Department of Energy
Washington, DC 20585

April 18, 2014

Mr. David Trimble
Director, Natural Resources and Environment
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Dear Mr. Trimble,

Thank you for providing a copy of your draft report, "Department of Energy: Enhanced Transparency Could Clarify Costs, Market Impact, Risk, and Legal Authority to Conduct Future Uranium Transactions" (the GAO draft report). The GAO draft report describes the conclusions drawn from the GAO's audit of four Department of Energy (DOE or the Department) uranium transactions in 2012 and 2013.

The heart of the GAO draft report is that two elements of the USEC Privatization Act – sections 3112 and 3113 – by their silence have repealed express provisions of the Atomic Energy Act (AEA) that explicitly authorize DOE to engage in certain transactions involving uranium and other materials. The analysis contained in the GAO draft report is legally unfounded because it is based on a *sub silentio* implied repeal of a variety of specific AEA provisions, directly contrary to the Supreme Court's teaching that it is a "cardinal rule [of construction] that repeals by implication are not favored [lest] congressional silence [be read] as effecting a repeal by implication [of] a longstanding, important component of the Government's [atomic energy] program." *Morton v. Mancari*, 417 U.S. 535, 549-550 (1974) (internal citations and punctuation omitted). Such patently erroneous legal contentions cannot contribute to meaningful assessments of the Department's performance of its various responsibilities. We should remain mindful to heed the Supreme Court's guidance for the Comptroller General that "[i]nterpreting a law enacted by Congress to implement the legislative mandate is the very essence of 'execution' of the law, [and may not be done by] an officer under [Congress'] control." *Bowsher v. Synar*, 478 U.S.714, 732, 726 (1986).

First, the GAO draft report repeats its previous and unpersuasive position that the Department does not have the authority to transfer depleted uranium. GAO's position is based on its incorrect belief that the USEC Privatization Act, in particular section 3112(a), repealed or amended the Department's authorities under the Atomic Energy Act (AEA) to distribute or sell depleted uranium (which is source material). Section 3112(a) requires that any uranium transfers or sales be "consistent with this section." The remainder of section 3112 places restrictions on transfers or sales of other Departmental uranium, creating an overlay on the Department's more general AEA authorities to

transfer or sell uranium, but places no such restrictions on the sale or transfer of depleted uranium. GAO disregards a fundamental canon of statutory interpretation and reads section 3112 to implicitly remove the Department's AEA authorities with regard to the distribution or sale of source material even though it is well established that in interpreting a statute, repeals by implication are disfavored.

Second, the GAO draft report wrongly contends that section 3113 of the USEC Privatization Act is the sole mechanism through which the Department could accept title to, and eventual disposal responsibility for, depleted uranium. Section 3113 requires DOE to accept for disposal low level waste (including depleted uranium that is ultimately determined to be low level waste) at the request of the generator. Nothing in section 3113 directs or implies that all depleted uranium accepted by the Department is or necessarily will be determined to be low level waste. Further, section 3113 does not supplant the Department's authority under section 66 of the AEA "to purchase, take, requisition, condemn, or otherwise acquire supplies of source material," which includes DUF6.

This error is compounded with the GAO draft report's contention that the Department did not receive adequate compensation for the depleted uranium it sold or accepted. GAO's arguments are premised upon its erroneous conclusion that section 3113 is the only authority the Department has for accepting depleted uranium and its incorrect assertion that DOE must set a monetary price for its depleted uranium and make its sales or transfers consistent with that price. As noted above, section 3113 is not the sole mechanism for DOE acceptance of depleted uranium and its provisions regarding compensation do not control the analyzed transactions in which the Department took title to, and eventual disposal responsibility for, depleted uranium. Further, the requirements under the AEA (sections 63 and 161m.) for DOE to receive reasonable compensation for its source material are not so rigid as to require compensation only in accordance with a set monetary price.

Finally, the GAO draft report incorrectly contends the Department did not comply with the requirements of section 3112(d) in its March 2013 transfer of low enriched uranium (LEU) to USEC. The GAO draft report alleges, without merit, that the Department did not obtain a determination from the President that the material was not necessary for national security purposes. The LEU was not included in the Nuclear Weapons Stockpile Plan (Plan), a document listing material necessary for defense purposes and signed by the President. The Department's standard practice has been that the last signed Nuclear Weapons Stockpile Plan is valid as a Presidential policy directive and is the standing authority until it has been replaced by an updated plan. The fact that the LEU was obtained by DOE, and then transferred to USEC, after the date of the Nuclear Weapons Stockpile Plan does not undercut the Department's position: the absence of the LEU in the Plan in effect at the time of the transfer meets the requirement of section 3112(d)(2)(A).

The GAO draft report contains five recommendations. The Department notes that many of these recommendations advocate actions by the Department that go far beyond the statutory obligations related to uranium transfers and at least one asks the Department to forego the protections generally afforded to pre-decisional or attorney-client communications. Several of these recommendations could actually have the effect of decreasing the value the government receives from uranium transactions.

- First, the GAO draft report recommends that DOE clarify the total amount of depleted uranium hexafluoride (DUF6 or tails) it intended to accept from USEC in a June 2012 cooperative agreement and, if necessary, amend this cooperative agreement to ensure that DOE is not required to accept additional tails liability at a later date. In accordance with the terms of Cooperative Agreement DE-NE0000530, the Department provided 80% cost share for Budget Period 1 of the June 2012 cooperative agreement by accepting title and liability for up to 39,200 MT of Depleted Uranium Hexafluoride (DUF6). The parties to the cooperative agreement agreed that this acceptance would be treated as DOE providing $87,670,184 in cost share contribution (80% of the total estimated cost of the agreement's Budget Period 1). DOE has accepted 38,317 MT DUF6 to meet this Budget Period 1 cost share obligation. No further action is required to ensure compliance with the terms of the cooperative agreement.

- Second, the draft GAO report recommends that for each uranium transaction it conducts, the Department prepare a document outlining the legal authority for the transaction and outlining how the transaction complies with the cited authority and that the Department make this document publicly available. The Department will comply with all legal requirements for future transactions, but will not create and make publicly available documents that are not required by law and would traditionally be protected as attorney work product or privileged pre-decisional documents.

- Third, the draft GAO report recommends that DOE develop guidance establishing a method for determining the value of depleted uranium for any future transfers and that DOE apply this method consistently and transparently in those transfers. The Department will determine the value of depleted uranium in any given transaction and ensure that the Department receives reasonable compensation in the transaction. The Department is not required to establish guidance or a pricing policy for depleted uranium, and to do so would hinder the Department's ability to maximize the value received by the government in a given transaction.

- Fourth, the draft GAO report recommends that the Department "take steps to mitigate the risks" for uranium transactions where the expected benefits rely on third party contracts. The programs have advised us that, where appropriate or feasible, the Department will take steps to mitigate risks. However, the Department cannot control the actions of third parties in agreements to which it was not a party and must not attempt to exert control or influence in a way that establishes an agency or apparent agency relationship.

- Fifth, the draft GAO report recommends that DOE conduct a "rigorous and documented" internal review of its independent expert's analysis of the market impact of these transactions and, to the extent DOE makes the analyses publicly available, that they be consistent with DOE's Information Quality Guidelines. We have been advised by the Office of Nuclear Energy that it will continue to consider the applicability of the Information Quality Guidelines to independent analyses of the potential market impact of proposed transactions and, if they are applicable, will take appropriate steps to ensure they are satisfied.

- Finally, as part of the fifth recommendation, the GAO draft report recommends that the Department "seek and consider" input from industry on the amounts of DOE transfers and whether the Department should reinstitute a prior guideline on the amounts of uranium transfers it would generally consider in a given year. The Office of Nuclear Energy (NE) advises us that it has met in the past and continues to meet regularly with industry parties, both at conferences and in meetings with Departmental officials when those meetings are requested. In those conversations, NE makes it clear it is open to receiving information from industry and takes that information under advisement as it makes future plans.

The enclosed memorandum provides a more thorough response to these and GAO draft report's other contentions.

Sincerely,

Eric J. Fygi
Deputy General Counsel

Enclosure

Department of Energy Analysis of Legal and Other Issues Raised in GAO Draft Report

The GAO draft report "Department of Energy: Enhanced Transparency Could Clarify Costs, Market Impact, Risk, and Legal Authority to Conduct Future Uranium Transactions" (GAO-14-291) (the GAO draft report) analyzes four specific transactions conducted by the Department of Energy (DOE or the Department) and discusses several perceived legal issues and other issues in the analyzed transactions. The GAO draft report characterizes all of these transactions as "involving" the United States Enrichment Corporation (USEC), but DOE notes that it only had direct contractual relationships with USEC in three of the four transactions. The Department disagrees with GAO's legal and other analyses, and its detailed analysis of the GAO draft report's legal and other contentions follows.

A. May 2012 Depleted Uranium Enrichment Project

In May 2012, the Department transferred a quantity of high-assay depleted uranium hexafluoride (DUF6, depleted uranium, or tails) to Energy Northwest (ENW) in the first of a series of interrelated transactions known as the Depleted Uranium Enrichment Project. In a series of agreements to which the Department was not a party, ENW contracted with USEC for the enrichment of the tails at the Paducah Gaseous Diffusion Plant (GDP), owned by DOE but leased and operated by USEC. ENW then agreed to sell a portion of the resultant LEU, which was US-origin and unobligated by peaceful use assurances, to the Tennessee Valley Authority (TVA). Through an interagency agreement (IA) with NNSA, TVA acquires and burns US-origin LEU in a specified reactor that produces tritium. The Department's other involvement in this series of transactions was a modification to the existing TVA-NNSA IA to produce additional tritium using this LEU.

1. Authority to Transfer Depleted Uranium

This is not the first time that GAO has challenged the Department's authority to transfer depleted uranium, and the GAO draft report rests on GAO's prior legal position on this matter. As stated in the GAO draft report, the Department does not endorse or accept GAO's legal interpretation, and DOE believes it has authority to transfer depleted uranium.

GAO's opinion, espoused in both an earlier letter report[1] and again in this draft report, is based on its view of the effect of section 3112 of the USEC Privatization Act[2] on the Department's authorities under the Atomic Energy Act of 1954, as amended (AEA). Section 3112(a) states the Department "shall not provide enrichment services or transfer or sell any uranium (including natural uranium concentrates, natural uranium hexafluoride, or enriched uranium in any form) to any person except as consistent with this section."[3] Although the remainder of section 3112 has provisions pertaining to the sale of natural or low enriched uranium and to other types of uranium inventories held by the Department, it is silent as to the sale, transfer, or other

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[1] "*Nuclear Material: DOE Has Several Potential Options for Dealing with Depleted Uranium Tails, Each of Which Could Benefit the* Government," March 31, 2008 (GAO 08-606R).
[2] 42 U.S.C. § 2297h-10.
[3] 42 U.S.C. § 2297h-10(a).

disposition of DUF6. GAO reasons that because the remainder of section 3112 provides conditions upon which natural or enriched uranium can be sold or transferred, but does not mention depleted uranium, the Department lacks authority to sell depleted uranium because it is covered under the general language regarding transfers or sales in section 3112(a).

As noted in the GAO draft report, the Department's interpretation of the effect of section 3112 of the USEC Privatization Act on its existing AEA authorities is different.[4] The text of section 3112(a) does not create a blanket prohibition on uranium transfers or sales and then permit specified sales. Rather, it requires that any transfers or sales be "consistent with this section." Section 3112 places no restrictions on transfers or sales of depleted uranium, but does place restrictions on transfers or sales of other Departmental material, which function as an overlay on the Department's more general AEA authorities to transfer or sell that material. Accordingly, the Department's transfer of depleted uranium would be "consistent with" section 3112.

Section 63. of the AEA authorizes the Department to distribute source material, which includes DUF6, and the USEC Privatization Act did not expressly repeal or amend this existing transfer authority under the AEA. Nevertheless, GAO reads section 3112 to implicitly remove the Department's AEA authorities with regard to distribution or sale of source material. Repeals by implication, however, are disfavored by the courts.[5] "When there are two acts upon the same subject, the rule is to give effect to both if possible."[6] GAO makes no effort to read the AEA and the USEC Privatization Act as consistent with one another. The Department's position, on the other hand, gives effect to both statutes, with the specific restrictions in the USEC Privatization Act constituting an overlay to the general authorities granted to the Department by the AEA.

It should also be noted that Congress took no action to disapprove of the Department's earlier transfer of tails to the Bonneville Power Administration in a pilot project or to "clarify" the Department's authority, although such a clarification was recommended by GAO in the 2008 letter report.

2. Control of Third Parties/Risk Mitigation

The GAO draft report states that the Department "did not take steps to mitigate risks associated with its reliance on third party contracts for the May 2012 tails transfer to ensure that the expected benefit of the transfer would be achieved."[7] The GAO draft report stated that the Department identified the general risks associated with the transfer, including that the expected benefit was reliant upon third party contracts, but contends that DOE did not take steps that could have mitigated some of these risks – including a right of first refusal for the purchase of the LEU or an overarching memorandum of agreement (MOA).

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[4] *See, e.g.*, Letter from Eric J. Fygi, DOE Deputy General Counsel, to Susan D. Sawtelle, GAO Managing Associate General Counsel (Dec. 21, 2007), relating DOE's conclusion that the 2005 transaction involving the transfer of depleted uranium to Bonneville Power Administration did not fall within the particular constraints of section 3112 of the USEC Privatization Act.

[5] *See, e.g., Ruckelshaus v. Monsanto Co.*, 467 U.S. 986, 1017 (1984) (citing *Regional Rail Reorganization Act Cases*, 419 U.S. 102, 133 (1974)).

[6] *United States v. Borden Co.*, 308 U.S. 188, 198 (1939).

[7] GAO draft report at 43.

The Department was well aware of the risks of the transaction and believed that its understanding of the third party contracts, and the various cross-defaults or "off ramps" within those agreements, protected the integrity of the series of transactions. In addition, the Department was cognizant of criticisms it has received from GAO in the past,[8] and was very careful to structure its contracts and its involvement with third party contracts to avoid an agency relationship or the appearance of an agency relationship. Although the Department did anticipate receiving a benefit through the eventual use of the US-origin LEU for the production of tritium, the LEU was not being produced on the Department's behalf, and the Department did not want to overly involve itself in the third party's contracts.

The Department did not have privity of contract with any of the parties to the transactions other than its transfer to ENW and its IA with TVA. The parties understood the overall goal of the series of transactions, and the Department was as involved in the transactions as it could be without giving rise to an agency relationship or the appearance of an agency relationship. Even if the agreements following enrichment of the DUF6 were to fall apart for some reason, the Department would still be able to receive the benefit of an increased volume of domestic-origin LEU on the market, which would create a pool of material available for TVA to purchase or for obligation-swapping.

A MOA or other memorandum of understanding would not have provided any additional assurance, as it would not have been enforceable and the Department could not exert any control over third party agreements to which it was not a party. In addition, a right of first refusal for LEU produced through ENW's enrichment contract with USEC would have created the appearance of an agency relationship or the appearance that ENW was enriching the DUF6 on the Department's behalf.[9] The Department's involvement in the Depleted Uranium Enrichment Project was limited to the two agreements to which it was a party, and it was aware of the risks and managed them as appropriately as possible when it entered into its agreements.

B. March 2012 SWU Procurement

In March 2012, the Department procured separative work units (SWU), the unit of measure for enrichment services, from USEC. As compensation, the Department took title to, and eventual disposal responsibility for, a set quantity of DUF6 or tails, thereby freeing up cash that USEC had held as surety for disposal bonds it held to fulfill Nuclear Regulatory Commission (NRC) requirements. In the uranium market, an entity purchasing SWU provides feedstock in the form of natural uranium hexafluoride (UF6), which is enriched, producing low enriched uranium (LEU). The market operates on a principle of fungibility, meaning that the LEU a party purchasing SWU receives may not contain the actual UF6 provided, but it is treated as if it does. DOE provided USEC with a quantity of Russian-origin UF6 and, after the SWU value was applied, received back US-origin LEU.[10] This LEU, again in terms of how the uranium market

[8] "Excess Uranium Inventories: Clarifying DOE's Disposition Options Could Help Avoid Further Legal Violations," September 2011 (GAO-11-846).

[9] Such an agreement would also have been inconsistent with the TVA-NNSA IA, which does not contemplate the Department's purchasing the LEU needed for tritium production. Under the IA, TVA purchases unencumbered LEU and NNSA reimburses it the difference in cost needed to purchase US-origin material.

[10] The fact that DOE received back US-origin LEU was of import to the Department, which needs material free from peaceful use restrictions for tritium production and other defense purposes, but the market permits "flag swapping"

views these types of transactions, contained both the UF6 DOE provided to USEC for enrichment and the SWU it purchased.

1. Applicability of Section 3112 of the USEC Privatization Act

The GAO draft report concludes that section 3112(b) of the USEC Privatization Act governed this provision of Russian-origin UF6 feedstock to USEC, and that the exchange was a transfer of uranium from DOE to USEC that should have been accounted for in DOE's market impact analyses supporting secretarial determinations under section 3112(d) for other uranium transactions in that time period.

Section 3112(b)(2) directs the Department to sell within seven years of enactment certain inventories of Russian-origin UF6 delivered to the Department under section 3112(b)(1). Section 3112(b)(2) requires that the Department "sell and receive payment for" the UF6 received under section 3112(b)(1) within seven years of enactment. The Department did not sell all of the material received under section 3112(b)(1); as reflected in its summaries of its inventory in its 2009 and 2013 Excess Uranium Inventory Management Plans, the Department has 1,079 MTU of that material remaining. That fact, however, has no bearing on the legal question at hand. The provision of the material to USEC as feedstock could not be considered a "sale" under section 3112(b)(2), or a sale or transfer under section 3112(d) because, as explained above, it was a transaction for the purchase of SWU from USEC and not a transaction for the sale or transfer of uranium. Accordingly, it did not need to be accounted for in DOE's market impact analysis for other transactions in that time period.

2. Authority of the Department to Assume Title to and Disposal Responsibility for DUF6

In the context of both this transaction and the June 2012 tails transaction, discussed in section D, *infra*, the GAO draft report contends that the Department's only authority for taking title to, and eventual disposal responsibility for, DUF6 is section 3113 of the USEC Privatization Act.

Section 3113, "Low Level Waste," states that the Department, "at the request of the generator, shall accept for disposal low-level radioactive waste, including depleted uranium if it were ultimately determined to be low-level radioactive waste," generated by USEC through operation of the GDPs and any other enrichment provider licensed by the NRC. Pursuant to section 3113, if the Department accepts material under section 3113, "the generator shall reimburse the Secretary for the disposal . . . in an amount equal to the [Department's] costs, including a pro rata share of any capital costs."

Section 66. of the AEA authorizes the Department "to purchase, take, requisition, condemn, or otherwise acquire supplies of source material."[11] Nevertheless, the GAO draft report reads section 3113 of the USEC Privatization Act as the sole mechanism by which the Department

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and other fictions based upon the fungibility of uranium, so the change in origin, or "flag", does not alter the fundamental nature of the transaction.

[11] Although not specifically citing section 66. of the AEA, the Department used its AEA authority to accept roughly 19,700 metric tons uranium (MTU) of depleted uranium tails as its cost share in a 2010 cooperative agreement with USEC to support the continued development and demonstration of USEC's American Centrifuge Technology.

could take title to DUF6. (This error by GAO also plays into its discussion of the compensation it believes the Department should have received, discussed in section E(2), *infra*.) The USEC Privatization Act, however, did not remove or repeal the Department's existing section 66. authorities to "purchase, take, requisition, condemn, or otherwise acquire" source material, including DUF6. Section 3113 requires the Department to take title to and dispose of depleted uranium if a generator declares it low level waste and asks the Department, pursuant to section 3113, to accept it for disposal. As such, section 3113 is not an authorization statute, and it is not a statutory direction that any depleted uranium accepted by the Department from a generator is de facto low level waste. Instead, it functions as a guarantee, for generators, that the Department must, at a cost, accept its depleted uranium determined to be low level waste for disposal if the generator so chooses. Generators are not required to send depleted uranium determined to be low level waste to DOE for disposal; alternative disposal options are permissible. USEC did not invoke section 3113 in its proposal to the Department in the SWU procurement, and the Department relied on its section 66. authority to "take, requisition, condemn, or otherwise acquire" DUF6, not on its obligation under section 3113 to dispose of low level waste, if requested, for a generator.

C. March 2013 LEU Transfer

In March 2013, the Department transferred the same LEU it had received as a result of its SWU procurement to USEC. In exchange, DOE received the feed component of the LEU back and applied the value of the SWU component of the LEU (which DOE and USEC agreed was approximately $44.4 million) as part of the government cost share of its June 2012 research, development, and demonstration (RD&D) cooperative agreement with USEC.

1. Compliance with requirements of section 3112(d)(2)(A)

Section 3112(d)(2)(A) requires that for covered transfers, the President must determine that the uranium is not necessary for national security needs. The Department has historically treated material not included in the Nuclear Weapons Stockpile Plan, a memorandum signed by the President that identifies uranium necessary for defense needs, as having been determined by the President as not being necessary for national security needs.

The GAO draft report posits that because the Nuclear Weapons Stockpile Plan, which is updated periodically, had not been updated since DOE added the LEU to its inventory after procuring the SWU from USEC, the Department could not rely on the Nuclear Weapons Stockpile Plan to satisfy the requirements of section 3112(d)(2)(A).[12] The GAO draft report further contends that the LEU must have been necessary for national security needs because DOE justified the procurement of the SWU[13] as saying the resultant unobligated LEU was necessary for national security purposes and DOE has repeatedly linked the need for a domestic enrichment capability with national security purposes.

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[12] GAO draft report at 36-37.

[13] The GAO draft report incorrectly analyzes this transaction saying the Department "acquired" the LEU. This underscores the report's fundamental misunderstanding of the March 2012 transaction. GAO draft report at 86 (". . . when the department acquired this same LEU in March 2012 . . . "). The Department did not acquire LEU, it procured SWU, which was applied to the feedstock provided by the Department, resulting in the LEU.

The Department's standard practice has always been that the last signed Nuclear Weapons Stockpile Plan is valid as a Presidential policy directive and is the standing authority until it has been replaced by an updated plan. The Nuclear Weapons Stockpile Plan in effect at the time of the transaction, dated July 2011, had not been updated. The fact that the LEU was obtained by DOE, and then transferred to USEC, after the date of the Plan does not undercut the Department's position: the absence of the LEU in the Plan in effect at the time of the transfer meets the requirement of section 3112(d)(2)(A). Second, the Secretarial Determination under section 3112(d) is a general statement indicating the material is excess and not needed now, and thus does not undermine the Nuclear Weapons Stockpile Plan.

The Department did state in the Justification for Other Than Full and Open Competition for the SWU procurement that DOE needs unencumbered LEU for tritium production and defense purposes and that USEC was the only company that could provide enrichment services that were free from peaceful use assurances.[14] However, in the time between the March 2012 and June 2012 transactions, the Department executed its agreements in the Depleted Uranium Enrichment Project, a series of agreements that provided unobligated LEU for up to 15 years of tritium production and increased the quantity of US-origin LEU available for flag-swapping or origin exchanges.

D. June 2012 Tails Acceptance

In June 2012, the Department agreed to accept title to, and eventual disposal responsibility for, a quantity of DUF6 from USEC in exchange for an agreed upon value being applied as the government cost share for a portion of the June 2012 RD&D Agreement.

1. Authority to Accept DUF6

In its analysis of this transaction, the GAO draft report makes the same errors as it did in analyzing the acceptance of DUF6 by the Department in the March 2012 SWU procurement. The GAO draft report again contends that section 3113 of the USEC Privatization Act is the proper authorizing authority. The GAO draft report's interpretation of section 3113 as being the Department's sole authority to take title to DUF6 is incorrect, as discussed in section B(2), *supra*.

E. Compensation Issues

1. Compensation for Transfer of Depleted Uranium

Section 63. of the AEA provides that for source material distributed to a commercial licensee, the Department "shall make reasonable charge determined pursuant to section 161m."[15] Section 161m. provides that for sales, leases, or other transactions making source or special nuclear material available to licensees, the Department

[14] Justification for Other Than Full and Open Competition Procurement Request Number 12NE000165 (February 7, 2012).
[15] Section 63.(c) (42 U.S.C. 2093(c)).

> shall establish prices to be paid by licensees for material or services to be furnished by the [Department] pursuant to this subsection, which prices shall be established on such a nondiscriminatory basis as, in the opinion of the [Department] will provide reasonable compensation to the Government for such material or services and will not discourage the development of sources of supply independent of the [Department].[16]

The draft report then describes several ways in which it views the Department's transfer of DUF6 to ENW as failing to comply with these requirements. The Department addresses each of these issues below.

a. The Department is not required to establish a monetary price for source material

The GAO draft report focuses on the language in section 63.(c) that the Department "shall make a reasonable charge" for source material transferred to commercial licensees and contends that a "charge" requires a monetary price or fee.

In focusing on just the definition of "charge" however, the GAO draft report ignores the remainder of the requirement of section 63.(c), which states that the Department must make a "reasonable charge *determined pursuant to section 161m.*"[17] Therefore, interpreting section 63.(c) requires that section 161m. be examined. Section 161m. requires that the Department establish prices that "*in the opinion of the [Department]* will provide reasonable compensation to the Government . . ."[18]

Charge is defined as "the price demanded for a thing or service."[19] The first definition for price is "genuine and inherent value," which is followed by "the amount of money given or set as the amount to be given as consideration for the sale of a specified thing."[20] Thus, in reading the relevant statutes regarding the compensation the Department must receive for transfers or sales of source material, the Department must establish a "charge" or "price" –the value of consideration to be given – for the DUF6 that, in the Department's opinion provides "reasonable compensation" to the Department.

The GAO draft report reads this to mean that the Department must receive "reasonable compensation" from the price charged to the recipient, and contends that other factors may not be considered as contributing to the compensation considered by the Department. This reads more into the statute than is written – the statue requires that the Department must establish a price that will provide reasonable compensation to the government for the material, not that the price must be a predetermined monetary value and the exclusive means of determining reasonable compensation to the government for the material. Establish is defined as "to set or fix

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[16] Section 161m. (42 U.S.C. 2201(m)).
[17] Section 63.(c) (emphasis added).
[18] Section 161g. (emphasis added).
[19] WEBSTER'S THIRD INTERNATIONAL DICTIONARY OF THE ENGLISH LANGUAGE (UNABRIDGED) at 377.
[20] *Id.* at 1798.

after consideration."[21] Thus, it is fair for the Department to consider a transaction as a whole, consider the entirety of the benefits to the Department, and charge no monetary price and still, in its opinion, receive reasonable compensation.

b. The Department is not required to publish a pricing policy

The GAO draft report states that the Department's historical practice of "establishing prices" has been to set standard, monetary charges that it published in the Federal Register along with its prices for the provision of enrichment service at the GDPs. The Federal Register notice GAO has located[22] is from over thirty years ago. The notice updates prior notices on "charges and other information with respect to plutonium and uranium enriched in the isotope U-233" from as early as 1963.[23]

In the formation of USEC as a government corporation in EPACT 1992, Congress established the corporation as the "exclusive marketing agent on behalf of the United States Government for entering into contracts for providing enriched uranium (including low-enriched uranium derived from highly enriched uranium) and uranium enrichment and related services." Along with this, in an effort to make the government corporation competitive in the commercial field, Congress provided that "[t]he Corporation shall establish prices for its products, materials, and services provided to customers other than the Department on a basis that will allow it to attain the normal business objectives of a profit making corporation."[24] Accordingly, the government was no longer required to establish and publicize prices, which obviated the need for notices and pricing policies like those found in the 1982 Federal Register notice brought to DOE's attention.

Thereafter, when USEC was privatized, the USEC Privatization Act clarified that DOE could sell or transfer natural and enriched uranium from its uranium inventories consistent with section 3112 and its existing AEA authorities. No mention of publicized pricing was carried over into the new legislative framework. Accordingly, the 1982 notice found by GAO that preceded privatization by more than 15 years was part of a framework that is not applicable or existent today. DOE is permitted to sell uranium directly into the market in accordance with its applicable laws and regulations, and is not required to publish pricing policies in the Federal Register.

c. The Department received reasonable compensation for the DUF6 transferred to ENW

The GAO draft report dismisses the intangible benefits and value the Department received under the Depleted Uranium Enrichment Project as comprising "reasonable compensation" based on its restrictive and incorrect reading of the requirements of sections 63. and 161m. of the AEA. As discussed above, sections 63. and 161m. require that the Department must, in its opinion, receive "reasonable compensation" for source or special nuclear material provided to commercial

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[21] *Id.* at 778.
[22] 47 Fed. Reg. 17110 (April 21, 1982)
[23] 28 Fed. Reg. 5314 (May 28, 1963). The 1963 notice did not cover distribution to commercial licensees because no such licenses had been issued in 1963.
[24] EPACT 1992 section 1402.

licensees. Reasonable compensation is not defined in the AEA, and the Department has considered tangible and intangible benefits in assessing reasonable compensation.

At the time of transfer, the Department considered the DUF6 transferred to ENW a liability with a negative value on the Department's books. The material was slated for processing at the Department's DUF6 conversion facility into a more stable form and for eventual disposal. Although the DUF6 had potential value, the value of the DUF6 outside of the Depleted Uranium Enrichment Project was not clear for several reasons. The DUF6 had value only if it was enriched, and the Department could not enrich the material because it did not have appropriated funds to enter into a contract for enrichment services. Nevertheless, the Department recognized that outside parties may contend that the DUF6 has potential value and the Department must be compensated for the potential value of the material. Based on the prices of natural uranium and the costs of the enrichment services that would be required to enrich the DUF6 to natural uranium assays at the time of the transfer, the DUF6 was imputed to have a potential value of $300M.[25]

In the series of transactions in the Depleted Uranium Enrichment Project, several Departmental elements received a number of benefits that amounted to reasonable compensation. NNSA was projected to receive a benefit through the guaranteed source of unobligated LEU that will be used in the TVA reactors to produce sufficient quantities of tritium to supply the tritium program for up to 15 years. Although it was difficult to quantify the benefit to the Department of that assured supply of LEU, this outcome serves important Departmental objectives: keeping the tritium supply at appropriate levels and avoiding the need to downblend HEU that is suitable for use in Naval Reactor programs. The Department projected that there could be savings for NNSA if the costs to produce tritium in TVA reactors using unobligated LEU purchased by TVA are less than the costs to downblend HEU. Downblending HEU removes it from the Department's stockpiles, and there is no current enrichment capability that can produce additional HEU should it be needed for Naval Reactor or other defense purposes. Preserving HEU inventory is thus extremely important to the Department.

Finally, EM was projected to receive a benefit in deferred and avoided costs because the Depleted Uranium Enrichment Project kept the Paducah GDP operating for an additional year. The Depleted Uranium Enrichment Project – with transfers from the Department to ENW at the Paducah GDP beginning on May 15, 2012 – was anticipated to keep the GDP operating for approximately one year beyond when USEC has indicated it would shut the facility down. Surveillance and maintenance (S&M) activities would need to take place until the Department could begin cleanup and decontamination and decommissioning (D&D) services at the facility. Finally, EM also projected savings because the DUF6 it transferred was slated for conversion and disposal. EM took title to the secondary tails from the enrichment process, but those tails are of a smaller quantity than the DUF6 being transferred to ENW.

Although the Department has traditionally accepted "compensation" for nuclear material in the form of money or services that can have a monetary value attached to them, it is reasonable to view intangible benefits as compensation as well. In *Regents of the University of California v.*

[25] This value is arrived at by taking the value of natural uranium at the time of transfer and subtracting the costs of the enrichment services that would be needed to enrich the DUF6 to natural uranium assay levels.

Public Employment Relations Board, the Supreme Court considered the "private hands exception" to the general statutory prohibition on entities other than the Postal Service conveying or transmitting letters along postal routes, which applies when the services are provided "without compensation."[26] In determining that direct monetary exchange was not necessary to establish compensation, the Court gave the term compensation "its normal meaning" and found that it "includes indirect as well as direct compensation."[27] The intangible benefits in that case included the provision of a service that employees would otherwise pay for with union dues.[28] The court further stated, "Common-law notions of consideration . . . do not control the interpretation of this statute. Congress, after all, used the generic term 'compensation,' which can include less direct exchanges of benefits."[29]

Other case law also demonstrates that intangible benefits can be considered compensation in many different kinds of circumstances.[30] Accordingly, the language in sections 53. and 161m. requiring "reasonable compensation" can include "less direct exchanges of benefits"[31] like the intangible benefits the Department anticipated it would realize in this transaction. The intangible benefits to the tritium program, combined with the tangible projected savings to the tritium program, projected reduced rates for BPA ratepayers, and the deferred and avoided costs for EM, amounted to reasonable value for the DUF6 transferred to ENW.

2. Compensation for Accepting Tails for Disposal of Depleted Uranium

As discussed more fully in section B(3), *supra*, the GAO draft report incorrectly contends that the Department's sole authority for taking title to, and eventual disposal responsibility for, DUF6 is section 3113 of the USEC Privatization Act. Based on its incorrect conclusion that the Department may only accept tails under section 3113, the GAO draft report contends that the Department may have been undercompensated because section 3113 requires the generator to reimburse the department for "for the disposal of depleted uranium pursuant to paragraph (1) in an amount equal to the [Department's] costs, including a pro rata share of any capital costs." This requirement was not applicable to the transactions in which the Department accepted title to, and eventual disposal responsibility for, DUF6 because the Department did not accept them pursuant to section 3113 of the USEC Privatization Act, but rather relied upon its section 66. authorities.

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[26] 485 U.S. 589, 597 (1988).
[27] *Id.* at 598, 600.
[28] *Id.* at
[29] *Id.* at 600-601.
[30] *See, e.g., Clair Aero, Inc. v. Nat. Transp. Safety Board*, 2007 WL 754789 (D.C. Cir. 2007) (NTSB precedent "establishes that the receipt of intangible benefits such as goodwill or the expectation of future economic benefits is compensation under the regulations"); *Sec. and Exchange Comm. v. Yun*, 148 F.Supp.2d 1287, 1291-92 (M.D. Fla. 2001) (where defendant in insider trading scheme received intangible unjust enrichment, court recognized that as sufficient receipt of profits to require defendant to disgorge profits); *Leik v. Comm'r of Internal Revenue*, 1948 WL 7098 (U.S. Tax Ct. 1948) (where a contract for sale of tangible and intangible assets specifically lists only tangible assets, no need to compensate for intangible assets).
[31] *Regents of the University of California*, 485 U.S. at 601.

Even without this requirement, however, in both the SWU procurement and the June 2012 tails transaction, the Department conducted a thorough cost-benefit analysis to ensure that the transactions were favorable to the Department.

F. Market Impact Analysis Thoroughness, Reliability, Publication

1. The ERI Analyses Supported the Secretary's Related Determinations

The GAO draft report criticizes the two ERI analyses the Department commissioned that formed the bases of the May 2012 and June 2012 Secretarial Determinations. Although the GAO draft report does not explicitly say that it believes the Secretary's determinations that the proposed transactions would not have an adverse material impact on the domestic uranium mining, conversion or enrichment industry were improper, it does say that DOE "cannot be certain of the studies' conclusions,"[32] and that casts doubt on the determinations.

Section 3112(d)(2)(B)'s requirement that the Secretary determine that covered transactions will not have an adverse material impact on the domestic uranium mining, conversion, or enrichment industry does not contain any language on how that obligation must be fulfilled or what the foundation of that determination must be. For most covered transactions, the Department has historically contracted with ERI for ERI to conduct and produce an independent assessment of the impact the proposed transfers will have on the specified industries. Subject matter experts within the Department then review the independent assessment and compare it to their own understanding of the uranium market and advise the Secretary on whether to make the determination of no adverse material impact. The Secretary, relying on the totality of information available to him or her, then makes that determination. The Department notes that although the ERI analyses may have contained conclusions, the determination of the impact of the covered transactions was not made by ERI, but instead was made by the Secretary.

The GAO draft report states that peer review or other methods of assessing ERI's methodology and assumptions were necessary for the studies to be sufficiently reliable for the Secretary to make the determinations. Nevertheless, GAO's own assessment of the ERI analyses found that they did not contain "significant flaws"[33]and that ERI's approach was "generally reasonable."[34] The GAO draft report notes that it believes ERI based its analyses on incomplete data because it did not include data that uranium producers do not reveal in filings with the Securities and Exchange Commission or other public forums. The GAO draft report also contends that the ERI analyses did not account for the cumulative effects of the transfers or consider what the GAO considers "all relevant factors" that could affect prices.[35]

The Department tasked ERI to provide an independent assessment of the impact of proposed transfers on the domestic uranium mining, conversion, and enrichment industry. The fact that experts may disagree as to the factors or other information in an analysis docs not necessarily mean the analysis is incorrect, however. The Department is not convinced that the GAO draft

[32] GAO draft report at 50.
[33] GAO draft report at 94.
[34] GAO draft report at 95.
[35] GAO draft report at 97.

report's cited flaws, which by the GAO draft report's own opinion are not "significant," call into question the information in the analyses or the validity of the Secretarial Determinations. That said, the Department does take note of input it receives from industry and other sources regarding these analyses and adjusts its work scope or direction for ERI based upon reflected concerns. Thus, although the Department does not believe that the ERI analyses were flawed or insufficient to form the bases for the Secretarial determinations, the Department will keep the GAO draft report's concerns in mind as it moves forward with future determinations.

2. The Department Satisfied its "Information Quality Guidelines" in Reviewing the ERI Analyses

The GAO draft report mentions the Department's "Information Quality Guidelines"[36] (DOE Guidelines) and states that the ERI analyses, which "could be seen as detailing influential financial information,"[37] did not comply with these requirements.

The DOE Guidelines apply to the distribution of information to the public initiated or sponsored by the Department. The DOE Guidelines define "influential" information, when used in the context of scientific, financial or statistical information, to mean

> information (1) that is subject to embargo until its dissemination by DOE or a DOE element...because of potential market effects [this provision applies to information disseminated by the Energy Information Administration]; (2) that is the basis for a DOE action that may result in an annual effect on the economy of $100 million or more; or (3) that is designated by a DOE Element as 'influential'.

In addition, the DOE Guidelines provide for pre-dissemination review procedures that require the Department, before disseminating information to the public, to "ensur[e] that the information is consistent with the OMB and DOE Guidelines and that the information is of adequate quality for dissemination." For "influential" information, to the extent practicable, the DOE Guidelines state that the relevant DOE Element should provide for "higher level review of the originating office's conclusions."

Assuming for purposes of this response that the ERI analyses constituted "influential" financial information, as suggested by the GAO, the Department provides for pre-dissemination review of analyses conducted by ERI (including those analyses described in the GAO draft report) as follows. Once DOE receives an analysis, conducted pursuant to a DOE-provided statement of work to analyze a prescribed transaction or set of transactions, Department staff with subject matter expertise review the analysis for completeness and to determine if the analyses comport with their understanding of the uranium, conversion and enrichment markets. The Department can provide additional comments or questions for portions of the report it would like clarified or further explored. Department staff then make a recommendation to the Secretary based on their understanding of the nuclear fuel markets, the ERI report and other pertinent data or information.

[36] Available at http://energy.gov/sites/prod/files/cioprod/documents/finalinfoqualityguidelines03072011.pdf.
[37] GAO draft report at 50, fn 85.

Going forward, the Department will continue to consider the applicability of the Information Quality Guidelines to independent analyses of the potential market impact of proposed transactions and, if it determines the Information Quality Guidelines apply to those analyses, it will take appropriate steps to ensure the Information Quality Guidelines are met.

3. The Department's Provision of Natural Uranium to USEC in the SWU Procurement did not Need to be Considered in Subsequent Market Impact Analyses

As discussed in section B(1), *supra*, the Department's provision of natural uranium as feed in the SWU procurement was not a transfer or sale under section 3112 of the USEC Privatization Act. The GAO contends, however, that section 3112(d)(2)(B) requires that the department "account for Russian-origin uranium" in its market impact analyses. The statute requires that the Department must take "into account the sales or uranium under the Russian HEU Agreement and the Suspension Agreement," neither of which apply to the provision of feedstock to USEC in the SWU procurement. It is also worth noting again that the uranium market, using the principles of fungibility upon which it is based, views the feedstock provided to USEC as being contained in the LEU the Department received as a result of the procurement.

G. Appropriate Weight to be Given to GAO's Legal Analysis and Other Conclusions

The GAO draft report hinges most of its criticisms of the Department's transactions upon GAO's interpretation of applicable statutory provisions. Because of that, it is worth noting the appropriate weight that should be given to GAO's interpretation of DOE's statutes and the deference that DOE's interpretations are due. The Supreme Court has consistently espoused the view that an agency interpretation is entitled to some degree of deference.[38] The more deferential *Chevron*[39] deference applies to adjudications, rulemakings, and certain other agency interpretations carrying the force of law.[40] However, as the Supreme Court reaffirmed in *United States v. Mead Corp.*, even those agency interpretations that do not fall under the *Chevron* doctrine are still entitled to deference under *Skidmore v. Swift.*[41]

In *Skidmore*, the Supreme Court recognized that where agency interpretations are "based upon more specialized experience and broader investigations and information than is likely to come to a judge in a particular case" they may "constitute a body of experience and informed judgment to

[38] *See Chrysler v. Brown*, 441 U.S. 281, 315 (1979) ("[A] court is not required to give effect to an interpretative regulation. Varying degrees of deference are accorded to administrative interpretations, based on such factors as the timing and consistency of the agency's position, and the nature of its expertise." (quoting *Batterton v. Francis*, 432 U.S. 416, 424-25 (1977))).

[39] *Chevron U.S.A., Inc. v. Natural Res. Def. Council*, 467 U.S. 837 (1984).

[40] In *United States v. Mead Corp.*, 533 U.S. 218 (2001), the majority held:"administrative implementation of a particular statutory provision qualifies for *Chevron* deference when it appears that Congress delegated authority to the agency generally to make rules carrying the force of law, and that the agency interpretation claiming deference was promulgated in the exercise of that authority." 533 U.S. at 226–27. *Barnhart v. Walton*, 535 U.S. 212 (2002), articulated a slightly different standard for when interpretations should receive *Chevron*, rather than deference based on *Skidmore v. Swift*, 323 U.S, 134 (1944), finding that "the interstitial nature of the legal question, the related expertise of the Agency, the importance of the question to administration of the statute, the complexity of that administration, and the careful consideration the Agency has given the question over a long period of time" may all indicate that an interpretation should get *Chevron* deference rather than *Skidmore* deference. 535 U.S. at 222.

[41] 323 U.S. 134 (1944).

which courts and litigants may properly resort for guidance."[42] *Skidmore* held that in considering the weight to give an agency interpretation, a court should evaluate, "the thoroughness evident in its consideration, the validity of its reasoning, its consistency with earlier and later pronouncements, and all those factors which give it power to persuade, if lacking power to control."[43]

In this case, as the agency that owns and transfers uranium, DOE has the "specialized experience" and broader information upon which a court could rely for guidance. DOE's interpretation of its authorities to transfer uranium and the requirements for those transfer have been visited on many prior occasions, which has resulted in thorough consideration based upon the history of transfers, the legal requirements for those transfers, and analysis of prior GAO reports. In looking at the "validity" of DOE's reasoning, a court should view DOE's position as a permissible interpretation of its transfer authorities. DOE's interpretation has many factors that should have power to persuade the court, including DOE's history of uranium transfers and complying with the legal requirements for those transfers. This all supports the conclusion that the DOE's interpretation should be given considerable weight in any review.

Finally, we note that that the opinions of GAO in the draft GAO report and in the prior letter regarding depleted uranium transfers are not binding upon DOE. The GAO is an instrumentality of the legislative branch that cannot exercise executive functions.[44] Because "[i]nterpreting a law enacted by Congress to implement the legislative mandate is the very essence of 'execution' of the law,"[45] whatever GAO's examination of these questions might reveal to those in the GAO or elsewhere would not be any sort of legally-authoritative "determination" of what the law actually is that bore on the transactions about which GAO wrote.[46] While DOE would carefully consider any legal analysis GAO might provide for its persuasive value in DOE's determination of the legal question addressed in considering a transaction, ultimately DOE is responsible for any dispositive legal examination of the issues presented. The Department has given careful and respectful consideration of the analysis and conclusion reached in the draft GAO report. Nevertheless, the Department adheres to its view that it was authorized to enter into the analyzed transactions and that it complied with all applicable legal requirements for those transactions.

H. Factual Clarifications

- On the cover page, the summary concludes with a statement regarding the Department's market impact analyses and states that they had conclusions of "no market impact." This is not what those studies concluded. Moreover, the studies presented information and the Secretary makes the determination, based on information in the studies and advice from

[42] *Id.* at 139–40.
[43] *Id.* at 140.
[44] *Bowsher v. Synar*, 478 U.S. 714, 732 (1986).
[45] *Id.* at 733.
[46] The Office of Legal Counsel in the Department of Justice has noted on several occasions that "Although the opinions and legal interpretations of the GAO and the Comptroller General often provide helpful guidance on appropriations matters and related issues, they are not binding upon departments, agencies, or officers of the executive branch." Memorandum for Lois J. Schiffer, Assistant Attorney General, Environment and Natural Resources Division and for John D. Leshy, Solicitor, Department of the Interior, from Todd David Peterson, Deputy Assistant Attorney General, *Re: Administrative Settlement of Royalty Determinations* at n.7 (July 28, 1998).

Departmental program experts, that covered transfers will not have an adverse material impact on the domestic uranium mining, conversion, or enrichment industry.

- Page 3, Footnote 9, the Portsmouth GDP produced HEU until 1992, not 1991.
- Page 12, sidebar and text, both refer to tails as a "byproduct" of the enrichment process. The tails are not a byproduct, but rather a product of the enrichment process. The enrichment process creates two streams of product, enriched uranium and depleted uranium. Byproduct material is defined in section 11e. of the AEA, and depleted uranium does not fit within this definition.
- Page 14, Paragraph 1, third from last complete sentence reads: "For example, according to DOE, retention of the existing cleanup and decommissioning obligations was essential to provide a positive value to the government at privatization." This sentence is confusing as drafted. The GDP Lease obligates DOE to perform and pay for cleanup work for contamination that occurred prior to the lease. This is because the GDPs were operated by the Department for some time prior to the lease to the government corporation, and thus the Department agreed to be responsible for the cleanup of the pre-existing contamination. The Department is unclear how this decision is interpreted as being "essential" to providing positive value to the government at privatization – the agreement pre-dated privatization, and the Department retained the obligation after privatization.
- On page 25, the draft report states that "DOE decided that the tails had no value in this transaction, and therefore the transaction had no cost to the department." This is incorrect. In fact, DOE determined that the tails identified in this transfer would have an imputed value as a result of the transaction, corresponding to the difference between the value of the resultant LEU and the cost to enrich the tails.
- Page 26 (Line 1): "Beginning in May 2012, DOE transferred 9,092 MTU of U.S. origin high-assay depleted uranium tails..." DOE transferred 9,075 MTU of U.S. origin high-assay depleted uranium tails.
- Page 31, figure 5 says "DOE transferred 48 MTU of domestic LEU to USEC (equivalent to 409 MTU of natural uranium plus $44.4 million of enrichment services [SWU]) credited toward DOE's commitment to support the RD&D agreement." It is unclear to DOE if this is a punctuation error or a drafting error (i.e., if the closing parentheses should be at the end of the sentence instead of where it is.) The sentence reads as if the entire value of the 48 MTU of LEU was credited to the RD&D Agreement, which it was not. Even if the punctuation were correct, however, the sentence still somewhat misstates the agreement. The enrichment services were also not applied as a portion of the government cost share; USEC and DOE agreed to a value for the SWU component of the LEU and that value was applied as a portion of the government cost share on the cooperative agreement.

I. Errata Edits

- Page 1, Paragraph 1, last sentence: There is a missing word. The sentence currently states, "Since then, shares of USEC been publicly traded on the New York Stock Exchange." Add the word "have" before "been."
  Page 10, first full paragraph, 2nd sentence: Insert "types of": "Uranium buyers, such as power utilities... into nuclear fuel in two different **types of** markets."

- Page 10, first full paragraph, 3rd sentence: Insert "or services": "In the "term" market, buyers contract with sellers for the delivery of a quantity of material **or services** over a period of years.
- Page 54, line 21-22 states that USEC "is the only supplier of enrichment services that is not subject to obligations under certain international agreements." This should be updated to reflect that USEC is no longer supplying enrichment services; therefore, it "was" the only supplier of enrichment services not subject to peaceful use assurances.
- On page 83, lines 9-10, the draft report states that "DOE agreed to accept title to, and eventual disposal responsibility for about 39,200 MTU of USEC's tails…" DOE agreed to accept 39,200 MT of DUF6 not 39,200 MTU.