

## Consultation response:

# Long-Term Capacity Remuneration Mechanism in the Greek Electricity Market

10 May 2019

---

## BACKGROUND

1. ClientEarth is an innovative public interest environmental law organisation that operates in Europe and beyond, bringing together law, science and policy to create practical solutions to key environmental and energy challenges.
2. Our dedicated Energy team pursues Europe's clean energy transition and a fully functioning internal energy market by supporting the development and implementation of EU energy and environmental legislation. Our team has expertise amongst other in State aid law and more specifically in capacity mechanisms, having participated in similar consultations in the UK and Poland.
3. Since 2017, ClientEarth has been working on issues concerning the Greek energy market. In particular, we have been advocating in support of the transition to a clean, innovative, affordable and flexible energy system.
4. With the present response we wish to submit our comments in respect of the 23 April 2019 public consultation on the design of the Long-Term Capacity Remuneration Mechanism in the Greek Electricity Market (hereinafter "**CM**") in preparation of the notification of the scheme to the Commission.

## 1 Introduction

5. The introduction of a capacity mechanism is a last resort measure, when the energy system faces genuine security of supply and resource adequacy failures, which cannot be addressed alternatively through the operation of the market or other measures. Capacity mechanisms constitute an intervention in the market and as such they must be designed in a transparent, non-discriminatory and accessible way to all market participants in order to limit market distortions. To that purpose, capacity mechanisms should be technology neutral and open to new market players.
6. However, the current proposal does not reflect these principles. Instead, as explained in more detail below, it would provide additional subsidies to fossil-fuel generation to the detriment of cleaner and cheaper alternatives and at the expense of Greek consumers, who will ultimately bear the expense of the scheme.

## 2 General remarks on the consultation process

7. Although we welcome the opening of the current consultation by the Greek Ministry of Environment and Energy, the process followed seems not in line with the law or established practice.
8. Unlike the 2014 and 2016 proposals for a long-term CM that were open for comments for 2 months<sup>1</sup>, the current consultation must be completed within the extremely tight deadline of just 18 days. This short timeline is disproportionate to the impact the implementation of the proposed CM will have on the Greek energy market, and makes it difficult for interested parties – such as market players, as well as expert organisations like ClientEarth – to prepare and submit fully reasoned responses.
9. Moreover, the consultation is organised by the Ministry and not by the competent Greek Regulatory Authority for Energy ("**RAE**"). The latter has the competence according to Article 29 of Law 4001/2011(National Gazette A' 189/22.08.2011) to carry out consultations for any matter that may have a significant impact on the relevant energy market. Finally, the text in English does not remedy the wider failure of the consultation to be easily accessible for foreign market participants as it is published on a webpage that is in Greek only. This limits the ability of stakeholders from neighbouring markets that may be affected, or stakeholders who have the experience of capacity markets in other Member States for an effective and meaningful participation in the consultation.
10. Even more significantly, the current proposal is not evidenced with an updated resource adequacy assessment, while the 2014 and 2016 CM consultation package included such an assessment. The unavailability of the resource adequacy assessment prevents the public from submitting meaningful comments on the actual necessity for the proposed CM as well as to assess properly the underlying design assumptions.
11. Despite this serious lack of evidence, a very careful study of available information on the Greek market raises serious concerns for the necessity and the justification of the proposed scheme.

## 3 Assessment of the need for the proposed CM

12. To address alleged serious security of supply concerns, Greece is already implementing out-of-market measures including a flexibility mechanism with direct payments for fossil-fuel generators and an interruptibility scheme available for big industrial consumers.
13. Those temporary regimes and the need for the proposed CM are questionable in the light of the implementation of the Greek energy market reform, which is expected to establish a market that will deliver adequacy capacity. Most importantly, the latest publically available

---

<sup>1</sup> See [http://www.rae.gr/site/categories\\_new/about\\_rae/activity/global\\_consultation/history\\_new/2014/290714.csp?viewMode=normal](http://www.rae.gr/site/categories_new/about_rae/activity/global_consultation/history_new/2014/290714.csp?viewMode=normal) and [http://www.rae.gr/site/categories\\_new/about\\_rae/factsheets/2016/gen/1609.csp](http://www.rae.gr/site/categories_new/about_rae/factsheets/2016/gen/1609.csp)

resource adequacy assessment fails to demonstrate a real security of supply problem that justifies the existing temporary, and more significantly, the new long-term CM.

### 3.1 The Energy Market Reform

14. As a matter of EU law, the proposed CM requires State aid approval by the European Commission prior to implementation. State aid law requires the Member State seeking approval of a capacity mechanism to "*clearly demonstrate the reasons why the market cannot be expected to deliver adequate capacity in the absence of intervention, by taking account of on-going market and technology developments*".<sup>2</sup> As a result, market reforms are prioritised over capacity mechanisms.
15. The present Energy Market landscape in Greece is dominated by a major market reform, the so-called "Target Model". The obligation to align the energy market with the Target Model is included in the Supplementary Memorandum of Understanding ("**SMoU**") of July 2017 and its latest fourth review. Although the Greek authorities have postponed or delayed the reform that has been envisaged since 2012<sup>3</sup>, the Target Model is expected to go live in the first quarter of 2020. It establishes the intraday, day ahead and forward markets operated by the Hellenic Energy Exchange ("**HENEX**") and a balancing market operated by the Greek TSO, ADMIE.
16. It is generally accepted that the implementation of the Target Model will increase capacity in the market and will eliminate the need for a wide CM like the one described in the consultation. This has been reflected in the recent decision of DG Comp clearing the interruptibility scheme and before that in the 2012 final proposal for the Greek Energy Market Reform of RAE<sup>4</sup>, which envisaged only a complementary reserve mechanism in addition to the reformed market. This approach was further enshrined in the 2014 and 2016 proposals of RAE for the basic design of the CM. The 2014 proposal found that traditional market mechanisms such as the operation of the intraday, day ahead, forward and balancing markets would suffice to remedy the same market failures that the proposed scheme sought to address. The 2014 proposal provided for a review clause of the suggested scheme in parallel with the progress on the implementation of the Target Model. This review clause was further maintained in the 2016 proposal<sup>5</sup>, which overall concluded that after the entry into force of the Target Model any need for a CM should be limited to a flexibility and strategic reserve scheme.

---

<sup>2</sup> Para 223 of the European Commission's Guidelines on State aid for environmental protection and energy ("**EEAG**").

<sup>3</sup> 2014 Proposal of RAE for the reform of the capacity adequacy mechanism, available at <http://www.rae.gr/site/file/system/docs/misc1/20102011/290714010>

<sup>4</sup> Final proposals of RAE for the reform of the electricity market, available at [http://www.rae.gr/site/file/categories\\_new/about\\_rael/factsheets/general/03122012\\_1?p=file&i=0](http://www.rae.gr/site/file/categories_new/about_rael/factsheets/general/03122012_1?p=file&i=0)

<sup>5</sup> "Basic design of the permanent capacity adequacy remuneration mechanism" available at: [http://www.rae.gr/site/categories\\_new/about\\_rael/activity/global\\_consultation/history\\_new/2016/120716.csp](http://www.rae.gr/site/categories_new/about_rael/activity/global_consultation/history_new/2016/120716.csp)

17. Finally, according to a recent report<sup>6</sup> the key actors of the Greek energy market agree that security of supply problems can be remedied through the implementation of the Target Model, security of fuel supply and long-term energy planning.
18. As a consequence, the need for a capacity mechanism has to be assessed only after the implementation of the Target Model and only if such an implementation is not adequate to address market failures.

### 3.2 Inadequacy of the resource adequacy assessment

19. Also as a matter of EU State aid law, the nature of the generation adequacy problem must be defined if a capacity mechanism has to be approved by the European Commission.<sup>7</sup> Before implementing a capacity mechanism, the authorities have to carry out a proper analysis and quantification of the generation adequacy providing the unit of measure for quantification and its method for calculation.
20. To the best of our knowledge, the Greek authorities have not established yet a reliability standard. This is confirmed in page 10 of the current consultation: "*The Greek authorities will set the target LOLE*". However, it is not possible to design an appropriate capacity mechanism without knowing what reliability standard is to be achieved<sup>8</sup>.
21. Neither is it adequate to design such a long-term scheme on the basis of the incomplete and temporary adequacy assessment submitted to the European Commission for the extension of the interruptibility scheme.
22. Nor is ADMIE's 2017 generation adequacy assessment sufficiently robust to prove a system adequacy failure that needs to be addressed with a long-term scheme like the one in question. In general, the 2017 assessment is very conservative and its assumptions must be subject to further examination. More specifically:
  - a. The assumption on the interconnectors contribution to system adequacy is based on historical values; it downplays the role of imports in security of supply. It also fails to take under consideration the impact of the market coupling with neighbouring countries along with the increase in the interconnection capacity as a result of new infrastructure and the minimum guaranteed availability of 70% envisaged in Article 14 of the recast Regulation on the internal market for electricity (the "**recast Regulation**").

---

<sup>6</sup> IENE, report on the "Security of Supply of the Greek Energy System", July 2017, available at <https://www.iene.gr/articlefiles/h%20asfalia%20tou%20ellinikou%20energeiakou%20systimatos.pdf>, pages 26-28. The report is a summary of the views of RAE, ADMIE, DEDDIE and market participants presented in workshops organised by the Institute of Energy for South-East Europe in 2017; the topic of the workshop was a mild security of supply incident in Greece during the winter of 2016-2017.

<sup>7</sup> Para 221 EEAG: "The precise objective, at which the measure is aimed, should be clearly defined, including when and where the generation adequacy problem is expected to arise. The identification of a generation adequacy problem should be consistent with the generation adequacy analysis carried out regularly by the European Network of Transmission Operators for electricity in accordance with the internal energy market legislation"

<sup>8</sup> See European Commission, "Final Report of the Sector Inquiry on Capacity Mechanisms", re page 8, available at [http://ec.europa.eu/competition/sectors/energy/capacity\\_mechanisms\\_final\\_report\\_en.pdf](http://ec.europa.eu/competition/sectors/energy/capacity_mechanisms_final_report_en.pdf)

- b. The assumptions on peak demand are based on out-dated data. For example, the trend of increased electricity demand for heating purposes has already been shifted to gas supply and heat pumps.
  - c. The assessment fails to properly consider the contribution of hydro plants to security of supply.
  - d. The assumption on the closure of gas power plants is erroneous. On the contrary, gas capacity increases; in the last 6 months, RAE has granted new generation permits for two new CCGT plants of more than 1200 MWe capacity, which are expected to operate in 2022-2023.
  - e. The assumption of the phase out of lignite capacity is flawed. For example, according to the assessment, Amyntaio I and II units were expected to shut down by the end of 2019 due to the exhaustion of the allowed operation hours under the exemption of the Limited Lifetime Derogation (“LLD”) of Article 33 of the Industrial Emissions Directive. Although these hours were completed at the end of 2018, the operation of the power plant will continue at least until 2022 following an illegal and unilateral extension of the LLD through a Ministerial Decision adopted in November 2018.<sup>9</sup>
  - f. The assumption that the interconnection of Crete with Attica will be operational in 2024 is no longer valid, given the recent developments and delays in the implementation of the project.
  - g. In general, the 2017 resource adequacy assessment is not in line and coherent with the measures envisaged in the draft National Energy and Climate Plan (“NECP”).
23. In a request for information regarding the operation of Amyntaio power plant, we became aware that the TSO produced in late 2018 a new resource adequacy assessment for 2019-2030. This report is not publically available and its content is unknown to us. However, as already stressed, this report must substantiate a persistent and genuine security of supply concern that cannot be addressed through the forthcoming energy market reform. Moreover, following the wording of the present proposal for a future determination of a reliability standard, we doubt that the 2019-2030 assessment establishes that standard.
24. Therefore, the overall need of the present wide long-term capacity mechanism is not substantiated from a system adequacy perspective.

## 4 Assessment of the scheme

25. The tight deadline of just 18 days to comment on the proposal is insufficient to provide detailed analysis of the various aspects of the scheme. Therefore, we will briefly outline some of the flaws of the proposal.

---

<sup>9</sup> Joint Ministerial Decision (82568/11912/19-11-2018, National Gazette B' 5031/26-11-2018

## 4.1 Discrimination against Demand Response

26. The Consultation (p. 10) lists the resources eligible to participate in the scheme. These include dispatchable power plants; renewable energy sources ("**RES**") including hydroelectric; individual or aggregated demand response ("**DSR**") meeting a 1MW bid size threshold; and interconnections.
27. Although the proposal provides for a "green bonus" for storage and very low carbon technologies (p. 20), the scheme fails to secure a level playing field between DSR and conventional fossil fuel plants due to the substantial differences in contracts length. In essence, DSR providers cannot bid for longer-term capacity agreements given their limited ability to assess their demand over a long timeframe or to realise investments that can meet the CAPEX criteria associated with contract lengths of 5 to 10 years for new investment.
28. By contrast to DSR, long-term capacity agreements are effectively available only to lignite and other fossil fuel-powered plants, existing or new. According to the proposal, existing capacity may receive one-year contracts that can be further extended by one or two years if the plant is under major refurbishment related to an environmental upgrade; or if the refurbishment is necessary for the technical availability of the installation. However, if this refurbishment is associated with costs for compliance with existing Union standards, such as the BAT conclusions, these payments are not permissible.<sup>10</sup>
29. Furthermore, the CAPEX criterion for refurbishment opens a window of opportunity for existing capacity providers to be considered as new capacity providers (see footnote 8 of page 14) and therefore eligible for longer contracts. As the proposal fails to specify the CAPEX limit for the eligibility of existing providers as new capacity providers, we kindly request the Ministry to clarify the associated CAPEX levels.
30. As a result of the CAPEX eligibility limits, conventional generators receive a competitive advantage compared to DSR providers through the eligibility of the first for long-term contracts, therefore, the technology neutrality of the scheme is seriously undermined. In addition, if the long-term contracts are signed before 31 December 2019, conventional carbon-intensive plants may secure subsidies until 2033 regardless of their emission performances. Thus, the proposed scheme undermines the objective of phasing out fossil fuel subsidies prescribed by EU law.<sup>11</sup>
31. Finally, the consultation (page 11) provides that "*Participation in the balancing market will be obligatory for DSR Providers who were successful in the auctions will be required to be available for 24 hours a day for the whole year*". We kindly request the authorities to clarify the meaning of this requirement and to ensure that this condition does not introduce an additional constraint to the participation of DSR in the current scheme.
32. To safeguard the technology neutrality of the scheme and its compatibility with State aid law and the freshly adopted recast Regulation we suggest that the contracts are concluded only for 1 year. We also believe that a minimum bid size of 250 KW (as is often the case in the US) instead of 1MW would allow broader diversification of DSR providers.

---

<sup>10</sup> Paragraphs 3, 18, 53-54 EEAG.

<sup>11</sup> See para 221 EEAG and Article 18(5) of the recast Regulation.



## 4.2 Hurdles in Interconnectors ('ICs') participation

33. It seems that the proposal uses a de-rating factor for ICs on the basis of historical data of the NTC. However, as stated above in 22 a, this de-rating factor is obsolete. It fails to assess properly the upcoming energy markets reforms, such as the market coupling and the operation of new markets like the balancing market. It also fails to assess the gradual opening of the ICs' cross border capacity to reach the minimum guaranteed level of 70% in line with article 14(7) of the recast Regulation.
34. The proposed scheme (page 14) provides that during the transition period ICs with EU Member States are eligible to participate only for the T-1 auctions. The scheme does not provide any justification for this limitation. We believe that ICs' eligibility must be extended to the T-4 auctions during the transition period.

## 4.3 Leniency of the penalty regime

35. Some aspects of the penalty regime described in the consultation (page 26) seem lenient. For example, according to the "*non-performance Pay-back obligation*", if providers fail to offer the contracted capacity during a scarcity event, they will have to return only the pay-back obligation and not the CM payment. However, it seems that such a practice will be a counter-incentive for providers to have their resources available during scarcity events. That is why a stricter penalty of returning both the CM payment and the pay-back obligation in the event of failure to provide capacity in scarcity events would be more appropriate.

## 5 Conclusions

36. The Ministry has not sufficiently demonstrated that a long-term CM is necessary to address resource adequacy concerns in the Greek energy system. There is no substantiation of security of supply concerns through a thorough and updated resource adequacy assessment based on an appropriate reliability standard. As such the proposal is far from complying with State aid rules, and appears unlikely to be approved by the European Commission.
37. The CM as designed clearly favours fossil fuel generators over DSR, renewables and interconnectors. The Greek energy market needs to move away from its carbon-intensive past and present, and must embrace a clean, flexible and affordable energy future for the benefit of consumers and the environment.
38. The Ministry and RAE should prioritise the proper and an on time implementation of the obligation to apply the Target Model. As generally accepted, this market reform is adequate to address system adequacy risks over the introduction of a new subsidy scheme that clearly favours fossil fuel generators. Thus, we recommend that the Ministry abstains from adopting the proposed CM.
39. If the Ministry remains determined to implement a CM, we recommend that a new consultation is carried out after the resource adequacy assessment of 2019-2030 or any other updated resource adequacy assessment is made available. RAE should conduct the new consultation, which must be online for at least 2 months, as would ordinarily be the case

10 May 2019

in similar circumstances. We also urge the Ministry to determine a reliability standard through an independent expert.

40. Finally, we request the Ministry to clarify the points raised in paragraph 31.

41. We remain at your disposal for any further clarification.

Yours sincerely,

*Maria Kleis Walravens*

**Maria Kleis**  
Head of Energy  
+32 (0) 28 08 3470  
[mkleis@clientearth.org](mailto:mkleis@clientearth.org)

**Eleni Diamantopoulou**  
Senior Lawyer, Energy  
+44 (0)30 30 50 5964  
[ediamantopoulou@clientearth.org](mailto:ediamantopoulou@clientearth.org)