

APRIE response to EU consultation paper on generation adequacy, capacity mechanisms and the internal market in electricity

February 7th, 2013

INTRODUCTION

APRIE is the Spanish association of independent electricity producers.

The members of the association represent CCGTs installed in Spain after the implementation of the liberalized framework defined by Act 54/1997, on electricity sector: Plana del Vent (owned by Alpiq), Bizkaia Energía (owned by Osaka Gas and ESB), GDF SUEZ Cartagena Energía and Castelnou Energía (both GDF SUEZ) and Escatrón Peaker (Global 3 Energía).

The scenario in which these investment decisions were taken has changed dramatically. From a situation of a lack of installed capacity in 2001 (which included blackouts), to the current economic crisis and decarbonisation policies, which have implied an enormous increase in the installed capacity of "uncontrolled" electricity and, consequentially, production. This has led the system to what some consider is an overcapacity scenario.

Potencia instalada a 31 de diciembre

	Sistema peninsular	
	MW	% 12/11
Hidráulica	17.761	1,1
Nuclear	7.853	0,0
Carbón ⁽¹⁾	11.620	0,0
Fuel/gas	1.492	0,0
Ciclo combinado	25.291	0,1
Total régimen ordinario	64.016	0,3
Hidráulica	2.039	-0,1
Eólica	22.213	5,3
Solar fotovoltaica	4.186	3,4
Solar termoeléctrica	1.878	79,1
Térmica renovable	940	9,5
Térmica no renovable	7.252	-0,4
Total régimen especial	38.507	5,9
Total	102.524	2,4



asturias generación
de electricidad s.l.

ALPIQ



BizkaiaEnergía

GDF SUEZ

GLOBAL3

To supply a demand that has decreased year by year since economic crisis started.

Máxima demanda de potencia media horaria y de energía diaria

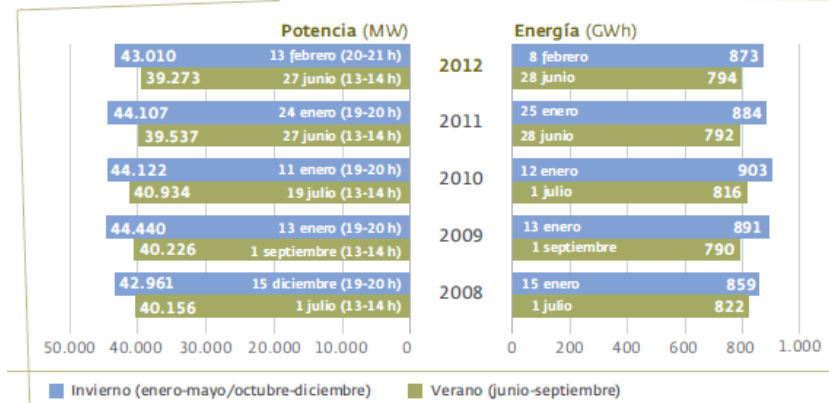


Figure 1: Spanish electricity system – Advanced edition of the Report for 2012. (Source: www.ree.es)

In this context, the main impact on CCGTs is the reduction of EOH (Equivalent Operating Hours), leading to a situation whereby most CCGTs are now operating at a loss.

Year	Generation (GWh)	Installed capacity (MW)	EOH
2006	63,506	15,500	4,096
2007	68,139	20,958	3,251
2008	91,286	21,675	4,211
2009	78,279	23,066	3,394
2010	64,604	25,235	2,560
2011	50,619	25,269	2,003
2012	38,558	25,269	1,526

Figure 2: Informes sobre el sistema eléctrico español – 2006 - 2012. (Source: www.ree.es)

Nevertheless, CCGTs, because of their flexibility, are crucial due to their role as backup for renewable/intermittent energies.

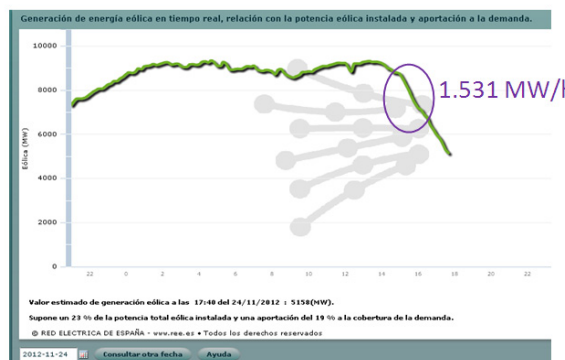


Figure 3: Example of extreme generation profile of wind energy (24/11/2012).
(Source: www.ree.es)

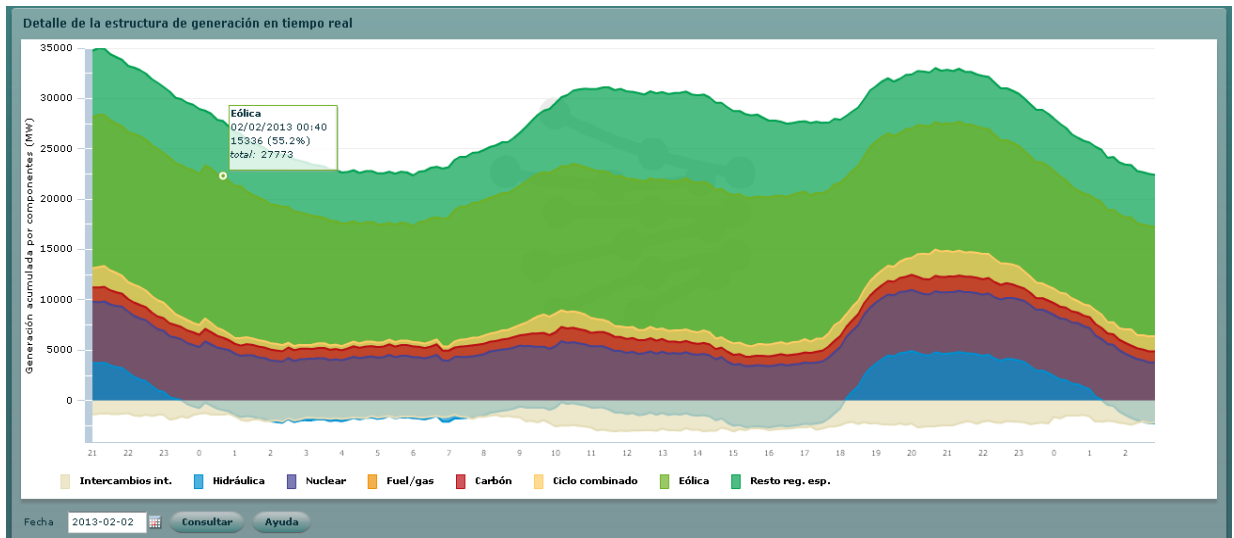


Figure 4: Structure of generation in real time on the 2/02/2013 (Yellow - CCGTs generation, Light green - wind production). Source: www.ree.es

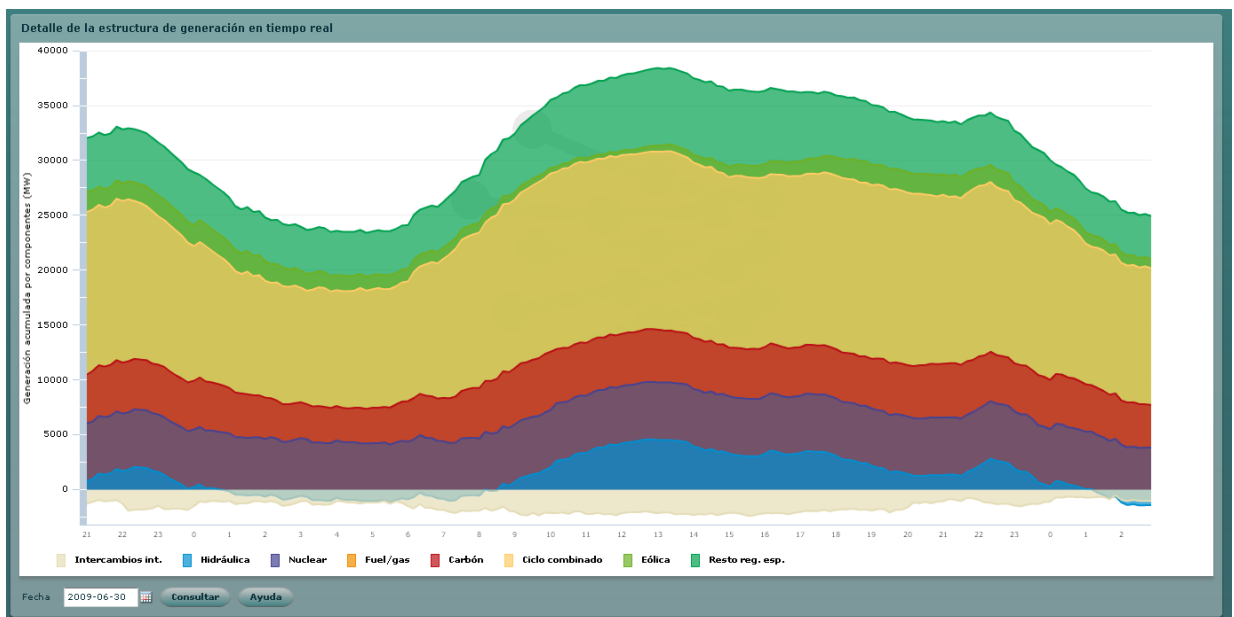


Figure 5: Structure of generation in real time on the 30/06/2009 (Yellow - CCGTs generation, Light green - wind production) Source: www.ree.es

This back-up role is particularly important in Spain and, due to geography, in the Iberian Peninsula, because of its small interconnection capacity with France.



Figure 6: Interconnection capacity of the Iberian Peninsula with France (Source: www.ree.es).

In the described scenario, capacity payments in Spain (or, generally speaking, any kind of capacity remuneration mechanism that assures CCGT's availability) are needed because:

- The context in which the investment decisions were taken has completely changed:
 - CCGTs' EOHs have reduced because of the increase of renewable/intermittent production.
 - Market prices have dropped because of the offers submitted by RES (0 €/MWh) and the current incomes are not enough to keep CCGTs available.
- CCGTs are crucial to the full and proper integration of renewable/intermittent energies into the overall generation mix. This is particularly the case in countries/regions where interconnection capacity is very limited.
- In Spain demand has been in decline since 2010; however, this is expected to recover over the coming years. That means that, although currently there are cases of underutilised investments, these will soon be required by the system.

QUESTIONNAIRE

(1) Do you consider that the current market prices prevent investments in needed generation capacity?

Yes, current market prices in Spain do not give the correct signal to new investment as they are heavily influenced by a priority of dispatching on RES and other regulatory effects such as domestic coal.

(2) Do you consider that support (e.g. direct financial support, priority dispatch or special network fees) for specific energy sources (renewables, coal, nuclear) undermines investments needed to ensure generation adequacy? If yes, how and to what extent?

Yes, of course.

In Spain the decisions to build most of the existing CCGTs were not based on RES development targets as these targets had not yet been established (most of these decisions were taken in the early 2000s). Now, however, RES development has put conventional plants under financial stress.

This undermines confidence for non-support based investments with, as a consequence, a possible negative impact on generation adequacy through anticipated decommissioning of existing units and postponing/stop of new investments.

However, (intermittent) RES-E generation capacities require CCGT support as they are not always “there” when the system requires them and they do not provide adjustment services (reserve and balancing energies).

(3) Do you consider that work on the establishment of cross-border day ahead, intraday and balancing markets will contribute to ensuring security of supply? Within what timeframe do you see this happening?

This depends to a great extent on the interconnection capacity. The reality is that in the short term this capacity is not sufficient, leaving countries such as Spain far less integrated.

(4) What additional steps, if any, should be taken at European level to ensure that internal market rules fully contribute to ensuring generation adequacy and security of supply?

First of all, increase interconnection capacity to completely allow energy flows across Europe.

To achieve the Internal Market, it is essential that there is harmonization of electricity sector rules, and also policies, across Europe. Also, that this is done in conjunction with a flexible gas market.

(5) What additional steps could Member States take to support the effectiveness of the internal market in delivering generation adequacy?

An overall “European planning” system should be developed, to optimize the use of energy sources.

In those countries where a great percentage of intermittent production exists, backup requirements have to be defined to attract new investment in conventional generation or infrastructures (interconnections to maximize the integration of RES).

(6) How should public authorities reflect the preferences of consumers in relation to security of supply? How can they reflect preferences for lower standards on the part of some consumers?

Price responsiveness to demand could be used to reflect lower standards of security of supply.

(7) Do you consider that there is a need for review of how generation adequacy assessments are carried out in the internal market? In particular, is there a need for more in depth generation adequacy reviews at:

- a. National level**
- b. Regional Level**
- c. European Level**

If the goal is the Internal Market, generation adequacy reviews should be carried out, as much as possible, at European level (considering the degree of cross-border interconnections) and broken down to regional and national levels in order to come to a globally optimal adequacy.

Having said this, is this possible, or even practicable, taking into account that essential competencies (adequacy standards or security of supply, for example) on energy issues stay within the hands of Member States?

(8) Looking forward, is the generation adequacy outlook produced by ENTSO-E sufficiently detailed? In particular,

- a. Is there a need for a regional or European assessment of the availability of flexible capacity?**
- b. Are there other areas where this generation adequacy assessment should be made more detailed?**

(9) Do you consider the Electricity Security of Supply Directive to be adequate? If it should be revised, on which points?

(10) Would you support the introduction of mandatory risk assessments or generation adequacy plans at national and regional level similar to those required under the Gas Security of Supply Regulation?

(11) Should generation adequacy standards be harmonized across the EU? What should be that standard or how could it be developed taking into account potentially diverging preference regarding security of supply?

No. Adequacy standards, among other parameters, have to be established taking into account the economic activity of each country.

(12) Do you consider that capacity mechanisms should be introduced only if and when steps to improve market functioning are clearly insufficient?

No. It is clear that energy only markets do not allow the recovery of costs (investors/producers) and introduce volatility in the price paid by consumers.

(13) Under what circumstances would you consider market functioning to be insufficient:

- a. to ensure that new flexible resources are delivered?
- b. to ensure sufficient capacity is available to meet demand on the system at times of highest system stress?

(14) In relation to strategic reserves:

- a. Do you consider that the introduction of a strategic reserve can support the transition from a fossil fuel based electricity system or during a nuclear phase out?
- b. What risks, if any, to effective competition and the functioning of the internal market do you consider being associated with the introduction of strategic reserves?

(15) In relation to capacity markets and/or payments:

- a. Which models of capacity market and /or payments do you consider to be most and least distortionary and most compatible with the effective competition and the functioning of the internal market, and why?
- b. Which models of capacity market and /or payments do you consider to be most compatible with ensuring flexibility in a low carbon electricity system?
- c. Are there any models of capacity mechanism the introduction of which would be irreversible, or reversible only with great difficulty?

CRM schemes must take into account the national/regional scenario. The CRM scheme needed in an overcapacity context (Iberia) is not the same as that needed when a scarcity of capacity exists (France).

The selected scheme has to minimize distortions and be compatible with effective competition and the functioning of the internal market. However, it also has to consider that if the right signal for investment is not conveyed, there will be problems in the future to get investments in new capacity.

(16) Which models of capacity mechanisms do you consider to have the least impact on costs for final consumers?

(17) To what extent do you consider capacity mechanisms could build on balancing market regimes to encourage flexibility in all its forms?

CRM must assure capacity availability in each of the different markets (day ahead, intraday, balancing, etc.). Nevertheless it has to be taken into account that the energy scheduled in each of those markets also has to be appropriately paid.

(18) Should the Commission set out to provide the blueprint for an EU-wide capacity mechanism?

It would be useful for Member States, however, any such blueprint has to consider the differences existing between Member States.

(19) Do you consider that the European Commission should develop detailed criteria to assess the compatibility of capacity mechanisms with the internal energy market?

The EU should develop detailed criteria only if they can differentiate the scenarios existing in each Member State.

(20) Do you consider the detailed criteria set out above to be appropriate?

a. Should any criteria be added to this list?

b. Which, if any, criteria should be given most weight?

The list of criteria developed by the European Commission seems appropriate.