

# Coal phase-out compensation for LEAG

Non-compliance with State aid law and the EU's 2019 Electricity Market Regulation

---

May 2020

## **Executive Summary**

LEAG's 12 lignite-fired units in Lusatia will benefit from a combination of three different compensation schemes linked to their closure. The Coal Law will require LEAG to close lignite units on a similar schedule to its business as usual plans, and will make only a minimal difference to the amount of lignite burned – yet will allow LEAG to receive huge sums of money in 'compensation' for these minimal changes to its activities.

### **The Direct Closure Payments**

The Draft Coal Law provides EUR 1.75 billion to LEAG for the closure of four units prior to 2030. These Direct Closure Payments require approval as a State aid compatible with EU law. However, two key criteria for being found compatible are unlikely to be met.

Firstly, the payments provide no incentive for early plant closures. Each of the four units benefiting from the payment will actually close *later* than under business as usual. Overall, the coal phase-out only leads to two of LEAG's lignite units closing slightly earlier than planned, but still not until 2038, with a similar overall volume of lignite being burned.

Secondly, the Direct Closure Payments appear grossly disproportionate to the impact that this law will have on LEAG's likely operating costs, given that there will be only small differences in the operating lifetimes and fuel consumptions of LEAG's lignite-fired units.

Failure to incentivise LEAG to materially reduce CO<sub>2</sub> emissions, and paying a disproportionate amount of compensation for any reductions that are in fact achieved, are likely to preclude the European Commission from assessing the Direct Closure Payments as compatible with EU law. This appears in line with the approach taken by the Commission in its recent approval of closure aid to the Netherlands' Hemweg 8 coal power plant.

### **The New Security Reserve**

The Draft Coal Law also establishes a New Security Reserve, paying LEAG to mothball Jänschwalde A (2025) and B (2027) prior to their scheduled 2028 closure. This Reserve violates the requirements of the EU's 2019 Electricity Market Regulation, and the European Commission appears unlikely to find it compatible under State aid law.

Firstly, the Electricity Regulation specifies detailed requirements to be met by any capacity mechanism – including 'strategic reserves'. The New Security Reserve fails to comply with many of these requirements. This appears to render the Reserve unlawful.

Secondly, assuming the New Security Reserve were permissible under the Electricity Market Regulation, it is highly questionable whether its design is compatible with State aid law rules. It does not appear to pursue its stated objective of contributing to 'security of supply'. Assessed on the basis of contributions to CO<sub>2</sub> emissions reductions, the design of the Reserve seems disproportionate, inappropriate, and provides a perverse incentive to actually increase generation in the years prior to mothballing.

### **Conclusion**

There are serious concerns about the legality under EU law of both the Direct Closure Payments and the New Security Reserve, as described in the Draft Coal Law.

May 2020

## 1 Introduction

1. Germany's Commission for Growth, Structural Transformation and Employment - commonly referred to as the **Coal Commission** - has proposed phasing out hard coal and lignite in Germany by 2038. This has led to significant public debate as to whether coal plant operators should receive compensation for closing early – and if so, how much. The coal industry insists on receiving huge sums; much of civil society (and other energy market players) considers this to be both legally and economically unnecessary and politically undesirable.
2. In October 2019, ClientEarth published its analysis highlighting serious legal concerns regarding the potential compatibility of such aid to lignite operators with the internal market – these concerns imply that the European Commission may struggle to find a lawful basis to approve this State aid (the **No Money for Old Lignite** report).<sup>1</sup> That analysis remains valid and provides an important critique of the overall approach to providing compensation in return for coal plant closures.
3. However, more details have since emerged regarding the German government's compensation plans. In this supplementary analysis, we draw attention to planned compensation for closure of the lignite-fired power plants operated by **LEAG** – the company founded in 2016 when Swedish energy group Vattenfall AB sold its Lusatian lignite assets to Czech investors EPH and PPF Investments.
4. We focus in particular on:
  - a. The EUR 1.75 billion of that package earmarked for closure of four lignite-fired units operated by LEAG, but which the operator's own business plan demonstrates would be closing even earlier without the State aid.
  - b. Linked proposals to create a new 'security reserve' – additional to Germany's various existing security of supply mechanisms – specifically for LEAG's lignite power plant Jänschwalde, units A and B.
5. Our analysis demonstrates that neither the EUR 1.75 billion package nor the new security reserve meet the baseline criteria for being approved by the European Commission as State aids compatible with EU law. Moreover, the reserve appears to violate the detailed legal requirements specified by the EU's 2019 Electricity Market Regulation that apply to capacity mechanisms.
6. The German government therefore needs to reconsider its approach to compensating lignite operators – in our view, any such compensation should be strictly limited to the minimum required under the general principles of German law.

---

<sup>1</sup> ClientEarth's October 2019 publication 'No money for old lignite' is available here: <https://www.documents.clientearth.org/wp-content/uploads/library/2019-10-28-no-money-for-old-lignite-clientearth-legal-analysis-ce-en.pdf>.

May 2020

## 2 Minimal impact on LEAG's operations of Draft Coal Law

**LEAG's 12 lignite-fired units in Lusatia will benefit from a combination of three different compensation schemes linked to their closure – the existing 2016 Security Reserve, the New Security Reserve, and the Direct Closure Payments. The Coal Law will require LEAG to close lignite units on a similar schedule to its business as usual plans (or even later), and will make only a minimal difference to the amount of lignite burned – yet will allow LEAG to receive huge sums of money in 'compensation' for these minimal changes to its activities.**

7. LEAG<sup>2</sup> operates 12 lignite-fired units in Lusatia: Jänschwalde A to F; Boxberg N, P, Q & R; Lippendorf R and Schwarze Pumpe A & B. Under current plans, they will be covered by three different compensation schemes linked to their closure:
  - a. the 2016 security reserve (approved as a compatible scheme by the European Commission in May 2016) (**2016 Security Reserve**) – Jänschwalde E and F;<sup>3</sup>
  - b. the proposed new security reserve (**New Security Reserve**) Jänschwalde A and B; and
  - c. direct payments worth EUR 1.75 billion to LEAG for closure of four other units by 2030 (**Direct Closure Payments**) - Jänschwalde C and D, and Boxberg N and P.
8. Both the New Security Reserve and the Direct Closure Payments are regulated by the proposed Coal Law ("*Kohleverstromungsbeendigungsgesetz*") – more details on the compensations are set out in the following sections of this analysis.<sup>4</sup> Four other units also have agreed closure dates in 2038, but are not eligible for compensation under any scheme, as they will not close before 2030 (Schwarze Pumpe A and B, Boxberg Q and R).
9. When LEAG's investors negotiated the purchase of Vattenfall's assets in 2016, one of the documents provided by Vattenfall was 'Business Planning Scenario 1A' (**BPS 1A**). BPS 1A set out the planned operating lifetimes for the 12 lignite-fired units and related opencast lignite mines – foreseeing that 8 units would close by 2028, with only Schwarze Pumpe A & B (2037) and Boxberg Q & R (2040 and 2041) closing later.
10. Although LEAG has at times suggested it might move away from BPS 1A plans – e.g. in 2017 it established a new mining concept ("*Revierkonzept*") for the Lusatian lignite, which

<sup>2</sup> LEAG is the joint brand of the two operating companies for coal plants (Lausitz Energie Kraftwerke AG) and mines (Lausitz Energie Bergbau AG). Lausitz Energie Verwaltungs GmbH is the majority owner of both and is itself 100% owned by LEAG Holding a.s. based in Prague. See: <https://www.leag.de/en/company/>.

<sup>3</sup> Commission Decision of 27 May 2016 in case SA.42536, available at: [https://ec.europa.eu/competition/elojade/isef/case\\_details.cfm?proc\\_code=3\\_SA\\_42536](https://ec.europa.eu/competition/elojade/isef/case_details.cfm?proc_code=3_SA_42536). It is sometimes also referred to as the "lignite reserve".

<sup>4</sup> German text of the draft: [https://www.bmwi.de/Redaktion/DE/Downloads/G/gesetzentwurf-kohleausstiegsgesetz.pdf?\\_\\_blob=publicationFile&v=8](https://www.bmwi.de/Redaktion/DE/Downloads/G/gesetzentwurf-kohleausstiegsgesetz.pdf?__blob=publicationFile&v=8).

May 2020

proposed longer operating lifetimes and further exploitation of mines that have not yet been permitted – that document has remained at the core of its decision-making. This can be seen, for example, in the 2018 expert report commissioned by the Regional Authority for Mining, Geology and Minerals of Brandenburg on the topic of “*Validation and plausibility check of the lignite reserves for the open-cast lignite mines of the Lausitz Energie Bergbau AG*”, and which refers exclusively to BPS 1A.<sup>5</sup> It is therefore reasonable to consider the timeline for closure of plants set out in BPS 1A as the business as usual scenario.

11. Analysis conducted by Germany’s Öko Institut demonstrates that the planned closures as set out in Annex 2 of the Draft Coal Law would be little different to business as usual – most units closing on the same schedule, with some slightly earlier and others slightly later. This can be seen in the table on the following page that we have adapted from the Öko Institut’s analysis.<sup>6</sup>
12. The Öko Institut’s analysis further demonstrates that the expected difference in the amount of lignite burned as a result of the phase-out plan is therefore very small: 854 million tonnes compared to 867 million tonnes (13 million tonnes or 1.5% decrease). Considering only those plants that would receive the Direct Closure Payments (rather than the New Security Reserve), there would be no meaningful decrease in lignite extraction and combustion whatsoever (approximately 750 million tonnes in either case).<sup>7</sup> Yet for such minimal or non-existent decrease in lignite combustion, LEAG would receive EUR 1.75 billion in Direct Closure Payments, as well as further payments under the New Security Reserve – payments which seem to have no correlation to the actual emissions reductions or revenues lost from power generation.<sup>8</sup>

---

<sup>5</sup> Available at: [https://lbgr.brandenburg.de/media\\_fast/4055/Gutachten%20R%C3%BCckstellungen.pdf](https://lbgr.brandenburg.de/media_fast/4055/Gutachten%20R%C3%BCckstellungen.pdf), p. 3, 65, 82

<sup>6</sup> Analysis of power plant closure plans for Germany’s Lusatia mining district, available in English at: [https://www.oeko.de/fileadmin/oekodoc/Memo-2020-01-22-Kraftwerksstilllegungen-Lausitz\\_EN.pdf](https://www.oeko.de/fileadmin/oekodoc/Memo-2020-01-22-Kraftwerksstilllegungen-Lausitz_EN.pdf).

<sup>7</sup> Own calculations using figures in table on p.4 of the Öko Institut’s analysis.

<sup>8</sup> We are aware that the Ministry of Economy (who are also responsible for agreeing the coal phase-out schedule with operators and federal states) have sent auditors to LEAG to confirm this point. However, the assumption is that the auditors will simply confirm the 2017 Revierkonzept. This is because the Ministry commissioning the audit has a political interest in not undermining the agreements they have reached with operators and federal states after over a year of negotiations.

| Unit             | Year commissioned | Capacity (MWth) | (Proposed) compensation scheme | Closure date as per coal phase-out plans       | Closure date as per BPS 1A | Will it close earlier or later under coal phase-out plans?    |
|------------------|-------------------|-----------------|--------------------------------|--|----------------------------|---|
| Jänschwalde F    | 1989              | 500             | 2016 Security Reserve          | 31-12-2018 (mothballed)                        | 31-12-2018                 | No change   |
| Jänschwalde E    | 1987              | 500             | 2016 Security Reserve          | 31-12-2019 (mothballed)                        | 31-12-2019                 | No change   |
| Jänschwalde A    | 1981              | 500             | New Security Reserve           | 31-12-2025 (mothballed)<br>31-12-2028 (closed) | 31-12-2028                 | 3 years earlier mothballed; final closure in line with BPS 1A |
| Jänschwalde B    | 1982              | 500             | New Security Reserve           | 31-12-2027 (mothballed)<br>31-12-2028 (closed) | 31-12-2028                 | 1 year earlier mothballed; final closure in line with BPS 1A  |
| Jänschwalde C    | 1984              | 500             | Direct Closure Payments        | 31-12-2028                                     | 31-12-2027                 | 1 year later  |
| Jänschwalde D    | 1985              | 500             | Direct Closure Payments        | 31-12-2028                                     | 31-12-2027                 | 1 year later  |
| Boxberg N        | 1979              | 500             | Direct Closure Payments        | 31-12-2029                                     | 31-12-2028                 | 1 year later  |
| Boxberg P        | 1980              | 500             | Direct Closure Payments        | 31-12-2029                                     | 31-12-2028                 | 1 year later  |
| Schwarze Pumpe A | 1998              | 750             | No compensation                | 31-12-2038                                     | 31-12-2037                 | 1 year later  |
| Schwarze Pumpe B | 1998              | 750             | No compensation                | 31-12-2038                                     | 31-12-2037                 | 1 year later  |
| Boxberg R        | 2012              | 640             | No compensation                | 31-12-2038                                     | 31-12-2041                 | 3 years earlier   |
| Boxberg Q        | 2000              | 860             | No compensation                | 31-12-2038                                     | 31-12-2040                 | 2 years earlier   |

### 3 The Direct Closure Payments

The Draft Coal Law provides EUR 1.75 billion to LEAG for the closure of four units prior to 2030. These Direct Closure Payments require approval as a State aid compatible with EU law. However, two key criteria for being found compatible are unlikely to be met.

Firstly, the payments provide no incentive for early plant closures. Each of the four units benefiting from the payment will actually close *later* than under business as usual. Overall, the coal phase-out only leads to two of LEAG's lignite units closing slightly earlier than planned, but still not until 2038, with a similar overall volume of lignite being burned.

Secondly, the Direct Closure Payments appear grossly disproportionate to the impact that this law will have on LEAG's likely operating costs, given that there will be only small differences in the operating lifetimes and fuel consumptions of LEAG's lignite-fired units.

Failure to incentivise LEAG to materially reduce CO2 emissions, and paying a disproportionate amount of compensation for any reductions that are in fact achieved, are likely to preclude the European Commission from assessing the Direct Closure Payments as compatible with EU law. This appears in line with the approach taken by the Commission in its recent approval of closure aid to the Netherlands' Hemweg 8 coal power plant.

#### 3.1 Legal basis under the Draft Coal Law

13. LEAG has four units eligible for the Direct Closure Payments - Jänschwalde C and D (closing in 2028), and Boxberg N and P (closing in 2029). In each case, the closures are 1 year later than under business as usual (BPS 1A) – meaning that the compensation does not lead any of these units to close earlier.

14. Section 42 (2) No. 3 Coal Law draft provides that a public law contract between the Federal Government and the lignite operators should include:

*“A compensation for the permanent closure of lignite plants under Annex 2 with a net nominal capacity of more than 150 megawatts **before 2030**, amounting to [...] EUR 1.75 billion for lignite plants in Lusatia - the compensation compensates for economic disadvantages resulting from the early withdrawal of lignite in terms of mining obligations, necessary conversions, personnel restructuring and electricity marketing.” (our emphasis)*

15. The explanations to Section 42 of the draft Coal Law mention what aspects have been considered regarding the level of compensation:

May 2020

*“The level of the compensation is based on the compensation formula of the lignite security reserve in accordance with the appendix to Section 13g EnWG. It takes into **account lost electricity market revenue** [...] In deviation from the compensation for security reserve in accordance with Section 13g EnWG, **empirically validated typified assumptions** for the individual parameters are used to determine the compensation.” (our emphasis)*

16. The draft law does not contain full details of the formula to be used to calculate compensation for the respective operators – although it is ‘based on’ the approach taken for the 2016 Security Reserve, it will differ in some as yet uncertain aspects. It is therefore not possible to verify whether the substance of the law actually enables it to pursue the aims stated.

### 3.2 State aid analysis – key considerations

17. We provided a thorough overview of State aid considerations in our No Money for Old Lignite report,<sup>9</sup> and do not repeat such a comprehensive analysis here. However, we highlight some key points of significant relevance in considering whether the Direct Closure Payments could receive State aid approval from the European Commission.
18. All government support must be assessed to consider whether (1) it is or could be a State aid, and (2) if so, it should be considered compatible with the internal market. Typically, the possible aid is notified to the European Commission, which then conducts both stages of the assessment. This is precisely what happened with the 2016 Security Reserve, which the Commission considered may constitute a State aid (although it ultimately left open the question of existence of aid) and would be compatible with the internal market.
19. Our previous analysis demonstrated that coal phase-out compensation in the form of Direct Closure Payments would very likely be considered to be a State aid, and so would need to be assessed for compatibility with the internal market.<sup>10</sup> Consequently, the Direct Closure Payments of EUR 1.75 billion for which LEAG would be eligible should be assessed for compatibility with the internal market. Additionally, should contracts be concluded between the government and operators to confirm the phase-out that contain additional provisions not specified in the Draft Coal Law, they should be individually reported to the European Commission for further assessment.
20. Under Article 107(3)(c) of the Treaty on the Functioning of the European Union (TFEU)<sup>11</sup>, the Commission will find an aid to be compatible only where the following criteria are met:

---

<sup>9</sup> See pages 8-17 of that report, link at footnote 3 above.

<sup>10</sup> Ibid, pages 8-12.

<sup>11</sup> This article provides that the Commission may find compatible with the internal market “aid to facilitate the development of certain economic activities or of certain economic areas, where such aid does not adversely affect trading conditions to an extent contrary to the common interest”. Opposite to developing an economic activity, the purpose of the Direct Closure Payments is to terminate coal production in Germany. It is thus questionable whether Article 107(3)(c) TFEU would be a sound legal basis for the Commission’s

May 2020

- a. Contribution to a well-defined objective of common interest;
  - b. Need for State intervention;
  - c. Appropriateness of the aid;
  - d. Incentive effect;
  - e. Proportionality of the aid; and
  - f. Avoidance of undue negative effects on competition and trade between Member States.
21. These criteria were assessed in detail in our No Money for Old Lignite report.<sup>12</sup> As noted therein, the well-defined objective would be the reduction of CO<sub>2</sub> emissions, and there is a plausible argument for the need for State intervention. Appropriateness and the avoidance of undue negative effects on competition and trade between Member States should be assessed with respect to the possibility of pursuing other less distortive mechanisms. Therefore for criteria (a)-(c) and (f), we refer back to our prior analysis.
22. However, there is more to be said with respect to criteria (d) and (e) given what we now know is proposed in the way of Direct Closure Payments for LEAG.

### 3.2.1 Incentive effect

23. Aid can be found compatible only if it changes the behaviour of the beneficiary in such a way that it engages in an activity which it would not carry out without the aid or which it would carry out in a restricted or different manner, in pursuit of the identified objective of common interest. The objective pursued is the reduction of CO<sub>2</sub> emissions.
24. Our previous analysis showed that the huge losses that Sandbag<sup>13</sup> have modelled for the German lignite fleet mean that even absent compensation the operators may choose to close their plants on economic grounds before 2030 (this is also reflected in LEAG's BPS 1A).<sup>14</sup> This is exactly what has been seen in other EU countries in recent years. It seems possible that economic factors such as the high ETS price,<sup>15</sup> requirements to invest in new

---

assessment. Nonetheless, this is the one that the Commission used for assessing the German Strategic Reserve in 2016 and, very recently, the compensation for closure of Hemweg coal plant in the Netherlands. The TFEU does not contain any directly applicable legal basis for assessing aid for the closure of economic activities.

<sup>12</sup> Ibid., pages 12-17.

<sup>13</sup> An energy consultancy recently rebranded as Ember.

<sup>14</sup> Sandbag's analysis is available at: <https://ember-climate.org/project/the-lignite-cash-cow/>.

<sup>15</sup> We note that ETS prices have temporarily reduced significantly due to the coronavirus crisis. That crisis has also had a significant impact on the MWh generated by coal plants across Europe – as coal is flexible, it can easily be ramped down, and so has been called upon less than would be expected. Given the

May 2020

pollution abatement technologies, and increasing price competitiveness of other generation technologies could economically drive the closure of Germany's lignite plants.

25. In those circumstances, there would be very limited incentive effect attributable to the Direct Closure Payments. However, a comparison of the coal phase-out plans with the BPS 1A gives rise to even more significant doubts regarding the existence of an incentive effect for LEAG.
26. As demonstrated by the table above, none of the four units eligible for Direct Closure Payments would close earlier than under business as usual (BPS 1A) – in fact, they all close one year *later*, though still before 2030.<sup>16</sup> Considering LEAG's fleet as a whole, other than the plants covered by one of the two Security Reserves (considered below), only two out of eight units would close *earlier* as a result of the coal phase-out plans – and these two 'early' closures would still be as late as 2038.
27. Moreover, Öko Institut's analysis shows that there would be no material reduction in the amount of lignite burned in these units – meaning that there would also be no material reduction in CO<sub>2</sub> emissions.
28. Given that the reduction of such emissions is the identified common interest objective, the failure to incentivise material reductions thereof provides a strong indication that there is no meaningful incentive effect resulting from the Direct Closure Payments.

### 3.2.2 Proportionality of the aid

29. Proportionality requires that the aid amount per beneficiary is limited to the minimum needed to achieve the environmental protection or energy objective pursued. The test is summarised in the Commission's Guidelines on State aid for environmental protection and energy 2014-2020 (that are not applicable in this case but provide a useful reference):

*"As a general principle, aid will be considered limited to the minimum necessary if it corresponds to the **net extra cost** necessary to meet the objective compared to the counterfactual scenario in the absence of aid. The net extra cost is determined by the difference between the economic benefits and costs... of the aided project and those of the alternative investment project which the company would carry out in the absence of aid, that is the counterfactual scenario."* (our emphasis)

---

contradictory impacts on profitability of these two factors, and the uncertainty of medium to long-term impacts from the coronavirus crisis, for the purposes of this analysis we assume that coronavirus will have a neutral impact on profitability (taking into account ETS price, actual generation from coal plants, etc).

<sup>16</sup> This was recommended accordingly by the Coal Commission and is also mentioned in the Coal Law. It is based on the fact that regulated closures after 2030 do not constitute an undue hardship triggering the Constitutional obligation to offset or compensate (though we argue in the No Money for Old Lignite report that given the economic situation of lignite it is even questionable whether undue hardship can be assumed for closures pre-2030).

May 2020

This requires an extremely detailed analysis by the German legislator and authorities as well as the European Commission.<sup>17</sup> However, Öko Institut's comparison of the coal phase-out plans with BPS 1A allows us to reach some clear preliminary conclusions.

30. The common interest objective pursued is the reduction of CO<sub>2</sub> emissions. Any aid must therefore be limited to the net extra cost necessary for LEAG to meet this objective compared to the costs that would be faced by LEAG absent the coal phase-out plans. Costs incurred with respect to closing the plant, such as site remediation of associated mines and so on are likely to be incurred regardless of the date at which the plant closes. This means that any net extra costs must be very accurately and precisely identified by reference to the actual additional costs incurred by earlier closure.
31. In this context, we are concerned (based in part on past practice) that operators might seek to secure phase-out money to cover costs that they would already be required to face under German mining law to recultivate mines at the end of their lifetimes.<sup>18</sup> This would clearly not be an 'eligible', or net extra, cost – there is a prior legal obligation on the operator to fund such recultivation, and these costs would be faced regardless of the precise date of the coal phase-out. The European Commission will likely be very attentive to this aspect – ensuring both that the compensation is calculated without reference to those recultivation costs that would anyway be applicable, and that any compensation granted is actually used for the specified purposes.
32. We do not have precise figures for the relative costs LEAG would face under BPS 1A and the coal phase-out plans. However, we have demonstrated that under both scenarios, a near identical amount of lignite would be burned, and plants would close on a very similar schedule. Therefore, whilst there would be some minimal difference in operating costs under these two scenarios, the difference would be very small – and certainly would be expected to be very considerably less than EUR 1.75 billion allocated across four units.

### 3.2.3 Recent State aid decision – Hemweg plant closure in the Netherlands

33. On 13 May 2020, shortly before this analysis was published, the European Commission issued a press release<sup>19</sup> announcing the approval of EUR 52.5 million in compensation for

---

<sup>17</sup> In its Sustainable Europe Investment Plan of January 2020, the European Commission announced that it would be particularly attentive to the assessment of this criterion for coal phase out compensations. See Commission's Communication on the Sustainable Europe Investment Plan (or European Green Deal Investment Plan) of 14 January 2020, COM(2020) 21 final, at: [https://ec.europa.eu/commission/presscorner/detail/en/fs\\_20\\_48](https://ec.europa.eu/commission/presscorner/detail/en/fs_20_48).

<sup>18</sup> See especially Section 55 (1) No. 7 of the German Mining Act. In order to ensure the fulfilment of this obligation, the mining authorities can request operators to provide financial securities already during the operation (see Section 56 (2) of the German Mining Act). LEAG is at the moment facing a legal case regarding the concern of insufficient financial securities that do not allow for the enforcement of this obligation. Already before, civil society repeatedly pointed to the risk of money provided for financial securities being diverted in the company structures around LEAG in way to escape the financial burden of recultivation to the detriment of the public budget.

<sup>19</sup> Available at: [https://ec.europa.eu/commission/presscorner/detail/en/IP\\_20\\_863](https://ec.europa.eu/commission/presscorner/detail/en/IP_20_863).

May 2020

the early closure of Hemweg 8 in the Netherlands. Hemweg 8 was a 685 MWth hard coal plant that was forced to close on 1 January 2020, 25 years after it entered operation, as part of the Dutch government's coal phase-out (all Dutch plants must close by 1 January 2030).

34. The full text of the Commission's decision has not yet been published, so only a limited amount can be surmised of its reasoning. However, the press release clearly states that the Commission approved the compensation on the basis that:
- a. The measure will contribute to 3.6 megatons of CO<sub>2</sub> emissions reductions annually, and
  - b. The payment adequately compensates Hemweg for the profits it would have been able to make if it had continued operating.
35. On this basis, the Commission concluded that *"the contribution to EU environmental and climate goals of the measure outweighs any potential distortion of competition and trade brought about by the support"*.
36. There are very clear differences between the Dutch case and the Direct Closure Payments that point towards the latter facing major obstacles to be considered compatible aid. In particular:
- a. The fact that earlier closures of LEAG's units are not secured, and that a similar amount of lignite will still be mined and burned, indicates that there will be much less (or no meaningful) CO<sub>2</sub> emissions reductions in the German case.
  - b. For similar reasons, and in particular given the rapidly declining profitability of lignite plants in Germany, it is much harder to argue that LEAG would be compensating for profits lost due to the coal phase-out.
37. Therefore, the Hemweg case is far from helpful for LEAG (and also seems unlikely to help other German coal operators in a similar position, such as RWE) – rather, it highlights key reasons why the Direct Closure Payments not be compatible with State aid law.

### 3.2.4 Conclusion

38. Even before considering whether the Direct Closure Payments are necessary, appropriate or not adversely affecting competition and trade between Member States in pursuit of the objective of reduced CO<sub>2</sub> emissions, there are major obstacles to the European Commission concluding that the aid is compatible with the internal market.
39. **Any incentive effect is at best minimal, most likely in practice non-existent, and may even be 'negative' – in that six units are planned to actually close *later* than under BPS 1A. To the extent that any benefits are in fact achieved, which is open to question, the size of the Direct Closure Payments (EUR 1.75 billion) appears wholly disproportionate to the contribution made towards the objective pursued.**

May 2020

## 4 The New Security Reserve

**The Draft Coal Law also establishes a New Security Reserve, paying LEAG to mothball Jänschwalde A (2025) and B (2027) prior to their scheduled 2028 closure. This Reserve violates the requirements of the EU’s 2019 Electricity Market Regulation, and the European Commission appears unlikely to find it compatible under State aid law.**

**Firstly, the Electricity Market Regulation specifies detailed requirements to be met by any capacity mechanism – including ‘strategic reserves’. The New Security Reserve fails to comply with many of these requirements and thus appears unlawful.**

**Secondly, assuming the New Security Reserve were permissible under the Electricity Market Regulation, it is highly questionable whether its design is compatible with State aid law rules. It does not appear to pursue its stated objective of contributing to ‘security of supply’. Assessed on the basis of contributions to CO<sub>2</sub> emissions reductions, the design of the Reserve seems disproportionate, inappropriate, and provides a perverse incentive to actually increase generation in the years prior to mothballing.**

**The New Security Reserve therefore appears impermissible as a matter of EU law.**

### 4.1 Legal basis under the Draft Coal Law

40. The 2016 Security Reserve provides the model for the New Security Reserve that is provided for in the draft Coal Law.
41. The 2016 Security Reserve involved the mothballing (for four years) and subsequent closure of eight lignite-fired units, to be called upon for electricity only in defined emergency situations.<sup>20</sup> The aim was to reduce CO<sub>2</sub> emissions, contributing to Germany’s target of 40% reductions by 2020. Total compensation under the reserve was forecast to be EUR 1.6 billion and was approved by the European Commission as a potential State aid compatible with the internal market.<sup>21</sup> The last of the eight units was mothballed on 1 October 2019.<sup>22</sup> The reserve has never been activated since its creation.

<sup>20</sup> Section 1 (6) of the Regulation on Security of Electricity Supply in the Event of a Supply Crisis allows the security reserve to be called upon for the "coverage of essential needs". The Regulation is available here: <http://www.gesetze-im-internet.de/eltsv/EltSV.pdf>.

<sup>21</sup> Commission Decision of 27 May 2016 in case SA.42536, available at: [https://ec.europa.eu/competition/elojade/isef/case\\_details.cfm?proc\\_code=3\\_SA\\_42536](https://ec.europa.eu/competition/elojade/isef/case_details.cfm?proc_code=3_SA_42536).

<sup>22</sup> See Section 13g (1) of the Energy Markets Act (EnWG) containing the mothballing time schedule, available under: [https://www.gesetze-im-internet.de/enwg\\_2005/index.html#BJNR197010005BJNE022402118](https://www.gesetze-im-internet.de/enwg_2005/index.html#BJNR197010005BJNE022402118).

May 2020

42. The New Security Reserve set out in the draft Coal Law<sup>23</sup> will secure the mothballing of Jämschwalde A (31 December 2025) and B (31 December 2027), with their final closure by 31 December 2028.<sup>24</sup> Once the law is passed, the reserve would take place without further proof of its necessity from an energy markets' perspective.<sup>25</sup>
43. The draft law provides that LEAG will be remunerated according to the same principles as the 2016 Security Reserve with slight amendments.<sup>26</sup> The remuneration is mainly based on the foregone profits that the plants would have made if they were allowed to continue to operate commercially on the electricity wholesale market.
44. The remuneration for foregone profits is calculated based on historic revenues from the last two years before the mothballing, providing an incentive to operate a plant as much as possible in expectation of the mothballing (a perverse incentive to actually generate more CO<sub>2</sub> emissions, contradicting the purported objective of the measure). The remuneration also compensates for the costs of preparing the initial mothballing of the plant and the fixed costs of keeping it in a mothballed state. However, the draft Coal Law contains no estimate of the total amount the government is expecting to pay in compensation to LEAG.
45. Full details of the reserve will be subject to a contract between the government and the operators.<sup>27</sup> However, it is not clear why a contract is required, given that the formula is set by law (and no such contract was required for the 2016 Security Reserve). Any contractual conditions not already approved by the European Commission in the context of the Coal Law will need to be notified to the Commission for a fresh State aid approval.

## 4.2 Electricity Market Regulation and State aid analysis

46. As with the Direct Closure Payments, it must be determined whether (1) the New Security Reserve constitutes a State aid and (2) if so, whether it is compatible with EU law. Additionally, given that this scheme is a form of capacity mechanism, it must meet the requirements of Regulation 2019/943 on the internal market for electricity (**Electricity Market Regulation**).
47. The German government presents the New Security Reserve as having two purposes: ensuring security of supply and reducing CO<sub>2</sub> emissions. These are two different objectives of common interest under State aid law and need to be assessed individually.

---

<sup>23</sup> See Section 40 in conjunction with Annex 2 of the draft law, available under: [https://www.bmwi.de/Redaktion/DE/Downloads/G/gesetzentwurf-kohleausstiegsgesetz.pdf?\\_\\_blob=publicationFile&v=8](https://www.bmwi.de/Redaktion/DE/Downloads/G/gesetzentwurf-kohleausstiegsgesetz.pdf?__blob=publicationFile&v=8).

<sup>24</sup> See Annex 3 of the draft law, p. 59.

<sup>25</sup> This differs from the plans for an additional security reserve for certain units of RWE's Niederaußem plant in North Rhine-Westphalia, which is under the reservation of future assessment of the situation of energy supply. See Section 41(2) of the draft law.

<sup>26</sup> See Annex 3 of the draft law.

<sup>27</sup> See Section 42(2) no. 9 and 10 of the draft law.

May 2020

48. We first analyse the compliance of the New Security Reserve against the rules in Chapter IV of the Electricity Market Regulation in the context of the claim that it pursues 'security of supply'. Secondly, we will assess whether the New Security Reserve could better be justified as a matter of State aid law with respect to the objective of reducing CO<sub>2</sub> emissions.

#### 4.2.1 Compliance with Electricity Market Regulation requirements

49. A security reserve (referred to in the Electricity Market Regulation as a 'strategic reserve') is a form of capacity mechanism now subject to Chapter IV of the Electricity Market Regulation, which sets out the general and design principles for capacity mechanisms in general, and strategic reserves specifically. A strategic reserve, like any other form of capacity mechanism, is considered according to Article 21(4) Electricity Market Regulation as a "last resort" measure needed only when adequate market reforms are not able to achieve the expected results.

50. Articles 21 and 22 set out the general principles and design principles for capacity mechanisms in general, and strategic reserves specifically, and these requirements are applicable from 1 January 2020. There is no evidence that in designing the New Security Reserve, the German authorities have sought or achieved compliance with the Electricity Market Regulation. On the contrary, our analysis shows that the new rules are not complied with. We are not alone in reaching this conclusion – on 14 April 2020, Germany's four Transmission System Operators (TSOs) published a comment on the draft Coal Law noting that its proposals for a New Security Reserve conflict with the requirements of the Electricity Market Regulation.<sup>28</sup>

51. Without conducting an exhaustive analysis, we identify at least the following legal flaws:

- a. **Identification of a resource adequacy concern:** In principle, the identification of a resource adequacy concern should be done through the European Resource Adequacy Assessment ("ERAA", Article 20(2)). National Resource Adequacy Assessments ("NRAA") are necessary only if a security of supply concern has not been identified in the ERAA (Articles 20(1)(2), 24(1)). If there is a need for a NRAA, this should be conducted in line with the methodology described in Article 23(5)(6). Both the ERAA and the relevant methodology are currently being produced and they are due later this year. However to date, there is no assessment, European or national, showing a resource adequacy concern in the years from 2025-2028 in Germany that would demonstrate the need for a New Security Reserve.
- b. **Implementation plan:** The second step after identifying a national resource adequacy concern is to produce an implementation plan of how to address this concern mainly through resolving market failures and removing regulatory barriers (Article 20(3) and 21(5)). Germany has not yet developed such a plan nor received an opinion from the Commission on whether the identified measures are sufficient to

---

<sup>28</sup> The comment by TenneT, 50 Hertz, Amprion and Transnet BW is available at: [https://www.tennet.eu/fileadmin/user\\_upload/Company/Publications/Position\\_Papers/German/Stellungnahme\\_Kohleausstiegsgesetz\\_ÜNB\\_final.pdf](https://www.tennet.eu/fileadmin/user_upload/Company/Publications/Position_Papers/German/Stellungnahme_Kohleausstiegsgesetz_ÜNB_final.pdf).

May 2020

address regulatory distortions or market failures that give rise to these adequacy concerns.<sup>29</sup>

- c. **Impact of the proposed scheme in neighbouring countries:** If eventually the implementation plan fails to address the identified resource adequacy concern, a capacity mechanism may be needed. In that case, Germany must carry out a study on the impact of the New Security Reserve on neighbouring Member States before introducing it (Article 21(2) EMR). It seems that German authorities have not conducted such a study yet.
  - d. **Beneficiaries:** The New Security Reserve does not select capacity providers by way of a transparent, competitive and non-discriminatory process, nor does it remunerate providers through such a competitive process (Article 22(1)(2)).<sup>30</sup> The reserve is not open to all resources that might be able to provide the required technical performance, including energy storage and demand side management. In addition, there is no evidence that the authorities have examined the technical feasibility of opening the New Strategic Reserve to cross-border participation (Article 26). There is no evidence that numerous other detailed design requirements in these provisions will be met by the reserve.
  - e. **Carbon intensiveness criterion:** In line with Article 22(4)(a): from 1 July 2025, generation capacity emitting more than 550g of CO<sub>2</sub> of fossil fuel origin is prohibited from receiving capacity payments – a condition that cannot be met by lignite-fired units.
52. The New Security Reserve therefore violates a wide range of obligations specified in the Electricity Regulation. Even before considering the additional State aid law requirements, it is clear that the New Security Reserve would violate EU law.
53. Consequently, not only is it unlawful for Germany to implement the New Security Reserve, but there also appears to be no possibility that the European Commission would approve it as a compatible State aid.

#### 4.2.2 State aid compatibility assessment

54. Whilst the New Security Reserve appears to fall at the hurdle of compliance with the Electricity Regulation, we also consider the extent to which the European Commission could find it to meet the criteria to be considered a compatible State aid. However, such approval seems extremely unlikely if the Reserve clearly violates the Electricity Market Regulation.

---

<sup>29</sup> The Implementation Plan should not be confused with the Grid Action Plan (Article 15) that the German Ministry for Economics and Energy adopted in January 2020. The latter plan will have a positive impact on the resource adequacy but it mainly includes measures with regards to the operation of the grid rather than market design measures.

<sup>30</sup> Germany would need to strictly evidence why only Jänschwalde A and B are suitable for the reserve and can provide the targeted level of capacity, as opposed to other capacity providers.

May 2020

55. Regarding the existence of State aid, reference must be made to the Commission’s decision approving the 2016 Security Reserve. Whilst it concluded that the payments made to operators were financed by way of state resources, it did not reach a conclusion regarding the existence of an advantage. Germany argued that the reserve payments should be considered as a compensation for damages resulting from State actions. Weighed against this, the Commission noted that it could not be certain what level of compensation would have been payable under German law for the enforced mothballing and subsequent closure of the plants. It therefore left open the question of whether the 2016 Security Reserve constituted a State aid, and moved to the issue of compatibility.<sup>31</sup>
56. It seems likely that a similar analysis would be conducted with respect to the New Security Reserve.<sup>32</sup> This leads us to consider the issue of compatibility.
57. The elements to consider in the compatibility analysis are identical to those relevant to assessing the Direct Closure Payments. However, we address here all elements of that test, given that the issue of a new reserve was not considered in our 2019 report No Money for Old Lignite.

#### 4.2.2.1 Contribution to a well-defined objective of common interest

58. The Commission considered the objective of the 2016 Security Reserve to be linked to the ultimate closure of the units – reduced CO<sub>2</sub> emissions and air pollution. Germany also claimed that the reserve pursued security of supply objectives – a claim that the Commission rejected, relying instead on the environmental objectives of the scheme.<sup>33</sup>
59. The draft Coal Law provides a similar set of justifications for the New Security Reserve – although it does not mention air pollution, it states that the reserve is:

*“necessary to provide missing power plant capacity in extreme events. For a limited number of years, the power plants can be used as a last and temporary safeguard of the electricity supply if, contrary to expectations, supply and demand are not balanced despite free price formation on the electricity market, e.g. in unforeseeable extreme weather situations.”*

---

<sup>31</sup> The Commission similarly avoided to conclude that the direct grant payment for closure of Hemweg 8 unit in the Netherlands constitutes a State aid. See Commission’s decision of 13 May 2020 on SA.54537

<sup>32</sup> The arguments in favour of this measure constituting a State aid may in fact be stronger, given that – with low (or negative) profitability of lignite plants and a high ETS price – future lost profits from early closure are likely to be minimal, such that the amount paid under the New Security Reserve overcompensates LEAG compared to the future lost profits. It therefore seems prudent to proceed on the basis that (1) the European Commission would assess the existence of aid on a similar basis to the approach taken in 2016, and (2) it would either again be unable to reach a conclusion or would include that there is in fact an element of State aid.

<sup>33</sup> See paragraph 60 of the decision on the 2016 Security Reserve.

May 2020

It also states that mothballing and decommissioning “*will substantially reduce carbon dioxide emissions in the German electricity sector*”, however without further explaining this.<sup>34</sup>

60. However, as noted in the discussion of the Electricity Market Regulation above, there is no evidence that an appropriate analysis has been conducted to determine whether the New Security Reserve is designed or required for the purposes of ensuring security of supply. Given that the Commission rejected security of supply as an objective for the 2016 Security Reserve, it would be at least as likely to do so for the New Security Reserve.
61. The remaining criteria for compatibility of the New Security Reserve are therefore considered below from the perspective of its contribution to the objective of reducing CO<sub>2</sub> emissions. However, we emphasise that, even if CO<sub>2</sub> reduction could be considered the true objective, **the Reserve remains a form of capacity mechanism and, as it fails to comply with the corresponding rules in the Electricity Market Regulation, there should be no possibility of the Commission approving this measure as a State aid.** We provide the analysis below merely for completeness, demonstrating that even if it were possible to consider the Reserve not to be a form of capacity mechanism, it still does not appear to meet the criteria for State aid compatibility.

#### 4.2.3 Need for State intervention

62. Our No Money for Old Lignite report considered that, in general terms, State intervention could be required in order to secure the earlier phase-out of Germany’s coal fleet. This remains true. However, it may not be true with respect to specific plants – and does not appear to be true for Jänschwalde A and B.
63. These units already planned for final closure by 2028 in BPS 1A. Whilst it is true that the New Security Reserve would secure their earlier mothballing in 2025 and 2027, they would still ultimately be shutdown at the same date of 2028. Moreover, given the low / negative profitability of lignite-fired power plants highlighted in the report by Sandbag / Ember,<sup>35</sup> it is not clear that these units would have been operating in the years prior to 2028. Therefore, even assumed the planned mothballing would equal a closure, the additional reduction of CO<sub>2</sub> is not obvious and needs proof.
64. This means that there is no clear need for State intervention to secure the slightly earlier mothballing of these units in order to secure reductions in CO<sub>2</sub> emissions. It would be for Germany to provide a convincing and well-evidenced argument that there is such a need.

#### 4.2.4 Appropriateness of the aid

65. The criterion of appropriateness requires consideration of whether the aid measure is an appropriate instrument to address the policy objective concerned. An aid measure will not be considered appropriate if the same positive contribution to the common interest objective

---

<sup>34</sup> See p. 161 of the draft law, *ibid.*

<sup>35</sup> Sandbag’s analysis is available at: <https://ember-climate.org/project/the-lignite-cash-cow/>.

May 2020

pursued is achievable through other less distortive policy instruments or other less distortive types of aid instruments.

66. Less distortive policy instruments than the New Security Reserve arguably exist. For example, the Coal Law could simply include Jänschwalde A and B in the list of plants with an earlier date and then being included within the group of plants compensated by the Direct Closure Payments (though of course those payments may also not constitute compatible State aid, as discussed above). Certainly, establishing a strategic reserve that does not meet the requirements of the Electricity Markets Regulation should be considered more distortive than a reserve that did meet those requirements. Additionally, the perverse incentive to generate more in the years prior to mothballing is clearly distortive.
67. The situation differs from that which prevailed at the time of the 2016 Security Reserve – not only are strategic reserves now regulated by the Electricity Markets Regulation, but also the New Security Reserve is proposed as, in effect, a carve out from the broader phase-out rules requiring the closure of Germany's lignite fleet. Each of these elements weakens the case for a finding of appropriateness.
68. It therefore seems unlikely that the Commission would consider the New Security Reserve to be an appropriate policy instrument for pursuing CO<sub>2</sub> emissions reductions.

#### 4.2.5 Incentive effect

69. The comments made above with respect to the presence (or absence) of an incentive effect for the Direct Closure Payments are generally also applicable to the New Security Reserve – in particular, the fact that low / negative profitability anyway suggests that many lignite plants would be expected to close in the coming years, as they will no longer be economic to operate.
70. LEAG's BPS 1A indicates that these plants would be closed by 2028 under business as usual. The New Security Reserve would see them mothballed 1 to 3 years earlier, and unlikely to operate between mothballing and final closure in 2028. Whilst this may superficially appear to suggest that there is some small incentive effect, given the low / negative profitability of lignite-fired power plants highlighted in the report by Sandbag / Ember, it is not clear that these units would have been operating in the years prior to 2028.
71. Furthermore, as laid out above, the formula to calculate the remuneration provides an incentive to operate plants at high capacity two years before the date of mothballing. This could contravene the overall objective of CO<sub>2</sub> reduction of the phase-out law (see above). If there is any incentive, it may therefore be a *perverse* incentive to increase the operation of the plant in certain years prior to mothballing.
72. It is therefore questionable whether the New Security Reserve would have any meaningful incentive effect as required for a finding of compatibility.

May 2020

#### 4.2.6 Proportionality of the aid

73. The comments made above with respect to proportionality of the Direct Closure Payments are generally also applicable to the New Security Reserve. Moreover, failure to comply with Electricity Regulation requirements for a competitive tender process (amongst other requirements) render it even less likely that the New Security Reserve could be considered to be designed in a way that ensures that compensation is limited to the minimum necessary to achieve the objective of security of supply.

74. A more detailed assessment of proportionality is difficult without full knowledge of the quantum of aid.

#### 4.2.7 Avoidance of undue negative effects on competition and trade between Member States

75. We refer here to our comments in our No Money for Old Lignite report. Whilst this criterion is rarely decisive, we note that recent research has found that phasing out of coal power alongside the expansion of renewables to a predicted 65% of the power mix by 2030 would lead to an increase in power prices of only 1%<sup>36</sup> – so potential negative effects of the coal phase-out on the market would be very limited and would not outweigh the pursuit of the objective of common interest to reduce CO<sub>2</sub> emissions.

#### 4.2.8 Conclusion

**76. The New Security Reserve appears to be fundamentally misconceived, as it clearly violates many of the requirements for strategic reserves specified in the Electricity Regulation, applicable since the start of 2020. This reason alone should be enough to prevent it being put into law.**

**77. Regardless, our assessment has shown that even were the Electricity Regulation not to be a sufficient hurdle to its implementation, the New Security Reserve faces serious obstacles to being found a compatible State aid by the European Commission.**

---

<sup>36</sup> See report published by Agora Energiewende on 12 August 2019: <https://www.agoraenergiewende.de/en/press/news-archive/the-german-coal-compromise-and-its-significance-for-the-energy-industry/>.

May 2020

ClientEarth is a non-profit environmental law organisation based in London, Brussels and Warsaw. We are activist lawyers working at the interface of law, science and policy. Using the power of the law, we develop legal strategies and tools to address major environmental issues.

ClientEarth is funded by the generous support of philanthropic foundations, institutional donors and engaged individuals.

**Brussels**

Rue du Trône 60  
5ème étage  
1050 Bruxelles  
Belgique

**London**

274 Richmond Road  
London  
E8 3QW  
UK

**Warsaw**

ul. Żurawia 45  
00-680 Warszawa  
Polska

ClientEarth is a company limited by guarantee, registered in England and Wales, company number 02863827, registered charity number 1053988, registered office 10 Queen Street Place, London EC4R 1BE, with a registered branch in Belgium, N° d'entreprise 0894.251.512, and with a registered foundation in Poland, Fundacja ClientEarth Prawnicy dla Ziemi, KRS 0000364218.