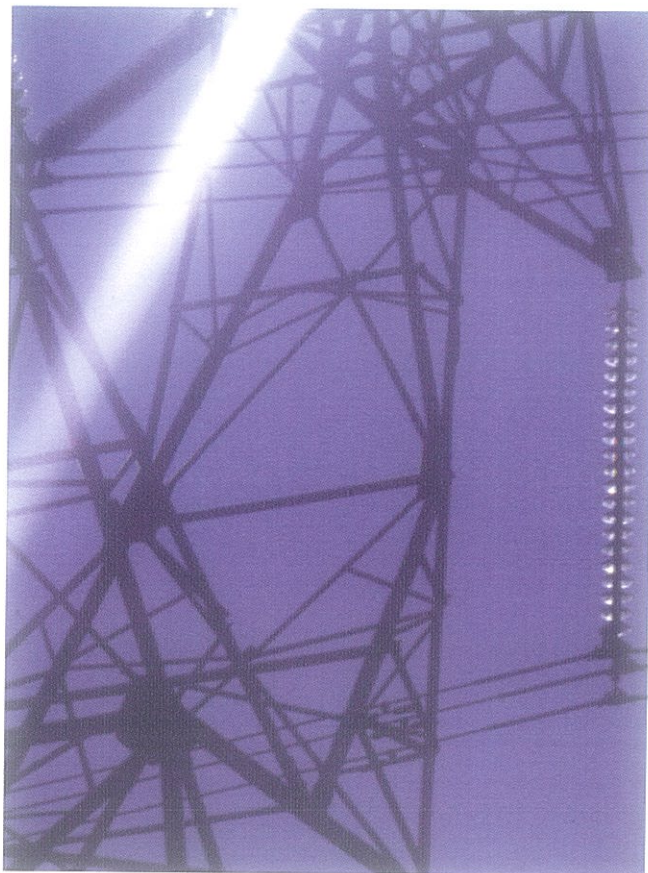
It is often thought that the evolution of electricity demand is a fairly reliable indicator of the behaviour of the economy. Periods of greater economic activity are linked to appreciable growth in electricity consumption, while periods of recession coincide with moderate or even negative variations in electricity demand.

The Spanish case is a recent example: in 1992 and 1993, years which were characterized by a negative evolution of the economy, the net consumption of electricity increased by around 1%; in 1994 and 1995, however, when the evolution of various economic indicators appeared to confirm a certain reactivation, overall electricity demand grew by 3,2% and 3,8%, and growth of the industrial sector amounted to 4.9% and 5,9% respectively.

In any case it should be pointed out that there are other factors, apart from the behaviour of the economy, that influence electricity demand: increasing quality of living standards, greater penetration by electricity in industrial processes, the spread of efficient energy technologies, higher or lower outside temperatures, etc.

Could you give us an idea of what 1995 has been like for the Spanish electricity sector, from the economic point of view?

Some of the main economic indicators of activity in the Spanish electricity sector have been reflecting an almost continuous improvement for several years now. The 1995 financial year



has been yet another step in this process of growing economic and financial equilibrium. This has been the case despite continuous moderation of electricity tariffs: since 1959 the price of electricity has decreased in Spain by 39% in constant pesetas, and if we prefer to look at a more recent timescale we see a similar situation, with electricity tariffs decreasing by almost 17% in constant pesetas since 1987. In 1996 they will not undergo any increase.

The electricity utilities are managing to compensate for this moderation in electricity prices, not without some effort, through rigorous control of their costs, and this is allowing them to improve their financial situation. In 1988, for example, the sector's financial debt amounted to 64% of the value of its total fixed assets or three times turnover; at present it stands at little more than 50% of this, or less than twice the turnover. This is due, among other things, to the fact that the resources generated by the companies are more than sufficient to finance investments in new installations. Incidentally, these investments continue to stand at considerable levels, close to 350,000 million pesetas per year (equivalent to 3 billion dollars), and are oriented preferentially towards

transmission and distribution infrastructures, this having a positive effect on the quality of the supply.

Moving on to the nuclear sector, how do you judge the operation of the Spanish plants?

Throughout 1995, the nine Spanish nuclear units have had an excellent performance in relation to safety, availability and costs, in keeping with their achievements in previous years. In this respect, their operational safety has been repeatedly qualified as satisfactory by our regulatory authority, and average availability has been almost 86%, a figure similar to that achieved in previous years in which the aggregate of the Spanish plants have occupied the third or fourth place in the world ranking for this parameter. As regards operation and maintenance costs, the average figure is one cent per kWh, this being in line with the most efficient plants in the world, in

which - like the Spanish plants - we see the dual condition of low cost and high availability. It is important to underline this fact: usually the nuclear power plants with better performance are those which tend to show lower O&M costs.

This recognition of good operation occurs also at international level. Over the last year, some of our plants have broken national and international records as regards the lack of events or the load factor attained, as in the case of Garoña, with a world record load factor of 99% in 1995 and more than 490 days connected to the grid without interruption.

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Among the outstanding events occurring in 1995, I should like to draw special attention to the return to normal operation of the José Cabrera (Zorita) plant following a year-long outage in 1994 for repairs to the reactor vessel head penetrations, and also to the steam generator replacement operations carried out at the Ascó I plant, operations which are to be performed at Ascó II and Almaraz I in 1996 and at Almaraz II in 1997.

Attention should also be brought to the 17 MWe uprate achieved by Ascó I following the aforementioned steam generator replacement, which might increase to 38 MWe in the second phase. Other plants also forecast power increases in forthcoming years - as is the case in other countries - with a maximum overall uprate figure of 900 MWe, in other words, 12% over the current installed capacity of 7,400 MWe.

As regards the Nuclear Area of UNESA, what is the current situation of the Strategic Plan under study by the Nuclear Committee?

The UNESA Nuclear Committee recently approved the Strategic Plan - known as the Nuclear Power Plant Joint Action Plan, - which has subsequently been ratified by UNESA's top management. In putting this initiative into perspective, allow me to recall that since its creation in 1985 the UNESA Nuclear Committee is the framework within which those responsible for the Spanish nuclear power plants attempt to jointly manage the operation of their installations, as part of a process of continuous enhancement of their safety, reliability and economy. Consequently what has characterized the UNESA Nuclear Committee in the past, and continues to do so today, is the joint effort by the nuclear plants, making a more efficient use of resources in a framework of synergy and complementary action.

The Joint Action Plan is, therefore, a step - indeed a major step - in the same direction. In view of the positive experience of somewhat more than 10 years of working together, the Plan aims to identify the actions of common interest to most of the nuclear plants to be taken over the next 10-year period, with special emphasis on the first five years. This is a set of 53 initiatives in different areas (Safety, Modernization, Maintenance, Wastes, Costs, etc.), 12 of which have been selected as priority issues such as

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Lifetime Management, Upgrading, Modernization of Instrumentation and Control, Applications of Probabilistic Safety Assessments, etc.

Which are the most outstanding aspects of the activities carried out within the framework of collaboration with international institutions involved in nuclear power plant operation, such as WANO or INPO and NEI in the U.S.A.?

Since its creation in 1989 - at an event held in Moscow at which, as the Chairman of UNESA, I signed the charter of constitution, along with the Chairmen of Electricity Utilities from across the world - WANO is the forum for the world's nuclear plants where, through the exchange of experience and information and through mutual assistance, attempts are made to achieve the highest levels of safety and reliability. As is only obvious, and often pointed out, the level of safety of the

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world chain of nuclear plants is fixed by that of the weakest link. This calls for effort by all in order to ensure that this level is the highest possible. We risk in this the current and the future viability of nuclear energy.

On the basis of this conviction, UNESA, on behalf of the Spanish electricity utilities, participates actively in the governing bodies of WANO, as do our plants in all the Association's programmes.

With regard to INPO, we have been involved in this organization's international programme from the very beginning, this having allowed our plants to maintain highly fruitful relations with their American counterparts for the exchange of experiences and mutual improvement. INPO is the best possible model of useful and efficient organization for WANO.

Finally, in 1995 UNESA has become associated with NEI, this having allowed us to intensify the already smooth relationships maintained with one of its predecessor organizations: NUMARC. It should not be forgotten that for most of our plants, which are based on U.S. technology, it is fundamentally important to keep abreast of the development of standards and regulations in the United States, and even to anticipate such development.

Since you will become shortly Chairman of UNESA, What are your projects?

There is a high degree of continuous coordination among the Chairmen of the different electricity utilities which makes it possible to maintain an essential line of continuity from the Chair of UNESA. Furthermore, it is habitual for each UNESA Chairman to collaborate closely with his fellow Chairmen and specially with his predecessor in establishing the general tasks to be performed by the Association.

The framework within which UNESA is to carry out its activities in the near future implies considerable challenges for the Spanish electricity sector, such as the legal development the Government resulting from the upcoming general election will bring into effect, the growing internationalization of the electricity industry and the demands that all this will bring in terms of competitiveness and efficiency. My wish is that UNESA continue to contribute through its technical and professional assistance to allowing the companies in the sector to successfully meet all these challenges.