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GLOBAL 2000 Comment on State aid – Czechia – State aid SA.58207 (2021/N) – Support for the construction and operation of a new nuclear power plant at the Dukovany site – Invitation to submit comments pursuant to Article 108(2) of the Treaty on the Functioning of the European Union

The organizations signing at the end of the letter support this statement.

Dear Sir or Madam,

thank you for the opportunity to give comments in the matter of State aid – Czechia – State aid SA.58207 (2021/N) – Support for the construction and operation of a new nuclear power plant at the Dukovany site – Invitation to submit comments pursuant to Article 108(2) of the Treaty on the Functioning of the European Union, as published at https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.C_.2022.299.01.0005.01.ENG&toc=OJ%3AC%3A2022%3A299%3ATOC.

The summary of the decision provides the key facts of the project: *The objective of the measure is to fill the power gap expected in 2030–2040 from the decommissioning of obsolete nuclear and coal power units in Czechia. The main goals pursued are security of supply, decarbonisation and diversification of energy sources. Czechia intends to start the new-build nuclear power plant commissioning in 2036. The total funding requirement for the construction of the project is currently estimated at EUR 7,74bn (at 2020 prices) which will be financed by EUR 0,18bn CEZ equity and EUR 7,56bn State Loan. The Commission has concluded in the opening decision on the existence of aid within the meaning of Article 107(1) of the Treaty on the Functioning of the European Union (TFEU). Regarding the compatibility of the measure with the Article 107 (3)(c) of the TFEU, the Commission also concludes on the existence of a market failure and on the necessity of aid for the development of an economic activity.*
Nevertheless, the Commission has doubts on the following elements of the compatibility assessment: — the appropriateness and proportionality of the three components of the measure (PPA for a particularly long period, a loan and a change of law protection mechanism complementing the PPA); — the limitations of the distortion of competition on the market (balancing test) and more specifically on the choice of ČEZ as project promoter; and whether the

negative market effects will be kept to the minimum.

EU Environment policy

EU environment policy is based on Articles 11 and 191–193 of the Treaty on the Functioning of the European Union. Under Article 191, combating climate change is an explicit objective of EU environmental policy. Sustainable development is an overarching objective for the EU, which is committed to a 'high level of protection and improvement of the quality of the environment' (Article 3 of the Treaty on European Union).

In the Judgment in Case C-594/18 P Austria v Commission, the Court of Justice of the European Union on September 22 2020 stated that *"Nor, contrary to what the General Court held, does the Euratom Treaty preclude the application in that sector of the rules of EU law on the environment, and therefore State aid for an economic activity falling within the nuclear energy sector that is shown upon examination to contravene environmental rules cannot be declared compatible with the internal market. The error of law thereby committed by the General Court had no effect, however, on the soundness of the judgment under appeal, since the principle* ***of protection of the environment, the precautionary principle, the 'polluter pays' principle and the principle of sustainability****, relied on by Austria in support of its action for annulment, cannot be regarded as precluding, in all circumstances, the grant of State aid for the construction or operation of a nuclear power plant."* [emphasis added]

Article 191(1) TFEU provides the objectives of the EU's environmental policy, among them the **Polluter-Pays Principle**, which is not ensured by the project, because liability for possible damages due to nuclear accidents is limited by the Czech Atomic Law to 8 billion CZK (324 million euros). Also not covered is the backend, i. e. both decommissioning of nuclear power plants and management of spent nuclear fuel and other nuclear wastes. Nuclear spent fuel is the most toxic substance on earth and needs to be kept separated from the environment for 1 million years. Currently, the Czech Republic is not taking this duty seriously, because for the final repository only 1.1 billion euros have been accumulated to date. Compared to the only more the less completed final repository's cost in Onkalo Finland this is much too low[1]. For the new project presented in the announcement, no increased fees have been mentioned.

Concrete environmental and sustainability goals as described in the State Aid Announcement based on EU Taxonomy

(40) The Czech authorities also explained that the Project would likely meet the technical screening criteria set out in point 4.27 of the proposed delegated act adopted pursuant to the Taxonomy Regulation, even though those are not yet in force. For example, the Czech authorities explain that there will be resources available at the end of the estimated useful life of the nuclear

1 https://res.cloudinary.com/dhymuyvek/image/upload/v1642698048/Nuclear_Waste_Management_in_the_EU_Assessment_Report_2022_01_4257abfafb.pdf

power plant corresponding to the estimated cost of radioactive waste management and decommissioning.
Furthermore, the Czech authorities take into account of section 4.27 of the proposed Delegated Regulation for delegated act for the regulation of the final disposal facilities for the radioactive waste. As regards two criteria set out in the delegated act (namely, having a documented plan with detailed steps to have in operation, by 2050, a disposal facility for high-level radioactive waste, and use of accident-tolerant fuel from 2025), Czech authorities explain that they aim to realise the Project in line with those criteria.

Comment: Unless the currently applied system of fees paid into the National Atomic Fund is not changed considerably, those funds will not be available (see Polluter-Pays Principle). A substantial increase would however change the economics of the Project as well as all the other already operating plants. Before this state aid case will be decided, the EC should ask the Czech authorities to provide information on the future management of those fees/MWh produced electricity or whether an entirely new mechanism is envisaged.

Another issue under the taxonomy CDA is water supply for the new NPP and its impacts on the Jihlava River, which in line with Annex 1/Appendix B (GENERIC CRITERIA FOR DNSH TO SUSTAINABLE USE AND PROTECTION OF WATER AND MARINE RESOURCES) should already have been answered in the EIA. *Environmental degradation risks related to preserving water quality and avoiding water stress are identified and addressed with the aim of achieving good water status and good ecological potential as defined in Article 2, points (22) and (23), of Regulation (EU) 2020/852, in accordance with Directive 2000/60/EC of the European Parliament and of the Council (1) and a water use and protection management plan, developed thereunder for the potentially affected water body or bodies, in consultation with relevant stakeholders. Where an Environmental Impact Assessment is carried out in accordance with Directive 2011/92/EU of the European Parliament and of the Council (2) and includes an assessment of the impact on water in accordance with Directive 2000/60/EC, no additional assessment of impact on water is required, provided the risks identified have been addressed.*

Comment*:* The most recent additional study by the **G. Masaryk** Water Research Institute, however, left the issue of sufficient water supply open, to be answered by more precise water management plans. What is certainly missing is a water use and protection management plan, developed thereunder for the potentially affected water body or bodies, in consultation with relevant stakeholders. The current situation of nuclear power plants all over Europe shows that in case of water stress due to low water levels, the authorities feel obliged to allow higher water temperatures to keep the NPP operable. This has severe consequences on water life and should be avoided already in the planning phase.

NPP Dukovany V completion schedule as an issue with environmental consequences

It is very likely that the completion of the NPP Dukovany V will be not on schedule, as NPP

projects are in general. This will have not only economic consequences, but also impacts on the environment and climate protection, which were presented as the reason for this nuclear plant project. Therefore it would be necessary to put forward reasons and mechanisms which the Czech government intends to introduce to ensure a successful and timely completion, which has not been achieved with any of the planned reactor types, and secondly how some alternative plan would be able to replace the lacking generation capacity or to reduce demand.

According to the Announcement, Czechia intends to start the new-build nuclear power plant commissioning in 2036. Even taking into account that some preparatory work (EIA, other permits) have already been completed or are under way, the successful construction of the planned NPP cannot be seen as certain. Delays of reactor construction outside China and with not even finished designs (EPR 1200) or reactor types licenced never before in the Czech Republic and Europe is very likely.

The Announcements lists the following reactor types. The project promoter intends to choose from three possible technology choices:

- **AP 1000** design by Westinghouse Electric Company LLC (USA);
  Comment: In Europe, no AP 1000 reactor has been constructed yet. This reactor has a simplified design applying so called passive nuclear safety features. Doubts remain regarding the containment robustness and e. g. pumps. The Czech Nuclear Safety Authority SUJB has no experience with licensing this type of reactors, because all operating reactors are VVER reactors from the former Soviet Union, which could lead to severe delays. The AP 1000 under construction in the U.S. reached costs of 30 billion USD; construction start was in 2013.
- **APR 1000+** design by Korea Hydro & Nuclear Power (South Korea);
  Comment: The KHNP Reactors are considered non-licensable in Europe and would need design adjustments, possibly also an upgrade of the output to 1200 MWe installed.
- **EPR-1200** design by EdF (France).:
  Comment: While no EPR is in full commercial operation in Europe yet, two have already been operating in China. But the Taishan NPP unit 1 was taken offline for inspection on July 30, 2021. The immediate cause was fuel rod leakage, however, later it turned out that the problem might be a generic design failure in the reactor pressure vessel for which EDF is required to present a design solution to the French nuclear regulator ASN. Even in China, the construction time was 9 years. The EPR reactors in China are EPR-1750; the EPR-1200 has not been designed yet and technical complexity of such a task should not be underestimated.

Concerning the construction time, it is helpful to recall the following quote by the ECJ in its 2022 Judgement: “Hinkley Point C is scheduled to enter into service in 2023, with an operational life of 60 years.”[2] Currently the revised startup date for HPC is now June 2027 and total costs are

[2] Judgment of the Court in Case C-594/18 P, 22 September 2020

estimated to be in the range of £25bn to £26bn[3]. It is safe to assume this is not the last delay and cost escalation.

(196) The assumption presented by the Czech authorities, according to which the Project would have an operational lifetime of 60 years seems to be in line with a number of studies (50) recognised by the Commission as well as with the operational lifetime expected for the Hinkley Point C and PAKS II plants.

Comment: None of those NPP is even completed yet, so this does not prove anything.

The table on "RISK SHARING ACCORDING TO THE INFORMATION PROVIDED BY THE CZECH AUTHORITIES" according to the International Atomic Energy Agency (IAEA) and their allocation within the Dukovany II Project shows that out of the listed 15 risks all but two – credit default and damages of a nuclear accident – are borne by the state. However, this is a wrong claim: actually only one risk is not transferred to the state, because nuclear liability is not covered by the company, but the state: the Czech Republic is signatory state to the Vienna Convention, thus limiting the company's liability to 8 billion CZK or 324 million euros. The rest of the damage will have to fall back on the public, the state and of the Czech Republic and the other affected countries.

Another risk is the cost escalation common in nuclear new-build projects. However, no information was provided how this would be managed in the case of this project.

Even this short analysis of the proposed project showed a number of unresolved issues and even wrong information by the project owners. In combination with the currently very unstable situation on the electricity markets, we not only call upon the Czech government and the European Commission to update the information, but to withdraw this project and to not grant permission for state aid in the case SA.58207 (2021/N).

Yours sincerely

[3] BBC News, May 20, 2022. Accessed on August 22, 2022: Hinkley Point C delayed by a year as cost goes up by £3bn - BBC News

The following organizations support this statement:

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