

Allen L. Lear Interim General Counsel & Secretary (301) 564-3349 phone (301) 564-3206 fax

February 8, 2008

VIA EDGAR AND HAND DELIVERY Mr. H. Roger Schwall Assistant Director Division of Corporation Finance Securities and Exchange Commission 100 F Street, NE Washington, DC 20549-7010

Re: Comments on USEC Inc. Periodic Reports

Dear Mr. Schwall:

By letter dated November 29, 2007 (the "Original Comment Letter"), the Staff of the Division of Corporation Finance (the "Staff") delivered to USEC Inc. ("USEC" or the "Company") the Staff's comments on USEC's Form 10-K for the fiscal year ended December 31, 2006 and proxy statement dated March 22, 2007 (the "Proxy Statement"). By letter dated December 19, 2007, USEC responded to the Original Comment Letter. By letter dated January 30, 2008 (the "Comment Letter"), the Staff delivered to USEC its follow-up comments. Set forth below are responses of USEC to the most recent comments of the Staff. The responses have been keyed to correspond to each of the comments of the Comment Letter. In our responses we have noted certain clarifications that we will provide in future filings. As applicable, these additional disclosures will be reflected in the proxy statement for our 2008 annual meeting of shareholders, which we expect to file in March 2008.

Schedule 14A

Filed March 22, 2007

1. Please confirm in writing that you will comply with the following comments in all future filings. Provide us also with an example of the disclosure you intend to use. Please understand that after our review of your responses, we may raise additional comments.

RESPONSE:

We will comply with the following comments in all future filings. Examples of disclosure we intend to use to the extent applicable are provided in our responses to the comments below.

USEC Inc. 6903 Rockledge Drive, Bethesda, MD 20817-1818 Telephone 301-564-3200 Fax 301-564-3201 http://www.usec.com

Executive Compensation

Compensation Discussion and Analysis

Setting Executive Compensation, page 21

2. We note your response to our prior comment 5. Please identify the durable goods manufacturing organization, the general manufacturing organization and the metals and mining organization for which the committee reviewed pooled compensation data.

RESPONSE:

With regard to our prior response, we would like to expand and clarify our explanation of the survey data we used for benchmarking executive compensation. Our previous response may have unintentionally given the impression that the Compensation Committee reviewed pooled compensation data from a single general manufacturing organization and a single metals and mining organization. In fact, the Compensation Committee reviews pooled compensation data from surveys that involve a number of companies. The surveys are commercially available published books that are compiled and sold by Watson Wyatt Worldwide and Mercer LLC. These firms aggregate data from thousands of participants and the findings are segregated by, for example, revenue level, number of employees, and industry. In conducting market benchmarking for us, Watson Wyatt consultants gathered competitive market data from these surveys with scope (size, industry, etc.) matched to USEC as closely as possible for each position. The surveys do not disclose specific companies within each survey cut, or data tranche. For example, a particular survey cut may indicate that it is based on 50 durable goods manufacturing organizations with 50 incumbents and median revenue of \$1.3 billion, none of which are specifically disclosed. Therefore, it is not possible to identify specific companies in the survey data as a durable goods manufacturer or a general manufacturer and no specific durable goods manufacturing organizations, general manufacturing organizations, or metals and mining organizations were considered by the Compensation Committee.

For benchmarking against specific companies, we use a peer group and the companies that made up our peer group were disclosed on page 21 of our Proxy Statement.

In an attempt to make this clearer, an example of revised disclosure for 2006 would be as follows:

"As a result of the limited nature of the Peer Group data, our Compensation Committee also used commercially available survey data provided to it by Watson Wyatt. This survey data included the 2005/2006 Watson Wyatt Data Services Top Management Report, the 2006 Mercer Executive Compensation Survey, and a proprietary Watson Wyatt large company compensation survey. This survey data includes pooled compensation data from many companies and the findings are segregated by, for example,

revenue level, number of employees, and industry. Using survey cuts of durable goods manufacturing organizations and general manufacturing organizations with comparable annual revenues, the Compensation Committee reviewed pooled compensation data for positions similar to those held by each named executive officer. In the case of Messrs. Welch, Barpoulis and Hansen, the Compensation Committee also used a survey cut of metals and mining organizations with comparable annual revenues."

Elements of Executive Compensation

Total Direct Compensation

Base Salary, page 23

3. We note your response to our prior comments 6 and 7. In regard to your statement that disclosure of each individual named executive officer's specific detailed objectives are confidential and proprietary within the meaning of Instruction 4 to Item 402(b) provide the further disclosure required by that Instruction. Specifically, discuss how difficult it will be for the executive to achieve the undisclosed target levels.

For each named executive officer disclose the target they achieved. We do not agree that disclosure of this information would not be meaningful to investors.

Finally, provide us with the actual disclosure you propose to use in response to this comment and our prior comments 6 and 7. Included in your response should be clarification that there are no individual performance factors in addition to, and separate from, the five factors enumerated in the proxy statement.

RESPONSE:

The 2006 key performance objectives were all designed to achieve the Company's strategic business plan and accordingly were designed to be achievable, but to require a substantial effort and initiative on the part of the individual named executive officers. Each of the named executive officers' key performance objectives were designed to be difficult to achieve and to challenge the executive.

During 2006, the named executive officers met these challenges and the Compensation Committee determined that achievement levels for each of the named executive officers was as follows: Mr. Welch 99%; Mr. Barpoulis 102%; Mr. Hansen 100%; Mr. Sewell 105%; Mr. Van Namen 105%.

An example of revised disclosure for 2006 incorporating your comment and your prior comment 7 would be as follows (we have highlighted those portions that represent new disclosure from what we provided previously for your convenience):

"The 2006 key performance objectives for the Chief Executive Officer and the other named executive officers included objectives aimed at: (1) implementing mitigating actions to address increased electric power costs; (2) meeting milestones relating to the Company's American Centrifuge project under a 2002 agreement between the U.S. Department of Energy and the Company, and validating performance and economics of the American Centrifuge project; (3) maintaining a stable supply of Russian highly enriched uranium; (4) developing and implementing a revised strategic plan; and (5) developing and executing a comprehensive communications plan. For individual named executive officers (other than the Chief Executive Officer), their particular objectives were a more detailed subset of these five objectives with a focus on such named executive officer's functional area. For example, Mr. Barpoulis' specific objectives as Chief Financial Officer generally related to financial and accounting matters; Mr. Hansen's specific objectives as General Counsel generally related to legal, corporate governance and corporate communications matters; Mr. Sewell's specific objectives as Senior Vice President American Centrifuge and Russian HEU generally related to operations and program management matters; and Mr. Van Namen's specific objectives as Senior Vice President, Uranium Enrichment generally related to uranium enrichment operations and marketing and sales matters. There are no individual performance factors in addition to, and separate from, the five factors listed above. The weight of each of the key performance objectives varied by individual with any one objective being weighted between 5% and 30%.

The 2006 key performance objectives were all designed to achieve the Company's strategic business plan and accordingly were designed to be achievable, but to require a substantial effort and initiative on the part of the individual named executive officers. Each of the named executive officers' key performance objectives were designed to be difficult to achieve and to challenge the executive.

The Compensation Committee reviews and approves the achievement level and incentive payment for each named executive officer under the Annual Incentive Program. With respect to 2006 individual key performance objectives, the Compensation Committee determined achievement levels for the

named executive officers ranging from 99% to 105% <u>as follows: Mr. Welch 99%; Mr. Barpoulis 102%;</u> <u>Mr. Hansen 100%; Mr. Sewell 105%; Mr. Van Namen 105%. As described on page 24 of the proxy</u> <u>statement, in determining annual incentive awards for 2006, these achievements levels were weighted</u> <u>45% and were combined with the corporate financial performance achieved of 140.2% (weighted</u> <u>55%). For the 2006 performance year, the Compensation Committee approved annual incentive</u> <u>payouts to the named executive officers of between approximately 122% and 124% of target as</u> <u>follows: Mr. Welch 122% of target; Mr. Barpoulis 123% of target; Mr. Hansen 122% of target; Mr.</u> <u>Sewell 124% of target; Mr. Van Namen 124% of target.</u>"

If you have any further questions or comments, please contact me at (301) 564-3349.

Sincerely,

/s/ Allen L. Lear

Allen L. Lear Interim General Counsel and Secretary