EUROPEAN COMMISSION

Brussels, 16.10.2023
C(2023) 7084 final

PUBLIC VERSION

In the published version of this decision, some information has been omitted pursuant to Article 17(2) of Council Regulation (EC) No 139/2004 concerning non-disclosure of business secrets and other confidential information. The omissions are shown thus […]. Where possible the information omitted has been replaced by ranges of figures or a general description.

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Subject: **Case M.10988 – BROOKFIELD/CAMECO/WESTINGHOUSE**
Commission decision pursuant to Article 6(1)(b) of Council Regulation No 139/2004[1] and Article 57 of the Agreement on the European Economic Area[2]

Dear Sir or Madam,

(1) Following a referral pursuant to Article 4(5) of the Merger Regulation, the European Commission received, on 11 September 2023, notification of a proposed concentration pursuant to Article 4, by which Brookfield Corporation ('Brookfield', Canada) and Cameco Corporation ('Cameco', Canada) will indirectly acquire joint control over Westinghouse Electric Company

1 OJ L 24, 29.1.2004, p. 1 (the 'Merger Regulation'). With effect from 1 December 2009, the Treaty on the Functioning of the European Union ('TFEU') has introduced certain changes, such as the replacement of 'Community' by 'Union' and 'common market' by 'internal market'. The terminology of the TFEU will be used throughout this decision.

2 OJ L 1, 3.1.1994, p. 3 (the 'EEA Agreement').

('Westinghouse', US and, together with Cameco and Brookfield, the 'Parties') by way of purchase of shares (the 'Transaction').[3] [4]

1. THE PARTIES

(2) Cameco, headquartered in Saskatoon, Canada, is a global provider of uranium products and services. It focuses on the first stages of the nuclear fuel supply chain including: (i) uranium mining and milling and the production and supply of U_3O_8, i.e., natural uranium concentrate (thereafter referred to as 'uranium concentrate');[5] (ii) the refining and conversion of uranium concentrate (U_3O_8) to uranium hexafluoride ('UF_6') and to ceramic-grade natural uranium dioxide ('UO_2'); and (iii) the manufacturing and supply of fuel assemblies ('FAs') for Canada Deuterium Uranium ('CANDU') or heavy water nuclear reactors ('HWRs').

(3) Brookfield, headquartered in Toronto, Canada, is a global asset manager which offers a range of public and private investment products and services.

(4) Westinghouse, headquartered in Pennsylvania, United States, is primarily active in: (i) the fabrication and supply of FAs for non-CANDU reactors, primarily for light water reactors ('LWRs'); (ii) the design of nuclear islands; (iii) the supply of services to existing nuclear steam supply systems; (iv) the provision of safety and operational instrumentation and control systems; (v) ancillary activities in decommissioning and disposal, and (vi) the supply of nuclear grade zirconium alloy components.

2. THE CONCENTRATION

(5) Pre-Transaction, Westinghouse is solely owned and controlled by Brookfield. Pursuant to an equity purchase agreement dated 11 October 2022, Cameco will acquire a 49% interest in Westinghouse, with Brookfield holding the remaining 51%. Post-Transaction, Brookfield and Cameco will jointly control Westinghouse.

2.1. Westinghouse will be jointly controlled by Brookfield and Cameco

(6) Brookfield, through its solely controlled indirect subsidiary Watt Aggregator L.P. (Cayman Islands), and Cameco will acquire joint control over Watt New Aggregator L.P. (the 'Joint Investment Vehicle', Cayman Islands). Pursuant to the equity purchase agreement,[6] the Joint Investment Vehicle will acquire all the interests in Westinghouse from Brookfield.

(7) The Joint Investment Vehicle will be jointly, directly or indirectly, owned by (i) investment funds ultimately controlled by Brookfield, which will have a 51% interest in the Joint Investment Vehicle, and (ii) Cameco, which will have a 49% interest in the Joint Investment Vehicle.

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3 Publication in the Official Journal of the European Union, OJ C 332, 21.9.2023, p. 12.

4 This Decision is made without prejudice to the application of the provisions of the Treaty on the European Atomic Energy Community and merely covers the aspects of the Transaction to the extent that it falls under the scope of the Treaties and the Merger Regulation.

5 For the purposes of this Decision 'natural uranium concentrate and 'uranium concentrate' are synonyms.

6 Form CO, Annex 10 – Equity Purchase Agreement.

(8) Pursuant to the Shareholders' Agreement signed on 11 October 2022 (the 'SHA'),[7] Brookfield and Cameco will acquire certain governance rights in respect of the Joint Investment Vehicle, conferring each of Brookfield and Cameco joint control over the Joint Investment Vehicle, and therefore over Westinghouse.

(9) Each of Brookfield and Cameco shall appoint three directors to the Joint Investment Vehicles' board of directors. The directors appointed by Brookfield shall account for 51% of votes of the board, while the directors appointed by Cameco shall account for the remaining 49% of votes of the board. Although […], certain reserved matters shall require the affirmative vote of a majority of the board, including at least one director appointed by Brookfield and one director appointed by Cameco. These include:

i. […] and the annual budget and […] of Westinghouse; and

ii. […].

(10) […]. Accordingly, the consent of each of Brookfield and Cameco will be required for the approval of the budget and […].

(11) […].[8] Each of Brookfield and Cameco will therefore jointly control Westinghouse.

2.1.1. Acquisition of joint control over Westinghouse's potential conversion business

(12) Westinghouse was previously active in the supply of services to convert uranium concentrate to UF_6 at its facility located in Springfields, UK (the 'Springfields Facility') […], until the plant ceased to operate in 2014. Westinghouse is now considering re-starting the supply of services to convert uranium concentrate to UF_6 […]. Westinghouse is further considering entering the supply of services for the conversion of reprocessed uranium ('RepU') to UF_6 by setting up a new production line at its Springfields Facility. Westinghouse is expected to become operational in the conversion of uranium concentrate and RepU to UF_6 from possibly […] (Westinghouse's potential 'Conversion Business').

(13) The Parties submit that, pursuant to the Shareholders' Agreement, Westinghouse's potential Conversion Business shall be placed outside the perimeter of the Transaction.[9]

(14) Under the SHA, Cameco will not, according to the Parties, acquire the use of any veto rights or information rights over Westinghouse's potential Conversion Business. Cameco will not acquire the use of any voting on the commencement or the operation of the potential Conversion Business and will be recused from any discussions or decisions concerning an evaluation of whether to restart the provision of conversion services. On an ongoing basis, the SHA shall ensure that Cameco will not acquire access to Westinghouse's information systems and will have no rights to receive or access information relating to the ongoing operation and marketing of Westinghouse's potential Conversion Business, or involvement in any discussions relating to the commercial strategy of the latter.

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7 Form CO, Annex 11 – Shareholders' Agreement.

8 See paragraphs 69 and […] of the Commission Consolidated Jurisdictional Notice under Council Regulation (EC) No 139/2004 on the control of concentrations between undertakings (the 'CJN').

9 [*Information on the Amendment to SHA signed on 7 September 2023 aiming at placing the potential Conversion Business outside the scope of the Transaction. The Amendment to SHA was terminated as of no later than 21 November 2023*].

(15) In the Parties' view, Cameco will therefore not acquire joint control over Westinghouse's potential Conversion Business, which shall remain under the sole control of Brookfield.

(16) The Commission notes that pursuant to the SHA signed between the Parties on 11 October 2022,[10] Cameco would acquire joint control over the whole of Westinghouse, including any future activities of Westinghouse on the market for conversion of uranium concentrate into UF_6. On 7 September 2023 the Parties agreed on an amendment to the SHA[11] in relation to the veto rights and information rights that Cameco will acquire over Westinghouse's potential activities on the market for the conversion of uranium concentrate into UF_6, with a view to placing such potential activities of Westinghouse outside the scope of the Transaction ('the Amendment').

(17) The Commission further notes that the Amendment does not provide for a structural separation of Westinghouse's potential activities on the market for the conversion of uranium concentrate into UF_6, but rather introduces a limitation of Cameco's veto rights over Westinghouse, as set out in the SHA, in relation to matters pertaining to Westinghouse's potential activities in such market.

(18) Based on the above, the Commission considers, for the purposes of this Decision, that Cameco will acquire the capability to exercise decisive influence over Westinghouse as a whole, including any future activities in the market for the conversion of uranium concentrate into UF_6, if Westinghouse were to re-enter such market, despite the Amendment to the SHA.

(19) *First,* Westinghouse is currently not active in the provision of services to convert uranium concentrate into UF_6. The assets owned by Westinghouse that would be used to operate the potential Conversion Business can therefore not be considered an object of control that is separate from Westinghouse overall. The Merger Regulation provides in Article 3(1)(b) and Article 3(2) that the object of control can be one or more, or also parts of, undertakings which constitute legal entities, or the assets of such entities, or only some of these assets. Recital 24 of the CJN further clarifies that, when the object of control is not a legal entity but merely consists of assets, such assets must constitute the whole or part of an undertaking, i.e., a business with market presence, to which a turnover can clearly be attributed.

(20) The assets owned by Westinghouse that would be used to operate the potential Conversion Business do in the Commission's view currently not constitute an undertaking in the sense of Article 3(1)(b) and Article 3(2) of the Merger Regulation and Recital 24 of the CJN. The potential Conversion Business does not have any dedicated management, personnel, activities, or assets that are currently generating any turnovers.[12] The potential Conversion Business moreover has no market presence to which a turnover can be allocated. It therefore does not constitute a defined part of Westinghouse as an undertaking. The Commission does therefore not consider that, due to the absence of veto and information rights in

10 Form CO, Annex 11 – Shareholders' Agreement.

11 Form CO, Annex 15 – Amendment to SHA.

12 Westinghouse possesses the idle conversion facilities at Springfields, through which it had been operating in the market for conversion of uranium concentrate into UF_6 until 2014. However, these assets are currently not operational and are not generating any turnover. Moreover, these idle assets would require significant upgrades to become operational again. They can therefore not be considered as a business that is separate from Westinghouse pursuant to recital 24 of the CJN. See Form CO, paragraphs 432 – 434.

relation to certain matters, Cameco will not acquire joint control of the whole of Westinghouse.

(21) *Second,* the Commission does not consider that the absence of certain veto and information rights on the matters described in the amendment to the SHA will necessarily result in Cameco's inability to exercise decisive influence over all of Westinghouse, including its decisions in relation to restarting conversion activities and Westinghouse's commercial strategy in relation to such activities.

(22) Even if decisions in relation to Westinghouse's conversion activities will formally be taken solely by Brookfield, Cameco will still have means to influence such decisions. As Brookfield will be dependent on cooperation with Cameco to reach the overall strategic objectives of Westinghouse on which Cameco will have veto rights, it is likely that Brookfield will decide on the reopening of the potential Conversion Business and its commercial strategy in a way that would not endanger Brookfield's cooperation with Cameco. This is in particular given that the revenues of Westinghouse's activities, on which Cameco will have veto rights, […] the revenues anticipated by Westinghouse's potential conversion activities.[13] Brookfield would therefore have an interest to align itself with Cameco on the conversion activities, so as to not endanger their cooperation in Westinghouse overall. Such alignment of the interests of Brookfield and Cameco on Westinghouse's overall strategic objectives is sufficient to confer Cameco the *de facto* ability to influence Westinghouse's decisions also in relation to its potential conversion activities.[14]

(23) *Third*, the potential Conversion Business will continue to be part of the overall corporate structure of Westinghouse. The potential Conversion Business will therefore be presided by Westinghouse's […] the Commission considers that Cameco could exercise decisive influence over the potential Conversion Business.

(24) Furthermore, the potential Conversion Business' budget will remain part of the overall budget of Westinghouse, on the allocation of which Cameco will be able to exercise decisive influence. The potential Conversion Business will therefore compete with other business units within Westinghouse for the allocation of funds from Westinghouse's overall budget.[15] Even if Cameco will not be able to directly decide on the potential Conversion Business' budget, decisions on the allocation of funds to all other competing initiatives within Westinghouse, on which Cameco will be able to exercise decisive influence, will directly affect the funds available to the potential Conversion Business. Since Cameco will be able to influence the budget made available to Westinghouse's potential Conversion Business, it will also be able to influence the likelihood and scope of its reopening, as well as its commercial strategy.

13 Form CO, paragraph 495.The projected revenues of Westinghouse's activities to convert uranium concentrate into UF_6 would represent […]% of its overall turnovers.

14 See recitals 77 *et seq.* CJN.

15 Form CO, paragraph 456. In their Supplemental Submission of 21 September 2023, the Parties submit that decisions related to the allocation of capital investment to the potential Conversion Business will take precedence over other allocations and will be decided by Westinghouse and Brookfield alone. However, the Commission understands that this does not undermine Cameco's veto rights in relation to Westinghouse's annual budget and business plan.

(25) Based on the above, the Commission will for the purposes of this decision consider that Cameco will acquire joint control of the whole of Westinghouse. If Westinghouse were to re-enter into the provision of services to convert uranium concentrate into UF_6, the Commission considers that Cameco will also have joint control over Westinghouse's activities in this market.

2.2. Westinghouse will continue to be a full-function undertaking

(26) Westinghouse is a pre-existing, economically autonomous undertaking with market facing activities for the past 130 years. Following completion of the Transaction, Westinghouse will continue to constitute a full-function undertaking active in the supply of services and fuel to nuclear utilities on a standalone basis.

(27) In particular, Westinghouse will (i) have sufficient resources to operate independently on a market as it will have its own dedicated management and access to sufficient resources in order to conduct its business; (ii) conduct activities beyond one specific function for the parents as it will maintain its own market presence and branding; (iii) have sale/purchase relations with its parents that will not be such that it will be reliant on either Cameco or Brookfield for sales or purchases, and (iv) it is expected to operate on a lasting basis. More specifically:

i. Westinghouse will continue to have its own, dedicated management, employees, and financial and operational resources to operate independently in the market. The ordinary, day-to-day operational management of Westinghouse will be the purview of Westinghouse's senior management, which will be fully dedicated to Westinghouse's operations. […].[16] Westinghouse's senior management will furthermore have access to sufficient assets, including Westinghouse's numerous facilities throughout the world and their personnel, as well as sufficient financial resources.[17]

ii. Westinghouse will further continue to undertake all the activities of an independent business offering services and fuel to nuclear utilities, and its activities will not be limited to one specific function for its parent companies.

iii. Westinghouse is expected to continue generating substantially all its revenue from sales with third party customers. […].[18]

iv. Lastly, Westinghouse is expected to operate on the market as a standalone undertaking on a lasting basis.[19]

(28) Therefore, Westinghouse will post-Transaction be a full function joint venture.

3. UNION DIMENSION

(29) The Transaction does not have a Union dimension under Article 1(2) or Article 1(3) of the EUMR, as […] does not have a Union-wide turnover exceeding EUR 250 million or turnover exceeding EUR 25 million in at least three Member States.

16 Response to request for information ('RFI') 13, paragraph 6.4.
17 Response to RFI 13, paragraph 6.5.
18 Response to RFI 13, paragraph 6.7.
19 Response to RFI 13, paragraph 6.10.

(30) Nonetheless, the Transaction fulfils the two conditions set out in Article 4(5) of the Merger Regulation since it is a concentration within the meaning of Article 3 of the Merger Regulation and it is capable of being reviewed under the national competition laws of at least three Member States; in this case seven Member States ([…]) were capable of reviewing it.

(31) On 8 February 2023, the Notifying Party, by means of a reasoned submission, requested that the Transaction be examined by the Commission pursuant to Article 4(5) of the Merger Regulation.[20] A copy of that submission was transmitted to the Member States on 8 February 2023 and the Member States competent to examine the proposed Transaction did not express disagreement to the referral request within the period laid down by the Merger Regulation.[21]

(32) Accordingly, the Transaction is deemed to have a Union dimension pursuant to Article 4(5) of the Merger Regulation.

4. RELEVANT MARKETS

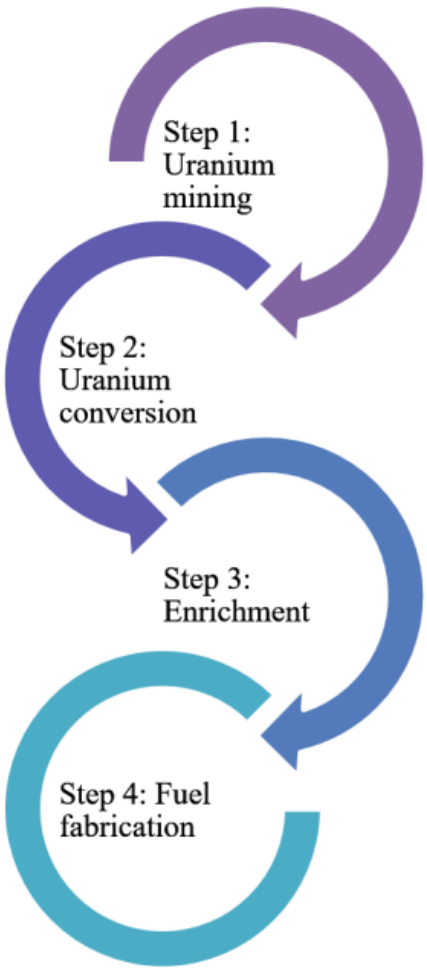
4.1. Introduction

(33) Most nuclear reactors use water to cool their cores, whilst others use gas or metals. There are two major types of water-cooled reactor, namely LWRs and HWRs. There are two basic types of LWRs, namely pressurised water reactors ('PWRs') and boiling water reactors ('BWRs'). Water-water energetic reactors ('VVERs') are a type of PWR.

(34) The supply of nuclear fuel comprises a series of processes to develop and manufacture fuel for use in nuclear reactors for electricity generation. It consists of four main steps: (i) the mining of uranium and the production and supply of uranium concentrate;[22] (ii) the conversion of uranium concentrate to UF_6 (for use in LWRs)[23] or to ceramic-grade natural UO_2 (for use in HWRs); (iii) for LWRs only, the enrichment of UF_6; and (iv) the fabrication of FAs for use in the nuclear reactors. An overview of the nuclear fuel supply chain is provided in Figure 1 below.

20 Form RS of 8 February 2023.
21 Commission, Note to Member States of 2 March 2023.
22 The process of mining uranium involves a complex procedure that often starts decades before the mining of uranium, with the exploration of uranium deposits. Form CO, paragraph 120.
23 A number of steps need to be undertaken to convert U_3O_8 (i.e., uranium concentrate) into UF_6: (i) purification of U_3O_8 into UO_3; then (ii) purified UO_3 into UF_4; and then (iii) UF_4 into UF_6. Form CO, paragraph 425.

Figure 1: Overview of the nuclear fuel supply chain[24]



Uranium **mining** starts with the exploration of uranium deposits, often decades before any uranium is actually mined. Once a viable deposit has been identified, uranium is mined to produce uranium concentrate.

Uranium **conversion** is the process of converting uranium concentrate into a form which can be used in fuel assemblies. It is most commonly converted to uranium hexafluoride (UF_6) which then needs to be enriched for use in fuel assemblies for light water reactors; alternatively it is converted into natural uranium dioxide (UO_2) which is used in heavy water reactors without the need for enrichment.

During the **enrichment** process, UF_6 is turned into fuel for light water reactors by separating isotopes to concentrate the specific isotopes used to produce energy by nuclear fission. Enriched uranium used for nuclear fuel is typically referred to as low enriched uranium ("**LEU**").

Fuel assemblies are used to deliver nuclear fuel into the core of a nuclear reactor, comprised of a collection of several dozen fuel rods, which are tubes made out of zirconium alloy containing pellets of uranium. For heavy water reactors, the uranium is natural UO_2; fuel assemblies for light water reactors contain LEU.

Source: Form CO, Figure 1

(35) Cameco and Westinghouse carry out activities which are to a large extent complementary. Cameco and Westinghouse operate at different levels of the nuclear fuel supply chain and are active in different markets. They mostly provide different products and services to customers operating different types of nuclear reactors.

(36) Cameco is focused on the overall nuclear fuel supply chain for HWRs and the early stages of the nuclear fuel supply chain for LWRs. It is active in the supply of uranium concentrate and the supply of services to convert uranium concentrate into UF_6 and UO_2, and is also active in the design, manufacture, and supply of FAs for HWRs.

(37) By contrast, Westinghouse is active in the later stage of the nuclear fuel supply chain for LWRs, and in particular the design, manufacture, and supply of FAs for LWRs.[25] Westinghouse further provides other services to the nuclear industry,

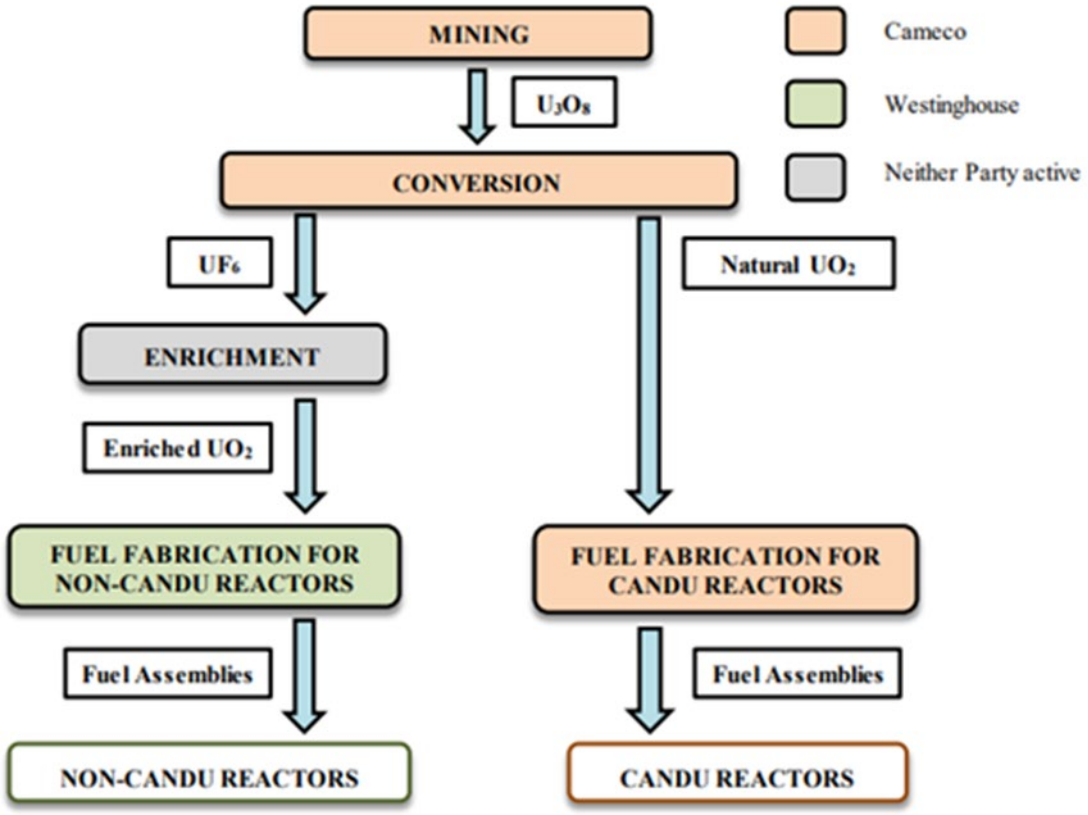
24 When RepU is part of supply, it comes after 'Step 4: Fuel Fabrication', and loops back to 'Step 2: Uranium conversion'.

25 Westinghouse also manufactures and supplies FAs for advanced gas reactors ('AGRs'). There are no AGRs in the EEA and there are no plans for any AGRs to be opened in the EEA in the next 5 to 10 years. AGRs are found

which are not related to the nuclear fuel supply chain, such as the design of nuclear islands, the supply of services to existing nuclear steam supply systems, the provision of safety and operational instrumentation and control systems, as well as limited ancillary services, such as decommissioning and disposal.[26]

(38) An overview of Cameco's and Westinghouse's activities in the nuclear fuel supply chain is provided in Figure 2 below. Using the terminology of the Parties, in Figure 2 CANDU means HWRs, and 'Non-CANDU' includes LWRs.

Figure 2: Cameco's and Westinghouse's activities in the nuclear fuel supply chain



Source: Form RS, Figure 4

4.2. Relevant product markets

4.2.1. Supply of uranium concentrate

4.2.1.1. The Commission's previous practice

(39) In relation to the supply of uranium concentrate[27], which is the end product of the process of mining uranium, the Commission has previously considered, from the supply side perspective, a market for the mining and milling of natural uranium but

almost exclusively in the UK, and they are expected to be decommissioned by 2030. Westinghouse does not manufacture or supply AGR FAs to utilities in the EEA (Response to RFI 13, and Form CO, footnote 2). AGRs will therefore not be discussed further in this Decision.

26 Westinghouse is further active in the supply of nuclear grade zirconium alloy components, which are used for the manufacture of fuel assemblies. Although such components could potentially be used as an input to Cameco's manufacture of CANDU FAs, this vertical link does not give rise to an affected market as a result of the application of the Notice on Simplified Procedure. Therefore, this vertical link will not be discussed in this decision.

27 Uranium oxide concentrate (U3O8) is known in the industry as 'uranium concentrate'.

has not determined whether activities such as exploration belong to separate markets or are ancillary to mining and milling.[28] From the demand side perspective, the Commission has previously considered a market for the procurement of uranium (which is understood to refer to uranium concentrate).[29]

(40) The Commission has not previously considered whether the supply of uranium concentrate can be segmented between primary and secondary supplies. 'Primary supply' is the supply of newly mined uranium concentrate to downstream customers. 'Secondary supply' is an alternative source of supply of uranium concentrate including from (i) stocks and inventories of mined uranium concentrate, (ii) uranium concentrate made available as a result of underfeeding, whereby enrichers adjust the parameters of the enrichment process to conserve uranium (underfeeding reduces the required amount of unenriched UF_6 to produce a given amount of enriched UF_6 and therefore reduces the amount of uranium concentrate needed), and (iii) the re-enriching of depleted uranium ('tails'), to recover and reuse uranium concentrate.[30]

(41) As regards the supply of commodities more generally, the Commission has previously found that it is not necessary to segment the market between primary and secondary sources if the same material can be produced using primary and secondary sources of feedstock, such that customers cannot distinguish the output produced from primary and secondary sources.[31]

4.2.1.2. The Parties' views

(42) The Parties submit that there is a distinct market for the supply of uranium concentrate, which includes the mining and milling of uranium and ancillary activities resulting in the supply of uranium concentrate.[32]

(43) The Parties further submit that primary and secondary supplies of uranium concentrate belong to the same product market, because uranium concentrate is fungible and there are no significant differences between primary and secondary supply in terms of pricing or supply arrangements.[33]

4.2.1.3. The Commission's assessment

(44) The majority of respondents to the market investigation[34] confirmed that there is a distinct market for the supply of uranium concentrate and that it encompasses all ancillary activities such as exploration, mining and milling.[35] For example, one respondent stated that '[a]*ctivities such as exploration, mining and milling of natural uranium concentrate are an integral part of uranium mining, and each*

28 M.1940 - *Framatome/Siemens/Cogéma/JV*, paragraphs 60-61.
29 M.5224 - *EDF/British Energy*, paragraphs 128, 130 and footnote 66.
30 Form CO, paragraph 122. It is noted that both underfeeding of enrichers and the re-enrichment of depleted uranium result in uranium in the form of UF_6. As LWR utilities will typically convert their uranium concentrate procurements into UF_6 (see Form CO, footnote 452), procuring UF_6 from enrichers either through underfeeding or through the re-enrichment of depleted uranium spares the utility from procurements of the respective uranium concentrate.
31 M.6541 - *Glencore/Xstrata*, paragraphs 321 and 333.
32 Form CO, paragraphs172.
33 Form CO, paragraphs 173 – 174.
34 The formal market investigation included sending two sets of electronic Requests for Information ('eRFIs') to market participants: an eRFI to competitors and an eRFI to customers ('both eRFIs').
35 Responses to questions B.A.1 and B.A.2 of both eRFIs.

activity should not be considered as a separate market'[36] and another respondent stated '[c]*ontracts for the supply of uranium concentrate typically encompasses the full package (i.e. exploration, mining and miling)*'.[37]

(45) In relation to primary and secondary sources, the majority of respondents to the market investigation stated that, in addition to primary sources, they supply or procure uranium concentrate also to/from secondary sources, and that there are no significant differences between primary and secondary supply of uranium concentrate in terms of product characteristics, pricing or supply arrangements (e.g., procurement, contract specifics, storage, transport).[38]

(46) The majority of customers confirmed that that they can substitute uranium concentrate supplied from primary sources with uranium concentrate from secondary sources and that they use uranium concentrate from primary and secondary sources for the same purposes.[39] For example, one customer stated that '[u]*ranium concentrate from primary and secondary sources have the same characteristics and are used interchangeably as feed for conversion services*'.[40]

(47) A supplier of uranium concentrate stated that the time and investment that it would take to switch from supplying uranium concentrate from primary sources to supplying uranium concentrate from secondary sources would be '*minimal – on the assumption that a supplier has existing terms and conditions with the secondary supplier. If those are not in place, the first transaction may take more time and effort to agree terms and conditions*' and that '*It would be similarly easy to switch to an existing primary source. Initiating a new uranium mine as a primary source would, however, require substantial investment in exploration, construction and development*'.[41]

(48) Based on the above, the Commission considers, in line with the Commission's precedents and for the purposes of this Decision, that there is a market for the supply of uranium concentrate which encompasses all ancillary activities such as exploration, mining and milling. Furthermore, the Commission considers that the market for the supply of uranium concentrate is likely to consist of both primary and secondary supply but that whether any such segmentation is warranted can be left open as the Transaction does not raise serious doubts as to its compatibility with the internal market or the functioning of the EEA Agreement even under the narrowest plausible market definition, i.e., separate markets for the primary supply of uranium concentrate and for the secondary supply of uranium concentrate.

4.2.2. Services to convert uranium concentrate to UF6

4.2.2.1. The Commission's previous practice

(49) The Commission previously considered the conversion of uranium concentrate as a market product separate from the other steps in the nuclear fuel supply chain and

36 Response to question B.A.2 of the eRFI to competitors.
37 Response to question B.A.2 of the eRFI to customers.
38 Responses to questions B.A.3 and B.A.5 of both eRFIs.
39 Responses to questions B.A.7 and B.A.9 of the eRFI to customers.
40 Response to question B.A.10 of the eRFI to customers.
41 Response to question B.A.9 of the eRFI to competitors.

did not consider further sub-segmenting the market based on the product produced, i.e., by UF_6 and ceramic grade natural UO_2.[42]

4.2.2.2. The Parties' views

(50) The Parties submit that within the overall market for conversion of uranium concentrate, there are distinct product markets for, respectively, (i) the supply of services to convert uranium concentrate into UF_6 and (ii) the supply of services to convert uranium concentrate into ceramic grade natural UO_2.[43]

(51) This is because services to convert uranium concentrate into UF_6 and into ceramic grade natural UO_2 are procured by different utilities. LWRs run on fuel that is derived from UF_6, while HWRs use ceramic grade natural UO_2 as fuel.[44] Moreover, the Parties submit that providers of conversion services into UF_6 cannot switch to offering conversion services into ceramic grade natural UO_2 and *vice-versa*.[45]

(52) The Parties further submit that, as regards conversion services into UF_6, a distinction should be made between the conversion of uranium concentrate and the conversion of RepU, due to material differences in the supply chain, the technical characteristics of the end product and regulatory implications, resulting in the two services not being substitutable from either a demand, or from a supply perspective.[46]

4.2.2.3. The Commission's assessment

(53) The results of the market investigation indicate that services to convert uranium concentrate into UF_6 should be distinguished from services to convert uranium concentrate into ceramic grade natural UO_2.[47]

(54) A clear majority of utility companies (i.e., customers) replied that they do not view the two services as substitutable.[48] As one utility company explained, '[c]*eramic grade natural UO_2 is not useable in […] light water PWR*''. None of the utilities that responded to the market investigation indicated that they procure services to convert uranium concentrate into both UF_6 and ceramic grade natural UO_2.[49] All of the utilities that provided a response submitted that they would not switch between the two services, if there was a price increase of 10% in the service they currently procure.[50]

(55) Similarly, all conversion providers responded that they provide either conversion services into UF_6 or conversion services into ceramic grade natural UO_2.[51] One conversion supplier explained that '[c]*onversion into UF_6 and conversion into UO_2 serve two different purposes, and require different industrial plants with different*

42 M.5224 - *EDF/British Energy*, paragraphs 128, 130; M.1940 - *Framatome/Siemens/Cogéma/JV*, paragraph 62.
43 Form CO, paragraph 180.
44 Form CO, paragraph 187.
45 Form CO, paragraph 184.
46 Form CO, paragraphs 189 *et seqq*.
47 The Transaction does not give rise to an affected market for the conversion of uranium into UO2. Conversion of uranium into UO2 will therefore not be further discussed in the following sections of this decision.
48 Responses to question C.A.2. of the eRFI to customers.
49 Responses to question C.A.1. of the eRFI to customers.
50 Responses to question C.A.3. of the eRFI to customers.
51 Responses to question C.A.1. of the eRFI to competitors.

regulations and chemical hazards'.[52] The clear majority of conversion providers submitted that they cannot promptly switch from supplying conversion into UF_6 to supplying conversion into ceramic grade natural UO_2, and *vice-versa*.[53] One respondent explained that their '*conversion plant's capability is limited to UF_6*'[54], while another conversion provider explained that a '[s]*witch is not possible without investing in a new plant. A new plant can be authorized, erected and ready for production in less than 5 years for UO_2 conversion and up to 10 years for UF_6 conversion*'.[55]

(56) The results of the market investigation further confirm that UF_6 procured from secondary sources, such as enrichers' underfeeding and inventories of utilities, governments, and other undertakings, are considered a substitute to the procurement of services to convert uranium concentrate into UF_6.

(57) The clear majority of utility companies replied that they view sourcing UF_6 from secondary sources as a substitute to procuring conversion services to UF_6.[56] One utility indicated that the '[t]*echnical specifications are the same, which is the only thing that matters (i.e. having UF_6 complying to the specifications)*'.[57] Another utility confirmed that '[i]*f UF_6 is acceptable* [for the] *enrichment facility it is also substitute for us*'[58] while another utility noted that '*UF6 is a ubiquitous commodity*'.[59]

(58) In line with utilities, the clear majority of conversion suppliers confirm that they view UF_6 supplied from secondary sources as a substitute to their conversion services.[60] As one conversion supplier notes, '[t]*hese products are identical and completely interchangeable*'.[61] Another conversion supplier confirmed that '[a]*s long as the UF_6 meets the specification designated by customers (such as utilities), the source is irrelevant from a technical point of view*'.[62]

(59) The results of the market investigation are less clear in relation to whether conversion of uranium concentrate into UF_6 and conversion of RepU into UF_6 constitute separate markets.

(60) The market investigation indicates that conversion of RepU into UF_6 is currently being procured to a very limited extent by utilities. Of the 14 respondents who replied that they procure services to convert uranium concentrate into UF_6, only two replied that they also procure services to convert RepU into UF_6.[63] Both of them indicated that their only provider of conversion of RepU to UF_6 is based in Russia, and that there are no other providers that can offer such conversion services.[64]

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52 Responses to question C.A.4. of the eRFI to competitors.
53 Responses to question C.A.5. of the eRFI to competitors.
54 Responses to question C.A.2. of the eRFI to competitors.
55 Responses to question C.A.6. of the eRFI to competitors.
56 Responses to question C.A.6. of the eRFI to customers.
57 Responses to question C.A.7 of the eRFI to customers.
58 *Ibid*.
59 *Ibid.*
60 Responses to question C.A.7. of the eRFI to competitors.
61 Responses to question C.A.8. of the eRFI to competitors.
62 *Ibid*.
63 Responses to question C.A.8. of the eRFI to customers; non-confidential minutes of a call with a utility company, 22 March 2023.
64 Responses to question C.A.9. of the eRFI to customers; non-confidential minutes of a call with a utility company, 22 March 2023

(61) While a majority of utilities responded that they would consider UF_6 derived from RepU conversion as a substitute for UF_6 derived from uranium concentrate,[65] many of them explained that this is subject to the resulting UF_6 meeting the technical specifications required by enrichers and fuel assembly manufacturers, who will need to handle the end product of RepU conversion.[66] As one respondent explained, '[i]*t will every time depend on quality of UF_6 and its acceptance* [by the] *enrichment facility*',[67] while another utility indicated that there are '*constraints at the fuel fabricator to accept RepU*'.[68]

(62) The market investigation indicates that there are differences in the supply chain, the technical characteristics of the resulting UF_6 and the associated safety implications, as well as in the regulatory regime.[69] As regards the differences in the supply chains, one utility noted that, in order to procure RepU conversion into UF6, a utility has to actually be engaged in reprocessing its spent fuel itself, rather than disposing it: '[o]*nly operators which have reprocessed uranium can procure such services, which can only be made through the recycling of the spent fuel*'. This utility further noted that '*the handling of reprocessed uranium requires more attention and care, making nuclear plant operators more reluctant*',[70] confirming the feedback provided by other respondents that enrichers and fuel fabricators treat UF_6 derived from RepU differently compared to UF_6 derived from uranium concentrate.[71] Another utility replied that '[a]*t the moment, the only source of RepU conversion is Russia*'.[72] In relation to safety considerations, one respondent noted that '*safety case modifications would be required due to the differing characteristics of RepU versus natural uranium*', while other respondents referred to the increased levels of radiation of RepU,[73] which might also explain the need for special treatment of RepU-derived UF_6 by utilities, enrichers and fuel manufacturers. Lastly, as regards regulatory implications, one utility mentioned that to switch to sourcing RepU-derived UF_6 '[t]*here are likely core design and licensing changes needed that could take years to implement. Additionally, there may be legal restrictions on producing or procuring RepU*', while another utility referred to regulatory restrictions as '[m]*ost likely the biggest barriers'*.[74]

(63) The majority of utilities in the market investigation indicated that they do not know whether they would switch to sourcing UF_6 derived from RepU, if there was a 10% price increase in UF_6 derived from uranium concentrate.[75] Of those who replied either positively or negatively, the majority said that they would not.[76]

(64) From a supply-side perspective, the Commission understands that currently, only the Russian state-owned nuclear conglomerate Rosatom provides conversion of RepU into UF_6.[77] Global capacity for RepU conversion is limited, amounting to 2

65 Responses to question C.A.10. of the eRFI to customers.
66 Responses to question C.A.11. of the eRFI to customers.
67 *Ibid*.
68 Responses to question C.A.14. of the eRFI to customers.
69 *Ibid*.
70 *Ibid*.
71 See paragraph 58 above.
72 Responses to question C.A.14. of the eRFI to customers.
73 *Ibid*.
74 *Ibid*.
75 Responses to question C.A.12. of the eRFI to customers.
76 *Ibid*.
77 Form CO, paragraph 204; responses to question C.A.14. of the eRFI to customers.

million kilogrammes of uranium (MKgU) per year, compared to the global capacity for conversion of uranium concentrate which is at 52 MKgU per year.

(65) Both non-Russian competitors in the market for the conversion of uranium concentrate into UF_6, namely Orano and ConverDyn, confirmed that they do not provide conversion services for RepU.[78] Orano noted that '[f]*luorination of reprocessed uranium requires a dedicated plant because artificial isotopes are more radioactive, thus leading to specific operations and maintenance modes, not to mention radioprotection of workers'*.[79] ConverDyn explained that their '*Conversion Facility is not designed or licensed to handle uranium containing transuranic elements resulting from the reprocessing of spent nuclear fuel*'.[80]

(66) Both Orano and ConverDyn submitted that they could not easily and promptly switch to providing RepU conversion into UF_6, which would require setting up a new, standalone conversion facility.[81]

(67) Based on the above, the Commission concludes that, in line with the Commission's prior decisions, there is a market for conversion of uranium concentrate into UF_6 which does not include conversion of uranium concentrate into UO_2. The Commission considers for the purposes of this Decision a market for conversion of uranium concentrate into UF_6 including both primary and secondary sources. The question of whether RepU conversion into UF_6 and conversion of uranium concentrate into UF_6 are part of the same product market or belong to separate product markets can be left open, as the Transaction does not raise serious doubts as to its compatibility with the internal market or the functioning of the EEA Agreement under any plausible product markets, including in a potential market for the conversion of uranium concentrate into UF_6 which includes RepU conversion into UF_6. For the purposes of this Decision, the Commission will conduct its competitive assessment under both plausible product markets (i.e., conversion of uranium concentrate into UF_6 excluding RepU conversion into UF_6 and conversion of uranium concentrate into UF_6 including RepU conversion into UF_6).

4.2.3. Manufacture and supply of fuel assemblies

4.2.3.1. The Commission's previous practice

(68) In relation to the manufacture and supply of FAs, the Commission has previously considered a market for fuel assembly services[82] and defined a separate market for the manufacture and supply of LWR FAs, concluding that FAs for PWRs and FAs for BWRs (the two types of LWR FAs) belong to different product markets. ([83])

4.2.3.2. The Parties' views

(69) The Parties submit that FAs for different reactor types can constitute separate product markets and, while the Commission has previously focused on LWRs and

78 Responses to question C.A.9. of the eRFI to competitors.
79 Responses to question C.A.10. of the eRFI to competitors.
80 *Ibid*.
81 Responses to question C.A.14; C.A.15 of the eRFI to competitors.
82 M.5224 - *EDF/British Energy*, paragraph 128.
83 The Commission considered that PWR FAs and BWR FAs differ in design (e.g., pellet size, beam geometry, guide tube functions, and number of arrangements), materials, composition, configuration, operation support, engineering analysis, manufacturing process and prices to customers (M.1940 - *Framatome/Siemens/Cogéma/JV*, paragraph 21; M.4153 – *Toshiba/Westinghouse*, paragraph 36).

differences between FAs for PWRs and BWRs, a more relevant distinction exists between HWRs and LWRs (i.e., before reaching PWR and BWR reactors, which are types of LWR reactors).[84] The Parties refer to HWRs as CANDU reactors and to LWRs as a type of non-CANDU reactor.

(70) The Parties submit that there are separate markets for the design, manufacture, and supply of FAs for CANDU reactors and for non-CANDU reactors, because FAs for CANDU and for non-CANDU reactors are not substitutable from a demand-side or supply-side perspective as their characteristics and functions vary significantly, including in terms of their size and technical differences. The key difference is the uranium used as input fuel. CANDU reactors run on natural / unenriched uranium fuel, whereas non-CANDU light water reactors require enriched uranium. This difference in input fuel means there are necessary physical differences in the size and shape of FAs for CANDU and non-CANDU reactors, meaning that they are not substitutable from the demand-side.[85]

(71) From a supply-side perspective, the Parties submit that manufacturers generally supply either CANDU or non-CANDU FAs, with only three FA manufacturers supplying both CANDU and non-CANDU FAs (Nuclear Fuel Complex based in India, KEPCO NF based in South Korea, and CNNC based in China), and that significant investment would be required to switch from supplying one type to supplying the other.[86]

4.2.3.3. The Commission's assessment

(72) All respondents who expressed a view agreed that FAs for HWRs and FAs for LWRs belong to separate product markets, mainly because HWRs operate with a different fuel, moderator, and cooling agent compared to LWRs and the design and fabrication of fuel assemblies for HWRs requires specific expertise and production equipment, which is distinct from LWRs.[87] For example, one respondent stated that FAs for HWRs and FAs for LWRs '*should be considered as separate product markets as the products, having significantly distinctive features, are not substitutable; the main differences being the use of natural vs. enriched uranium in HWR compared to LWR, different product design, hence different manufacturing processes, as well as product performance and safety justification methods due the different reactor design. This all leads to distinct sets of competencies both in design & engineering and in production*.'[88]

(73) All customers and a majority of competitors agreed that, within the LWR segment, FAs for the different nuclear reactor types, i.e. PWRs and BWRs constitute different product markets, mainly because FAs for the different types of LWR are not substitutable from a demand perspective, due to significant design differences.[89] For example, one competitor stated that '*PWR and BWR reactors are different technologies, therefore the fuel assemblies supplied for each are significantly different designs and not transferrable*'.[90] While most respondents focused on the differences between FAs for PWRs and BWRs from a demand

84 Form CO, paragraph 235.
85 Form CO, paragraphs 236 – 245.
86 Form CO, paragraphs 246 – 247.
87 Responses to questions D.A.1 of both eRFIs.
88 Response to question D.A.2 of the eRFI to competitors.
89 Responses to question D.A.3 of both eRFIs.
90 Responses to question D.A.4 of the eRFI to competitors.

perspective, one competitor also pointed to differences between FAs for PWRs and BWRs from a supply side perspective. They stated that, although FAs for BWRs and PWRs '*share some of the manufacturing process steps and supply chain for items entering the fabrication (for instance the manufacturing of fuel rods)*', they are not substitutable because they *'require significant design, development, licensing effort, as well as adaptation of the manufacturing processes for a supplier on one market to be able to enter the other market*'.[91]

(74) In relation to VVERs (a type of PWR), the market investigation confirmed that VVERs cannot use FAs designed for non-VVER PWRs, and vice-versa.[92]

(75) In relation to supply-side substitution, responses to the market investigation were mixed in relation to whether a manufacturer of non-VVER PWR FAs can switch relatively easily to the manufacture of FAs for VVERs, and vice versa. One respondent stated that '*Although it is possible to start supplying new types of FA, suppliers of VVER FAs would not be able to switch production to non-VVER FAs (or vice versa) within a short time frame (producers would need to get qualified for the production of new type of FA) and without significant capital investment*'.[93] Some respondents pointed to the possibility of starting to produce FAs for VVERs by using a licensed design, including one who stated that '*For a supplier of non-VVER PWR, it will be faster and more accessible to start supplying fuel through manufacturing of an existing product under license, however it still requires time and capital investment; the same would apply for a VVER fuel supplier wanting to start supplying PWR fuel assemblies*'.[94]

(76) Based on the above, the Commission concludes that there are separate markets for the manufacture and supply of FAs for HWRs and for LWRs, and that the market for the manufacture and supply of FAs for LWRs should be segmented between FAs for PWRs and BWRs. The Commission considers that it can be left open whether the market for the manufacture and supply of FAs for PWRs should be further segmented into separate markets for FAs for VVERs and for non-VVER PWRs as the Transaction does not raise serious doubts as to its compatibility with the internal market or the functioning of the EEA Agreement even under the narrowest plausible market definition, i.e., distinct markets for the manufacture and supply of FAs for VVERs and the manufacture and supply of FAs for non-VVER PWRs.

4.3. Relevant geographic markets

4.3.1. Supply of uranium concentrate

4.3.1.1. The Commission's previous practice

(77) The Commission previously concluded that the market for the procurement of uranium concentrate is worldwide[95] and previously assessed the market for the mining and milling of natural uranium on a worldwide basis only.[96]

91 Responses to question D.A.4 of the eRFI to competitors.
92 Responses to questions D.A.5 and D.A.6 of both eRFIs.
93 Responses to question D.A.8 of the eRFI to customers.
94 Responses to question D.A.8 of the eRFI to competitors.
95 M.5224 – *EDF/British Energy*, paragraph 131.
96 M.1940 – *Framatome/Siemens/Cogéma/JV*, paragraph 61.

4.3.1.2. The Parties' views

(78) The Parties submit that the supply of uranium concentrate should be considered a worldwide market given that the conditions of competition for the supply of uranium concentrate are homogenous worldwide, noting that:

i. just five countries - Kazakhstan, Namibia, Canada, Australia and Uzbekistan - account for over 80% of total global production of uranium concentrate and the operators of these mines arrange for the uranium concentrate to be transported to conversion sites in France, China, Russia, Canada, and the US;

ii. uranium traders around the world trade or purchase and supply uranium concentrate to other traders and sometimes customers;

iii. uranium concentrate is a commodity which is transacted following a standard specification (American Society for Testing and Material – ASTM) and prices across different regions are very similar and highly correlated, and are based on prices agreed in bilateral contracts and international indices;

iv. although transport and duty costs have been rising recently, they do not generally constitute a barrier to supply.[97]

(79) The Parties submit that, although 'Western' (including European) utility customers are understood to be seeking to diversify supply away from Russian-controlled sources of uranium concentrate since the beginning of the Russian war of aggression against Ukraine, no 'Western' country has imposed sanctions affecting the sale of uranium concentrate by Russian-controlled suppliers, and such stocks are still available for commercial purchase globally. The Parties therefore consider that the geographic scope of the market for the supply of uranium concentrate is still worldwide. [98]

4.3.1.3. The Commission's assessment

(80) The majority of respondents to the market investigation confirm that their customers and/or suppliers of uranium concentrate can be located anywhere in the world, they do not consider transport costs for uranium concentrate to be a hindering factor for supplying uranium concentrate to any part of the world and prices at which uranium concentrate is sold do not differ significantly across different global geographic areas.[99]

(81) In relation to supplies of uranium concentrate from Russian suppliers, a significant minority of customers stated that they currently procure uranium concentrate from Russian suppliers and that, absent any barriers such as sanctions, they expect to procure uranium concentrate from Russian suppliers in the next 5-10 years, although less than they currently procure.[100] Responses from suppliers of uranium concentrate were inconclusive as to whether they currently compete with Russian suppliers or will do so in the next 5-10 years.

(82) In relation to supplies of uranium concentrate from Chinese suppliers, while no customers stated that they currently procure uranium concentrate from Chinese suppliers, a minority of respondents stated that, absent any barriers such as

97 Form CO, paragraphs 175 – 176.
98 Form CO, paragraph 177.
99 Responses to questions B.B.1, B.B.3 and B.B.5 of both eRFIs.
100 Responses to questions B.B.7 and B.B.9 of the eRFI to customers.

sanctions, they expect to procure uranium concentrate from Chinese suppliers in the next 5-10 years.[101] All suppliers of uranium concentrate who responded to the market investigation said that they currently compete and that they expect to compete in the next 5-10 years for the supply of uranium concentrate with Chinese suppliers, with one explaining that '*Chinese owned primary producers, traders and utilities are active in the global uranium market*'.[102]

(83) On the basis of the above, the Commission concludes, in line with the Commission's precedents, that the market for the supply of uranium concentrate is a worldwide market, but considers that it can be left open whether Russian and/or Chinese suppliers are excluded in that market as the Transaction does not raise serious doubts as to its compatibility with the internal market or the functioning of the EEA Agreement even under the narrowest plausible geographic market definition, i.e., a worldwide market excluding Russian and Chinese suppliers.

4.3.2. Services to convert uranium concentrate to UF6

4.3.2.1. The Commission's previous practice

(84) The Commission has previously considered the market for the conversion of uranium into UF_6 as worldwide, although it noted that conversion facilities in Russia were still integrated into the overall military-industrial complex inherited from the former USSR, and access to Russian conversion capacity may be restricted, depending on the political situation.[103]

4.3.2.2. The Parties' views

(85) The Parties submit that the market for conversion of uranium concentrate into UF_6 is worldwide excluding China, as the Chinese state-owned conversion supplier does currently not provide its services outside China, while the demand of Chinese utilities is covered by conversion services offered by the Chinese provider.[104]

(86) The Parties further submit that the geographic market includes Russia, as Russian-controlled suppliers remain an important source of conversion services for customers worldwide, notwithstanding the geopolitical situation.[105]

4.3.2.3. The Commission's assessment

(87) The market investigation indicates that the market for conversion of uranium concentrate into UF_6 (both including or excluding RepU conversion into UF_6 and both including and excluding secondary sources of UF_6) is worldwide or at least worldwide but excluding Russian and/or Chinese conversion suppliers.

(88) The clear majority of utilities replied that their providers of services to convert uranium concentrate into UF_6 can be anywhere in the world.[106] The clear majority of utilities further submitted that transport costs do not hinder them from procuring conversion services globally,[107] while also a clear majority replied that prices for

101 Responses to questions B.B.11 – 13 of the eRFI to customers.
102 Responses to questions B.B.11 – 13 of the eRFI to competitors.
103 M.1940 - *Framatome/Siemens/Cogéma/JV*, paragraph 62.
104 Form CO, paragraphs 209 et seqq.
105 Form CO, paragraphs 211 et seqq.
106 Responses to questions C.B.1 of the eRFI to customers.
107 Responses to questions C.B.3 of the eRFI to customers.

conversion services do not differ significantly across different geographic areas.[108] One respondent noted, '[i]*t's a worldwide market and prices are quoted regardless of location',*[109] while another customer confirmed that '[c]*onversion prices offered by the different convertors all over the world are within the same price range*'.[110]

(89) The majority of conversion suppliers into UF_6 confirm that they supply their services worldwide,[111] that they are not hindered in doing so by transport costs,[112] and that conversion prices do not differ significantly across different parts of the world.[113]

(90) In relation to the question whether, following the beginning of the Russian war of aggression against Ukraine, the worldwide market should continue including Russian conversion supplies, the results of the market investigation indicate that in the foreseeable future Russian conversion supplies will remain in the market, albeit to a more limited extent.

(91) Out of the utilities that indicated in the market investigation that they currently source conversion of uranium concentrate into UF_6 from Russian suppliers, the majority of respondents among customers that expressed a view indicated that they would continue doing so in the next five-to-ten years, although they would limit their supplies from Russia.[114] A slight minority replied that, once their current supply contracts with the Russian conversion provider lapsed, they would likely not enter into new ones.[115]

(92) On the supply side, half of the respondents to the market investigation among competitors indicated that they expect to compete with Russian conversion suppliers in the next five to ten years.[116] One competitor indicated: '[w]*e expect that regions and individual companies will adopt different approaches to nuclear fuel supply from Russia. While some regions are likely to be subject to sanctions and some buyers will self-sanction, others will increase their dependency on Russia. We expect that due to the market's global nature, the different approaches may compensate for each other*'.[117]

(93) As regards conversion supplies from Chinese conversion providers, the market investigation confirms that those are currently not part of the worldwide market. The vast majority of utilities replied that they do not source such services from China,[118] while only a slight minority replied that they expect to do so in the next five to ten years.[119] All conversion suppliers confirmed that they currently do not compete with Chinese providers for the provision of conversion services,[120] and the majority does not expect to do so in the next five to ten years either.[121]

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108 Responses to questions C.B.5 of the eRFI to customers.
109 Responses to questions C.B.6 of the eRFI to customers.
110 Ibid.
111 Responses to questions C.B.1 of the eRFI to competitors.
112 Responses to questions C.B.3 of the eRFI to customers.
113 Responses to questions C.B.5 of the eRFI to customers.
114 Responses to questions C.B.7 and C.B.10 of the eRFI to customers.
115 Responses to questions C.B.11 of the eRFI to customers.
116 Responses to questions C.B.9 of the eRFI to competitors.
117 Responses to questions C.B.10 of the eRFI to competitors.
118 Responses to questions C.B.12 of the eRFI to customers.
119 Responses to questions C.B.14 of the eRFI to customers.
120 Responses to questions C.B.11 of the eRFI to competitors.
121 Responses to questions C.B.12 of the eRFI to competitors.

(94) Based on the above, the Commission considers that it can be left open whether the geographic scope of the market for the conversion of uranium concentrate into UF_6 is worldwide, or whether it is worldwide but excluding Russian and/or Chinese conversion suppliers, as the Transaction does not raise serious doubts as to its compatibility with the internal market or the functioning of the EEA Agreement even under the narrowest plausible market definitions, i.e., a worldwide market that excludes both Russian and Chinese conversion suppliers.

4.3.3. Manufacture and supply of fuel assemblies

4.3.3.1. The Commission's previous practice

(95) The Commission previously concluded that the markets for the design, manufacture, and supply of FAs for LWRs and separately for the narrower markets for the design, manufacture, and supply of FAs for PWRs and BWRs separately were EEA-wide (which at the time included the UK), noting that (i) the proximity of the FA supplier to the nuclear power plant ('NPP') is important for NPPs in order for them to avoid the significant additional costs and uncertainties associated with transporting fuel over long distances and dealing with different customs duties and regulatory environments, (ii) imports of FAs to EEA countries from the rest of the world were rare and (iii) there were significant price differentials for FAs in different regions of the world. However, the Commission previously presented market shares for the EEA, USA, Asia, Rest of world and worldwide.[122]

4.3.3.2. The Parties' views

(96) The Parties submit that they agree with the Commission's previous conclusion, when the UK was part of the EEA, that the scope of the markets for the design, manufacture and supply of PWR and BWR FAs was EEA-wide (i.e. currently the EEA and the UK).[123] The Parties submit that the conditions of competition do not differ materially between the UK and EEA, noting that Westinghouse manufactures BWR and PWR (including VVER) FAs at its Västerås facility in Sweden and its Springfields Facility in the UK […]. The Parties submit it can be left open whether the scope of the market is the EEA and the UK or EEA-wide. [124]

4.3.3.3. The Commission's assessment

(97) The majority of respondents to the market investigation agree that the market for the manufacture and supply of FAs is EEA-wide, primarily due to (i) the importance of proximity between the FA supplier and the NPP, considering transportation duration, risks and costs, (ii) regulatory requirements, that can differ between the EEA and other regions and (iii) import duties.[125] One respondent explained that '*Between the major fuel fabricators Framatome (France, Germany), Westinghouse (UK, Sweden, Spain) and GENUSA (Spain) the full spectrum of fuel assemblies can be manufactured in Europe to meet the reactor types in Europe and beyond*'.[126]

122 M.1940 - *Framatome/Siemens/Cogéma/JV*, paragraphs 32, 38-40; M.5224 – *EDF/British Energy*, paragraph 131.
123 Form CO, paragraph 249 and Response to RFI 15.
124 Response to RFI 15.
125 Responses to question D.B.1 of both eRFIs.
126 Response to question D.B.2 of eRFI to customers.

(98) While the most common response of customers is that their suppliers of FAs are typically located only within the same region (EEA, Americas, Asia, Africa etc.) in which their company is located, a minority of customers said either that their suppliers are typically only within the same country in which their company is located or that their suppliers can be located anywhere in the world. Suppliers of FAs gave a mixed response in relation to where their customers are located. [127]

(99) The majority of respondents stated that they consider costs, risks and/or delays associated with transport to be a hindering factor for procuring or supplying fuel assemblies from any part of the world.[128] One respondent explained that '*There are a number of issues delivering nuclear fuel assemblies from across the globe ranging from insurance, nuclear liability and secure transport routes. Air freight is usually not possible, there can be several issues with securing maritime insurance as well as the number of available fuel transport containers that would be taken out of circulation for an extended period of time. These are all barriers in locating any fuel fabricator outside of Europe*'.[129]

(100) The majority of customers stated that they consider import duties to be a hindering factor for procuring fuel assemblies from any part of the world, although suppliers of FAs gave a mixed response in relation to the impact of import duties.[130]

(101) The majority of suppliers of FAs stated that prices at which FAs are sold differ significantly across different global geographic areas, while customers gave a mixed response on whether prices differ significantly.[131]

(102) In relation to Russian suppliers of FAs, only VVER customers stated that they currently procure FAs from Russian suppliers, and only those VVER customers stated that, absent any relevant administrative barriers (sanctions etc.), they will procure FAs from Russian suppliers in the next 5-10 years, though less than they procure currently.[132] Similarly, only suppliers of FAs for VVERs stated that they currently compete with Russian suppliers, and those suppliers consider that, absent any relevant administrative barriers (sanctions etc.), they will continue to do so, though they expect a decrease in the supply of FAs from Russian suppliers.[133]

(103) In relation to Chinese suppliers of FAs, no customers stated that they currently source from Chinese suppliers and no suppliers stated that they currently compete with Chinese suppliers.[134] However, a minority of suppliers responded that, absent any relevant administrative barriers (sanctions etc.), they expect to compete for the supply of fuel assemblies with Chinese suppliers in the next 5-10 years, with one supplier explaining that '*Chinese fuel suppliers have developed domestic fuel assembly designs and, in the future, we expect that they will be more active on the global market with the supply of fuel for Chinese newbuild reactors and/or targeting established PWR markets with their domestic designs*'.[135]

127 Responses to question D.B.3 of both eRFIs.
128 Responses to question D.B.5 of both eRFIs.
129 Responses to question D.B.6 of the eRFI to customers.
130 Responses to question D.B.7 of both eRFIs.
131 Responses to question D.B.9 of both eRFIs.
132 Responses to questions D.B.11 and D.B.13 of the eRFI to customers.
133 Responses to questions D.B.11 and D.B.13 of the eRFI to competitors.
134 Responses to question D.B.15 of the eRFI to competitors and D.B.18 of the eRFI to customers.
135 Responses to questions D.B.15-16 of the eRFI to competitors.

(104) Based on the above, the Commission considers that it can be left open whether the geographic scope of the markets for the manufacture and supply of FAs is EEA-wide, EEA and the UK, or worldwide, and considers that it can be left open whether Russian and/or Chinese suppliers are excluded from the worldwide market, as the Transaction does not raise serious doubts as to its compatibility with the internal market or the functioning of the EEA Agreement even under the narrowest plausible market definitions, i.e., separate EEA-wide markets for the manufacture and supply of FAs for (i) PWRs and (ii) BWRs. As regards the manufacture and supply of FAs for VVERs in particular, the Commission considers that, due to the historic exclusive supply relationships of VVER utilities with Russian suppliers,[136] and in line with the Commission's findings in paragraph (102) above, the narrowest plausible market definition should entail the EEA including supplies from Russia.

5. COMPETITIVE ASSESSMENT

5.1. Affected markets

(105) In this Section, the Commission will assess the possible effects of the Transaction on possible affected markets, and in particular:

i. the horizontal effects, more specifically the risk of removal of potential competition from Westinghouse in conversion of uranium concentrate into UF_6;

ii. the conglomerate effects in relation to the complementary presence of Cameco and Westinghouse on certain markets of the nuclear fuel supply, and in particular whether Cameco and Westinghouse are able or have the incentive post-Transaction to foreclose their competitors in any of the markets for (i) the supply of uranium concentrate, (ii) the provision of services to convert uranium concentrate into UF_6, and (iii) the manufacture and supply of fuel assemblies for PWR, BWR and VVER, by leveraging their position in any other of these markets.

5.2. Horizontal effects in conversion of uranium concentrate into UF_6

5.2.1. Legal framework

(106) In accordance with the Commission Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings ('Horizontal Merger Guidelines'), a merger with a potential competitor can have horizontal anti-competitive effects in two situations: (i) when the potential competitor already significantly constrains the behaviour of the firms active in the market or (ii) it is likely to enter the market in a relatively short period of time after which it would constrain the behaviour of firms currently active in the market.[137]

(107) What constitutes an appropriate time period depends on the characteristics and dynamics of the market, as well as on the specific capabilities of the potential entrant.[138]

136 See paragraph (214) below.

137 Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings, (2004/C 31/03) ('Horizontal Merger Guidelines'), paragraph 59.

138 See, e.g., Commission Decision in M.7801 – *Webtec / Faiveley Transport*, paragraph 109.

(108) For the merger to have significant anti-competitive effects, two basic conditions must be fulfilled. First, the potential competitor must already exert a significant constraining influence or there must be a significant likelihood that it would grow into an effective competitive force. Evidence that a potential competitor has plans to enter a market in a significant way could help the Commission reach such a conclusion. Second, there must not be a sufficient number of other potential competitors, which could maintain sufficient competitive pressure after the merger.[139]

5.2.2. Potential competition

(109) Cameco is active in the conversion of uranium concentrate into UF_6. It is not active in conversion of RepU into UF_6. Westinghouse is not currently active in conversion of uranium concentrate into UF_6 or RepU conversion to UF_6. Westinghouse was active in conversion of uranium concentrate into UF_6 until 2014. Westinghouse is considering re-entering the supply of services to convert uranium concentrate into UF_6 and entering the supply of services to convert RepU into UF_6 at the Springfields Facility.

Parties' view

(110) The Parties submit that, if Westinghouse decided to re-enter conversion of uranium concentrate into UF_6, the earliest that it could start producing conversion of uranium concentrate into UF_6 is […].[140]

(111) The Parties submit that the preliminary considerations of Westinghouse to re-enter conversion of uranium concentrate into UF_6 fall short of a firm likelihood or a real concrete possibility of Westinghouse opening the line for conversion of uranium concentrate into UF_6 at the Springfields Facility, because opening is dependent on overcoming technical and commercial barriers, including: […]. The Parties submit that it is still to be determined whether Westinghouse […].[141]

Commission assessment

(112) For the purposes of this Decision, the Commission considers that Westinghouse is a potential competitor of Cameco in conversion of uranium concentrate into UF_6, […].

(113) The Parties submit that Westinghouse intends to re-enter conversion of uranium concentrate into UF_6, provided that (i) […].[142]

(114) Westinghouse has taken several preliminary steps towards the potential re-entry conversion of uranium concentrate into UF_6.

(115) *First*, Westinghouse sought funding from the UK Government to conduct initial design studies to explore the work required for a potential conversion line at Springfields.[143] Westinghouse has received a GBP 13 million fund from the UK Government to explore the re-opening of conversion services at the Springfields

139 Horizontal Merger Guidelines, paragraph 60.
140 Form CO, paragraph 454(e).
141 Form CO, paragraph 400.
142 Supplemental Submission dated 21 September 2023, paragraph 2.2 and 3.1(b)(iii).
143 Form CO, paragraph 453.

Facility.[144] The relevant UK Government department at the time, the Department for Business, Energy and Industrial Strategy ('BEIS'), […].[145] On […], Westinghouse applied for funding to the UK Government. In December 2022, BEIS awarded a GBP 13 million fund to Westinghouse (the 'Direct Award'). The Direct Award provides for […].[146]

(116) Westinghouse submits that, […], Westinghouse will complete the following steps.[147]

a) […].

b) […].

c) […].

d) […].

e) […].

(117) *Second*, in 2022 Westinghouse sent […].[148] […].[149]

(118) *Third*, […].[150] […].[151]

(119) […].[152] […].

(120) *Fourth*, based on the information available to the Commission, Westinghouse does not face insurmountable barriers to re-enter into conversion of uranium concentrate into UF_6, because Westinghouse was previously active in the provision of this service. […].[153]

(121) […].

(122) *First*, the market investigation indicates that the demand for conversion of uranium concentrate into UF_6 is currently significantly higher than the available supply. The market investigation indicates that, following the beginning of Russia's war of aggression against Ukraine, demand for conversion services of non-Russian, 'Western' suppliers such as those that Westinghouse would provide at the Springfields Facility will likely increase as NPP operators start switching away from Russian suppliers. […]. Following Russia's war of aggression against Ukraine prices of conversion of uranium concentrate into UF_6 have increased. The Commission understands that […].

144 Form CO, footnote 204 and paragraph 442.
145 Form CO, paragraph 453, and Annex Q14 to RFI 5.
146 Form CO, paragraph 453.
147 Form CO, paragraph 454.
148 […] Form CO, paragraph 479.
149 Form CO, Annex Q13.1 of RFI 5.
150 Form CO, paragraph 434.
151 Annex 7.1.1 to RFI 3.
152 […].
153 Submission of the Parties 21 September 2023, "The Competitive Effects of the Proposed Transaction in the NIU Conversion market".

(123) *Second*, the majority of respondents to the market investigation among customers expect that Westinghouse will likely re-enter conversion of uranium concentrate into UF_6 by re-starting a conversion line at the Springfields Facility.[154]

(124) *Third*, a strong majority of respondents to the market investigation among customers of conversion of uranium concentrate into UF_6 indicated that they would likely source Westinghouse's services for the conversion of uranium concentrate into UF_6 to be produced at the Springfields Facility.[155] […].[156]

(125) *Fourth,* a […] third-party provider of data on the nuclear sector, […], has included Westinghouse's potential conversion capacity at the Springfields Facility in its published projections of the conversion pricing from 2030.[157]

(126) *Fifth*, […].[158]

(127) *Sixth*, the market investigation indicates that Westinghouse is likely better positioned to enter conversion of uranium concentrate into UF_6 than companies that would need to start from scratch, because Westinghouse was active in conversion into UF_6 until 2014 and can at least partly upgrade existing infrastructure at the Springfields Facility to restart the line for conversion of uranium concentrate into UF_6.[159]

(128) […].

(129) The Commission understands that, if Westinghouse decides to re-enter conversion of uranium concentrate into UF_6, it will […].[160]

(130) Based on the above elements, for the purposes of this Decision, the Commission considers Westinghouse as a potential competitor of Cameco in the supply of conversion of uranium concentrate into UF_6.

5.2.3. Market shares

(131) Currently, five players are active globally in the supply of conversion of uranium concentrate into UF_6, i.e., Cameco (Canada), Orano (France), ConverDyn (US), Rosatom (Russia), and CNNC (China).

(132) The only RepU conversion plant currently in operation is in Russia and operated by Rosatom.[161] Therefore, the market shares presented for 2022 in this section are for the potential narrower market that excludes RepU conversion into UF_6. The market shares of Cameco are lower when Russian suppliers and RepU conversion are included.

(133) Cameco's market shares in 2022 at worldwide level are in a potential market for conversion of uranium concentrate to UF_6 that excludes RepU conversion into UF_6

154 Response to RFI to customers, C.C.25.
155 Response to question 8 of the questionnaire sent by the Commission in July 2023 to customers of conversion services.
156 Form CO, Annex Q13.1 of RFI 5.
157 […].
158 Response to RFI 5, […].
159 Response to RFI 5, […].
160 […].
161 Form CO, paragraph 128.

are presented below. These shares do not include ConverDyn, which re-entered conversion of uranium concentrate into UF_6 in 2023. ConverDyn's capacity is 7 MkgU, compared to 12.5 MKgU for Cameco. Cameco's market shares are as follows:

i. Including Russian and Chinese suppliers, [20-30]% by production, [20-30]% by capacity and [10-20]% by sales volume.[162] In that market, Cameco competed with Orano, Rosatom and CNNC, and their shares by capacity were [20-30]%, [20-30]%, and [20-30]% respectively.[163]

ii. Excluding Russian and Chinese suppliers, [50-60]% by production, [40-50]% by capacity, and [30-40]% by sales volume.[164] In such a market, in 2022 (before ConverDyn re-entered the market) Cameco competed only with Orano, whose share by capacity was [50-60]%..[165]

iii. Including Russian suppliers but excluding Chinese suppliers, [30-40]% by production, [30-40]% by capacity, and [20-30]% by sales volume.[166]

iv. Excluding Russian suppliers but including Chinese suppliers, [30-40]% by production, [30-40]% by capacity, and [20-30]% by sales volume.[167]

(134) Assuming Westinghouse enters conversion of uranium concentrate to UF_6 in […], the projected capacities of Cameco, Westinghouse, and their competitors in […] for conversion of uranium concentrate into UF_6 that excludes RepU conversion into UF_6 are presented in Table 1 below.

Table 1: Parties and competitors' capacity projection for conversion of uranium concentrate into UF_6, excluding RepU capacities, […]

Supplier	**Global**	**EEA**	**Worldwide ex. China and Russia**	**Worldwide ex. Russia**	**Worldwide ex. China**
	MkgU	MkgU	MkgU	MkgU	MkgU
Westinghouse	[5-10]	-	[5-10]	[5-10]	[5-10]
Cameco	[10-20]	-	[10-20]	[10-20]	[10-20]
Combined	**[10-20]**	**-**	**[10-20]**	**[10-20]**	**[10-20]**
Orano	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]
ConverDyn	[5-10]	-	[5-10]	[5-10]	[5-10]
Rosatom	[10-20]	-	-	-	[10-20]
CNNC	[10-20]	-	-	[10-20]	-
Total	**[70-80]**	**[10-20]**	**[40-50]**	**[50-60]**	**[50-60]**

Source: Form CO, Table 19.

162 Form CO, Annex 9, Tables 14, 19 and 24. The market shares based on sales volumes presented throughout include underfeeding secondary supply.
163 Form CO, Annex 9, Table 19.
164 Form CO, Annex 9, Tables 17, 22, and 31.
165 Form CO, Annex 9, Table 22.
166 Form CO, Annex 9, Tables 16, 21, and 26.
167 Form CO, Annex 9, Tables 15, 20, and 25A.

(135) In a potential market for conversion of uranium concentrate into UF_6 that excludes RepU conversion into UF_6, the combined entity's estimated share in capacity […] at worldwide level would be:

i. including Russian and Chinese suppliers, [20-30]%, followed by Rosatom [20-30]%, CNNC ([20-30]%), Orano ([10-20]%), and ConverDyn ([5-10]%), and the market share increment brought about by the Transaction would be [5-10]%%;

ii. excluding Russian and Chinese suppliers from, [40-50]%, followed by Orano ([30-40]%) and ConverDyn ([10-20]%), and the market share increment brought about by the Transaction would be [10-20]%;

iii. excluding either Russian suppliers only or Chinese suppliers only, [30-40]%, and the market share increment brought about by the Transaction would be [10-20]%.

(136) The projected capacities for RepU conversion into UF_6 in […] are [0-5] MkgU for each of Westinghouse and Rosatom. Therefore, in a potential market for conversion of uranium concentrate into UF_6 that includes RepU conversion into UF_6, Cameco and Westinghouse would have an estimated share based on capacity in […] at a worldwide level of [20-30]% if Russian and Chinese suppliers are included and [40-50]% if Russian and Chinese suppliers are excluded.[168]

5.2.4. Horizontal effects

The Parties' view

(137) The Parties submit that the Transaction will not give rise to a significant impediment to effective competition in relation to the supply of conversion services because […] (as outlined in (112)) and, if Westinghouse does enter, the market conditions will be such that, in summary:

i. […].[169]

ii. Cameco and Westinghouse will face strong competition from Orano and ConverDyn, who have the capacity to expand their conversion operations.[170]

iii. Customers, such as […], will have strong bargaining power. […], for example, operates nuclear reactors […] and accounted for […]% of Cameco's total sales of services to convert uranium concentrate into UF_6 in 2022.[171]

iv. Market entry and/or expansion is possible. Cameco has licensed its conversion technology to Kazatomprom (Kazakhstan) for evaluation and potential use at a uranium conversion facility in Kazakhstan, and existing operators of chemical facilities may be able to use their expertise in handling relevant chemicals to switch their production to the conversion of uranium concentrate into UF_6.[172]

v. The incremental share – should Westinghouse re-enter – would be […].[173]

vi. Western enrichers could increase the secondary supply of UF_6 through underfeeding.[174]

168 Response from the Parties of 28 September 2023 to Request for Information 13.
169 Form CO, paragraph 579.
170 Form CO, paragraph 623, 627 and 695.
171 Form CO, paragraphs 654 – 655 and 807.
172 Form CO, paragraphs 640 – 653.
173 Form CO, paragraph 419.

vii. Russian supply will likely remain in the market to some degree.[175]

(138) Furthermore, as outlined in Section 2.1.1, the Parties submit that, pursuant to the SHA, Cameco will not acquire the use of any veto rights or information rights over Westinghouse's potential Conversion Business and that therefore Cameco will not acquire joint control over Westinghouse's potential Conversion Business, which the Parties submit will remain under the sole control of Brookfield.

The Commission's assessment

(139) As outlined in Section 2.1.1, the Commission considers, for the purposes of this Decision, that Cameco will acquire the possibility to exercise decisive influence over Westinghouse as a whole, including its potential Conversion Business, and therefore the Commission will for the purposes of this Decision consider that Cameco will acquire joint control of the whole of Westinghouse, including its potential Conversion Business.

(140) Post-Transaction in a potential narrow geographic market for conversion of uranium concentrate into UF_6 (including or excluding RepU conversion into UF_6) that excludes Russian and Chinese suppliers, the combined entity would still face competition from at least two large players, Orano and ConverDyn.

(141) The results of the market investigation indicate that, absent future sanctions that prevent to source services to convert uranium concentrate into UF_6 from Russia suppliers, Russian suppliers (i.e., Rosatom) will likely continue to exert some degree of competitive pressure on the combined entity in the supply of conversion of uranium concentrate into UF_6 in the next five to 10 years, albeit likely to a lesser extent than they do today. While EEA-based NPP operators have indicated that they are looking for alternatives to Russian suppliers due to Russia's war of aggression against Ukraine, a number of EEA-based NPP operators that currently source conversion of uranium concentrate into UF_6 indicated that they expect to continue sourcing this service from Russian suppliers in the next five to 10 years.[176]

(142) In a potential geographic market for conversion of uranium concentrate into UF_6 (including or excluding RepU conversion into UF_6) that includes Russian suppliers but excludes Chinese suppliers, post-Transaction the combined entity will face competition from three large players, namely Orano, ConverDyn, and – albeit with likely reduced sales to 'Western', EEA- and US-based utilities – Rosatom.

(143) Although Chinese conversion suppliers currently sell conversion of uranium concentrate into UF_6 mainly in China, it cannot be ruled out that they will increase their exports of this services in the next five to 10 years. The results of the market investigation indicated that a few utilities outside China currently source conversion of uranium concentrate into UF_6 from China and expect to continue doing so in the next five to 10 years.[177]

174 Form CO, paragraph 550 b.
175 Form CO, para 550 c.
176 Responses to questions C.B.7 and C.B.10 of the eRFI to customers.
177 Responses to questions C.B.14 of the eRFI to customers.

(144) Barriers to entry are high and no new supplier other than Westinghouse is expected to enter the market in the short to medium term.[178] One market player stated that '*barriers to entry to build a new conversion facility are extremely high*', explaining that '[i]*n terms of the amount of time needed to open an entirely new conversion facility, … building a new facility is completely different than reopening an existing facility*', and they estimated that '*it took Orano around 14 years from its initial announcement and EUR 1.5 billion (the initially estimated cost was EUR 200 million) to open a new conversion facility*'.[179]

(145) In relation to possible entry into the market, a market player confirmed that '*Kazakhstan has been mentioned as a possible candidate country for new conversion capacity too*' but also stated that, other than ConverDyn re-entering and Westinghouse potentially re-entering, '[n]*o other new capacity has been coming to the market in a very long time*'.[180]

(146) That market player also stated that '[a]*s demand grows, new conversion plants could be developed* [because] *conversion plants are basically chemical facilities which convert material between different chemical compounds*', but they confirmed that they did not know of players in other markets with chemical facilities that could possibly establish conversion facilities for use in the nuclear fuel supply chain.[181] Another market player explained, in the context of barriers to entry, that '[w]*hile the conversion technology itself is a relatively simple chemical process, the chemical process uses hazardous material including fluorine, which is one of the most reactive elements, and it takes place in a nuclear facility*'.[182]

(147) In relation to possible expansion of conversion capacity, neither Orano nor ConverDyn are currently expected to expand their capacity.[183] However, Orano, which, for example, one customer described as a '*significant player in this market segment with its conversion facility in France*',[184] is '*ramping up production at its new … facilities*'.[185] ConverDyn's President and CEO, Malcolm Critchley publicly stated at the World Nuclear Fuels Market's 49th Annual Meeting and International Conference on Nuclear Fuel in June 2023 that ConverDyn could expand its capacity of the Metropolis plant in the United States from 7 MkgU to 10 MkgU with limited difficulty or even to its original capacity of 15 MkgU which it had prior to its shut-down in 2017. The Commission understands that Orano's conversion plant Philippe Coste has modularity to expand its conversion capacity from […].[186]

(148) In relation to secondary supply of UF_6, a majority of customers responded that the supply from secondary sources will decrease in the market in the next five to ten years, though the responses from competitors were inconclusive.[187]

178 […].
179 Non-confidential minutes of a call with a market player, 16 June 2023.
180 Non-confidential email from a customer to DG COMP, 22 June 2023.
181 Non-confidential Minutes of a call with a customer, 29 March 2023 and non-confidential email from a customer to DG COMP, 22 June 2023.
182 Non-confidential minutes of a call with a market player, 16 June 2023.
183 […].
184 Non-confidential Minutes of a call with a customer, 29 March 2023.
185 […].
186 See Form CO, paragraphs 359 and 691.
187 Responses to question C.C.24 of the eRFI to customers and question C.C.13 of the eRFI to competitors.

(149) One customer, in addition to two out of the 11 competitors (half of those who answered the question), stated that they expect the Transaction to have a negative impact on the market for the provision of services to convert uranium concentrate into UF_6,[188] because, as one competitor stated, '[t]*he addition of a conversion facility at Springfield would bring the total Western facilities to 4; the combined entity would control 2 of them accounting for over 50% of Western supply*'.[189] However, while the number of suppliers of conversion of uranium concentrate into UF_6 is and will likely remain limited, a clear majority of customers stated that post-Transaction Cameco and Westinghouse would not be an unavoidable trading partner for conversion of uranium concentrate into UF_6.[190] In addition to competition from Orano and ConverDyn, absent future sanctions, Russian and Chinese suppliers will likely exert some, albeit limited, competitive pressure in the short to medium term as outlined above. One customer emphasised its strategy '*to not be reliant on any one supplier along the nuclear supply chain*' and that '*given [its] diversification strategy, it would still have credible alternative suppliers of services to convert uranium concentrate to UF_6 if Cameco stopped supplying it or increased the price*'.[191]

(150) A large majority of customers responded that the overall impact of the Transaction on prices, service quality, security of supply and level of competition in relation to conversion of uranium concentrate into UF_6 would be positive or neutral.[192]

(151) One key element of why the Transaction is seen as positive/neutral is the importance customers place on security of supply, which they rank as being the most important criteria when choosing a supplier, ahead of price[193], and the view that an '*increase in conversion service capacity would be positive for the industry*'.[194] One customer explained that '*In the past* [t]*here has be*[en] *problems to get conversion to be profitable and therefore we have feared that conversion facilities would go out of business and in doing so creating bottlenecks in the supply chain. This move can assure long term capacity on the conversion market. All in all we are positive to this merger*'.[195]

(152) While a small number of customers stated that a fourth Western competitor in the market would be welcome (in addition to Cameco, Orano and ConverDyn), and that Westinghouse might be able to enter the market without Cameco, other customers indicated that the Transaction would help Westinghouse re-enter the market – and inject necessary additional conversion capacity – thanks to Cameco's experience in conversion and its financial strength.[196]

(153) The majority of respondents to the market investigation among customers indicated that, from a security of supply perspective, it would be preferable that Westinghouse operated the Springfields Facility under the joint control of Brookfield and Cameco. According to the majority of respondents to the market investigation among customers, if the Springfields Facility was operated under joint control of Cameco, it would also be preferable for the viability of the

188 Responses to question C.D.1 of both eRFIs.
189 Responses to question C.C.20-4 of the eRFI to competitors
190 Responses to question C.C.20 of the eRFI to customers.
191 Non-confidential minutes of a call with a customer, 22 March 2023.
192 Responses to question C.D.1 of the eRFI to customers.
193 Responses to question C.C.1 of the eRFI to customers.
194 Response to question C.D.1 of the eRFI to customers.
195 Response to question 10 of the questionnaire sent in July 2023 to customers of conversion services.
196 Responses to question 10 the questionnaire sent in July 2023 to customers of conversion services.

Springfields Facility as a reliable conversion facility.[197] For example, one customer stated that '*Cameco has a lot of experience in producing conversion services and a strong security of supply record*'.[198]

(154) Customers of conversion of uranium concentrate into UF_6 are utility companies, who tend to be large and are often State-owned such as EDF and Vattenfall. The Commission considers that such customers have a degree of buyer power, including because of their ability to switch suppliers of services to convert uranium concentrate into UF_6. For example, one customer stated that they could '*switch to other suppliers fairly easily and quickly*'.[199] Similarly, another customer stated the '*switch could be quite fast*'.[200]

(155) Based on the above, the Commission considers that the Transaction is unlikely to give rise to horizontal non-coordinated effects that would significantly impede effective competition in the worldwide market for conversion of uranium concentrate into UF_6, both including and excluding RepU conversion into UF_6.

5.2.5. Potential discontinuation of Westinghouse's plan to re-enter the conversion of uranium concentrate into UF_6 or reduction of Westinghouse's conversion capacity

The Parties' view

(156) The Parties submit that, post-Transaction, under the SHA Cameco would not have the ability to discontinue Westinghouse's potential plan to open a conversion line at the Springfields Facility and that, in any event, Cameco would not have the incentive to do so for the following, main reasons.

(157) *First*, the Parties submit that the incentives of Cameco and Westinghouse are aligned on the re-opening of the conversion line at the Springfields Facility. The Parties submit that Westinghouse's potential re-entry into conversion of uranium concentrate into UF_6 would likely not lead to a reduction in the prices of this service, […].[201] […].[202] […], if Westinghouse did not re-enter conversion of uranium concentrate into UF_6, other conversion suppliers would likely expand their conversion capacity to address the supply gap. In addition, 'Western', non-Russian enrichers could engage in underfeeding to mitigate the excess demand, which would reduce the amount of uranium concentrate required to produce a given amount of enriched UF_6. According to the Parties, in such a scenario Cameco would not benefit from Westinghouse's profits from the sale of the conversion services and may suffer a reduction in its uranium concentrate profits.[203]

(158) *Second*, […].[204]

(159) *Third*, the Parties submit that Westinghouse would not re-enter conversion of uranium concentrate into UF_6 unless […]. The Parties submit that, if Cameco were

197 Responses to question C.C.27 of the eRFI to customers.
198 Responses to question C.C.28 of the eRFI to customers.
199 Non-confidential minutes of a call with a customer, 22 March 2023.
200 Non-confidential minutes of a call with a customer, 29 March 2023.
201 Submission of the Parties of 21 September 2023, '*The Competitive Effects of the Proposed Transaction in the NIU Conversion Market'*, paragraph 5.3.
202 Form CO, paragraphs 540 and 550.
203 Submission of the Parties of 21 September 2023, 'The Competitive Effects of the Proposed Transaction in the NIU Conversion Market', paragraph 5.4.
204 Form CO, paragraph 546.

to discontinue Westinghouse's plan despite strong demand for conversion services, the entry or expansion by alternative supply sources would become much more likely, which would be less desirable for Cameco.[205]

(160) *Fourth*, the Parties submit that Westinghouse is considering re-entering conversion of uranium concentrate into UF_6 with a maximum annual capacity of […] MkgU per year.[206] Westinghouse is working to the assumption that this equates to a likely effective production of between […] and […] MkgU annually.[207] The Parties submit that, to ensure sufficient cost coverage and to allow for Westinghouse to generate a return on its capital expenditure investment for potential entry, Westinghouse will need to run the conversion line at the Springfields Facility at […].[208]

(161) *Fifth*, the Parties submit that the re-opening of Westinghouse's conversion line at the Springfields Facility is […] for Cameco than to unilaterally build a new facility in Canada or elsewhere, […].[209] The Parties submit that Cameco's only conversion facility in Port Hope, Canada has a […] annually and has a license limit of 12.5 MkgU annually. […].[210]

(162) The Parties submit that, in 2012, Cameco outsourced to third-party company TetraTech a scoping study on the potential expansion of UF_6 conversion capacity at Port Hope (the 'Scoping Study').[211] After the Scoping Study, […].[212] […].

i. […].

ii. […].

iii. […].

iv. […].

v. […].[213]

The Commission's assessment

(163) The Commission assessed whether post-Transaction Cameco would have the ability and the incentive to discontinue the plan of Westinghouse to re-enter conversion of uranium concentrate into UF_6[214] or to reduce the conversion capacity that Westinghouse plans to offer if it re-enters conversion into UF_6, and whether any such conduct would likely significantly impede effective competition in any plausible markets for the conversion of uranium concentrate into UF_6.

205 Form CO, paragraph 538.
206 Form CO, paragraphs 575 and 668 and Table 15. Response to RFI 14, paragraph 6.1.
207 Response to RFI 14, paragraph 6.1.
208 Response to RFI 14, paragraph 6.2.
209 Form CO, paragraph 552.
210 Form CO, paragraph 627(c); Response to RFI 14, paragraph 1.14.
211 Response to RFI 14, paragraph 1.11(a) and Annex 2 to RFI 14.
212 Response to RFI 14, paragraph 1.11(a) and Annex 2 to RFI 14.
213 Response to RFI 14, paragraph 1.16.
214 The Commission does not consider that Cameco would have the incentives to discontinue Westinghouse's plans to enter into the potential market for conversion of RepU into UF_6, as Cameco is not active in this potential market […]. See Form CO, paragraph 190.

(164) In terms of ability, absent the Transaction, Westinghouse would not need to take Cameco's interests into account when deciding whether to re-enter conversion of uranium concentrate into UF_6 and at what capacity. As outlined in Section 2.1.1, for the purposes of this Decision, the Commission considers that through the Transaction Cameco will acquire the capability to exercise decisive influence over Westinghouse as a whole, including its potential Conversion Business. For the purposes of this Decision, the Commission considers that post-Transaction Cameco could influence the decision of Westinghouse to not re-enter conversion of uranium concentrate into UF_6 or to re-enter at less capacity than the capacity that Westinghouse currently plans to offer if it re-enters conversion into UF_6.

(165) In terms of incentives, the results of the market investigation indicate that Cameco would likely not have an incentive to discontinue Westinghouse's plan to re-enter conversion of uranium concentrate into UF_6 or to reduce the conversion capacity that Westinghouse plans to offer if it re-enters conversion into UF_6.

(166) *First*, the majority of respondents to the market investigation among customers who expressed a view consider that Cameco would likely not have an incentive to discontinue Westinghouse's potential plan to re-enter conversion of uranium concentrate into UF_6 at the Springfields Facility, because demand for conversion of uranium concentrate into UF_6 exceeds supply and conversion customers need the potential additional conversion capacity that Westinghouse would provide at the Springfields Facility.[215] One customer stated that the '*market for conversion services is tight; there is room for Springfields too*'.[216] Another customer stated that '*Cameco is not expected* [to] *discontinue the project as there is a substantial market demand for extra conversion capacity*'.[217]

(167) *Second*, the internal documents submitted by Cameco confirm the Parties' submission that Cameco […].[218] The results of the market investigation confirm Cameco's submission. […].[219]

(168) *Third*, the majority of respondents to the market investigation among customers who expressed a view consider that the Transaction would likely not have an impact on the amount of capacity that Westinghouse would offer at the Springfields Conversion Facility. According to the majority of respondents among customers, Westinghouse would likely re-enter conversion of uranium concentrate into UF_6 with the same level of capacity with the Transaction as absent the Transaction.[220]

(169) *Fourth*, the […] of Westinghouse, outlined at paragraphs (118)-(119), show […]. The market investigation did not produce any evidence to suggest that Cameco would see the investment differently.

(170) Based on the above elements, the Commission considers that it is unlikely that Cameco would have an incentive to discontinue the plan of Westinghouse to re-enter conversion of uranium concentrate into UF_6 or to reduce the conversion capacity that Westinghouse potentially plans to offer.

215 Responses to question C.C.33 of the eRFI to customers.
216 Responses to question C.C.34 of the eRFI to customers.
217 Responses to question C.C.34 of the eRFI to customers.
218 Response to RFI 14,
219 […].
220 Responses to question C.C.35 of the eRFI to customers.

5.3. Conglomerate effects in the nuclear fuel supply

(171) The Commission notes that in the nuclear fuel industry, utilities (operators of the nuclear reactors) are typically the customer at each of the steps involved in the nuclear fuel supply chain, namely (i) the supply of uranium concentrate, (ii) the provision of conversion services, (iii) the provision of enrichment services[221] and (iv) the supply of FAs. Uranium suppliers, conversion providers, enrichment providers and FA suppliers each offer their services directly to the utility and do therefore typically not have supply contracts with each other.[222] [223] Suppliers in the nuclear fuel supply chain do not take ownership of the uranium fuel at any stage of the supply chain, which always remains with the utility.

(172) By way of example, a utility would typically enter supply contracts with the uranium concentrate supplier, conversion provider and FA manufacturer of their choice. The utility would arrange that the uranium concentrate supplier ships the uranium concentrate directly to the conversion provider, who, once having converted the uranium concentrate into UF_6, will ship the UF_6 to the FA manufacturer. The FA manufacturer, once having assembled the FA, will deliver the FA to the utility.[224]

(173) It follows that Cameco's and Westinghouse's activities in the nuclear fuel supply chain belong to neighbouring markets. Notably, uranium concentrate, conversion of uranium into UF_6 and the supply of FAs for LWRs (i.e., PWRs, both for VVERs and non-VVERs, and BWRs) are complementary, as nuclear utility companies would have no use for one service without the others, all of which are procured together for the same purpose, namely powering their NPPs.

(174) In this regard, some respondents to the market investigation raised concerns that Cameco and Westinghouse might have an interest to offer a bundle of uranium concentrate, conversion of uranium concentrate into UF_6 and FAs for LWRs by bundling these products and services, with the effect of foreclosing their competitors in the respective markets.

(175) The Commission will in this section assess Cameco's and Westinghouse's ability and incentive to engage in foreclosure strategies by leveraging:

i. their position in the markets for the manufacture and supply of LWR FAs into the market for the supply of uranium concentrate (Section 5.3.3);

ii. their position in the markets for the manufacture and supply of LWR FAs into the market for the provision of conversion services into UF_6 (Section 5.3.4);

iii. their position in the markets for the supply of uranium concentrate and its conversion into UF_6 into the markets for the manufacture and supply of LWR FAs (Section 5.3.5).

5.3.1. Analytical framework

(176) Conglomerate mergers consist of mergers between companies that are active in closely related markets, for instance suppliers of complementary products or of

221 Depending on the type of reactors the customer utility operates.
222 Form CO, paragraphs 773, 797 and footnote 184. See also Tab Q26 of Confidential Annex Q26-29.15 to RFI 2.
223 Supply relationships between Cameco and Westinghouse in the last 3 years have been *de minimis* and on an ad hoc basis. See Form CO, paragraphs 770 *et seqq*.
224 Form CO, paragraph 798.

products which belong to a range of products that is generally purchased by the same set of customers for the same end use.[225]

(177) According to the Non-Horizontal Merger Guidelines, in most circumstances, conglomerate mergers do not lead to any competition problems.[226] However, foreclosure effects may arise when the combination of products in related markets may confer on the merged entity the ability and incentive to leverage a strong market position from one market to another closely related market by means of tying or bundling or other exclusionary practices.[227]

(178) The Non-Horizontal Merger Guidelines distinguish between bundling, which usually refers to the way products are offered and priced by the merged entity[228] and tying, usually referring to situations where customers that purchase one good (the tying good) are required to also purchase another good from the producer (the tied good).[229]

(179) Within bundling practices, the distinction is also made between pure bundling and mixed bundling. In the case of pure bundling the products are only sold jointly in fixed proportions. With mixed bundling the products are also available separately, but the sum of the stand-alone prices is higher than the bundled price.[230]

(180) Tying can take place on a technical or contractual basis. For instance, technical tying occurs when the tying product is designed in such a way that it only works with the tied product (and not with the alternatives offered by competitors).

(181) While tying and bundling often have no anticompetitive consequences, in certain circumstances such practices may lead to a reduction in actual or potential competitors' ability or incentive to compete. This may reduce the competitive pressure on the merged entity allowing it to increase prices.[231]

(182) In assessing the likelihood of such a scenario, the Commission examines, first, whether the merged firm would have the ability to foreclose its rivals,[232] second, whether it would have the economic incentive to do so[233] and, third, whether a foreclosure strategy would have a significant detrimental effect on competition, thus causing harm to consumers.[234] In practice, these factors are often examined together as they are closely intertwined.

5.3.2. Market shares

(183) Cameco is not active in the manufacture and supply of FAs for LWRs. Westinghouse's and its competitors' market shares for the supply of FAs for LWR in the EEA are provided in Table 2 below.

225 Non-Horizontal Merger Guidelines, paragraph 91.
226 Non-Horizontal Merger Guidelines, paragraph 92.
227 Non-Horizontal Merger Guidelines, paragraph 93.
228 Non-Horizontal Merger Guidelines, paragraph 96.
229 Non-Horizontal Merger Guidelines, paragraph 97.
230 Non-Horizontal Merger Guidelines, paragraph 96.
231 Non-Horizontal Merger Guidelines, paragraphs 91 and 93.
232 Non-Horizontal Merger Guidelines, paragraphs 95 to 104.
233 Non-Horizontal Merger Guidelines, paragraphs 105 to 110.
234 Non-Horizontal Merger Guidelines, paragraphs 111 to 118.

Table 2: Market shares in the manufacture and supply of LWR FAs in the EEA (2022)

	PWR (incl. VVER)		Non-VVER PWR		VVER PWR		BWR	
By capacity	tU	%	tU	%	tU	%	tU	%
Westinghouse	[…]	[10-20]%	[…]	[10-20]%	[…]	[90-100]%[235]	[…]	[60-70]%
Framatome	[…]	[60-70]%	[…]	[60-70]%	-	-	[…]	[10-20]%
ENUSA	[…]	[10-20]%	[…]	[10-20]%	-	-	[…]	[20-30]%
Rosatom	-	-	-	-	-	-		
Total	[…]	100%	[…]	100%	[…]	100%	[…]	100%
By sales volume	Mlbs	%	Mlbs	%	Mlbs	%	Mlbs	%
Westinghouse	[…]	[10-20]%	[…]	[10-20]%	-	-	[…]	[50-60]%
Framatome	[…]	[50-60]%	[…]	[60-70]%	-	-	-	-
ENUSA	[…]	[10-20]%	[…]	[10-20]%	-	-	[…]	[40-50]%
Rosatom[236]	[…]	[10-20]%	[…]	[0-5]%	[…]	[90-100]%	-	-
Total	[…]	**100%**	[…]	**100%**	[…]	**100%**	[…]	**100%**

Source: Form CO, Annex 9.

(184) Westinghouse's and its competitors' market shares for the supply of FAs for LWR worldwide excluding Russia and China are provided in Table **3** below.

Table 3: Market shares in the manufacture and supply of LWR FAs by sales volume (estimated by uranium concentrate requirement), worldwide excluding Russia[237] and China (2022)

	Mlbs	%
Cameco	-	-
Westinghouse	[…]	[30-40]%
Framatome	[…]	[20-30]%
KEPCO NF	[…]	[10-20]%
Rosatom	[…]	[5-10]%
GNF	[…]	[5-10]%
ENUSA	[…]	[5-10]%
Other	[…]	[5-10]%
Total	**[…]**	**100%**

Source: Form CO, Annex 9, Table 147.

235 Westinghouse only sold VVER FAs to […].

236 Supplies by Rosatom into the EEA, which primarily refer to VVER FAs, are included in this Table consistently with paragraph (104) above.

237 This table includes Rosatom's supplies of VVER FAs outside of Russia and China, consistently with paragraph (104) above.

(185) The current market shares of Cameco and its competitors for the conversion of uranium concentrate into UF_6 are provided in paragraph (133) and the prospective market shares of Cameco, Westinghouse and their competitors in 2028, assuming Westinghouse's re-entry in conversion of uranium concentrate into UF_6, are provided in Table 1 above.

(186) The market shares of Cameco and its competitors in the supply of uranium concentrate are provided in Table 4 and Table 5 below.

Table 4: Market shares in the supply of uranium concentrate worldwide excluding secondary supply (2022)

	Mlbs	**Share (%)**
By capacity		
Cameco	[…]	[10-20]%
Kazatomprom	[…]	[10-20]%
Orano	[…]	[10-20]%
Rosatom	[…]	[10-20]%
CGNPC	[…]	[5-10]%
CNNC	[…]	[5-10]%
Other	[…]	[20-30]%
Total	[…]	100%
By production		
Cameco	[…]	[10-20]%
Kazatomprom	[…]	[20-30]%
Rosatom	[…]	[10-20]%
Orano	[…]	[10-20]%
CGNPC	[…]	[10-20]%
CNNC	[…]	[5-10]%
Other	[…]	[20-30]%
Total	[…]	100%

Source: Form CO, Annex 9, Tables 1 and 5.

Table 5: Market shares in the supply of uranium concentrate worldwide excluding Russia and China and excluding secondary supply (2022)

	Mlbs	Share (%)
By capacity		
Cameco	[…]	[20-30]%
Kazatomprom	[…]	[20-30]%
Orano	[…]	[10-20]%
BHP	[…]	[5-10]%
Navoi MMC	[…]	[5-10]%
Energy Fuels	[…]	[5-10]%
Other	[…]	[20-30]%
Total	[…]	100%
By production		
Cameco	[…]	[10-20]%
Kazatomprom	[…]	[30-40]%
Orano	[…]	[10-20]%
Navoi MMC	[…]	[5-10]%
BHP	[…]	[5-10]%
Other	[…]	[10-20]%
Total	[…]	100%

Source: Form CO, Annex 9, Tables 4 and 8.

5.3.3. Leveraging the Parties' position in the markets for the manufacture and supply of LWR FAs into the market for the supply of services to convert uranium concentrate into UF_6

(187) In line with its Non-Horizontal Merger Guidelines, the Commission will assess in this section whether the Transaction would afford Cameco and Westinghouse the ability and incentive to leverage Westinghouse's position in the manufacture and supply of FAs for LWR, to foreclose their competitors in the market for the supply of services to convert uranium concentrate into UF_6.

5.3.3.1. The Parties' views

(188) The Parties submit that most customers multi-source and run separate procurement processes for products and services on each step of the nuclear fuel supply chain, at different times and by different procurement teams, to seek the most competitive offer for each individual product or service.[238]

(189) The Parties further submit that Cameco is already active in the supply of uranium concentrate, the provision of services to convert uranium concentrate into UF_6 and

238 Form CO, paragraph 809, 825.

into UO2, as well as the manufacture and supply of HWR FAs, but does not have combined sales across the two markets to a significant extent: in 2022, only about [below 30%] of each of its uranium concentrate supplies and conversion services into UF_6 were sold in combination to the same customer. […].[239]

(190) Moreover, the Parties submit that […].[240]

5.3.3.2. The Commission's assessment

Ability to foreclose

(191) The Commission notes that, as indicated in Table 2, on the narrowest potential market for the manufacture and supply of FAs for BWRs in the EEA, Westinghouse has a market share of [50-60]% in terms of sales volume and [60-70]% in terms of manufacturing capacity when Russian suppliers are excluded. Moreover, on the market for the manufacture and supply of FAs for VVERs, Westinghouse is currently the […]. The Commission therefore considers that there is an indication that Westinghouse may have a significant degree of market power in those markets, within the meaning of paragraph 99 of the Non-Horizontal Merger Guidelines.

(192) However, the Commission considers that the Parties do not have the ability to foreclose their rivals in the conversion of uranium concentrate into UF_6, by leveraging their market power in the manufacture and supply of FAs for BWRs and VVERs in the EEA.

(193) *First*, to assess Westinghouse's ability to leverage such market power in order to win over customers from Cameco's rivals in the market for the conversion of uranium concentrate into UF_6, the Commission must first identify the pool of customers that would be targeted by such a strategy.[241]

(194) Although […] customers for FAs for BWRs and VVERs in the EEA also procure conversion of uranium into UF_6 in the worldwide market, the Commission considers that such customers only represent part of the overall customer base of Cameco's rivals in the provision of conversion of uranium concentrate into UF_6.

(195) As presented in Figure 1 above, UF_6 is used in the nuclear fuel supply chain of LWRs, regardless of the reactors' further distinction between PWRs (and further between VVERs and non-VVER PWRs), and BWRs. Therefore, the customer base addressable by providers of conversion of uranium concentrate into UF_6 refers to all LWR utilities worldwide, except for Russia and China, without further distinction.[242]

(196) Moreover, as Westinghouse is also active in the manufacture and supply of LWR FAs outside the EEA, in order to identify the common pool of customers between Westinghouse's FA supplies and Cameco's rivals in the conversion of uranium concentrate into UF_6, Westinghouse's position on the supply of FAs for LWRs has to be considered in a geographic scope that is symmetric to the market for the

239 Form CO, paragraph 808 *et seq*.
240 Form CO, paragraph 861.
241 Non-Horizontal Merger Guidelines, paragraph 100.
242 See paragraphs (67); (97) above.

conversion of uranium concentrate into UF_6, namely worldwide, excluding Russia and China.

(197) In this sense, the Commission notes that Westinghouse's shares in the manufacture and supply of FAs by type of reactor in the EEA are not indicative of its significance for the pool of customers that it has in common with Cameco's rivals in the supply of uranium concentrate. The Commission will rather consider Westinghouse's shares in the manufacture and supply of LWR FAs worldwide excluding Russia and China in terms of sales, estimated by the requirement in uranium concentrate, as indicated in Table 3.

(198) On this basis, Westinghouse does not account for a significant share of the manufacture and supply of LWR FAs, which would afford it the ability to foreclose Cameco's rivals in conversion of uranium concentrate into UF_6.[243]

(199) In 2022, Westinghouse's share in the manufacture and supply of LWR FAs worldwide excluding Russia and China was [30-40]% in terms of sales volumes, estimated by uranium concentrate requirement, and [20-30]% in terms of capacity.[244] Even if the Parties were to successfully engage in a strategy by which they would bundle their LWR FA supplies and services to convert uranium to UF_6, competing conversion providers would still have access to a customer base representing [60-70]% of total procurements of FAs in terms of uranium concentrate requirements and, by extension, of services to convert uranium concentrate into UF_6.[245]

(200) *Second,* a foreclosure scenario is unlikely under the current conditions of excess demand in the market for uranium concentrate conversion into UF_6. As mentioned at paragraph (157) *et seq.* above, currently demand for services to convert uranium concentrate into UF_6 exceeds the total output capacity of the available non-Russian suppliers, and the market is most likely to remain at excess demand in the following years, even assuming Westinghouse's re-entry in the conversion market as of […].[246] Under these circumstances, Cameco (and potentially Westinghouse) […] would have […] to absorb potential diverted sales from any foreclosed competitors in the provision of uranium concentrate conversion into UF_6. Moreover, as the total output capacity of non-Russian providers of uranium concentrate conversion into UF_6 does not suffice to meet customer demand,[247] it is unlikely that any of the Parties' competitors will not sell its full output. As one competitor explained, '*under the current market conditions, where demand for conversion services is higher than supply,* [this competitor] *does not consider that its production will be foreclosed from the market*'.[248]

(201) *Third,* the market investigation indicates that utility companies would not be receptive to a bundle of FAs and conversion services from a single provider at the expense of their supply diversification and security of supply, even if it were economically more attractive.

243 Non-Horizontal Merger Guidelines, paragraph 99.
244 Form CO, Annex 9, Tables 147 and 152.
245 Because these products are consumed in fixed proportions, see Form CO, footnote 452.
246 […].
247 Assuming Westinghouse's re-entry in conversion of uranium concentrate into UF_6 with a production of […].
248 Non-confidential minutes of a call with a competitor, 14 June 2023.

(202) Indeed, when asked to indicate the main criteria when choosing a provider of uranium concentrate conversion into UF_6, the vast majority of utility companies rated 'security of supply' as the most important criterion, with an average score of 4.92/5.[249] The criterion of 'price' came second with an average score of 4.08/5.[250] One utility explained that '*security of supply is always main criteria, mainly with the limited impact of conversion on the final cost of [*the enriched uranium product*]*',[251] while another utility noted that '*[s]ecurity of supply is the most important criteria, especially as the number of conversion services provided is limited*'.[252]

(203) Only a small minority replied that they typically procure uranium concentrate conversion into UF_6 combined with other products or services in the nuclear fuel supply chain.[253] While the clear majority replied that they procure conversion services both separately as well as combined with other products or services,[254] several of them explained that they use a mix of standalone and bundled conversion procurements to maximise their supply diversification. As one customer explained, '[w]*e consider that the way to guarantee the Security of Supply is maxim[i]zing the diversification, so we diversify also procuring the enriched uranium in different ways*'.[255] Another utility indicated that '*[t]o ensure security of supply,* [this utility] *has a policy of supply diversification and does not depend on any company or country.* [This utility] *sources uranium concentrate, conversion services, enrichment services and FAs from multiple suppliers, independently and not as an integrated solution. As it wants to diversify sources of supply and not depend on a single supplier for any products or services, while* [this utility] *sources both uranium concentrate and conversion services from Cameco, it has separate agreements*'.[256]

(204) It follows that utility companies would likely not switch their procurement of uranium concentrate conversion into UF_6 from Cameco's competitors to Cameco (and potentially Westinghouse) to any significant extent, as a result of the Parties' strategy to bundle uranium concentrate conversion into UF_6 and the supply of FAs, even if this would result in more attractive prices. The above findings indicate that utilities seem conscious that placing their procurement needs predominantly with the supplier able to offer the best price can in the long-term leave them with less supply options.

(205) In this regard, the Commission notes that a non-Russian supplier of integrated fuel solutions has existed in the market before. Areva, the predecessor of Orano and Framatome, was active in all steps of the nuclear fuel supply chain and was indeed offering an integrated fuel solution comprising of the supply of uranium concentrate, the conversion of uranium concentrate into UF_6, the enrichment of UF_6 and the manufacture and supply of FAs. Areva's split in 2018 into Orano and Framatome,[257] which focus on distinctive parts of the nuclear fuel supply chain, indicates that the ability to provide an integrated nuclear fuel solution does not

249 Responses to question C.C.1. of the eRFI to customers.
250 *Ibid*.
251 Responses to question C.C.2. of the eRFI to customers.
252 *Ibid*.
253 Responses to question C.C.4. of the eRFI to customers.
254 *Ibid*.
255 Responses to question C.C.5. of the eRFI to customers.
256 Non-confidential minutes of a call with a customer, 22 March 2023.
257 Form CO, footnote 423.

necessarily make a supplier more competitive. As Orano explains, *'[u]tilities are not generally interested in integrated solutions, and they only choose integrated solutions when they have no other choice available (unless they are too small to have sufficient resources to handle a diversification process)*.'[258] The Commission understands that the competitive situation in the market for nuclear fuel supplies has not changed significantly since 2018.[259] The most significant change since 2018 in this regard was Russia's war of aggression against Ukraine, which has reiterated the importance of diversification of supply and has motivated utilities that have so far been reliant on integrated fuel solutions to reduce such reliance and multi-sourcing.[260]

(206) *Fourth,* the market investigation confirms that the Parties would not be able to impose a bundle of uranium concentrate conversion into UF_6 and the supply of FAs to utility customers, to foreclose their competitors in uranium concentrate conversion into UF_6. The majority of utilities replied that in such case they could refuse the bundle and revert to alternative suppliers.[261] None of the utilities replied that they would have no option but to accept the imposed bundle.[262]

(207) The majority of customers replied that they do not consider Westinghouse as an unavoidable trading partner for FAs.[263] One respondent commented that '*[t]here are other players',*[264] while another one indicated that '*[w]e are not dependent on any single supplier'.*[265]

(208) Overall*,* the market investigation indicates that utility companies do not consider the prospect of the Parties engaging in a strategy to bundle conversion into UF_6 and FAs as realistic. The majority of the utilities who provided a view do not consider that the Parties would engage in such a strategy.[266] One utility replied that '*[t]hat would drive the customers away from buying Westinghouse fuel and they would not survive the competition and the Cameco investment in buying Westinghouse a total loss*', while another utility indicated that '*[t]hey will likely be able to sell the conversion services without having to limit their customers choice of supplier*'.[267]

(209) Utilities moreover commented that offering a nuclear fuel bundle that does not include enrichment services, which the Parties currently do not offer, would in any case not be attractive to customers. One utility explained that '*[t]here is missing step in supply chain - enrichment services'*[268] while another noted that the '*[c]ombination of conversion services and fuel assemblies would be less attractive without enrichment services. Cameco and Westinghouse would therefore need to partner up with a provider of enrichment services to offer an attractive bundle*'.[269] The Parties confirmed in this regard that they have not discussed and are not

258 Non-confidential minutes of the call with a competitor, 31 March 2023.
259 Market shares across all relevant markets in the nuclear fuel supply chain have been relatively stable since 2019; see Form CO, Annex 9.
260 Responses to questions B.B.8; C.B.8; D.B.13 of the eRFI to customers.
261 Responses to question D.C.8. of the eRFI to customers.
262 *Ibid*.
263 Responses to question D.C.17. of the eRFI to customers.
264 Responses to question D.C.18. of the eRFI to customers.
265 *Ibid*.
266 Responses to question D.C.6. of the eRFI to customers.
267 Responses to question D.C.7. of the eRFI to customers.
268 Responses to question C.C.7. of the eRFI to customers.
269 Responses to question C.C.11 of the eRFI to customers.

considering a partnership with any provider of enrichment services with a view to supplying an integrated fuel solution.[270]

(210) *Lastly*, even if the Parties were able to partner with an enrichment provider to offer a meaningful integrated fuel solution, the market investigation indicates that there are other suppliers that could offer a comparable fuel bundle as a counter strategy. The vast majority of utilities replied that other suppliers could provide a combined fuel solution either on their own or by partnering with other suppliers.[271] One respondent explained that '*Orano and CNEIC, a Joint-venture between ConverDyn and Urenco can offer such combined offer*', while another respondent replied that '*Framatome could partner with Orano and sell all components together as integrated assemblies*'.[272]

(211) The fact that other nuclear fuel suppliers could match a potential nuclear fuel bundle between Cameco and Westinghouse was also confirmed by the clear majority of conversion suppliers,[273] as well as FA suppliers.[274] Other than the Russian entities, several respondents mentioned as an example a potential cooperation between Framatome and Orano.[275]

(212) It follows that both Orano and ConverDyn could offset the hypothetical comparative advantage the Parties would have through their ability to offer an integrated fuel solution, by partnering with other nuclear fuel suppliers.

VVER utilities in particular

(213) Notwithstanding the fact that providers of uranium concentrate conversion into UF_6 provide their services to all LWR utilities, the Commission has specifically investigated whether the Parties could foreclose their competitors in the market for conversion of uranium concentrate into UF_6 from access to utilities operating VVERs.

(214) Utilities in Eastern Europe, Finland and China that operate Soviet-era VVERs historically procured integrated fuel solutions from the Russia-based nuclear conglomerate Rosatom. Rosatom's business model has historically been to offer an integrated fuel solution when building a VVER plant. VVER utilities typically concluded a single contract with Rosatom for the supply of their complete fuel requirements.[276] Since the beginning of the Russian war of aggression against Ukraine, […],[277] thus signalling that the VVER market would open for non-Russian nuclear fuel suppliers.

(215) Westinghouse has developed its own design for VVER FAs and has started concluding supply contracts with VVER utilities. In this context, the Commission has assessed whether the Transaction would afford the Parties the possibility to substitute the integrated fuel solution VVER operators previously procured from Rosatom, thereby foreclosing competing nuclear fuel suppliers from access to the VVER market.

270 Response to question 3, RFI 13.
271 Responses to question C.C.22 of the eRFI to customers.
272 Responses to question C.C.23 of the eRFI to customers.
273 Responses to question C.C.11 of the eRFI to competitors.
274 Responses to question D.C.11 of the eRFI to competitors.
275 Responses to questions C.C.12; D.C.12 of the eRFI to customers.
276 Form CO, footnote 8.
277 Form CO, paragraph 942.

(216) In addition to the reasons set out in paragraphs (198) to (210), the Commission considers that the Parties will not have the ability to foreclose competing providers of uranium concentrate conversion into UF_6 from access to supplying VVER utilities.

(217) *First,* the market investigation confirms that it is not the intention of VVER operators to replace a fuel bundle from Rosatom with a fuel bundle from the Parties. The results of the market investigation indicate that VVER operators have started to diversify their supplier base by multi-sourcing nuclear fuel on a component basis. The majority of VVER operators replied that in the next five to ten years, aside from integrated fuel solutions from Russia,[278] they will also procure nuclear fuel from suppliers on a component basis.[279] On average, VVER operators that responded to the market investigation indicated that in the next five to ten years non-integrated fuel supplies will account for over half of their overall demand.[280]

(218) As regards FAs, the clear majority of VVER operators replied that for the next five to ten years they have a strong preference to multisource rather than rely on one supplier.[281]

(219) *Second,* as regards the share of demand of VVER utilities to be covered by non-Russian suppliers, Westinghouse will not be the only alternative for FAs. Currently, VVER utilities are closing FA supply contracts with Framatome, which has licensed the VVER design of Rosatom and also develops its own design for VVER FAs, which is expected to be commercialised by 2028.[282] The majority of VVER utilities indicated either that they have already contracted or are in negotiations with Framatome for a future supply contract for FAs.[283]

(220) It follows that, even if the Parties were successful in bundling all of Westinghouse's VVER FA supplies with conversion services provided by Cameco (and potentially Westinghouse), competing conversion providers would still have access to supplying VVER utilities, at least for the part of demand that will be covered by FA supplies from Framatome.

(221) Even assuming the extreme and unlikely scenario, whereby the Parties would address all of the demand for FAs of VVER utilities outside Russia and China, and would be successful in bundling all such FA sales with the provision of services to convert uranium concentrate to UF_6, so as to also address all of the demand for conversion of such VVER utilities, the Parties' competing conversion providers would not be foreclosed from access to a sufficient customer base. This is because, as discussed at paragraph (194) above, providers of services to convert uranium concentrate into UF_6 provide such services to all LWR utilities alike, without distinction of the specific type of reactor operated by each utility. In terms of demand for uranium concentrate and its conversion into UF_6, VVER utilities worldwide except Russia and China account for ca. [10-20]% of all LWRs

278 Which several VVER respondents indicated that they will maintain, albeit at a lower level than today, for reasons of security of supply.
279 Responses to question E.4 of the eRFI to customers.
280 Responses to question E.6 of the eRFI to customers.
281 Responses to question E.10 of the eRFI to customers.
282 Form CO, paragraph 908.
283 Responses to questions E.8; E.9 of the eRFI to customers.

worldwide except Russia and China.[284] VVER utilities in the EEA, which are the most likely to diversify away their demand from Russian suppliers, only account for [0-5]% of all LWRs worldwide except for Russia and China.[285] It follows that, even in such an extreme scenario, a bundling strategy by the Parties would only target between [0-5]% and [10-20]% of the customer base of competing conversion providers.[286]

(222) *Third,* as regards specifically the EEA, where most VVER utilities outside Russia are located, several utilities, including VVER operators, indicated that the EURATOM Supply Agency ('ESA') has a strategic objective of ensuring security of supply in the nuclear fuel cycle throughout the EU and that it has an exclusive right to 'conclude' (i.e. countersign) contracts relating to the supply of nuclear materials between utilities and suppliers in the EEA. Several respondents indicated that ESA can and would be likely to step in by not countersigning a supply contract, if a nuclear reactor operator in the EEA was considering accepting a contract that limited the diversification of its supply .[287] As one competitor noted, '*it would be our expectation that they* [i.e. ESA] *do so to protect the interests of European customers as well as of fair competition for EU suppliers in the EU*',[288] while a VVER utility explained '*they have done it in the past*'.[289]

(223) Noting that VVER utilities will in the future have at least 3 alternative suppliers for their FAs, namely Rosatom, Westinghouse and Framatome, ESA is in a position to not countersign the supply of fuel bundles that will render a VVER utility significantly reliant on few suppliers.

(224) *Fourth,* the Parties would not be able to impose a bundle of conversion of uranium concentrate into UF_6 and FAs to VVER utilities to a meaningful extent. As discussed at paragraph (209) *et seq.* the Parties do not offer enrichment services and are not considering entering a partnership with an enrichment provider with a view to supplying an integrated fuel solution. The Parties therefore lack the ability to offer a complete nuclear fuel solution.

(225) Even if the Parties were to attempt imposing a bundle that would include uranium concentrate, conversion of uranium concentrate into UF_6 and the supply of FAs to VVER utilities, VVER utilities would not be forced to accept such bundle beyond what would serve their considerations on security of supply, as VVER utilities would have alternative supply options.[290] Moreover, ESA would be in a position to not countersign supply contracts between a utility and nuclear fuel suppliers that would render the utility significantly dependent on certain suppliers.[291]

Incentives to foreclose

(226) Absent the ability to foreclose their rivals in the conversion of uranium concentrate into UF_6 via bundling or tying their own conversion services with their supply of LWR FAs, a detailed assessment of the Parties' incentives to do so is not

284 See Form CO, Annex 9, Tables 147 and 177.
285 See Form CO, Annex 9, Tables 147 and 178.
286 Which would in any case represent prospective customers, as currently no conversion provider offers services to VVER utilities, which still procure all of their nuclear fuel from Russian suppliers.
287 Responses to question F.1 of both eRFIs.
288 *Ibid*.
289 *Ibid*.
290 See paragraph (219) et seqq.
291 See paragraph (222).

necessary. For the sake of completeness, the Commission notes based on the following assessment that the Parties will not have the incentives to engage into a strategy by which they would bundle or tie supplies of LWR FAs with the provision of uranium concentrate conversion into UF_6.

(227) The interests of Cameco and Brookfield in relation to a strategy of bundling or tying supplies of LWR FAs with the provision of uranium concentrate conversion into UF_6 would not be aligned. Engaging in a bundling strategy typically entails foregoing returns on the leveraging market, in the expectation to gain sales in the leveraged market.[292] In the present case, the foregone profits would incur in the supply of LWR FAs, as the Parties would either have to condition FA supplies on the purchase of uranium concentrate conversion into UF_6, or to supply the two components at a discount compared to when supplied on a standalone basis. This is especially likely, since Westinghouse will face competition for the manufacture and supply of FAs for any type of LWRs, meaning that utilities will have alternative FA suppliers to turn to. Any increased returns, assuming that the bundling strategy were successful, would incur through the increased sales of uranium concentrate conversion into UF_6.

(228) It follows from the above that, at least until Westinghouse's potential entry into conversion of uranium concentrate into UF_6, […], all risk of foregone sales would lie only with Westinghouse, while all potential profits would incur only for Cameco. Brookfield would be unlikely to approve such a strategy, as it would have no interest in letting Westinghouse forego sales or margins in the supply of fuel assemblies to increase Cameco's sales in uranium concentrate conversion into UF_6.

5.3.4. Leveraging the Parties' position in the markets for the manufacture and supply of LWR FAs into the market for the supply of uranium concentrate

(229) In line with its Non-Horizontal Merger Guidelines, the Commission will assess in this section whether the Transaction would afford Cameco and Westinghouse the ability and incentive to leverage Westinghouse's position in the manufacture and supply of FAs for LWR, to foreclose their competitors in the market for the supply of uranium concentrate.

5.3.4.1. The Parties' views

(230) The Parties submit that most customers multi-source and run separate procurement processes for products and services on each step of the nuclear fuel supply chain, at different times and by different procurement teams, to seek the most competitive offer for each individual product or service.

(231) The Parties further submit that Cameco is already active across the supply of uranium concentrate, the provision of services to convert uranium concentrate into UF_6 and into UO2, as well as the manufacture and supply of HWR FAs, but does not have combined sales across the two markets to a significant extent: in 2022, only about [below 30%] of each of its uranium concentrate supplies and conversion services into UF_6 were sold in combination to the same customer. […]..[293]

292 See Non-Horizontal Merger Guidelines, paragraph 106.
293 Form CO, paragraphs 808 *et seq*.

(232) Moreover, the Parties submit that their rivals will be able to supply an equivalent combined offering as a counterstrategy to the Parties' potential combined offer.

5.3.4.2. The Commission's assessment

Ability to foreclose

(233) As the Commission noted in paragraph (191) above, it considers that there is an indication that Westinghouse may have a significant degree of market power in the narrowest potential markets for the supply of FAs for BWRs and VVERs in the EEA when Russian suppliers are excluded, within the meaning of paragraph 99 of the Non-Horizontal Merger Guidelines.

(234) However, the Commission considers that the Parties do not have the ability to foreclose their rivals in the supply of uranium concentrate, by leveraging such market power.

(235) *First*, to assess Westinghouse's ability to leverage such market power to win over customers from Cameco's rivals in the market for the supply of uranium concentrate, the Commission must first identify the pool of customers that would be targeted by such a strategy.[294]

(236) Although […] customers for FAs for BWRs and VVERs in the EEA also procure uranium concentrate in the worldwide market, the Commission considers that such customers only represent part of the overall customer base of Cameco's rivals in the supply of uranium concentrate.

(237) As presented in Figure 1 above, uranium concentrate is used in the nuclear fuel supply chain of LWRs, regardless of the reactors' further distinction between PWR (and further between VVER and non-VVER PWRs), BWR etc. Therefore, the pool of customers addressable by uranium concentrate suppliers refers to all LWR utilities worldwide, except for Russia and China, without further distinction.[295] [296]

(238) Moreover, Westinghouse is also active in the manufacture and supply of LWR FAs outside the EEA. To identify the common pool of customers between Westinghouse's FA supplies and Cameco's rivals in the supply of uranium concentrate, Westinghouse's position on the supply of FAs for LWR has to be considered in a geographic scope that is symmetric to the market for the supply of uranium concentrate, namely worldwide, excluding Russia and China.

(239) In this sense, the Commission notes that Westinghouse's shares in the manufacture and supply of FAs by type of reactor in the EEA are not indicative of its significance for the pool of customers that it has in common with Cameco's rivals in the supply of uranium concentrate. The Commission will rather consider Westinghouse's shares in the manufacture and supply of LWR FAs worldwide

294 Non-Horizontal Merger Guidelines, paragraph 100.

295 See paragraphs (48); (82) above.

296 Uranium concentrate is procured also by HWR utilities, which further expands the addressable customer base for uranium concentrate suppliers. Cameco manufactures and supplies FAs for HWRs, while Westinghouse does not. Since the conglomerate relation between Cameco's supply of uranium concentrate and its supply of HWR FAs is pre-existing, the Commission's assessment will focus on the effects brought about by the addition of Westinghouse's activities in the supply of LWR FAs to Cameco's activities in the supply of uranium concentrate. The Commission notes that Westinghouse's market shares in the supply of LWR FAs […]. See Form CO, Annex 9, Table 102.

excluding Russia and China in terms of sales, estimated by the requirement in uranium concentrate, as indicated in Table 3.

(240) On this basis Westinghouse does not account for a significant share of the manufacture and supply of LWR FAs, which would afford it the ability to foreclose Cameco's rivals in the supply of uranium concentrate.[297]

(241) In 2022, Westinghouse's share in the manufacture and supply of LWR FAs worldwide excluding Russia and China was [30-40]%[298] in terms of sales volumes, estimated by uranium concentrate requirement, and [20-30]% in terms of capacity.[299] Even if the Parties were to successfully engage in a strategy by which they would bundle their LWR FA supplies and supplies of uranium concentrate, competing uranium concentrate suppliers would still have access to a customer base representing [60-70]% of total procurements of FAs and, by extension, of supply of uranium concentrate.

(242) *Second,* the market investigation indicates that utility companies would not be receptive of a bundle of fuel assemblies and supply of uranium concentrate from a single provider at the expense of their supply diversification and security of supply, even if it were economically more attractive.

(243) Indeed, when asked to indicate the main criteria when choosing a supplier of uranium concentrate, all utility companies rated 'security of supply' as the most important criterion, giving it a score of 5/5.[300] The criterion of 'price' came second with an average score of 4.08/5.[301] One utility explained that '[s]*ecurity of supply is the most important criteria when choosing suppliers of uranium concentrate*'.[302]

(244) Only a small minority replied that they typically procure uranium concentrate combined with other products or services in the nuclear fuel supply chain.[303] One utility even replied that '*[p]rocuring uranium concentrate separately from other products may result in better prices / better commercial conditions*'.[304]

(245) While the clear majority replied that they procure conversion services both separately as well as combined with other products or services,[305] several of them explained that they use a mix of standalone and bundled conversion procurements to maximise their supply diversification. As one customer explained, '[w]*e consider that the way to guarantee the Security of Supply is maximazing the diversification, so we diversify also procuring the enriched uranium in different ways*'.[306] Another utility indicated that '*[t]o ensure security of supply,* [this utility] *has a policy of supply diversification and does not depend on any company or country.* [This utility] *sources uranium concentrate, conversion services, enrichment services and FAs from multiple suppliers, independently and not as an integrated solution. As it wants to diversify sources of supply and not depend on a*

297 Non-Horizontal Merger Guidelines, paragraph 99.
298 If Westinghouse's and Cameco's combined sales of LWR and HWR FAs were considered, the market share would have been [30-40]%.. See Form CO, Annex 9, Table 102
299 Form CO, Annex 9, Tables 147 and 152.
300 Responses to question B.C.1. of the eRFI to customers.
301 *Ibid*.
302 Responses to question C.C.2. of the eRFI to customers.
303 Responses to question B.C.5. of the eRFI to customers.
304 Responses to question B.C.6. of the eRFI to customers.
305 *Ibid*.
306 Responses to question B.C.5. of the eRFI to customers.

single supplier for any products or services, while [this utility] *sources both uranium concentrate and conversion services from Cameco, it has separate agreements*'.[307]

(246) It follows that utility companies would likely not switch their procurements of uranium concentrate from Cameco's competitors to Cameco (and potentially Westinghouse) to any significant extent, as a result of the Parties' strategy to bundle uranium concentrate supplies and the supply of FAs, even if this would result in more attractive prices. The above findings indicate that utilities seem conscious that placing their procurement needs predominantly with the supplier able to offer the best price can in the long-term leave them with less supply options.

(247) Moreover, as discussed in paragraph (205), Areva's split in 2018 into Orano and Framatome, which focus on distinctive parts of the nuclear fuel supply chain, indicates that the ability to provide an integrated nuclear fuel solution does not necessarily make a supplier more competitive. As Orano explains, '[u]*tilities are not generally interested in integrated solutions, and they only choose integrated solutions when they have no other choice available (unless they are too small to have sufficient resources to handle a diversification process)*.'[308]

(248) *Third*, the market investigation confirms that the Parties would not be able to impose a bundle of uranium concentrate supply and the supply of FAs to utility customers, to foreclose their competitors in the supply of uranium concentrate. The majority of utilities replied that in such case they could refuse the bundle and revert to alternative suppliers.[309] None of the utilities replied that they would have no option but to accept the imposed bundle.[310]

(249) The majority of customers replied that they do not consider Westinghouse as an unavoidable trading partner for FAs.[311] One respondent commented that '*[t]here are other players',*[312] while another one indicated that '*[w]e are not dependent on any single supplier'.*[313]

(250) Overall*,* the market investigation indicates that utility companies do not consider the prospect of the Parties engaging in a strategy to bundle conversion into UF_6 and FAs as realistic. The majority of the utilities who provided a view do not consider that the Parties would engage in such a strategy.[314] One utility replied that '*[t]here is no such natural connection*'[315] between the two products, another utility indicated that '*[t]hat would drive the customers away from buying Westinghouse fuel and they would not survive the competition and the Cameco investment in buying Westinghouse a total loss*',[316] while another utility indicated that '*[i]t would limit Cameco's sales and increase their risk, and interfere with both Cameco's and Westinghouse's current long term contracts'.*[317]

307 Non-confidential minutes of a call with a customer, 22 March 2023.
308 Non-confidential minutes of the call with a competitor, 31 March 2023.
309 Responses to question B.C.9. of the eRFI to customers.
310 *Ibid*.
311 Responses to question D.C.17. of the eRFI to customers.
312 Responses to question D.C.18. of the eRFI to customers.
313 *Ibid*.
314 Responses to question B.C.7. of the eRFI to customers.
315 Responses to question B.C.8. of the eRFI to customers.
316 *Ibid*.
317 *Ibid*.

(251) Moreover, as discussed in paragraph (209), the Parties do currently not offer enrichment services, which would render their combined offer unattractive to utilities.

(252) *Lastly*, even if the Parties were able to partner with an enrichment provider to offer a meaningful integrated fuel solution, the market investigation indicates that there are other suppliers that could offer a comparable fuel bundle as a counter strategy. The vast majority of utilities replied that other suppliers could provide a combined fuel solution either on their own or by partnering with other suppliers.[318] One respondent explained that '*Framatome could partner with Orano and sell all components together as integrated assemblies*'[319], while another respondent replied that '[o]*thers (Areva (now Framatome/Orano) could have done it for years, and TENEX does it now*'.[320]

(253) The fact that other nuclear fuel suppliers could match a potential nuclear fuel bundle between Cameco and Westinghouse was also confirmed by all uranium concentrate suppliers,[321] as well as by the vast majority of FA suppliers.[322] Other than the integrated Russian and Chinese, several respondents mentioned as an example a potential cooperation between Framatome and Orano, while one uranium concentrate supplier also mentioned that '*Converdyn, Urenco and Framatom*[e] *with a group of primary uranium producers could have this capability*'.[323]

VVER operators in particular

(254) As regards considerations in relation to VVER operators in particular, the conclusions drawn in paragraphs (213) to (223) apply *mutatis mutandis.* The Commission does not consider that the Parties could foreclose competing uranium concentrate suppliers from accessing VVER utilities, by bundling Westinghouse's VVER FA supplies with Cameco's uranium concentrate supply for the following reasons.

(255) *First,* the market investigation confirms that it is not the intention of VVER operators to replace a fuel bundle from Rosatom with a fuel bundle from the Parties. VVER operators in the EEA have already started diversifying their supply base by multi-sourcing nuclear fuel on a component basis for their upcoming requirements, and it is their intention to continue doing in the next five to ten years.[324]

(256) *Second,* as regards the share of demand of VVER utilities to be covered by non-Russian suppliers, which will become addressable for Cameco's rivals in the supply of uranium concentrate, Westinghouse will not be the only alternative for FAs. Framatome is already concluding contracts or is in negotiations with the majority of VVER operators in the EEA for the supply of FAs.[325] It follows that, even if Westinghouse bundled the supply of its VVER FAs with the supply of

318 Responses to question B.C.23 of the eRFI to customers.
319 Responses to question B.C.24 of the eRFI to customers.
320 *Ibid*. TENEX is a subsidiary of Rosatom.
321 Responses to question B.C.12 of the eRFI to competitors.
322 Responses to question D.C.11 of the eRFI to competitors.
323 Responses to questions C.C.12; D.C.12 of the eRFI to customers.
324 Responses to question E.4 of the eRFI to customers.
325 Responses to questions E.8; E.9 of the eRFI to customers.

Cameco's uranium concentrate, competing uranium concentrate suppliers would still have access to VVER operators.

(257) *Third,* even assuming the extreme and unlikely scenario, whereby the Parties would address all of the demand for FAs of VVER utilities outside Russia and China, and would be successful in bundling all such FA sales with the supply of their own uranium concentrate, so as to also address all of the demand for uranium concentrate of such VVER utilities, the Parties' competing uranium concentrate suppliers would not be foreclosed from access to a sufficient customer base. This is because, as mentioned in paragraph (221) above, VVER utilities that will become addressable to Cameco's competing uranium concentrate suppliers will only account for between 4% and 10% of the overall customer base represented by LWR utilities.

(258) *Fourth,* as explained in paragraph (222), ESA has the mandate to ensure security of supply for nuclear utilities in the EEA, where most VVER operators outside Russia are located, and is in a position to not countersign the supply of fuel bundles that will render a VVER utility significantly reliant on few suppliers.

(259) *Lastly,* based on the above, the Parties would not be able to impose a fuel bundle to VVER utilities. This is because, as discussed at paragraph (209) above, the Parties cannot offer enrichment services and are not considering entering a partnership with an enrichment provider in this regard. Furthermore, VVER utilities would not be forced to accept a fuel bundle beyond what would serve their security of supply considerations, as they have alternative suppliers to turn to. Moreover, ESA could refuse to countersign supply contracts between a utility and nuclear fuel suppliers that would render the utility significantly dependent on certain suppliers.

Incentives to foreclose

(260) Absent the ability to foreclose their rivals in the supply of uranium concentrate via bundling or tying their supplies with their supply of LWR FAs, a detailed assessment of the Parties' incentives to do so is not necessary. For the sake of completeness, the Commission notes based on the following assessment that the Parties will not have the incentives to engage into a strategy by which they would bundle or tie supplies of LWR FAs with the supply of uranium concentrate.

(261) The interests of Cameco and Brookfield in relation to a strategy of bundling or tying supplies of LWR FAs with the supply of uranium concentrate would not be aligned. Engaging in a bundling strategy typically entails foregoing returns on the leveraging market, in the expectation to gain sales in the leveraged market.[326] In the present case, the foregone profits would incur in the supply of LWR FAs, as the Parties would either have to condition FA supplies on the purchase of uranium concentrate, or to supply the two components at a discount compared to when supplied on a standalone basis. This is especially likely, since Westinghouse will face competition for the manufacture and supply of FAs for any type of LWRs, meaning that utilities will have alternative FA suppliers to turn to. Any increased returns, assuming that the bundling strategy were successful, would incur through the increased sales of uranium concentrate.

(262) It follows from the above that all risk of foregone sales would lie only with Westinghouse, which is the only Party active in the supply of FAs for LWR, while

326 Non-Horizontal Merger Guidelines, paragraph 106.

all potential profits would incur only for Cameco, which is the only Party active in the supply of uranium concentrate. Brookfield would be unlikely to approve such a strategy, as it would have no interest in letting Westinghouse forego sales or margins in the supply of fuel assemblies to increase Cameco's sales of uranium concentrate.

5.3.5. Leveraging the Parties' position in the market for conversion of uranium concentrate into UF_6 and/or the supply of uranium concentrate into the market for FAs

(263) The Commission has further investigated whether there is a reasonable prospect of the Parties engaging into the reverse leveraging strategy to those discussed at Sections 5.3.3 and 5.3.4, namely a bundling strategy by which Cameco would leverage its market position in the supply of uranium concentrate and/or the provision of uranium concentrate conversion into UF_6, into the markets for the supply of LWR FAs, with the aim to foreclose Westinghouse's competitors in the supply of LWR FAs.

5.3.5.1. The Parties' views

(264) The Parties submit that most customers multi-source and run separate procurement processes for products and services on each step of the nuclear fuel supply chain, at different times and by different procurement teams, to seek the most competitive offer for each individual product or service.

(265) The Parties further submit that Cameco is already active across the supply of uranium concentrate, the provision of services to convert uranium concentrate into UF_6 and into UO_2, as well as the manufacture and supply of HWR FAs, but does not have combined sales across the two markets to a significant extent: in 2022, only about [below 30%] of each of its uranium concentrate supplies and conversion services into UF_6 were sold in combination to the same customer. […].[327]

(266) Moreover, the Parties submit that their rivals will be able to supply an equivalent combined offering as a counterstrategy to the Parties' potential combined offer.

5.3.5.2. The Commission's assessment

Ability to foreclose

(267) The Commission has already assessed in Sections 5.3.3 and 5.3.4 why utility companies would generally not be receptive of a fuel bundle that would include a combination of uranium concentrate and/or uranium concentrate conversion into UF_6, and the supply of LWR FAs.

(268) In this Section the Commission will set out why it does not consider that the Parties would have the ability to impose such a fuel bundle to utilities, by leveraging their market position on the market for the supply of uranium concentrate and/or the conversion of uranium concentrate into UF_6.

(269) *First,* Cameco[328] will not have a significant degree of market power in the supply of uranium concentrate or the conversion of uranium concentrate into UF_6, which

327 Form CO, paragraphs 808 *et seq.*
328 And, potentially, Westinghouse as regards the conversion of uranium into UF_6.

would afford them the ability to foreclose Westinghouse's rivals in the supply of LWR FAs.

(270) As indicated in Table 5 above, in 2022 Cameco's market share in the supply of uranium concentrate worldwide excluding Russia and China was [10-20]% in terms of production volumes and [20-30]% in terms of capacity. The market for the supply of uranium concentrate is fragmented with many suppliers located in different parts of the world. Cameco currently faces and will continue to face competition from competitors such as market leader Kazatomprom, Orano, Navoi MMC and BHP. Even if the Parties were to successfully condition all of Cameco's supplies of uranium concentrate to the utility also procuring its LWR FAs from Westinghouse, competing LWR FA supplies would still have access to a customer base of utility companies representing [80-90]% of total procurements of uranium concentrate.

(271) As regards the conversion of uranium concentrate into UF_6, as indicated in paragraph (133), in 2022 Cameco's market share in the worldwide market excluding Russia and China was [40-50]% in terms of capacity and [50-60]% in terms of production. Moreover, ConverDyn reopened its conversion facility this year with an estimated capacity of 7MKgU from 2023 onwards. This means that as of 2023, Cameco's share in the worldwide market excluding Russia and China in terms of capacity will be [30-40]%.[329]

(272) Cameco will face competition from at least Orano and ConverDyn, which are both credible competitors, and to an extent by Rosatom, which is not expected to be completely absent from the market in the foreseeable future.

(273) Moreover, in Section 5.2.4 the Commission has concluded that the potential re-entry of Westinghouse in the market for the conversion of uranium concentrate into UF_6 would not result in negative horizontal effects. Assuming Westinghouse's re-entry, in […] the Parties' combined market shares in the worldwide market excluding Russia and China are likely to be ca. [40-50]% [330] and [40-50]% if RepU were considered part of the same market. These market shares refer to a scenario of a complete absence of any competitive pressure from Russian conversion supplies, which as indicated in paragraph (152) is not likely.

(274) […]. Currently, Westinghouse supplies FAs to LWR utilities accounting for [30-40]% of demand for uranium concentrate conversion into UF_6 worldwide, excluding Russia and China.[331] For the Parties to bundle all of their prospective conversion into UF_6 sales, which will account for between [40-50]% and [40-50]% of supply, with the supply of LWR FAs, Westinghouse would have to significantly expand its manufacturing capacity of LWR FAs.[332]

(275) On the contrary, should Westinghouse not expand its capacity and continue supplying LWR FAs at relatively the same rate as it does today, providers of conversion into UF_6 would have access to LWR utilities accounting for [60-70]% of demand worldwide excluding Russia and China.

329 Form CO, Annex 9 Table 27.
330 See Table 1 above.
331 See Table 3 above.
332 The Commission understands that Westinghouse currently operates its LWR FA plants close to maximum capacity. See Table 10, Form CO.

(276) It follows that, under a combination of the most precautious scenarios, that assumes (i) a complete absence of competitive pressure exercised by Russia in the conversion of uranium concentrate into UF_6; (ii) the expansion of Westinghouse's manufacturing capacity for LWR FAs to accommodate all of the Parties' supplies of conversion into UF_6; and (iii) that the Parties were to successfully condition all of their uranium concentrate conversion services into UF_6 to the utility also procuring its LWR FAs from Westinghouse, competing LWR FA supplies would still have access to a customer base of utility companies representing between [50-60]% and [50-60]% of total procurements of conversion of uranium concentrate into UF_6. However, for the reasons mentioned above, the Commission does not consider that the most precautious scenario is likely.

(277) *Second*, the results of the market investigation confirm that utilities would still have credible alternative suppliers in both the market for the supply of uranium concentrate, as well as the conversion of uranium concentrate into UF_6.

(278) As regards the supply of uranium concentrate, the clear majority of utilities replied that they do not consider Cameco an unavoidable trading partner.[333] One utility commented that '*[t]hey are one of the largest miners in the world, but there are other suppliers if Cameco's terms were to become untenable*'[334] while another utility noted that '*[t]here are sufficient alternative uranium mining companies at the moment'*.[335]

(279) The majority of utilities replied that, if Cameco made the supply of uranium concentrate subject to them also procuring FAs from Westinghouse, they could refuse the offer and switch to alternative suppliers of uranium concentrate.[336] No utility replied that they would not be able to refuse the offer.[337]

(280) Similarly, the clear majority of utilities replied that they do not consider that Cameco and Westinghouse will become an unavoidable trading partner for the conversion of uranium concentrate into UF_6.[338] Explanations provided by utilities included '[t]*here are other market participants'*, '*[t]here are other suppliers to turn to'*, and '[s]*hould contracting with Cameco become untenable, there are currently other options'*.[339]

(281) The majority of utilities replied that, if Cameco and Westinghouse made the provision of uranium concentrate conversion into UF_6 subject to them also procuring FAs from Westinghouse, they could refuse the offer and switch to alternative providers of uranium concentrate conversion into UF6.[340] No utility replied that they would not be able to refuse the offer.[341]

333 Responses to question B.C.21. of the eRFI to customers.
334 Responses to question B.C.22. of the eRFI to customers.
335 *Ibid*.
336 Responses to question B.C.9. of the eRFI to customers.
337 *Ibid*.
338 Responses to question C.C.20. of the eRFI to customers.
339 Responses to question C.C.21. of the eRFI to customers.
340 Responses to question C.C.8. of the eRFI to customers.
341 *Ibid*.

(282) *Lastly,* as discussed at paragraphs (210) and (252) above, the market investigation indicates that there are other suppliers that could offer a comparable fuel bundle as a counter strategy.[342]

Incentives to foreclose

(283) Absent the ability to foreclose their rivals in the manufacture and supply of LWR FAs via bundling or tying their supplies with the supply of uranium concentrate and/or conversion of uranium concentrate into UF_6, a detailed assessment of the Parties' incentives to do so is not necessary. For the sake of completeness, the Commission notes based on the following assessment that the Parties will likely not have the incentive to engage into a strategy by which they would bundle, or tie supplies of uranium concentrate and/or services to convert uranium concentrate into UF_6 with the supply of LWR FAs.

(284) The Commission cannot exclude that, assuming the Parties had the ability to successfully engage into a bundling strategy, such strategy could benefit economically both Cameco and Westinghouse, and by extension Brookfield. Assuming that, by leveraging their position in the markets for the supply of uranium concentrate and the provision of uranium concentrate conversion into UF_6 would indeed result in increased sales of LWR FAs, to a degree that would compensate Cameco for any losses of potential foregone sales in the leveraging markets, there would likely be no conflicts of interest between Cameco and Brookfield similar to those explained in paragraphs (227) and (261).

(285) Nonetheless, the Parties are likely to be disincentivised to offer bundled solutions to any meaningful extent by the specific considerations of utility companies that drive their procurement behaviour regarding nuclear fuel.

(286) *First,* as explained above, the results of the market investigation indicate that the main driver for utilities in their procurement of nuclear fuel is security of supply, which in the respondents' rating has scored consistently higher than the price factor in all of the markets for the supply of uranium concentrate, the conversion of uranium concentrate into UF_6 and the manufacture and supply of FAs.[343] Utilities are therefore not likely to accept a bundled fuel supply that might be economically more attractive, at the expense of supply diversification. When utilities procure a combination of different fuel components, they usually do so due to considerations of security of supply, namely, to add an additional supplier to their supply base.[344] However, such procurements cannot possibly lead to the foreclosure of a fuel supplier, as their objective is precisely to spread the utility's exposure across multiple suppliers.

(287) Both Cameco and Westinghouse are sophisticated companies with a long-standing presence in the nuclear fuel industry. Both Parties have long-standing supply relationships with their customers and are aware of their customers' considerations. The Parties are therefore aware that utilities would generally not welcome any

342 In contrast to the supply of FAs, the leveraging of which is discussed in Sections 5.3.3. and 5.3.4, the supply of uranium concentrate and the conversion of uranium into UF_6 are not specific to any type of LWR. Therefore, this Section does not discuss VVER utilities separately.

343 Responses to questions B.C.1; C.C.1; D.C.1 of the eRFI to customers.

344 Responses to questions B.C.6; C.C.5; D.C.5 of the eRFI to customers.

attempt to offer a fuel bundle, thereby limiting their procurement options and diversification of their supply portfolio.[345]

(288) The recent example of the split-up of Areva indicates in this regard that fuel bundles are not the preferred standard for nuclear utilities.

(289) *Second,* the Parties would be disincentivised to offer a bundled fuel solution to any meaningful extent by the fact that utilities can switch away their demand to alternative suppliers and do also not hesitate to retaliate against suppliers.

(290) The market investigation indeed confirmed that in none of the markets for the supply of uranium concentrate, the conversion of uranium concentrate into UF_6 or the manufacture and supply of FAs are the Parties an unavoidable trading partner,[346] and that utilities consider that they could switch to alternative suppliers in all these markets.[347]

(291) The recent developments following the beginning of Russia's war of aggression against Ukraine further showcase that utilities do not hesitate to retaliate even against important suppliers such as Rosatom, by completely discontinuing their procurements.[348]

(292) *Lastly*, the Parties would likely be disincentivised in offering a bundle solution by the fact that there are alternative suppliers who could partner in order to offer similar, or even more attractive solutions that would also include enrichment. Offering a bundled fuel solution, if successful, would likely motivate the Parties' rivals to launch a counterstrategy by which they would seek to match the Parties' offer. This could end up in an intense bundle-to-bundle competition between the Parties and their rivals, which would likely end up in the reduction of the suppliers' profit margins.[349]

5.3.6. Conclusion on conglomerate effects

(293) Based on the above considerations and in light of all the evidence available to it, the Commission concludes that the Transaction does not give rise to serious doubts as to its compatibility with the internal market and the functioning of the EEA Agreement in relation to conglomerate effects between (i) the supply of uranium concentrate, (ii) the conversion of uranium concentrate into UF_6 and (iii) the manufacture and supply of FAs for LWRs.[350]

345 Form CO, paragraph 823.
346 Responses to questions B.C.21; C.C.20; D.C.17 of the eRFI to customers.
347 Responses to questions B.C.9; C.C.8; D.C.8 of the eRFI to customers.
348 Responses to questions C.B.8; B.B.8 of the eRFI to customers.
349 Form CO, paragraph 863.
350 The Transaction also results in a potential vertical link between Westinghouse's manufacture and supply of zirconium alloy components and Cameco's activities in the manufacture and supply of FAs. However, this vertical link does not give rise to affected markets as a result of the application of the Notice on Simplified Procedure. Therefore, this vertical link is not discussed in this decision. Westinghouse also offers other services to operators of NPPs that are not immediately related to the nuclear fuel supply chain, including: (i) the design of nuclear islands; (ii) the supply of services to existing nuclear steam supply systems; (iii) the supply of safety and operational instrumentation and control systems; and (iv) decommissioning and disposal. The Commission has not received any indication that any of these activities belongs to a market that could give rise to conglomerate effects in combination with Cameco's activities in the supply of uranium concentrate and the conversion of uranium into UF_6.

6. CONCLUSION

(294) For the above reasons, the European Commission has decided not to oppose the notified concentration and to declare it compatible with the internal market and with the EEA Agreement. This decision is adopted in application of Article 6(1)(b) of the Merger Regulation and Article 57 of the EEA Agreement.

For the Commission

(Signed)
Didier REYNDERS
Member of the Commission