

Remarks on the Bill which Regulates the Electric Highway

The bill is positive and going in the right direction in terms of facilitating the necessary construction and expansion works of the transmission system that the country requires, notwithstanding that it is always possible to introduce some improvements. One of the most relevant aspects of the initiative is that it allows integrating new parameters to the definition of the transmission infrastructure's routes.

It is a known fact that the development of the transmission system faces some problems due to the delays in the environmental proceeding and the obtainment of electricity concessions and servitudes, citizen objection, absence of slacks and the consequent delays in the works. This has generated concern with regard to the system's capacity to respond to the country's increasing transmission needs.

The troubles for obtaining the power lines concession are a pending issue, but the Executive sent a bill to the Congress which expedites proceedings, certainly respecting the rights of the affected owners. Its immediate approval shall be a key factor to ensure that the transmission works are carried out in the

specified terms. Meanwhile, the concept of Electric Highway (EH) complements the above, being a necessary contribution to execute large-scale renewable energy projects located at a greater distance. In view of the difficulties that these projects are facing today, it could be positive to rely on more State interference allowing to facilitate the lands and reduce the involved risks and terms for private developments, through a design where the definition of the routes and the urgency of the works have more visibility and legitimacy in dealing with the population.

In this context, the recent introduction to the Congress of the bill which regulates the Electric Highway is relevant. This bill has been expected for a long time –it was announced on May 21st, 2011-, and seeks to ensure that the transmission system grows with due anticipation and ease for providing more supply security and enabling the injection of electricity production which is far off from consumption centers.

The Electric Highway: General Features

The initial diagnosis set out by the bill's message is that there are congestions and weaknesses in the power transmission system, which put the demand's supply at risk, do not allow the optimal delivery and hinder the development of new generating plants. This situation derives from construction and expansion delays of the transmission works, as a consequence of the time taken for environmental authorizations, due to increasing citizen objections and the troubles for obtaining the necessary electricity concessions to impose rights of way.

Thus, the challenge is to rely on a stronger trunk transmission system which is capable of transporting the electricity generation increases that the country needs towards consumption centers. Therefore, the bill calls for "relying on an Electric Highway which allows transmitting the energy from new electricity generation plants in a safe, timely and reliable way". Additionally, it aims at a land use planning which makes a better use of the land where the lines shall pass, avoiding double routes and sub-utilization of the easement lanes.

The bill's message puts special emphasis on the need to promote greater participation of renewable energies in the matrix for independence, sustainability, competitiveness and security reasons, and the EH would be a key factor thereof. The reason for this is that, generally, these generation sources are more distant from the consumption centers, which requires a timely planning with enough slacks. The bill makes special reference to the convenience of diversifying the energy matrix by developing non-conventional renewable energies (NCRE), which are currently limited for being far off from the existing transmission networks; therefore, the associativity of NCRE projects for transmission lines' construction should be encouraged to generate the necessary slacks to transport the energy from these type of projects.

As for the planning process, the bill maintains the design of the prevailing trunk transmission studies (ETT, *Estudios de Transmisión Troncal*), although it extends its definition by incorporating a longer term planning, which considers greater uncertainties and generation options and defines recommendations for building lines with greater slacks. The longer term planning (20 years) would lead to the construction of bigger electricity facilities and reduce double lines, while the over-dimension would allow, according to the bill's message, "to place the transmission before the generation, enabling the exploitation of energy resources that are interesting for the country, such as renewable energies". In this manner, the ETT will be the platform for the EH.

It is important to point out that the Electric Highway is not a physical concept, but rather a set of applicable standards to certain lines, which vary over time. The bill extends the concept of trunk lines while including those

lines that enable the access to available resources for producing electric power or allow the withdrawal of an important group of consumers located outside the concession areas of distributing companies.

Then, a procedure is set out to rely on a EH (some aspects will be detailed further on), which includes the following steps:

- i. The bill shall define, based on technical and objective parameters, the lines having a public utility nature, which is basically the entire trunk system.¹ Once these public utility lines are defined, the State shall determine which shall be applied the EH procedure on the basis of certain parameters, such as the need to coordinate actors in a specific energy source, access difficulties for generation development or line construction complexity.
- ii. Those lines shall have unrestrictive open access and shall be constructed with greater slacks.
- iii. Feasibility of potential generation areas whose exploitation “is beneficial for the country” shall be pursued, involving sustainability, competitiveness and independence characteristics.
- iv. The route of the lines that are part of the EH shall be recommended by a consultant bid by the State, revised by an Inter-Ministerial Committee and agreed by the Council of Ministers for Sustainability.
- v. The route shall rely on an electricity easement in favor of the successful bidder, who shall be in charge of the construction and operation of the respective electric transmission lines.

In relation to pricing, the current system where generators pay use rates in the trunk transmission system is maintained. As for rate fixing of the lines enabling the access of potential generation areas, a differentiated payment for slacks shall be guaranteed, which shall be financed by the demand. This payment decreases as generation plants start to enter, and it is eliminated after 20 years. It is also expressly indicated that, for the purpose of usage charge payment in the case of generation complexes constituted by different units of a same owner, the final and total capacity of the complex from the moment the first unit is put into service shall be considered.

Specific Features of the Bill

Each time the expansion plan stipulates the need to build or extend a trunk transmission line with EH characteristics, a consultant bid by the Ministry of Energy shall decide, through a land lane survey (EFT, *Estudio de Franja*

Territorial), the best alternative of route or area on which easements shall be imposed and where the construction shall take place,. This survey shall be based on technical, economical and sustainability parameters, considering also social and productive factors. The EFT shall include the optimal route, a mapping on land use planning and zone management, areas or elements subject to protection and the physical description of the areas. The protection of human groups and production centers shall also be considered.

The consultant shall also notify the owners of the respective lands, who shall have a deadline to formulate observations or objections to the energy regulator (SEC). The highway bill incorporates similar improvements as those provided for in the electricity concessions' bill that is currently in the first legislative proceeding, which should improve the notification and claim processes.

The EFT cost shall be chargeable to the generating, transmitting and distributing companies, and free customers of the respective system.

An Inter-Ministerial Committee is created, which shall be the technical counterpart of the consultant, formed by a representative of the Ministry of Energy, the National Energy Council (CNE), the SEC and the Ministry of Environment. This technical-character Committee shall unanimously approve the consultant's EFT.

The bill envisages the possibility for the Ministry of Energy to order, based on sound criteria, the modification of the lane, which would compel the consultant to revise the EFT again. Once the definite bill is approved, it shall be subject to the agreement of the Council of Ministers for Sustainability.

Finally, the President shall promulgate a Supreme Decree approving the EFT and imposing electricity easement upon the route defined by the bill, in favor of the successful bidder for the construction and operation of the electric line. The successful bidder shall have a licensee character for all legal effects.

There shall be a public bidding for the construction of the electric lines. The successful bidder shall receive all the data collected in the EFT and the easements imposed upon the lane. It is envisaged that the successful bidder may propose certain changes concerning the route if he were prevented from building based on the EFT by fortuitous events or force majeure or if he could demonstrate with well-founded reasons that his alternative route proposal is better for complying with the demanded criteria, which should be approved by the same aforementioned procedure.

The licensee shall concomitantly agree with the owners of the lands the compensation value for the imposed easement, and if no agreement is

reached, the Undersecretary of Energy shall appoint one or more appraisal commissions, which shall make the assessment and stipulate the compensation to be paid. The licensee shall pay the compensation fixed by the appraisal commission –plus 20%- before materially taking over the property subject to easement.

The successful bidder shall deal with the Environmental Impact Statement, for which he can make use of the data collected by the consultant. It should be mentioned that the bill envisages improvements in the proceeding for obtaining authorizations which allow beginning the construction; among them, it considers the active involvement of the Ministry of Environment and the Council of Ministers for Sustainability and appoints the Executive Director of the Environmental Assessment Service (SEA) in charge of the environmental evaluation of these projects, who shall qualify its assessment urgency. Additionally, it indicates that the defined route shall not be part of the project's environmental assessment; only the significant impact derived from building the facilities. Finally, it provides for more delimited terms for the permits' obtainment and administrative procrastination rules, and preeminence is given to the electricity concession above other titles over the lands of the lane defined in the EFT.

Remarks on the Electric Highway Bill

The EH bill is in consonance with the current situation of the electric system, that is, the difficulty to execute large-scale private initiatives or projects requiring a greater coordination degree among the different actors. This bill could eventually grant public opinion a higher legitimacy level concerning the development of transmission works, since it incorporates environmental, social and productive sustainability parameters in the route specification, in addition to economic and technical factors, which could better deal with the citizens' concerns.

Moreover, private developers are given more certainties, since they are liberated from certain functions that they must do on their own under the current system and which generate important delays. The reason is that the definition of the optimal route, data collection, giving notice to the property owners and responding to the objections are left in the hands of the consultant, who would also be entitled to enter the properties with the support, if necessary, of public power. Once the route is approved, the easement is constituted, which is transferred to the successful bidder, who is explicitly recognized as the licensee. Consequently, part of the bidder's job is already done, which reduces the uncertainties in terms of proceedings and terms compliance.

It should be mentioned that the bill's message seems to point at carrying forward only the electrical facilities that are needed to transport the generation of renewable energy, inasmuch as they are sustainable and coming from own sources. Although the importance of relying on

thermoelectric power generation in our energy matrix is recognized, the bill does not seem to be designed to resolve the problems that this type of generation is also facing, despite of being a necessary source to guarantee a competitive and safe basic electric power generation.

Among the bill's positive aspects, we can highlight the following:

- 1) It maintains the general ETT framework with some improvements, which is adequate since it has an institutional framework, well-defined terms, and it works properly;
- 2) It gives the trunk system (longitudinal and some transversal lines) a public utility nature, which allows the State, in case it is defined as part of the EH, to impose rights of way by Supreme Decree;
- 3) The EFT incorporates to the optimal route definition not only economical and technical variables, but also environmental and social ones, thus dealing with the increasing citizen pressure on these matters;
- 4) The EFT considers collecting relevant information for the environmental impact study, which should help to accelerate the environmental proceeding terms;
- 5) A more efficient and expeditious proceeding is set out for notifications and claims,ⁱⁱ which would facilitate these processes with due protection of the affected people's rights;
- 6) The successful bidder is granted an already defined route including the right of way, and his licensee condition is recognized;
- 7) Rate fixing does not change in relation to the current system, which is positive, except for the slacks which are chargeable on demand; and
- 8) It is stipulated that multiple plants of a same complex shall take over the payment of usage charge from the moment the first unit is put into service, which avoids an unjustified transfer to the transmission costs' demand.

However, there are a series of negative aspects, detailed below, which are worth mentioning:

- 1) In the bill's message, the EH is set forth as a mechanism to promote the entry of NCRE to the matrix, which entails the risk of encouraging non-competitive generation sources without clarifying its costs;

- 2) Along the same line, it mentions that the transmission facilities could facilitate a series of projects that would not finance the transmission line on their own, thus giving a coordinating role to the State (assumably better than that of the market itself) and which could derive in an over-dimensioning of the lines, if these projects turn out to be unfeasible (although guarantees are provided for projects having significant progress degreesⁱⁱⁱ);
- 3) The message talks about strengthening generation poles “whose exploitation is beneficial for the country”, which has an important implicit discretionality degree in the definition of which is and is not beneficial;
- 4) An unnecessary arbitrary act is introduced when stipulating that the State shall define the lines requiring EFT, instead of doing it for all new trunk lines except well-founded exceptions;
- 5) The licensee is allowed to make changes once the definite route has been defined, which forces to reinitiate the approval proceeding, thus delaying the terms;
- 6) The final approval of the route is left in the hands of the Council of Ministers for Sustainability, inasmuch as this authority has proven to be inadequate to resolve complex issues; this could block or delay the proceeding (although, as a counterpart, it seems reasonable to involve the ministries in this process to facilitate the future approval stages); and
- 7) The intervention of the Ministry of Energy in an eventual redefinition of the route seems unnecessary and generates more uncertainty since it could modify the route for unspecified reasons.

Therefore, there are several possible amendments that could improve the project, such as:

- (1) The EFT should be required for every new construction or expansion of the trunk system, except those works being excluded for well-founded reasons;^{iv}
- (2) A more active participation of the private sector in the EFT elaboration process should be encouraged, even if only at a consultation level, to avoid future changes –when it has been already approved- which delays the definition of the final route and the beginning of the works;
- (3) The Inter-Ministerial Committee should include a representative of the Ministry of Economy in order to incorporate the views of the productive activity. On the other

hand, the Council of Ministers for Sustainability should be subject to peremptory deadlines for giving its decision, which are actually fulfilled; and

- (4) The power of the Ministry of Energy to require changes in the route should be eliminated, since there are prior instances (Inter-Ministerial Committee) that should receive the required changes.

Conclusions

The bill is positive and going in the right direction in terms of facilitating the necessary construction and expansion works of the transmission system that the country requires (although delimited to the transmission of renewable energy sources), notwithstanding that it is always possible to introduce some improvements. One of the most relevant aspects of the initiative is that it allows integrating new parameters to the definition of the routes of the transmission infrastructure, which deals better with the increasing citizen concern and, at the same time, offers more certainties to project developers who have been confronted with ever increasing uncertainty degrees.

However, the bill addresses the change of citizen demands, but also, in part, the lack of political will requiring to carry forward the projects, both in transmission and generation matters. Thus, although the idea of integrating environmental and social variables to the transmission lines' definition process is praiseworthy, the truth is that today there is an institutional framework to that end: the SEA. What is lacking then is greater leadership from the authority to achieve the execution of the works that are necessary for the country, as well as greater willingness to enforce the law. An example thereof is that they have not taken the necessary measures to prevent standstills with public power nor have they delimited the compensation amounts to the properties' alternative value, even though the law allows it. Therefore, it is questionable if practical problems are necessarily resolved with more regulations and new procedures; maybe, what is needed, at least in some cases, is to solve and promote the execution of initiatives by adequately using the prevailing regulation.

In brief...

A SUITABLE BILL, BUT SUBJECT TO IMPROVEMENT:

- The bill is positive since it improves planning of the transmission system and offers more certainties for executing the works that the country needs.
- There are possible improvements, such as requiring the land lane survey (EFT) to every new construction or expansion of the trunk system; encouraging a more active participation of the private sector in the EFT to avoid future changes; setting peremptory deadlines for the decision of the Council of Ministers for Sustainability and eliminating the authority of the Ministry of Energy for requiring amendments to the route once it has been defined.
- The Electric Highway bill deals with the change of citizen demands, but it also reflects the lack of political will which is needed to carry out the projects, both in transmission and generation matters.

ⁱ This is important, since the Constitution only allows the legal limitation of property based on the social role of the property, so the public utility nature allows the State to impose rights of way.

ⁱⁱ The bill stipulates that if it were difficult to identify the affected owners or if their number was much elevated to fulfill the notification formalities, the consultant may turn to the qualified judge so that he may instruct to immediately notify. If the owners' residence is unknown, the consultant may ask the Superintendence to promulgate a resolution ordering to notify them that the special easement maps are available at the Superintendence. Regarding observations, it is clarified that they may concern only erroneous identification of the affected property or the inclusion of properties not declared as affected.

ⁱⁱⁱ Among others, if the maximum expected generation capacity using the facility technically and economically justifies its construction; if for the first operating year, the maximum capacity using the facilities exceeds 25% of the total capacity and if these projects have an approved Environmental Qualification Resolution; if the transmission solution is economically efficient and if the projects are carried out by at least two persons not related to each other.

^{iv} It seems reasonable to exclude from this process certain works that do not justify an EFT, for example, if an expansion is required to be built in a land owned by the successful bidder.