

RAS 1086p

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

DOCKETED  
USNRC

BEFORE THE SECRETARY

December 16, 2005 (8:22am)

OFFICE OF SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

In the Matter of

Docket No. 70-7004

USEC Inc.  
American Centrifuge Plant (ACP)

ASLBP No. 05-383-01-ML

**Reply to USEC and NRC Staff Regarding PRESS Appeal (Continued)**

Following 10 CFR 2.341(b)(3), Portsmouth/Piketon Residents for Environmental Safety and Security (PRESS) submits this brief in the above captioned matter in reply to "USEC Inc. Brief in Response to PRESS Augmented Appeal Brief" ("USEC Reply," dated Dec 8), and "NRC Staff's Brief in Opposition to Portsmouth/Piketon Residents for Environmental Safety and Security (PRESS) Supplemental Appeal of LBP-05-28" ("Staff Reply," also dated Dec 8). These replies are distinct from the similarly titled submissions by those parties, dated Oct 27.

**Appeal Evaluation Criteria**

Neither party appears to have challenged our observation<sup>1</sup> that the criteria for evaluating an appeal are governed by 10 CFR §2.341(b)(4):

(4) The petition for review may be granted in the discretion of the Commission, giving due weight to the existence of a substantial question with respect to the following considerations:

- (i) A finding of material fact is clearly erroneous or in conflict with a finding as to the same fact in a different proceeding;
- (ii) A necessary legal conclusion is without governing precedent or is a departure from or contrary to established law;

<sup>1</sup>PRESS Appeal Reply at 1 and 2.

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- (iii) A substantial and important question of law, policy, or discretion has been raised;
- (iv) The conduct of the proceeding involved a prejudicial procedural error; or
- (v) Any other consideration which the Commission may deem to be in the public interest.

USEC continues to hold up an “error of law or abuse of discretion” as the sole criterion, while the Staff abandons even the “abuse of discretion” phrase, reducing the criterion to just a “claim of error.”

The Staff justifies this practice (Staff Reply at 3) by citing CLI-04-36. We discussed CLI-04-36 (PRESS Reply, at 1, to Staff Response of Oct 27), tracing the origin of the phrase “error of law or abuse of discretion” through CLI-00-21 to CLI-98-21 and CLI-98-6. We have now found CLI-98-21 and CLI-98-6 (under NUREG-0750), and we see that they used the phrase in questions regarding *standing*, not admission of contentions. The phrase may be traced further to CLI-95-12. We note that the statement that “the Commission has indicated that a presiding officer is to ‘construe the petition in favor of the petitioner,’” is also attributed<sup>2</sup> to CLI-95-12.

### Withdrawn Contentions

USEC states<sup>3</sup> that PRESS has withdrawn Contentions 13, 9, 7, and 1. The Staff<sup>4</sup> observes that PRESS explicitly withdrew Contention 13 and conceded that Contentions 1 and 9 were not admissible. To be clear, Contention 1 is withdrawn. Contention 9 is withdrawn, subject to the contingency that we did, indeed, misapprehend the low-level waste classification issue. Contention 13 (D&D) is withdrawn with the proviso that it lends support to our claim of unnecessary redactions. Contention 7 stands as a claim about the LA documents’ opacity, but its claims based on 3.9% feedstock are withdrawn.

### Alternative Site Use

With regard to our Contention 16 (“Alternative Site Use”), specifically with the concern about the No-action alternative, both the Staff and USEC suggest that USEC is only obliged to consider alternatives that accomplish the purpose of the proposed activity, to produce enriched uranium. Both the Staff<sup>5</sup> and USEC<sup>6</sup> back this up by citing CLI-93-3, 37 NRC

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<sup>2</sup>eg, LBP-98-7, 47 NRC 142, 144.

<sup>3</sup>USEC Reply at 2.

<sup>4</sup>Staff Reply at 3.

<sup>5</sup>Staff Reply at 14.

<sup>6</sup>USEC REPLY at 6 through 9.

135, which is too old for us to look up. USEC elaborates that this is based on 40 CFR §1502.14(d), which states, in its entirety, “include the alternative of no action.” Of course, 40 CFR governs the EPA and is derived from NEPA, in part, in a way that portions of 10 CFR are. In NEPA (42 USC §4332(2)(e)), Congress directs that all agencies of the Federal Government shall “study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources.” Thus, we see that the intent of 10 CFR regulations governing applicants’ discussions of the no-action alternative is that the subject should be “available resources,” which is to say, the site, and not the “purpose” of the proposed activity.

Further, USEC introduces<sup>7</sup> *Friends vs. Morrison*, 153 F.3d 1059 (9th Cir. 1998). In USEC’s characterization, “The Ninth Circuit found that an agency may reject the no-action alternative because it does not meet the purpose and need of the action.” But *Friends vs. Morrison* concerns an action by the Forest Service to perform logging in Alaska. Our view is that the purpose of splitting the AEC was, in main part, to divide the tasks of promoting and regulating nuclear industry<sup>8</sup>. As the regulatory body, the NRC is assumed to be detached from any concern for promoting the industry. As such, promoting the purpose of the proposed action – uranium enrichment – is not a concern of the agency’s mission. In this crucial respect, the Forest Service’s role in *Friends vs. Morrison* is quite different from the NRC’s role in this case.

We feel that the alternatives for the site have been treated as “straw men” in the ER, by comparison to which the ACP plans look preferable. We also believe we can present a serious alternative<sup>9</sup> (our “industrial heaven”) that will be the NRC’s “preferred alternative” (in the language of 40 CFR 1502.14(e)).

## Domino Effect

The Board clearly thought that we had had access to the Integrated Safety Analysis (ISA) when we composed Contention 5. As we noted in our Appeal (footnote 3, page 1), the original Federal Register notice, CLI-04-30, suggested that the Safety Analysis Report was available.

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<sup>7</sup>Id. at 8.

<sup>8</sup>From the NRC Website’s “Who We Are” page: “Supporters and critics of nuclear power agreed that the promotional and regulatory duties of the AEC should be assigned to different agencies.” (<http://www.nrc.gov/who-we-are/history.html>).

<sup>9</sup>For an idea, see DOE/EA-1346: “DOE proposes to transfer real property (i.e. underutilized, surplus, or excess PORTS land and facilities) by lease and/or disposal ... via a reindustrialization program. Using the program, DOE would transfer the real property to a community reuse organization, to other federal agencies, or to other interested persons and entities, should DOE and the regulators determine them suitable. The land and facilities would be developed or utilized for a range of industrial and commercial uses.” (<http://adamswebsearch.nrc.gov/idmws/ViewDocByAccession.asp?AccessionNumber=ML052170317>)

Without those details, all we know is that “the casing ‘provides physical containment of components in the unlikely event of a catastrophic failure of the gas centrifuge machine<sup>10</sup>.’” This statement is hardly reassuring, from the technical perspective.

The NRC isn’t usually required to regulate technology with moving parts, on the whole. Even Urenco centrifuge technology would mark a significant departure for the agency in this regard. But as we mentioned in footnote 12, Appeal at 24, ACP centrifuges represent a significantly increased regulatory problem over Urenco centrifuges. That’s why it is called *advanced* centrifuge technology. Urenco centrifuges might rotate with a rotor wall speed of 400 m/s (about 895 mph.), to yield 5 SWU per year<sup>11</sup>. So, if the ACP machines are 260 SWU / year machines, as we reasoned, and if they are much bigger than Urenco machines, then the risk is considerable. Moreover, if the casing is too weak to contain a failure, then the spacing of machines in the cascade will determine whether the “domino effect” gets stronger, or whether it dies down quickly – there’s a macroscopic, mechanical “chain reaction” effect just like with microscopic, nuclear fission, along with an analogous mechanical “criticality” concern.

This all introduces novel safety concerns, and it needs to be done correctly. Or not at all.

## Scioto Survey

The agency is obliged, by 42 USC §4332(2)(b), to “identify and develop methods and procedures, ... which will insure that presently unquantified environmental amenities and values may be given appropriate consideration in decisionmaking along with economic and technical considerations.”

In Section 3.14.2 (Appeal at 42 et seq.), we identify pages from the transcript in which we develop the idea of a comprehensive set of methods and procedures by which one may understand the base condition of the site, as well as the consequences of any planned or unplanned releases. These methods would not have been possible beyond five or ten years ago, when many of the regulations and guidelines were formulated. Twenty-first century problems deserve twenty-first century solutions. Data from a half-dozen locations or so, as presented in the ER, seems woeful.

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<sup>10</sup>Staff Reply at 6, quoting USEC Counsel’s quote from the ER.

<sup>11</sup>See, for example, <http://www.globalsecurity.org/wmd/intro/u-centrifuge.htm>.

## National Security

The ACP would have an enrichment capacity 15 to 30 times that of the controversial Natanz facility in Iran. USEC's argument<sup>12</sup> that Hobson's editorial is on "an entirely different subject" represents an entirely closed outlook. Establishing the ACP would, indeed, "send the wrong signal to the rest of the world<sup>13</sup>," and "risk rather than enhance our national security by encouraging other countries' nuclear weapons initiatives<sup>14</sup>," contrary to 10 CRF 70.40(b)(1).

## ACP Project Failure

Originally, the DOE abandoned ACP's precursor, the GCEP, in favor of AVLIS because AVLIS had cheaper capital and operational costs<sup>15</sup>. The prospectus for USEC's IPO featured AVLIS as the future of USEC. Then USEC abandoned AVLIS in favor of the ACP.

USEC suggests<sup>16</sup> that "PRESS erroneously inflates the cost of constructing the ACP." Work them out, you'll find that our figures are fine. Ignoring the tails disposition calculation that USEC objects to so vehemently<sup>17</sup>, you'll find that construction with centrifuges is much closer to our \$3 billion than the much-vaunted \$1.5 billion. USEC's annual profits of \$0.1 billion, undisputed in the USEC Reply, could only go down as the price of an SWU dropped as a consequence of the cheaper (than GDP) production method. The project would be very lucky to break even. USEC doesn't have a hope of funding the ACP.

## Conclusion

Contrary to the assertions of both USEC and the Staff, the Appeal identifies errors in the Board's Decision, it discusses the inappropriate use of case law, it establishes that the use of an applicant's prior violations history is without governing precedent, and it raises important questions of law, policy and discretion. Moreover, the Petition itself raises important questions of law and policy, and identifies a condition (unnecessary censorship) of the proceeding involving a prejudicial procedural error. It is in the public interest that PRESS' contentions be admitted.

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<sup>12</sup>USEC Reply at 10.

<sup>13</sup>Hobson, Petition at 57.

<sup>14</sup>Id.

<sup>15</sup>See, for example, <http://library.lanl.gov/cgi-bin/getfile?00416663.pdf> "Economic Perspective for Uranium Enrichment," which concludes that AVLIS is cheaper to set up and cheaper to run than centrifuge enrichment.

<sup>16</sup>USEC Reply at 4

<sup>17</sup>Id. at 5.

Respectfully submitted,

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Date: Dec 15, 2005

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**Certificate of Service**

I hereby certify that copies of the "Reply to USEC and NRC Staff Regarding PRESS Appeal (Continued)" ("PRESS Appeal (Continued) Reply") by Portsmouth/Piketon Residents for Environmental Safety and Security (PRESS) was served upon the persons listed below by email on the 15th of December, 2005, and by deposit in the United States mail on this day, the 16th of December, 2005.

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<sup>1</sup>Hardcopy only, no email.

Docket 70-7004: PRESS Appeal (Continued) Reply Service Certificate

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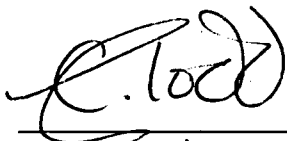
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