

## National Energy Strategy: Urgent, but Insufficient

**The Government's effort to introduce what the National Energy Strategy calls "a navigation chart" in electric power issues is appreciated, but there is still much progress to be made in order to definitely unblock the projects which allow guaranteeing the supply that the country needs in the mid and long term.**

Recently, the Government introduced the National Energy Strategy 2012-2030 (ENE, in Spanish), stating the challenge that Chile faces in energy matters, and focused on the need to rely on enough and competitive energy resources to sustain development, specially in a context where electricity rates are one of the highest in Latin America.

The ENE brings forth a series of measures – including legal, regulatory and administrative changes – dealing mainly with six pillars: (I) to promote energy efficiency; (II) to increasingly incorporate Non Conventional Renewable Energies (NCRE); (III) to foster traditional renewable energies (hydroelectric generation); (IV) to strengthen the transmission system; (V) to encourage competition; and (VI) to promote regional interconnections.

The idea to present a national strategy seems correct, particularly since it specifies the points that the country needs to emphasize in order to make some progress. It does not only synthesize the coming challenges, but it also means to start a new, more detailed working stage to materialize the proposed measures. But what seems positive in a general perspective, it is not so in a specific context, because there are a series of considerations and measures that are not the most adequate ones. Therefore, the proposals must be thoroughly analyzed and, in certain cases, they should be reconsidered.

### **The Basic Pillars of the National Energy Strategy (ENE)**

The first pillar refers to a greater development of Energy Efficiency (EE). The Government proposes an Energy Efficiency Action Plan (PAEE20, in Spanish), whose goal is to reduce by 12% the estimated final energy demand by 2020, which would represent an electric power transfer capability of 1,122MW. The plan envisages to foster EE in different productive sectors – such as building, industry, mining and transport -, and the application of minimum efficiency standards for equipments, devices and materials. It also proposes to create an Energy Efficiency seal to reward leading companies in EE development, and also efficient domestic and public lighting programs.

The announced EE measures seem to point in the right direction, since the efficient energy use effectively contributes to development, being equivalent to an additional generation source whose negative impact in any form whatsoever is null. However, the assumed goal is too ambitious for the proposed measures. In fact, to believe that the PAEE20 will generate incentives for a much more efficient management in sectors such as the mining industry, which currently develops second generation projects in energy efficiency matters, is not very realistic. Likewise, measures such as device labeling are very useful to inform users, but deeper and long-term change of habits and cultural changes are required to get the expected results.

The second pillar aims at fostering Non-Conventional Renewable Energies (NCRE); the current encouragement law is considered insufficient, since it advocates a 10% share of these energy sources by 2024. The assumed goal is to double in the next decade this share of NCRE in the matrix.

Among the proposed measures, there are positive ideas like the dissemination of more public information concerning project developments and strengthening the encouragement mechanisms, and also greater incentives for NCRE pilot projects which allow gaining knowledge about these technologies. However, there are also more questionable proposals, such as making public biddings by NCRE blocks subject to State subsidies, which validate the incorporation of non-competitive energy sources to the matrix. Moreover, the creation of a geo-referenced platform is proposed to evaluate the feasibility of geothermal projects, which actually means that the State will undertake tasks that are typical of private developers, unnecessarily assuming the cost and risk of that activity.

The third pillar aims at giving greater relevance to the hydric resource for generating electricity, since it is the main clean, renewable and own source. The Government's expectations are to have a share between 45% and 48% of traditional hydroelectricity in the next decade.

Despite the qualities inherent to the development of renewable energies, either conventional or not, to propose quantitative goals based on its share in the matrix seems at least questionable, even more so when its cost and impact in the country's competitiveness has not been analyzed nor its effect in the long-term service preparedness. We should remember that investment decisions for efficient resources allocation must be motivated by price signals, which constantly change over time. In the past, this has made the electric market to opportunely satisfy the country's increasing energy demands, even in critical drought conditions, natural gas outages and supply restrictions. Therefore, the policy core has been – and should continue to be – neutrality regarding the competitive development of different energy sources, which has given flexibility and responsiveness for the market to adapt to the changing conditions. It seems a risky bet to introduce substantial changes to this model which has obtained good results for the country, although it can be certainly improved.

But the ENE has made many other proposals concerning other issues. For example, it mentions the need to minimize the impact of the transmission lines, indicating that, in the case of the southern region, the energy transmission through “cutting-edge technologies” should be considered, including submarine or underground power cables”. We could ask ourselves if a submarine cable, with its effects on marine life, is actually less invasive than the aerial cables, unless we argue that visual impact is the only one that interests.

There is also talk about “widely protecting the Chilean Patagonia”, which could allow excluding generation and transmission initiatives for “immense areas”. This kind of statements makes us to legitimately ask if the Government pretends thereby to replace, with own and unknown criteria, the task carried out by the Environmental Impact Assessment System (SEA, in Spanish).

The ENE also puts many restrictions to the development of thermoelectric projects, in spite of recognizing that they are needed to provide for the country's energy demand in a safe and competitive

way. It mentions the possibility of taking actions to restrain the CO<sub>2</sub> emissions, advance towards technologies that are still incipient worldwide and very costly, and the land management to limit the installation of thermoelectric plants. These measures have a single common factor: they increase the electric generation cost and hinder the development of new projects, by imposing restrictions that somehow overlap the role within the authority of the SEA.

The fourth pillar is focused on the electric transmission, since it is acknowledged to present significant fragility levels and serious difficulties for the projects' execution. With the formula of "creating a safer and stronger model for the development of electric networks, the Government sets forth that the State must play a key role in planning the transmission systems.

In this perspective, it is proposed to create fiscal segments, establishing a regulation to determine the compensations of the facilities, its clearances and the land planning for the transmission system's expansion. This sounds like an excessive State planning, since the State would define issues that have been studied by independent consultants until now – that recommend the necessary works to the National Energy Commission (CNE) -, in terms of the consumption needs and the available offer. It is precisely this process of analysis, execution and commissioning that requires more responsiveness, thus ensuring that works are carried out in compliance with demandable service quality and expansion levels, with the corresponding compensation. In fact, the proposed public electric highway should progress in that direction, that is, to facilitate the development of private projects, based on market decisions and not by State interference.

Besides, measures like speeding-up the pending bill process which allows expediting the obtainment of servitudes and electric concessions, or the improvement of the current regulation to enable the connection of small generation means are certainly going in the right direction.

The fifth pillar seeks to introduce more competition in the electric market, which means to allow the entrance of new actors to the system. Therefore, the improvement of the bidding mechanisms for regulated customers has been announced, but no specific proposals have been made. Additionally, a reform of the Economic Charge Dispatch Center (CDEC, in Spanish) is being proposed, in order to be replaced by independent operation centers, with legal status and

own assets, autonomous and with clearly defined liabilities; all these factors positively increases the independence of the decision taking process for a better market performance.

In distribution matters, the idea is to introduce the trader figure, with due protections. The proposals aims at extending the free customers category and, implicitly, to adopt a system that separates the trader figure from the networks administrator, thus introducing greater competition. This proposal could be convenient if done gradually, respecting the in force contracts and capturing the demand's growth.

Finally, the sixth pillar seeks to develop the regional electric interconnection options. The arguments are that it could entail important benefits in terms of diversifying our matrix, increasing competition and reducing electricity costs. We should not forget, however, that in order to rely on a continuous and safe energy flow between countries, it requires a political stability which is not always present in the region. This issue is a matter of concern because Chile, due to the shortage of own generation sources, will probably always be a net importer of electric power, so the country's vulnerability could be substantially higher than the much criticized dependence on foreign fossil fuels.

### **What Truly Matters**

The Government is understandably worried about the country's energy development. Energy allows households to rely on power supply to turn on the lights, refrigerate their food, and turn on the electronic devices, but it also helps to develop the productive activity, and the growth and employment needed to reach higher wellbeing levels.

Chile is undergoing a growth process that should hopefully lead to the developed country condition in the next decade. This implies to achieve an annual average economic growth around 6%, which entails a similar increase of electric consumption. According to official estimates, by 2020, the implementation of new generation projects contributing with 8,000MW additional to the currently installed capacity, which amounts to 16,970MW, shall be necessary. This imposes a bigger challenge: to rely on enough and competitive energy resources to sustain the development that Chile needs.

The ENE is an important step, which represents the main energy development challenges which fulfill the characteristics that Chile has

imposed upon itself: to guarantee the power supply in a clean, safe and competitive way. Nevertheless, although the document has indicated the correct emphasis that should be put on their promotion and improvement, it is more a statement of intention than a definite general outline including measures with dates and terms to be followed.

This is concerning, because we have systematically seen how large-scale projects, which are necessary for the country's energy development – such as the case of HydroAysén and, more recently, Castilla – have been delayed by long judicial proceedings. This not only endangers the needed energy supply, but also has a harmful effect on the rates that the country will pay for electric power in the near future.

In the specific case of Castilla, the adverse judgment creates uncertainty for future investments, since it changes the existing criteria for different standards – environmental and land use – which qualify the same activity in different ways. Until today, the principle of specialty had prevailed, that is, the environmental standard over the territorial one. With the decision of the Appeals Court of Antofagasta this precedent changes, because it applies the territorial standard over the environmental one. This criterion is erroneous, since the environmental standard contains objective and technical parameters for qualifying the activity as contaminant, annoying or harmless, and the urban regulation only refers to it in general terms stating, for example, that “it could alter the balance of the environment”, that is, any human activity. Moreover, the Environmental Qualification Resolutions (RCA, in Spanish) misses all certainties if, once obtained, the general criterion of the planning instrument prevails over technical qualification criteria. Furthermore, the new doctrine applied by the Court contradicts the spirit of the Environment Framework Law, which clearly stresses the following: “the standard setting procedure must be serious and informed, since its importance is crucial to adequately protect our environment and to offer a minimum frame for achieving our economic development”.

Such situations represent a very bad signal for the investments' development, especially because the sector of electric power supply is essential for the country's economic and social development. Therefore, the authority should give conclusive steps towards unblocking projects, thereby urging the evaluation and approval procedures to be as objective and transparent as possible. Good intentions are clearly not enough, and even less if trying to

accommodate to the environmentalist ambitions which are not very realistic with regard to the possibilities of alternative energy sources for safely and economically satisfying the increasing needs of the country.

### Conclusion

The Government announced the National Energy Strategy 2012-2030 where it presents its view on electricity matters and their immediate challenges. Its purpose is to establish a long term strategy for developing a clean, safe and economic matrix, but it should be made clear that the aim is not advancing towards a centralized planning; an idea that could be inferred from the inclusion of certain quantitative goals.

In this context, the Government's effort to present what the National Energy Strategy calls "a navigation chart" in electric power issues is appreciated, but there is still much progress to be made in order to definitely unblock the projects which allow guaranteeing the supply that the country needs in the mid and long term. Therefore, it is necessary to speed-up the bills' proceedings, such as the one enabling to obtain servitude, and to foster specific measures to make the environment assessment processes more expedite, objective and transparent. This is the only way to materialize private initiatives, thereby achieving an efficient allocation of resources that allows reducing the electricity costs in the mid and long term.

In brief...

#### THE PROS AND CONS OF THE NATIONAL ENERGY STRATEGY:

- 1. Greater development of energy efficiency:** PROS: It encourages the efficient use of energy, which positively contributes to development. CONS: The assumed goal is too ambitious.
- 2. To foster NCRE, doubling in the next decade their share in the matrix:** PROS: It disseminates more information concerning project developments and strengthens the encouragement mechanisms. CONS: It validates the incorporation of non-competitive energy sources to the matrix, thus increasing costs.
- 3. Greater relevance of the hydric resource for generating**

**electricity:** PROS: It contributes to the growth of the country's main clean, renewable and own source. CONS: The inconvenience of setting quantitative goals that do not correspond to price signals.

- 4. To create a safer and stronger model for the development of electric power networks:** PRO: It deals with the significant fragility levels and difficulties for the projects' execution. CONS: It includes excessive State planning.
- 5. More competition to the electric power market:** PROS: It enables the entrance of new actors. CONS: It can only be gradually applied.
- 6. To develop regional electric interconnection options:** PROS: It could diversify the matrix and reduce costs. CONS: It requires political stability which is not always present in the region.