Department of Energy

Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208-3621

PUBLIC AFFAIRS

August 29, 2012

In reply refer to: DK-7

Dan Seligman, Attorney at Law
Columbia Research Corporation
P.O. Box 99249
Seattle, WA 98139

FOIA #BPA-2012-01700-F

Dear Mr. Seligman:

This is a partial response to your request for information that you made to the Bonneville Power Administration (BPA) under the Freedom of Information Act (FOIA), 5 USC § 552.

You have requested:
1. A copy of the agreements between Energy Northwest, TVA, the U.S. Enrichment Corp. and the Department of Energy (and/or BPA).

Response:
BPA has confirmed that the agreement between Energy Northwest and DOE has been made available to you in it's entirety under the Washington State Public Records Act. BPA has no additional records.

The request for the TVA and the U.S. Enrichment Corp. agreements has been forwarded to the Department of Energy (DOE) FOIA Office for resolution. BPA has forwarded all of its responsive documents to the DOE to include in their final determination.

You have requested:
2. A copy of the economic analysis that shows the fuel contract(s) will generate $80 million in rate case savings from 2014 to 2017 and potentially many more millions in savings through 2028.

Response:
Your request for a copy of the economic analysis that shows the value of the fuel contract(s) in coming years has been forwarded to the Department of Energy (DOE) FOIA Office for resolution. BPA has forwarded all of its responsive documents to the DOE to include in their final determination.

You have requested:
3. BPA's notice to Energy Northwest of the Administrator's approval or disapproval of the fuel contracts, pursuant to the net-billing agreement for the Columbia Generating Station.

Response:
BPA has provided the responsive documents in their entirety on the enclosed CD.

The DOE FOIA Office is still in the process of identifying the appropriate DOE Authorizing Official to assign the remaining parts of your request to. As soon as the Authorizing Official has been named, Ms. Winn will contact you to provide the name and contact information for that individual.

BPA will assess fees when this request is formally closed and/or transferred.

I appreciate the opportunity to assist you. Please contact Kim Winn, Communications Specialist, at 503-230-5273 with any questions about this letter.

Sincerely,

/s/Christina J. Munro
Christina J. Munro
Freedom of Information/Privacy Act Officer

EXECUTIVE BOARD

RESOLUTION NO. 1736

A RESOLUTION AUTHORIZING THE EXECUTION OF AN AGREEMENT WITH THE UNITED STATES DEPARTMENT OF ENERGY FOR DEPLETED URANIUM HEXAFLORIDE, A CONTRACT WITH USEC, INC. FOR ENRICHMENT SERVICES, AND A CONTRACT WITH TENNESSEE VALLEY AUTHORITY FOR THE SALE OF ENRICHMENT SERVICES AND URANIUM – COLUMBIA GENERATING STATION

The Chief Executive Officer reports that it is necessary to procure nuclear material on a long term basis; and

The Chief Executive Officer further reports that the United States Department of Energy (DOE) has a significant quantity (approximately 700,000 metric tons) of depleted uranium hexafluoride (DUF_6) which is scheduled for permanent disposal. A portion of the DUF_6 has enough remaining U^{235} that it can be cost effectively enriched to be suitable for use by Columbia Generating Station (Columbia). In 2005, DOE and Energy Northwest jointly developed a demonstration Pilot Project to process a portion of the DUF_6 into fuel for Columbia, which was a complete success, and DOE has approached Energy Northwest regarding interest in another depleted uranium program; and

The Chief Executive Officer further reports that USEC, Inc. (USEC) is in a unique position to support the program through enrichment of the DUF_6 because it leases the Paducah, Kentucky enrichment plant (Paducah Plant) from DOE, and the DUF_6 is physically located on that site. The age and type of storage cylinders makes shipping them impractical. Further, DOE has the goal of keeping the Paducah Plant operational to delay decommissioning costs that are not currently in its approved budget and the Paducah Plant is expected to close by the end of May 2012 unless additional production of the depleted uranium is in place. USEC can produce 482 metric tons (MTU) of enriched uranium product (EUP) from the depleted uranium and to make the proposed program viable, the entire 482 MTU of EUP must be sold. EUP consists of Separative Work Units (SWU) or enrichment services and natural uranium; and

The Chief Executive Officer further reports that with the current federal surplus guidelines, DOE has limited the transaction to only two federal agencies, Tennessee Valley Authority (TVA) and Bonneville Power Administration, which would benefit from savings to Energy Northwest. Currently, TVA is not willing to purchase or to pay for a portion of the material prior to 2015, but TVA can purchase the material beginning in 2015 to meet open fuel needs for its nuclear plants; and

The Chief Executive Officer further reports that it is beneficial to Energy Northwest to acquire the EUP from USEC to ensure an adequate and secure supply of EUP for Columbia, to minimize exposure to fluctuations in market prices, and to procure EUP at a rate substantially lower than current market rates. Further, Energy Northwest has determined it can use the 482 MTU of EUP for Columbia through 2038 (with the expectation that Columbia's operating license will be extended to 2043). To improve the economic value of the program and to provide a balance in ratepayer equity, Energy Northwest desires to sell a portion of the EUP and SWU to TVA with deliveries beginning in 2015. Energy Northwest will retain enough material for Columbia's fuel needs through 2028. The EUP purchased from USEC will be securely stored until it is used by Columbia or transferred to TVA; and

The Chief Executive Officer further reports that based on the foregoing, Energy Northwest will pay USEC, Inc. an estimated amount of $695-706 million for enrichment services contained in approximately 482 MTU of 4.4 weight percent EUP, and will pay DOE an amount not to exceed $5 million for handling, delivery, and storage fees for the DUF_6 and EUP. Energy Northwest will sell to TVA approximately 2.9 million Separative Work Units and 1675 metric tons of uranium contained in the EUP produced by the program for approximately $731 million over calendar years 2015 to 2022; and

The Chief Executive Officer further reports that TVA carries very strong credit ratings: Aaa (Stable) by Moody's, AA+ (Negative) by S&P, and AAA (Negative) by Fitch; and

The Chief Executive Officer further reports that this integrated transaction has arisen by the confluence of unique facts and circumstances that are each essential to the transaction and that the transaction and opportunity is possible only if Energy Northwest acquires all of the material tendered by USEC; and

The Chief Executive Officer further reports that the program will result in reduced nuclear fuel costs for Energy Northwest with projected savings anticipated to exceed $50 million; and

The Chief Executive Officer further reports that the fuel purchase will increase its cash requirements in the near-term and it is anticipated that a bond financing will be necessary to efficiently fund Energy Northwest's expenditures, including but not limited to the program, and that approval of the bonds will be brought to the Executive Board; and

Having reviewed the foregoing, the Executive Board finds that the execution of a contract with USEC, Inc. for supply of enrichment services and the execution of an agreement with DOE for the supply of DUF_6 and storage of EUP and the sale of enrichment services and uranium to TVA, is in the best interests of Energy Northwest and the electric ratepayers of the Pacific Northwest; NOW, THEREFORE,

IT IS RESOLVED that the Chief Executive Officer or his designee is authorized and directed to execute a contract for enrichment services with USEC, Inc. and an agreement with DOE for a combined value not to exceed $711 million and to execute a contract with Tennessee Valley Authority for the sale of uranium and enrichment services for a value of approximately $731 million, subject only to the contractual rights of the Bonneville Power Administration and the Participants' Review Board. *

ADOPTED by the Executive Board of Energy Northwest this 10th day of May, 2012.

Chairman

ATTEST:

Secretary

APPROVED AS TO FORM AND LEGALITY:

Counsel

*further Conditions:

1) TVA to provide surety/performance bond for $100,000,000. — or agree to raise it's limit of liability to $100,000,000.

2) TVA shall remove as a basis for termination the shut down of any reactors currently in operation.

Department of Energy

Bonneville Power Administration
Mail Drop 1399
P.O. Box 968
Richland, Washington 99352-0968

POWER SERVICES

May 15, 2012

In reply refer to: PGC/Richland

Mr. D. K. Atkinson, Vice President
Employee Development/ Corporate Services
Energy Northwest M/D PE 03
P. O. Box 968
Richland, WA 99352-0968

Dear Mr. Atkinson:

In reference to your letters, "Contract 335903 with U.S. Department of Energy for the Transfer of Depleted Uranium Hexafluoride and Storage of Low Enriched Uranium," "Contract 335900 with United States Enrichment Corporation (USEC) for Enrichment Services" and "Contract 335901 with the Tennessee Valley Authority for Sale of Uranium and Enrichment Services" all dated May 7, 2012, and received electronically on May 7, 2012, the Bonneville Power Administration (BPA) does not disapprove execution of the proposed contracts.

The proposed action would authorize Energy Northwest (EN) to execute contracts with:

- The Department of Energy (DOE) (C335903) for the delivery of depleted uranium hexafluoride (DUF_6), pickup of residual DUF_6, and pickup and storage of low enriched uranium (LEU) for a not to exceed amount of $5.0 million.
- A second contract with the USEC (C335900) to supply 4,440,000 separative work units (SWU) to help produce approximately 482 MTU of 4.4% enriched uranium from DOE supplied DUF_6. The total cost of this contract is not to exceed $706.0 million.
- A third contract with the Tennessee Valley Authority (TVA) (C335901) for the sale of SWU and uranium contained in LEU over EN fiscal years 2015-2022 for an amount of approximately $732.0 million.

BPA and EN have cooperated and worked together closely as this tails program has been developed. As the program is now implemented, this cooperation and communication will need to continue as decisions are made regarding funding and financing. Our desire is to work together to solve problems that may impact financing and/or cash flows. To facilitate this working relationship, we request that for the duration of the USEC contract, you provide BPA with a timely monthly summary of the program status, including but not limited to delivery schedules, cylinder deliveries, processing, loading, payments, etc., as well as information regarding any issues that have arisen. We request that a similar program summary be provided for the TVA contract on a quarterly basis for the duration of that contract.

BPA wishes to thank EN and its staff for the diligent work that has gone into developing and implementing this proposal. The results will provide a long term benefit to ratepayers of the Pacific Northwest through reduced nuclear fuel costs.

Sincerely,

Andrew J. Rapacz

Andrew J. Rapacz, Manager
Contract Generating Resources

cc:
Ms. Lynne A. Pagel, Energy Northwest - PE10
Ms. Linda M. Parrella, Energy Northwest - PE10
Mr. Scott M. Praetorius, Energy Northwest - PE10

bcc:
Official File – PGC (PM-14-23) (Columbia)
ERMS: http://bpaweb/services/erms/PM/14/23/PGC%20Records/Forms/AllItems.aspx

PEBentrup:dc:5348:05/15/12 (W:\Office\Briefing Papers\CY 2012 papers\a C335900, CGS Uranium tails bb - final.doc)

Reviewed: AJR for PEB 5/15/12
PEB/date

Department of Energy

Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208-3621

PUBLIC AFFAIRS

October 4, 2012

In reply refer to: DK-7

Dan Seligman, Attorney at Law
Columbia Research Corporation
P.O. Box 99249
Seattle, WA 98139

FOIA #BPA-2012-01700-F

Dear Mr. Seligman:

This is a final response to your request for information that you made to the Bonneville Power Administration (BPA) under the Freedom of Information Act (FOIA), 5 USC § 552.

You have requested:
1. A copy of the agreements between Energy Northwest, TVA, the U.S. Enrichment Corp. and the Department of Energy (and/or BPA).

Response:
It is our understanding that you have received, or are receiving, the above agreements through the Washington State Public Records Act through Energy Northwest. Therefore BPA will not need to respond further to this item.

You have requested:
2. A copy of the economic analysis that shows the fuel contract(s) will generate $80 million in rate case savings from 2014 to 2017 and potentially many more millions in savings through 2028.

Response:
In a conference call with the Department of Energy Office of General Counsel (DOE OGC) October 3, 2012, it was determined that DOE has no responsive records to this item of your request. DOE OGC requested that BPA supply what responsive documents that were found directly to you.

The responsive documents are released in their entirety.

You have requested:
3. BPA's notice to Energy Northwest of the Administrator's approval or disapproval of the fuel contracts, pursuant to the net-billing agreement for the Columbia Generating Station.

Response:
BPA provided the responsive documents in their entirety in a partial release dated August 29, 2012.

Pursuant to 10 CFR 1004.8, if you are dissatisfied with this determination, or the adequacy of the search, you may appeal this FOIA response in writing within 30 calendar days of receipt of a final response letter. The appeal should be made to the Director, Office of Hearings and Appeals, HG-1, Department of Energy, 1000 Independence Avenue, SW, Washington, DC 20585-1615. The written appeal, including the envelope, must clearly indicate that a FOIA Appeal is being made.

Due to the length of time taken to respond to you there are no fees associated with this request.

I appreciate the opportunity to assist you. Please contact Kim Winn, Communications Specialist, at 503-230-5273 with any questions about this letter.

Sincerely,

/s/Christina J. Munro
Christina J. Munro
Freedom of Information/Privacy Act Officer

Enclosures: EB mtg 4-2012 (Ridge - Uranium Tails).pdf
Fuel Executive Board Presentation - Final.pdf

ENERGY NORTHWEST

POWERFUL SOLUTIONS

2012 Uranium Enrichment Program

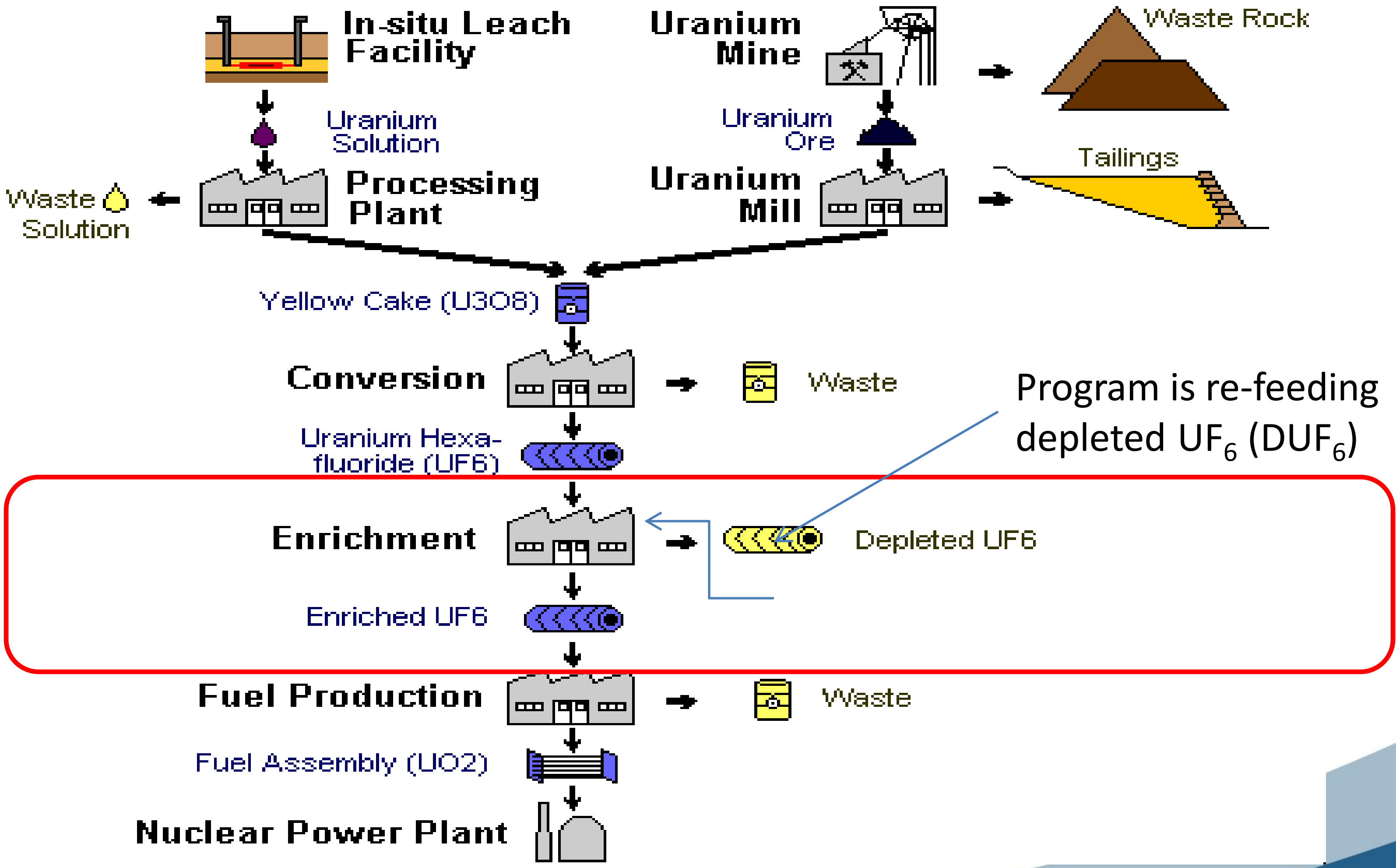
April 26, 2012

Overview

- Purpose – Seek Executive Board approval for Tails Program contracts and initial financing
- Program Summary – Atkinson/Rockett
- Financial Requirements for Energy Northwest (EN) and Bonneville Power Administration (BPA) – Ridge
- Program Constraints – Rockett
- Financial Decision Model (Base Case)- Praetorius
- Risks and Legal Issues – Reyff/Dutton
- Plan of Finance-Bond Sale – Armatrout
- Overview of contracts – Rockett
- Recommendations and Approval Conditions - Ridge
- Next Steps - Ridge

ENERGY NORTHWEST

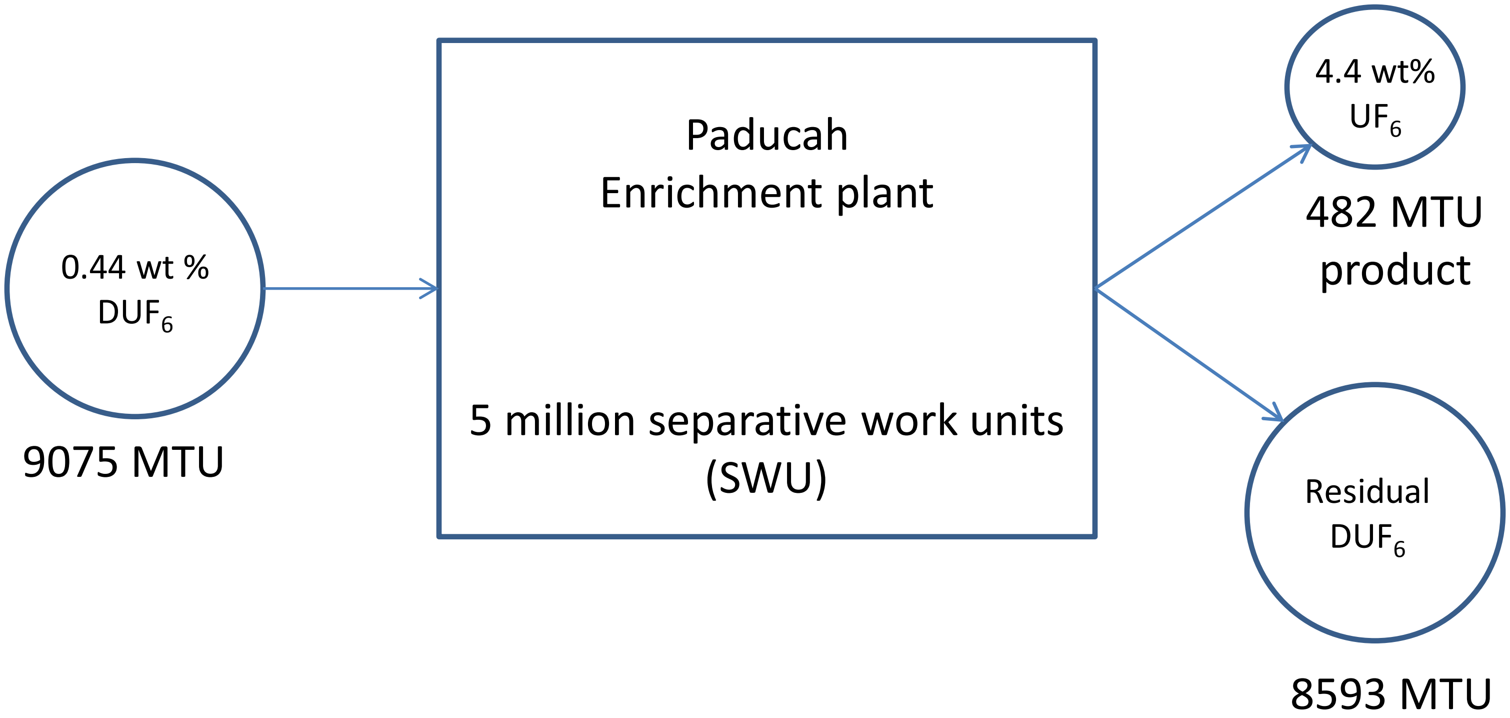
Nuclear Fuel Cycle



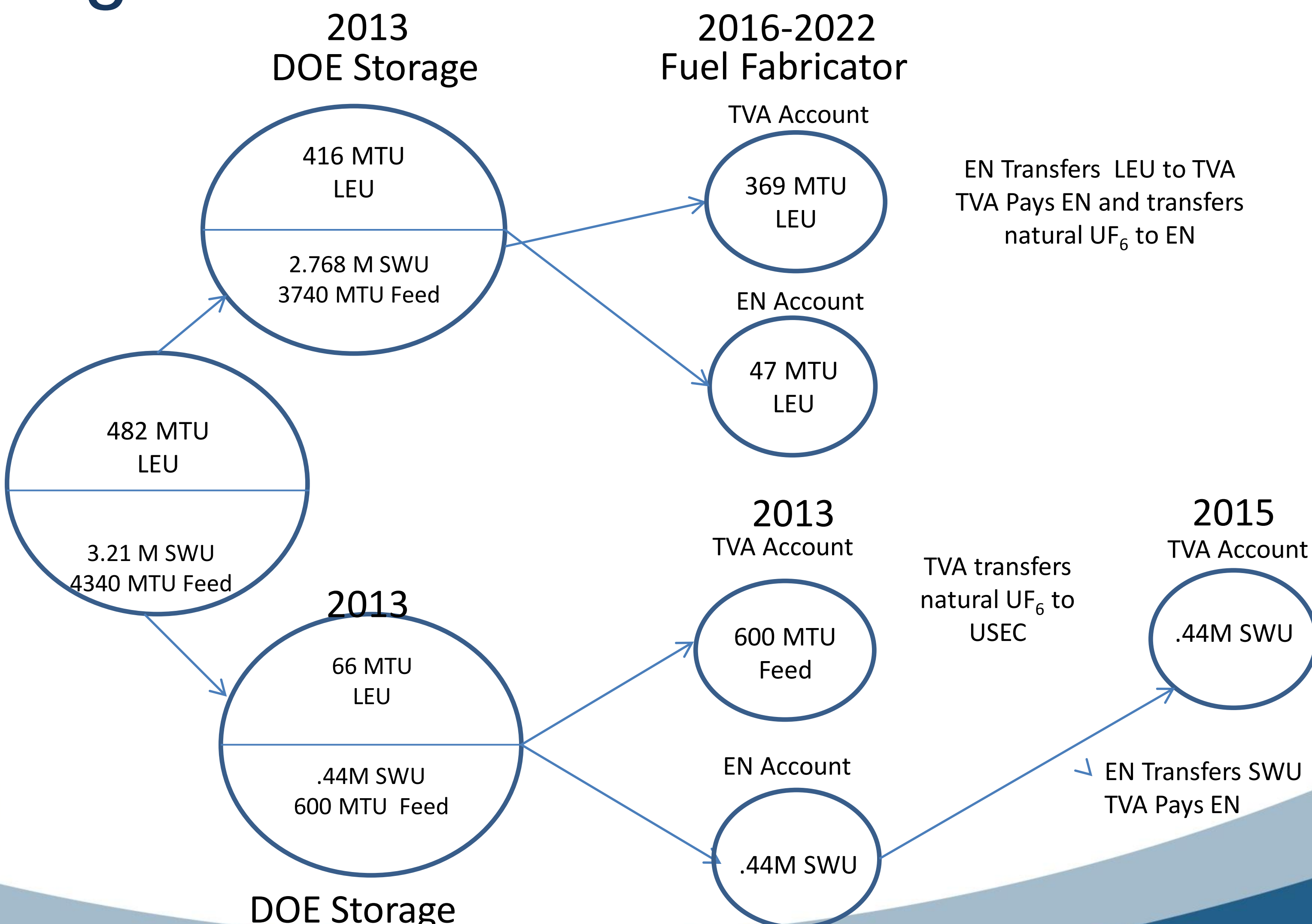
Program is re-feeding depleted UF_6 (DUF_6)

ENERGY NORTHWEST

Program Processing

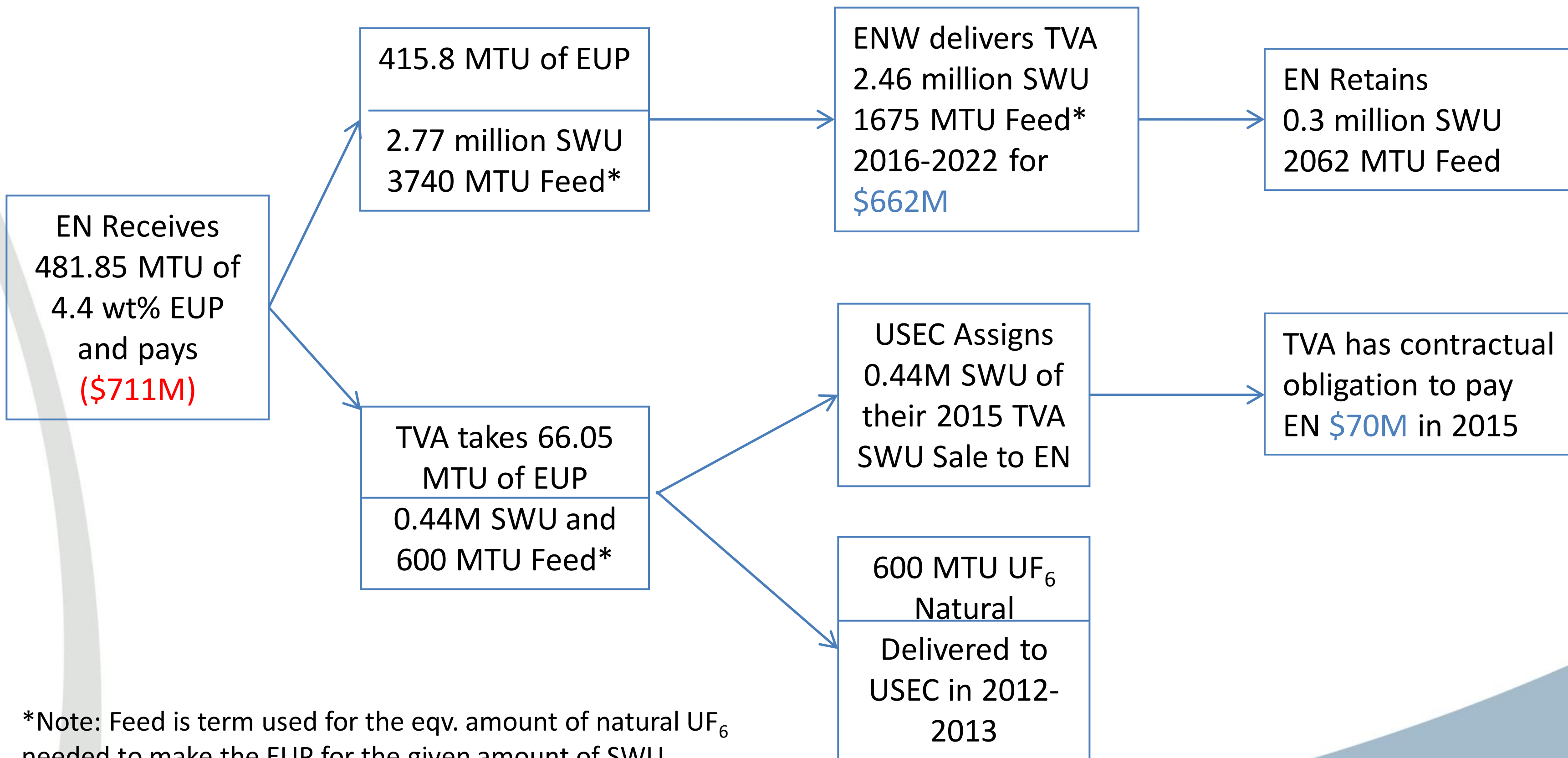


Program Material Flow



Program Description – Cash

Enriched Uranium (EUP) Produced **Disposition**



*Note: Feed is term used for the eqv. amount of natural UF_6 needed to make the EUP for the given amount of SWU

Financial Requirements

- At least $50 million in Net-Present Value at a 12 percent discount rate needs to be assumed
- Provide ~$20 million/year in rate relief for each of the next two rate periods (i.e. FY14-15, and FY16-17)
  - Or said slightly differently, net benefits of ~$80 million between now and the end of FY17, with the $80 million roughly split between rate periods

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Financial Requirements (cont'd)

- Weigh potential impact on BPA's credit rating
- Offload price risk through firm sale of at least 50 percent of enriched product to a creditworthy outside entity at a known quantity and price in advance of the deal (Columbia could use all the fuel during its license-extended life but there is substantial price risk that is better mitigated at the price tendered by counterparty)
- Align transaction benefits with costs from a Northwest ratepayer perspective

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Program Constraints

- All purchase and sales prices for the program have to have predetermined pricing structures which do not have EN taking any risk on the future prices

- Physical uranium forms and locations make additional sales of natural uranium above the planned sales much more difficult

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Financial Decision Model (Base Case)

- Fuel project costs of $711 million (plus $4 million of Cost of Issuance)
- Assumes maturities through 2022 (no license extension)
- Interest payments $126 million (All in rate of 2.64%)
- Amortizes debt in approximate lockstep to TVA sales
- TVA sales FY 2015-2022 $732 million

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Financial Decision Model (Base Case) (cont'd)

- Achieved $293 million in saving FY 2013-2028
- NPV of $70 million at a 12% discount rate exceeds targeted goal of $50 million.
- Base case model does not try and solve for rate case savings goals

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Decision Model (Financial)

Uranium Purchase - Economic Value

Cash Flow Table

	Subtotal	0 2012	1 2013	2 2014	3 2015	4 2016	5 2017	6 2018	7 2019	8 2020	9 2021	10 2022	11 2023	12 2024	13 2025	14 2026	15 2027	16 2028
Processing Costs	(735)		(735)															
USEC Participation	84		84															
Bond Proceeds	711		711															
Interest Payments	(126)		(17)	(17)	(17)	(16)	(16)	(16)	(13)	(6)	(6)	(2)						
Principal Payments	(715)		-	-	(70)	(24)	(25)	(109)	(279)	(26)	(129)	(51)						
Forward Sales	732			-	70	24	25	110	281	26	129	66	-					
10yr Fuel Plan Purchases - Project	(912)		(27)	(43)	(26)	-	(30)	(18)	(28)	-	-	(42)	-	(38)	-	(38)	-	(67)
10yr Fuel Plan Purchases - No Project	1,314		27	47	29	53	23	55	28	68	32	71	33	73	35	75	36	75
EN Budget	293		(17)	(14)	(14)	37	(23)	23	(11)	61	26	42	33	34	35	36	36	8
BPA Budget	293	(4)	(16)	(14)	(1)	22	(11)	14	7	53	30	40	33	34	35	36	29	6
Rate Period Benefit	293			(36)		11		22		82		73		70		65		6

NPV Table

Discount Rate	NPV
1%	$260m
3%	$205m
6%	$144m
9%	$101m
12%	$70m

Rate Period	Benefit
14/15	(36)
16/17	11
18/19	22
20/21	82
22/+	214

Assumptions

Processing Cost @ $154/SWU	$ 770.0
Contingency $25m	$ 25.0
Total Project Funding Requirements	$ 795.0
Optimized Principal and Interest Repayment	
USEC SWU cost @ $154	
USEC assignment of TVA SWU sales $70.0M	
USEC participation $84m. (1.0m SWU participation)	
CGS consumes balance of unsold inventory	

Observation / Conclusions

1) NPV of $70m @ 12% discount exceeds targeted goal of $50m.
2) This assumes a letter of credit for the initial funding requirements.
3) July 2012 long term financing take out letter of credit.

Contingency Analysis

DOE Cylinder Transfer	$3M-$5M
3rd party sampling EUP deliveries	$1M-$2M
Enriched Uranium Product (EUP) Storage Containers.	$2.0M-$2.5M
Consulting fees	$0.1M
Storage & Transportation Insurance	$0.1M
DOE license to store EUP	$1M-$3M
Contingency Balance Range	**$17.8M-12.3M**

Cash Flow Timing Issue

TVA Power Cost Fuel Surcharge (TVA will pay escalated SWU Cost to Offset Fuel Surcharge)	$-2.0M-$5.0M

Pros/Cons

<u>1A - Base Case</u>

<u>Pros:</u>

1) Amortizes debt in approximate lockstep to TVA sales
2) Likely the most prudent way to minimize risk and retire debt
3) Eliminates interest rate risk

<u>Cons:</u>

1) Does not meet BPA goal of $40 mm savings in 14/15 & 16/17 rate cases
2) Creates a $36 mm loss in the 14/15 rate case
3) EN/BPA remain subject to the risk that USEC does not perform on its contract and a premium penalty needs to be paid to redeem the outstanding bonds

Risks and Legal Issues

- Decision risk assessment
  - Joint activity between EN to BPA
  - Cross-functional input from all levels

Risks and Legal Issues (cont'd)

- 11 primary risks identified
  - 1 Operational / Fast Track Risk
  - 1 Regulatory & Legal – Bonding Risk
  - 1 Financial – Bonding Risk
  - 8 Regulatory & Legal – Counter Party Performance (Bankruptcy)
- Mitigation for each has been designed and reviewed by cross-functional team
  - Contracts are the primary mitigation
  - Multiple phased financing plan
  - Independent reviews
  - External subject matter experts/advisors

Risks and Legal Issues (cont'd)

__Most Important Residual Risks and Issues:__

- Doing business with a company with financial challenges
  - Ability to negotiate needed contract mitigation
  - Issuance of LT debt
  - Reputation
- Timeframe and complexity of deal development
- Storage – risk of loss
- Administering and monitoring the contracts

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Risk Committee Assessment

- Joint EN/BPA effort
- EN and BPA Risk Committees concurred to proceed with the following requirements:
  - Decision and financial criteria are met
  - Communication strategy developed
  - Final financing structure
  - Necessary contract terms are implemented

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Multi-Phased Financing Plan

- Phase 1 issue Short Term Line of Credit
  - Provide adequate funding to meet initial June and July 2012 fuel purchasing requirements
  - Adequate time for Rating Agency and Investor tours
  - USEC Performance review prior to issuing LT debt

- Phase 2 issue Long-Term Bonds
  - Scheduled to close mid-July 2012
  - Minimizes interest rate exposure and locks in low cost debt

Multi-Phased Financing Plan (cont'd)

- Structured to provide rate case relief $80 million
  - Capitalizing interest
  - Deferring principal payments
- Bond Purpose will allow for any Columbia expenditure including Fuel, O&M and Capital
  - Bond size estimated at $801 million
    - Including $50 million CGS capital
- Financial risk of issuing LT Debt - Non performance
  - Expensive to buyback bonds $35 million
  - Option to apply unused funds towards CGS operating costs

ENERGY NORTHWEST

Plan of Finance – Two Phased Approach

Uranium Purchase - Economic Value

Cash Flow Table

	Subtotal	0 2012	1 2013	2 2014	3 2015	4 2016	5 2017	6 2018	7 2019	8 2020	9 2021	10 2022	11 2023	12 2024	13 2025	14 2026	15 2027	16 2028
Processing Costs	(795)		(795)															
USEC Participation	84		84															
Project Fund Deposit	711		711															
Interest on Line of Credit	(0)		(0)															
Cost of Issuance	4																	
Capitalized Interest	36		19	18														
Interest Payments	(173)		(19)	(20)	(20)	(20)	(20)	(20)	(18)	(11)	(9)	(5)	(3)	(3)	(2)	(1)	(1)	-
Principal Payments	(751)		-	-	(28)	-	(5)	(112)	(248)	(67)	(135)	(74)	(14)	(16)	(17)	(19)	(17)	-
Forward Sales	732			-	70	24	25	110	281	26	129	66	-					
10yr Fuel Plan Purchases - Project	(912)		(27)	(43)	(26)	-	(30)	(18)	(28)	-	-	(42)	-	(38)	-	(38)	-	(67)
10yr Fuel Plan Purchases - No Project	1,314		27	47	29	53	23	55	28	68	32	71	33	73	35	75	36	75
EN Budget	247	-	-	1	25	58	(7)	16	16	16	16	16	16	16	16	16	18	8
BPA Budget	247	-	0	7	33	42	(1)	16	16	16	16	16	16	16	16	17	16	6
Rate Period Benefit	247			40		40		32		32		32		32		32		6

NPV Table

Discount	NPV
1%	$227m
3%	$193m
6%	$154m
9%	$126m
12%	$104m

Rate Period Benefit

14/15	40
16/17	40
18/19	32
20/21	32
22/+	102

Assumptions

Processing Cost @ $154/SWU	$ 770.0
Contingency $25m	$ 25.0
Total Project Funding Requirements	$ 795.0
Optimized Principal and Interest Repayment	
USEC SWU cost @ $154	
USEC assignment of TVA SWU sales $70.0M	
USEC participation $84m. (1.0m SWU participation)	
CGS consumes balance of unsold inventory	
$36m Capitalized Interest	
Delayed principal payments	

Pros:
1) Creates $80m savings in 14/15 & 16/17 rate cases in total
2) Interest rate lock after ~2months

Cons:
1) Capitalizing Interest
2) EN/BPA remain subject to the risk that USEC does not perform on its contract and a premium penalty needs to be paid to redeem the outstanding bonds

ENERGY NORTHWEST

USEC Contract

- Energy Northwest plans to purchase 4,440,000 SWU from USEC contained in approximately 482 MTU of enriched uranium product (EUP) at an estimated cost of $695-$706 million.
  - SWU price is firm fixed. Additional costs for cylinders, sampling, etc.
  - EUP will be provided in storage/transport cylinders.
  - Third party material testing to ensure it meets specifications.
  - Payment upon delivery to DOE for storage.
  - Termination if long term financing not obtained.

DOE Agreement

- DOE to supply 9075 MTU of depleted uranium to USEC's yard for processing and take back the residual depleted uranium. DOE will also pick up from USEC and provide storage for the EUP produced.
  - EN will reimburse DOE for cylinder delivery and pickup charges. The current estimated cost is $660,000, but could be higher if additional cylinders are needed due to rejection.

DOE Agreement (cont'd)

- EN will reimburse DOE for initial and annual storage fees. Current estimates is $200,000 initially and are $30,000 per year there after. DOE will store with the material with the same security and environmental requirements as their own material. DOE may not be able to provide blanket risk of loss coverage as would typically be provided with a standard commercial storage agreement.

ENERGY NORTHWEST

TVA Purchase Contract

- EN will sell 2.9 million SWU and 1675 MTU of uranium contained in EUP to TVA from 2015 to 2022 for approximately $732 million.
  - Prices are firm fixed prices.
  - Purchase is required.
  - Quantities dependent upon amount received from USEC under the program.

ENERGY NORTHWEST

Recommendation

- Energy Northwest recommends that the Executive Board approve a resolution for the award of a contract for enrichment services to USEC, Inc. and a Memorandum of Agreement with DOE for a combined value not to exceed $711,000,000.00 and the sale of a portion of the uranium received to Tennessee Valley Authority for approximately $732,000,000.00.
- Energy Northwest recommends that the Executive Board approve a resolution related to short term financing.

Approval Conditions

- We will return to Executive Board for approval if:

- Risk of loss of onsite material, if we need to assume this risk
- Change in payment conditions related to power sales and USEC deliveries
- Additional negative information regarding counter party financial condition
- If additional agreements are required
- Other items?

ENERGY NORTHWEST

Next steps

- Brief Public Power Staff – April 20 - Complete
- Seek Executive Board Approval – April 26
- Finalize short-term financing – April 26
- Obtain BPA's Non-disapproval for Contracts
- Executive Board call – May 4-11
- Final terms and conditions – May 4
- Signed Contracts – May 11
- Finalize interim or long-term financing
    - Pre-approval of Resolution at May or June Executive Board Meeting
    - Sale of Bonds in Mid-July
- Complete Budget Amendment
- Complete 10-year Fuel Plan Amendment

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

ENERGY NORTHWEST

Paducah Plant Site Visit *(Dale Atkinson)*

ENERGY NORTHWEST

Paducah Plant Site Visit

ENERGY NORTHWEST

Paducah Plant Site Visit

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.

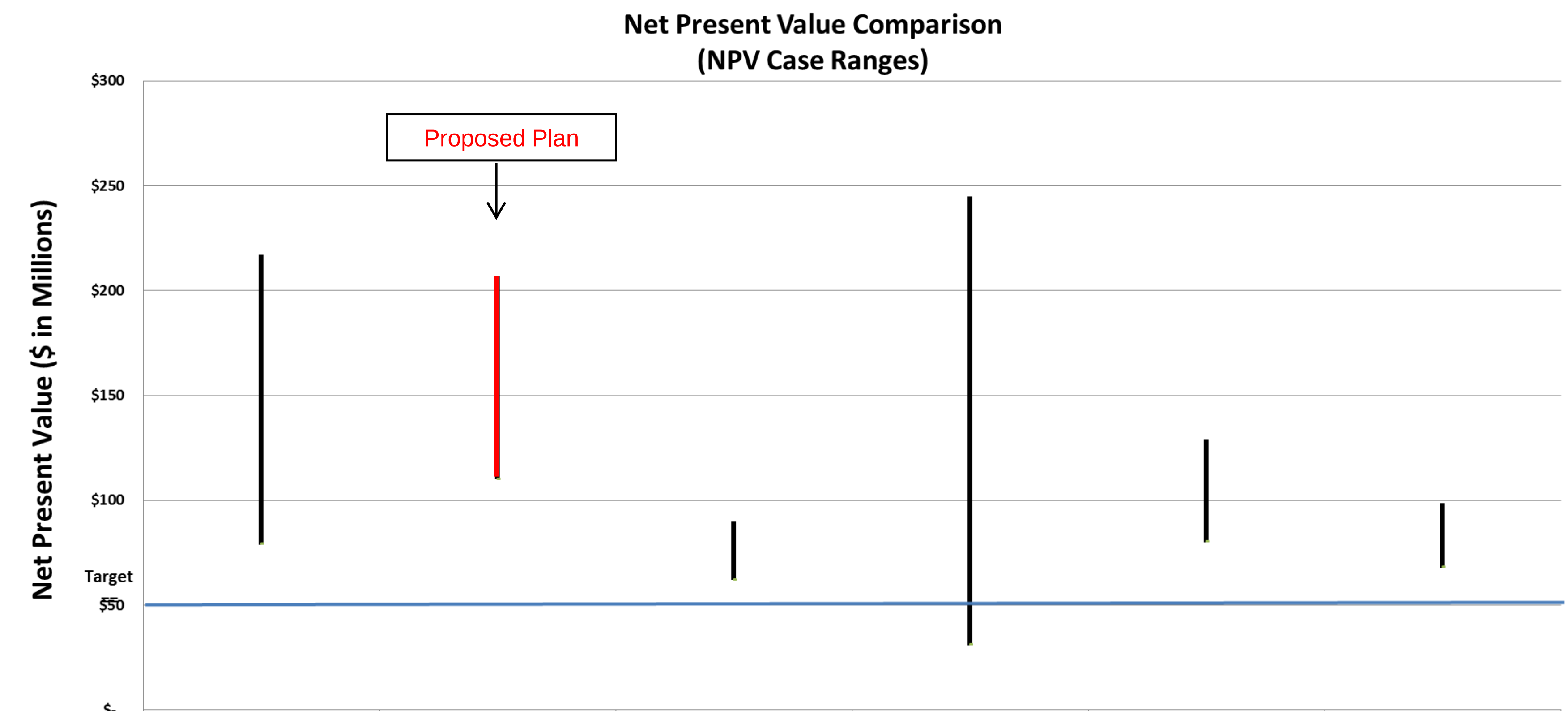
Approval Conditions (cont.)

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.

ENERGY NORTHWEST

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

Financial Model Sensitivity - Financing

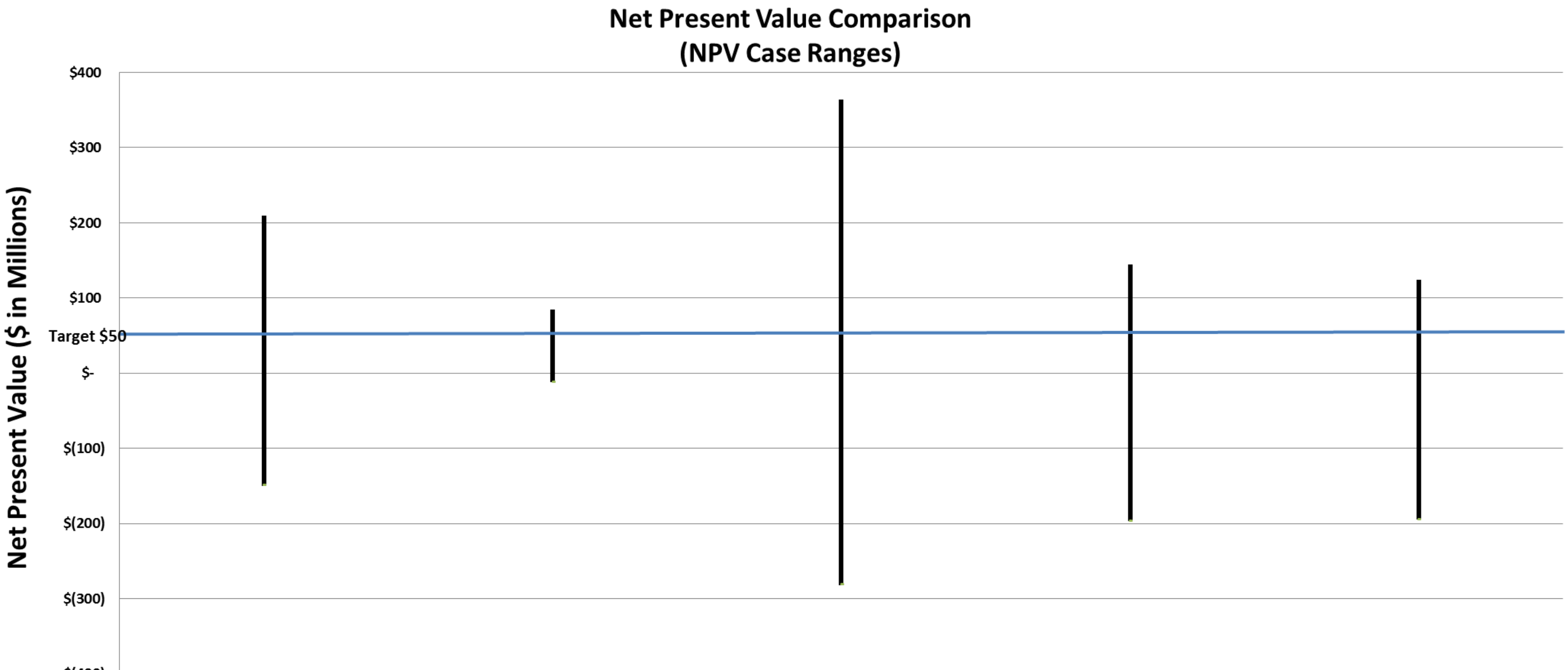


Discount %	1a. Base Min. Financing	1c. Structured Financing Plan	2a. USEC 4-Month Failure	3a. CGS Burn Fin.	4a. Market Sales Fin.	5a. Ux Consulting Fin.
3%	$217	$207	$90	$245	$129	$99
6%	$154	$165	$79	$124	$108	$87
12%	$79	$110	$62	$31	$80	$68

ENERGY NORTHWEST

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



Discount %	1b. Base No Financing	2b. USEC 4-Mo Failure No-Fin	3b. CGS Burn No-Fin.	4b. Market Sales No-Fin.	5b. Ux Consulting No-Fin.
3%	$210	$85	$364	$144	$124
6%	$53	$45	$27	$(7)	$(16)
12%	$(150)	$(12)	$(282)	$(197)	$(195)

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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.**

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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

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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.**

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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)*

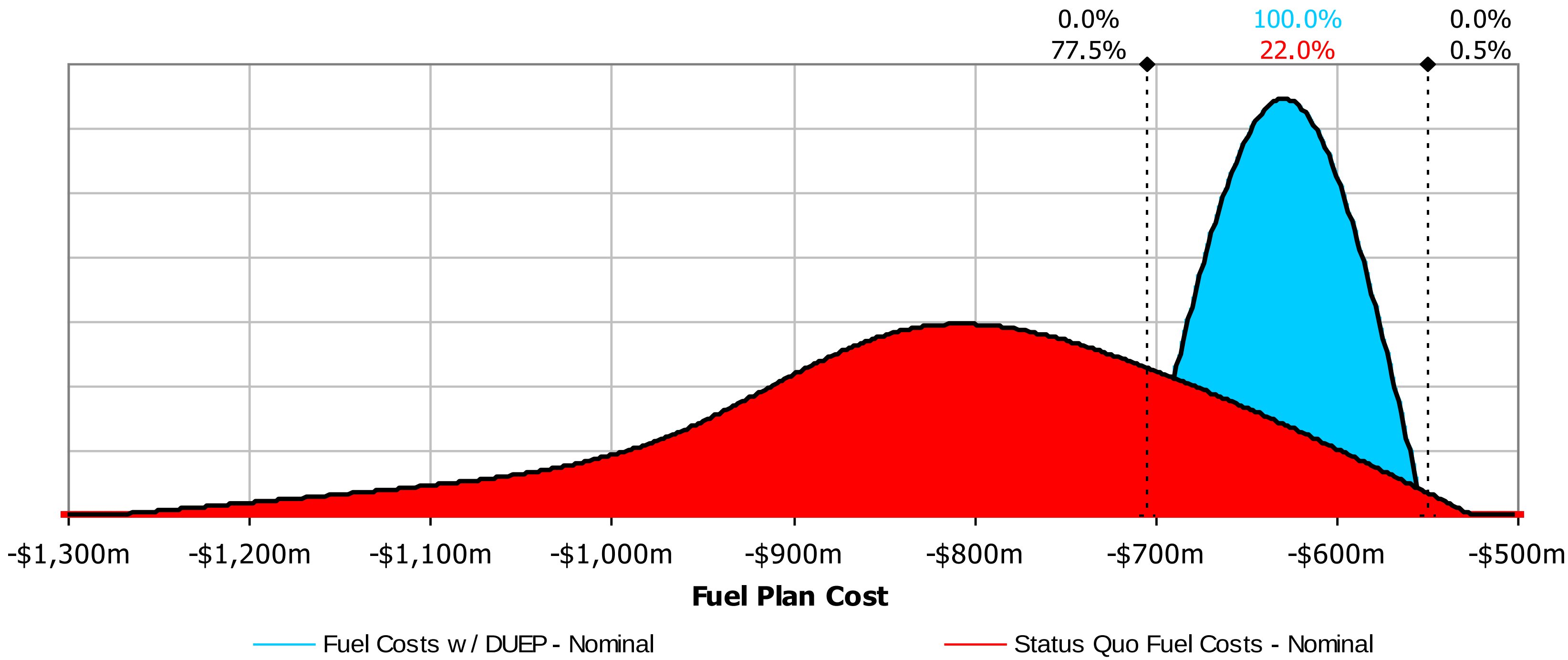
- Random Simulations of Fuel Cost Uncertainty, 2013-2028.
- Random Simulations of DUEP Benefits, 2013-2028.

Updated 5.8.12

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.)

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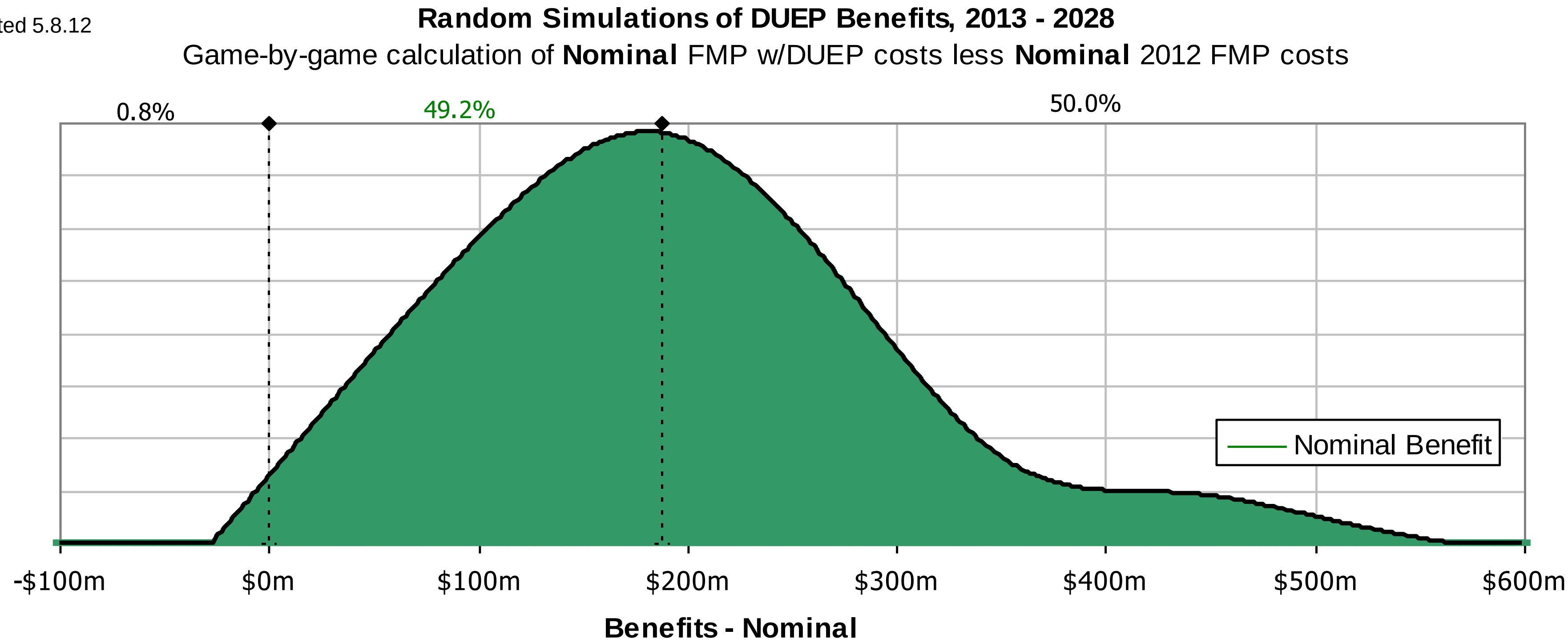
Updated 5.8.12



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.

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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^{rd} Party Oversight.
- Scott, Eric and Pam are not involved in plant operations.

ENERGY NORTHWEST

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.

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