



**ENERGY  
NORTHWEST**

# Tails Fuel Procurement Transaction

Executive Board

May 10, 2012

# Agenda

- ✦ Kick-off / Mark Reddemann - 5 Minutes
- ✦ Paducah Site Visit / Dale Atkinson - 5 Minutes
- ✦ Approval Conditions / Brent Ridge - 5 Minutes
- ✦ Review Approval Conditions and Actions Taken Since April Board Meeting / Team - 1.5 hours
- ✦ BPA Perspective / Greg Delwiche - 5 Minutes
- ✦ CEO Perspective / Mark Reddemann - 5 Minutes
- ✦ Question and Answer Session / Dale Atkinson - 45 Minutes
- ✦ Board Decision / Sid Morrison

# Paducah Plant Site Visit (*Dale Atkinson*)





# Paducah Plant Site Visit



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# Paducah Plant Site Visit



# Paducah Plant Site Visit

## ✦ Observations:

- Stable experienced workforce.
- Significant redundancy and excess capacity.
- Continuous operations for over 50 years.
- Good maintenance practices and large number of spares staged.
- Good morale.

# Approval Conditions (*Brent Ridge*)

1. Evaluate the financial model with a sensitivity analysis to understand EN's cost benefit (risk) trade off.
2. No additional negative information regarding counter party financial condition.
3. Clarification and understanding of financial relationship with banker. Contact JP Morgan to get their opinion.
4. Risk of loss protection for onsite materials.
5. No change in payment conditions related to TVA power sales and USEC deliveries.
6. No liens on the USEC material sold to Energy Northwest.

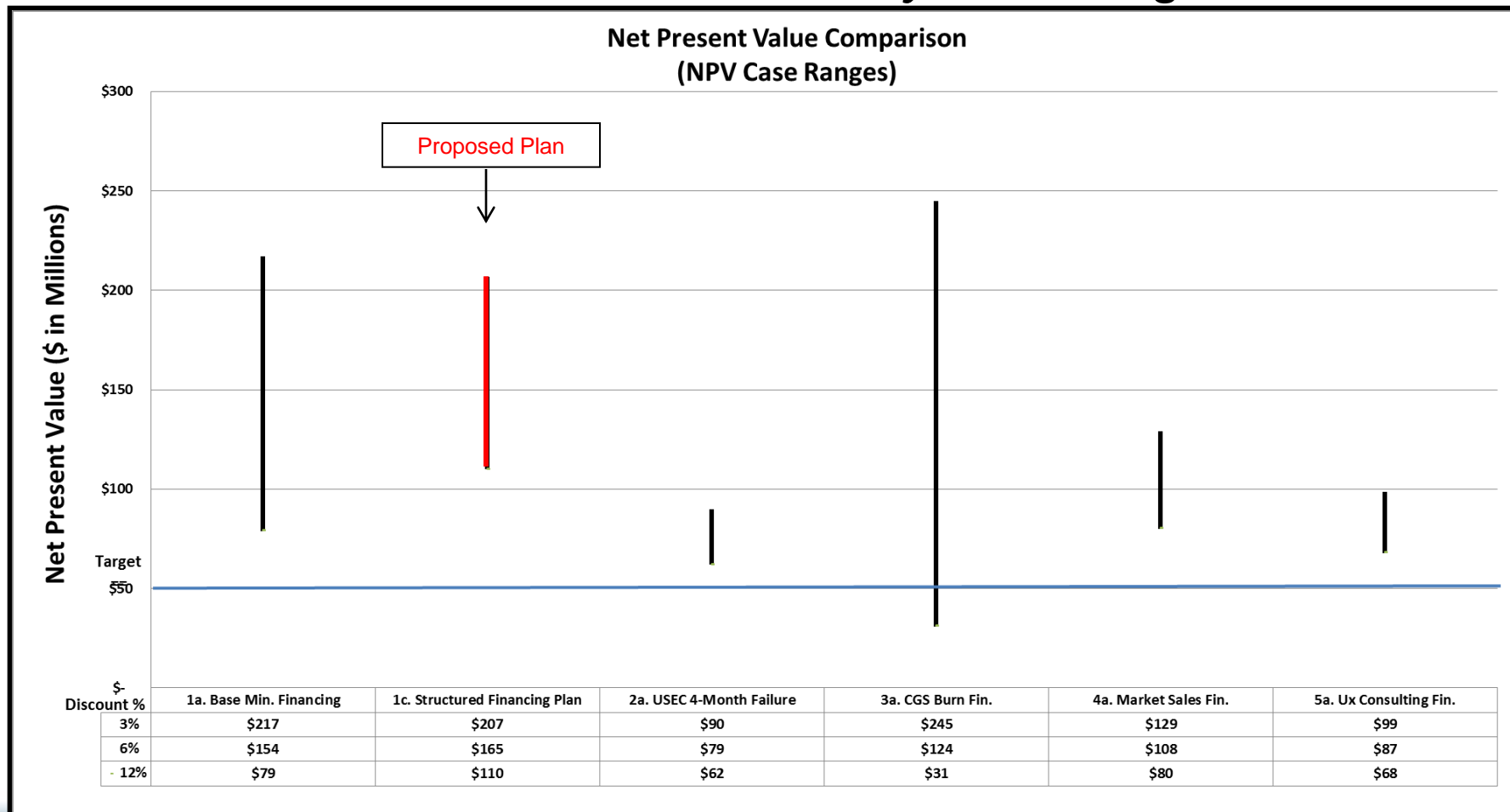


# Approval Conditions (cont.)

7. No material changes to the agreements that adversely impact EN. Explore modification to program to improve the risk benefit trade-off for Energy Northwest.
8. Review impacts if TVA backs out and Columbia gets all the fuel.
  - Include selling the material in the market with projected market pricing
9. Include upside and downside risk of not doing the transaction.
10. Independent consultant review of EN's transaction.
  - Include evaluation of worst case scenario.
11. Define how the transaction will be managed once approved.
12. Define how this will not divert resources from Columbia performance improvement efforts.

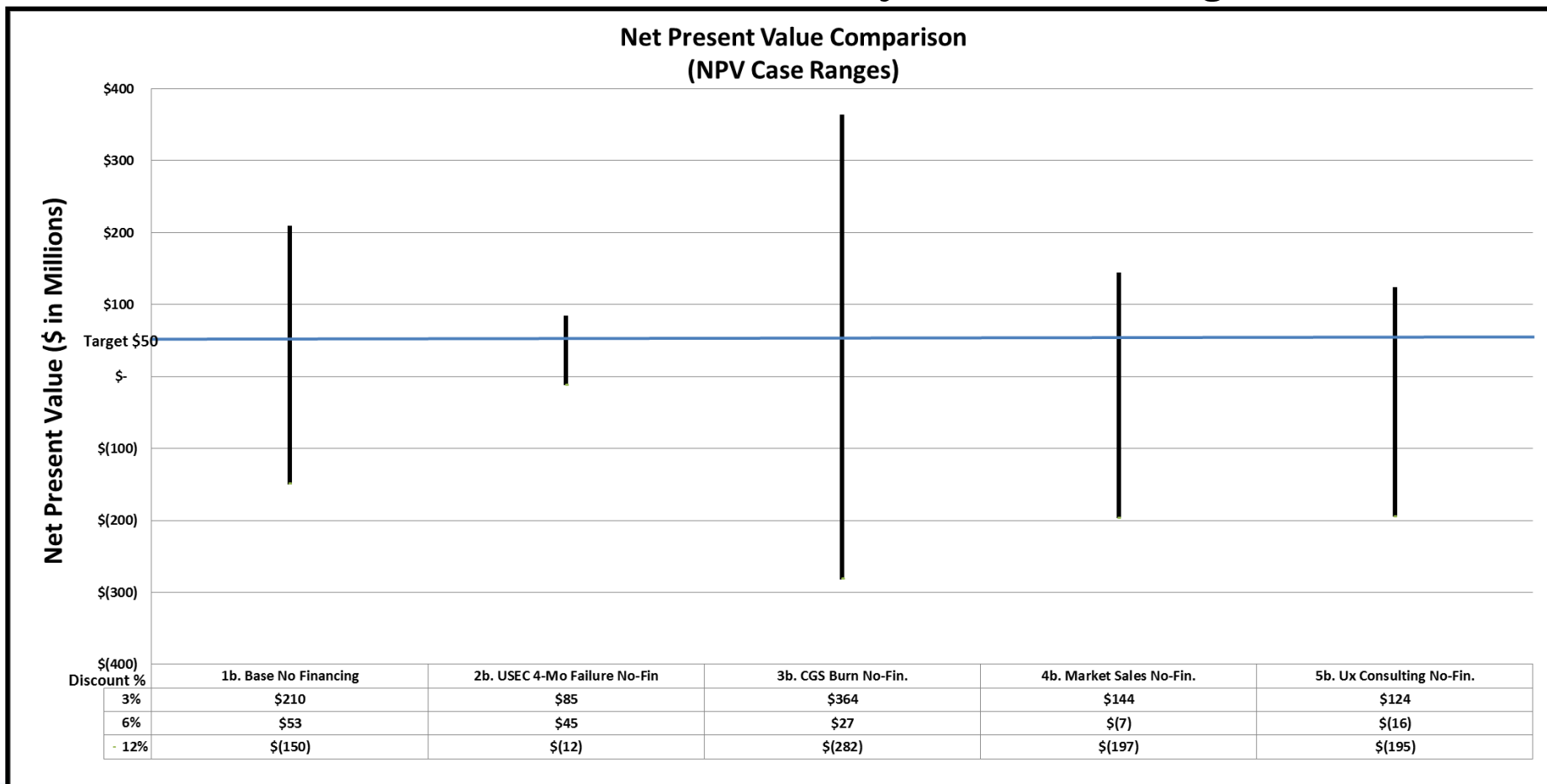
# 1. Evaluate the financial model with a sensitivity analysis to understand EN's cost benefit (risk) trade off. (*Brent Ridge*)

## ***Financial Model Sensitivity - Financing***



# 1. Evaluate the financial model with a sensitivity analysis to understand EN's cost benefit (risk) trade off. (*Brent Ridge*)

## ***Financial Model Sensitivity - No Financing***



## 2. No additional negative information regarding counter party financial condition. (*Brent Ridge*)

- ✦ Reviewed USEC cash flow statement - BPA/EN Finance Staff.
- ✦ Renewed a \$235 million term loan on 3.12.12 with J.P. Morgan.
- ✦ PWC Audit: USEC Quarterly Financial Statement (10Q) - Issued on 5.2.12.
- ✦ Consultant Report: USEC will be able to sustain a financially viable condition over 12 months beginning in June 2012 if the 5.0 million SWU tails deal is accomplished.
- ✦ Solvent even if American Centrifuge Project discontinues.
- ✦ **Conclusion: No additional negative financial information was found.**



### 3. Clarification and understanding of financial relationship with banker. USEC Liquidity Issue. (*Brent Ridge*)

- ✦ J.P. Morgan believes USEC will be around for the next 2-3 years, but probably has a different risk profile for them in a longer term.
- ✦ Renewed a \$235 million term loan on 3.12.12.
  - \$85 million term loan has a minimum interest rate of 10.25%.
  - \$150 million revolving credit have a minimum interest rate of 6.5%.
- ✦ J.P. Morgan believes USEC is credit worthy in the short-term because:
  - Inventory and contracts
  - J.P. Morgan has a senior lien on USEC's assets
    - Verified - EN Material will be lien free

## 4. Risk of loss protection for EN Fuel Stored on DOE site. (*Brent Ridge*)

### ✦ Risk of Loss insurance is available:

- \$100 million limit
- 30 day quote
- \$1 million deductible (\$5 million under review)
- \$216,000 annual premium

### ✦ Insurance Funding: Would be included in project costs and could be funded from bond sale.

### ✦ Insurance Duration: When fuel is on DOE site (2013-2022).

### ✦ **Conclusion: Low probability of occurrence and is not an industry practice to procure risk of loss insurance. We will not purchase insurance.**

5. No change in payment conditions related to TVA power sales and USEC deliveries. *(Bob Dutton)*

- ✦ Payment is on delivery of materials.
- ✦ **Confirmed: No change in payment conditions.**

6. No liens on the USEC materials/inventory sold to Energy Northwest. *(Bob Dutton)*

- ✦ **Confirmed: Contract language.**

7. No material changes to the agreements that adversely impact EN. Explore modification to program to improve the risk benefit trade-off for Energy Northwest. (*Bob Dutton*)

✦ Improvements to strengthen EN risk position:

- Performance Bond: \$500k to \$1m cost for \$100m in coverage.
  - TVA has agreed to Performance Bond.
  - EN recommends to purchase Performance Bond.
- Eliminated TVA 2-year opt out option, if all TVA reactors are shutdown.
- Eliminated TVA's right to only purchase their portion of the fuel produced with their power.
- Change to TVA Revenue Flow: \$92m moved forward

✦ **Conclusion: Risks Mitigated - No material changes.**



## 8. Review impacts if TVA backs out and Columbia gets all of the fuel. (*Dale Atkinson*)

### ✦ Scenario 3a: CGS 100% Consumption

- CGS fuel supply through 2038
- \$31m NPV at 12% Discount Rate

### ✦ Scenario 5a: Ux Consulting Projected Market Sales

- CGS keeps original committed fuel supply and consumes through 2028 and sells TVA's allocated portion of fuel into market on the same delivery schedule.
- \$68m NPV at 12% Discount Rate

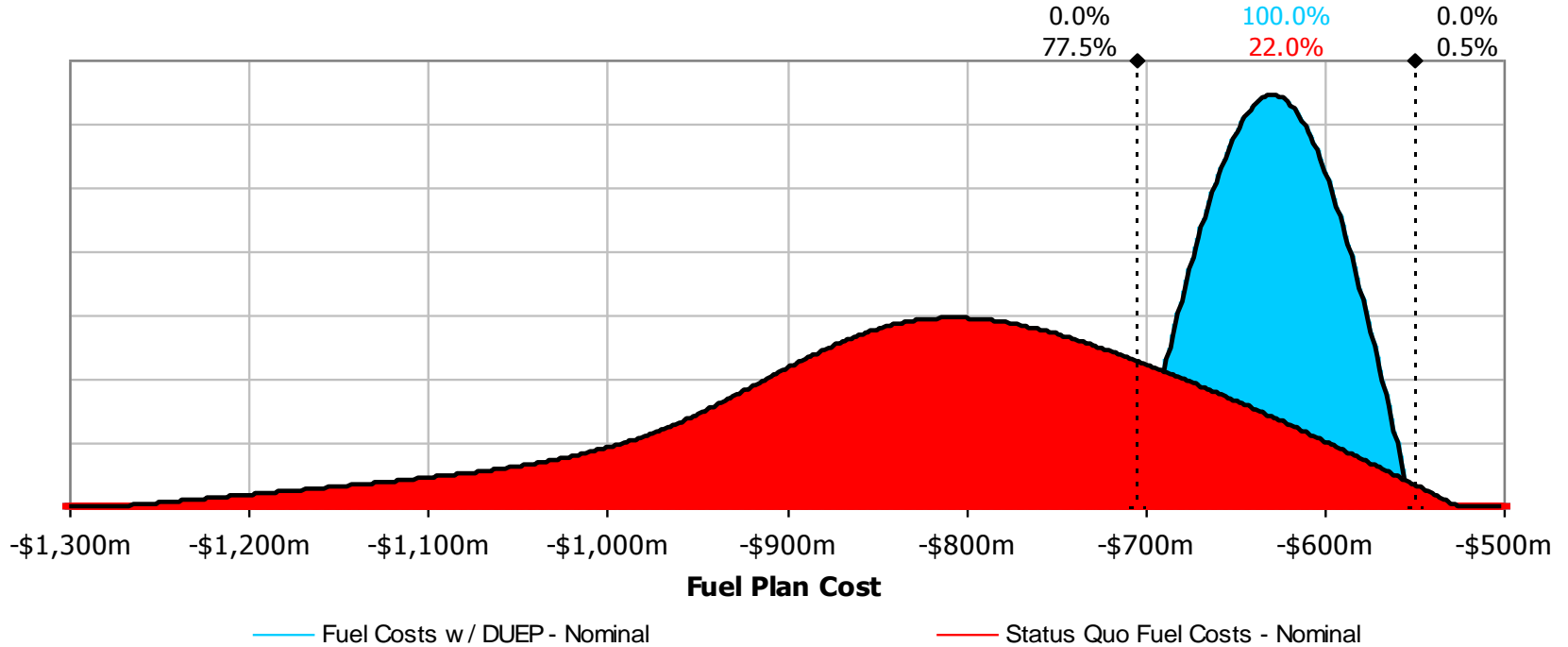
## 9. Include upside and downside risk of not doing the transaction. (*Marcus Harris*)

- ✦ Random Simulations of Fuel Cost Uncertainty, 2013-2028.
- ✦ Random Simulations of DUEP Benefits, 2013-2028.

# Random Simulations of Fuel Cost Uncertainty , 2013 - 2028

With and without the DU Enrichment Project

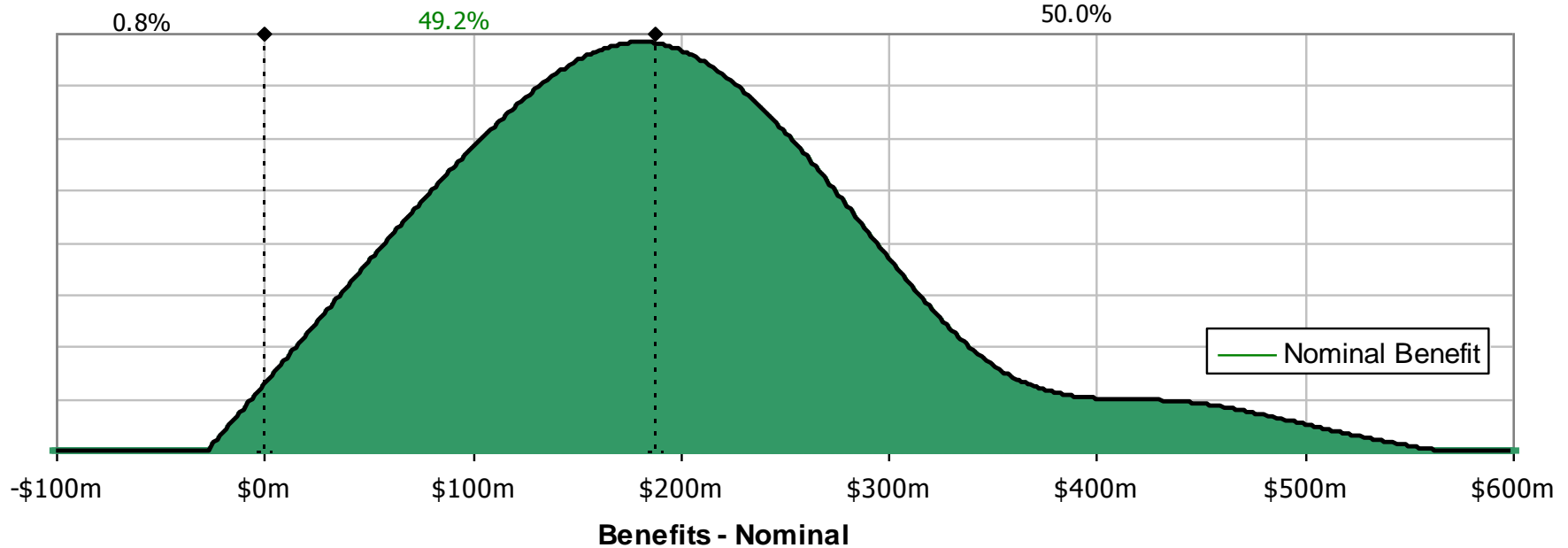
**Nominal** costs over 16 years (smaller numbers better)



**Conclusion: FMP modified for DUEP has much lower expected value costs, and much less statistical risk (narrower distribution of results ~ smaller Std Dev.)**

### Random Simulations of DUEP Benefits, 2013 - 2028

Game-by-game calculation of **Nominal** FMP w/DUEP costs less **Nominal** 2012 FMP costs



**Conclusion: there are very few simulated price trajectories ( 0.8%) in which the 2012 FMP is cheaper than the DUEP-modified FMP, and those savings are small. In nearly all price trajectories, the DUEP creates savings, and generally quite large.**



## 10. Independent consultant review of EN's transaction. (*Dale Atkinson*)

- ✦ Ux Consulting Selection

- ✦ Consultant's Report:

- Key Findings and Recommendations
- Q&A

11. Define how the transaction will be managed once approved. (*Dale Atkinson*)

✦ Management Oversight Plan Under Development

- Independent onsite verification
- Independent assay verification
- Use of third party oversight

12. Define how this will not divert resources from Columbia performance improvement efforts. (*Dale Atkinson*)

✦ 3<sup>rd</sup> Party Oversight.

- ✦ Scott, Eric and Pam are not involved in plant operations.

# BPA Perspective

# CEO Perspective



# Q&A

# Decision

EN Recommends the Executive Board approve the following resolutions:

1. Award of a contract for enrichment services to USEC, Inc. not to exceed \$706 million.
2. Agreement with DOE for a combined value not to exceed \$5 Million.
3. A contract for the sale of a portion of the uranium received to Tennessee Valley Authority for approximately \$731 Million.
4. Line of Credit for \$200 million from Bank of America.