

TURNING SWU INTO U

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URANIUM & SWU IMBALANCE

□ World Uranium Production Substantially Below Apparent Requirements

- Commercial Optimal Tails ~ 0.34% U-235
- Uranium Production ~ 36,000 tU
- Apparent Requirements ~ 70,000 tU

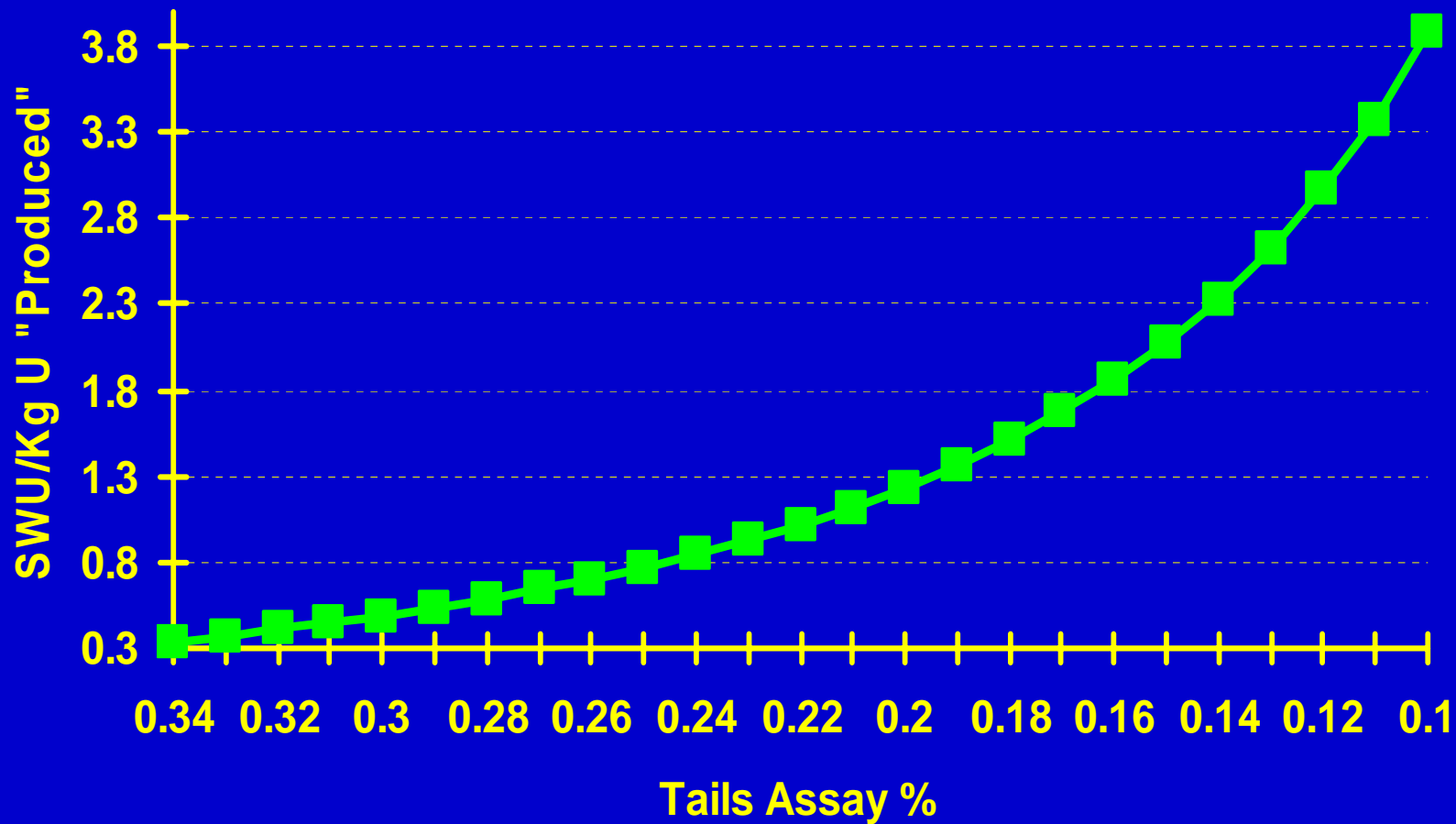
□ SWU Supply Substantially Above Apparent Requirements

- SWU Supply (Primary & HEU) ~ 47,000 tSWU
- Apparent Requirements ~ 35,000 tSWU

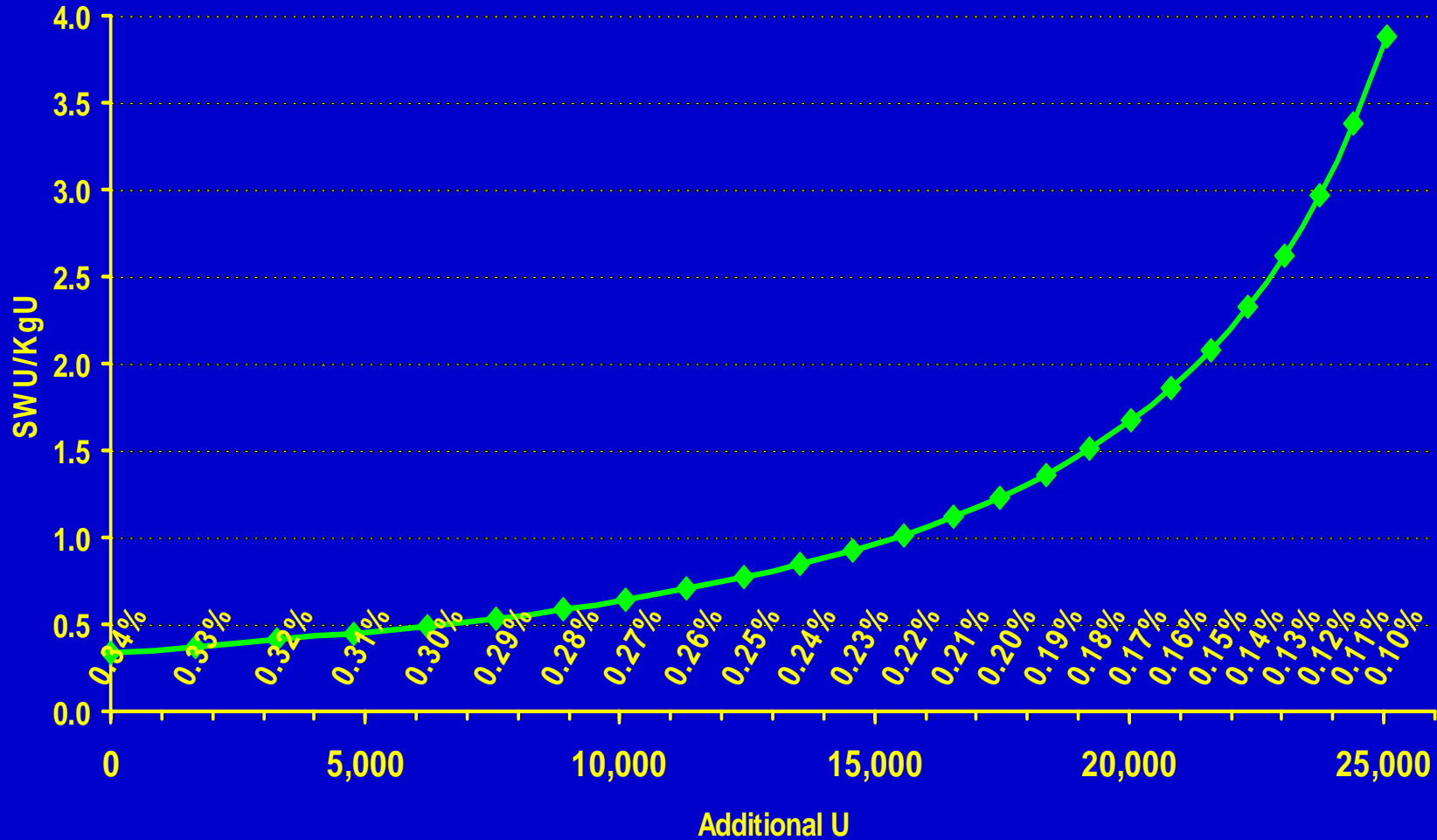
SWU SUBSTITUTES FOR U

- Transaction Tails Vs. Operating Tails
 - In 1970s, Overfeeding Made U Disappear
 - Underfeeding Now Makes U Appear
- Examine Quantitative Tradeoffs Between U & SWU
 - SWU/kg U
 - Cost/kg U
 - Volumes
- Specific Sources of Uranium From SWU

SWU REQUIRED TO EXTRACT ADDITIONAL URANIUM



URANIUM "PRODUCED" AS TAILS ASSAY DECREASES



ADDITIONAL SWU REQUIRED TO “PRODUCE” U AT VARIOUS TAILS ASSAYS



ENRICHMENT SOURCES OF URANIUM

- ❑ Underfeeding
- ❑ HEU Split Tails
- ❑ European Tails Upgrading
- ❑ HEU and Its Blend-Stock
- ❑ Russian Tails Stripping

ENRICHMENT PLANT UNDERFEEDING

□ Enricher Contracts to:

- Sell 5.0 million SWU to Enrich @ 0.34% Tails
- Utilities Deliver 9,650 t U
- Utilities Receive 861 t EUP (@ 4.5%)

□ Enricher Actually:

- Uses 5.37 million SWU to Enrich @ 0.30% Tails
- Feeds 8,800 t U to Make EUP
- Resells 850 t U
- Delivers 861 t EUP (@ 4.5%)

HEU SPLIT TAILS

□ USEC Receives From Tenex:

- 885 t EUP (Avg. 4.5%) from 30 t HEU Containing:
 - 5,500 t SWU @ 0.30% Tails
 - 9,040 t U @ 0.30% Tails
- Utilities Deliver 9,920 t U

□ USEC Delivers

- 885 t EUP (Avg. 4.5%) to Customers Containing:
 - 5,140 t SWU @ 0.34%
 - 9,040 t U to Tenex

□ USEC Retains 880 t U to Re-Sell

EUROPEAN TAILS UPGRADING

- European Enrichers “Underfeeding”
 - Stripping Tails In Russia Same as Underfeeding
 - Use 1.2 – 1.6 Million Russian SWU
 - Receive Back About 2,600 t U
 - Savings on Tails Disposal

- Russia Utilizes Residual Tails
 - HEU Blend-Stock
 - Other Uses

RUSSIAN HEU & BLEND-STOCK

- EUP From HEU Contains 9,000 t U (@0.30%)
 - Nearly 30% of U From Blend-Stock
 - U.S. Quota Sales 4,600 t U in 2003
 - Russia Takes 2,580 t U/Yr. For Blend-Stock
 - Remainder Put In “Monitored Inventory” (Russia and U.S.)

- HEU Blend-Stock
 - Russia Actually Uses Tails Not Natural U
 - 6,000 Tonnes Tails (0.30% Stripped to 0.10%)
 - 4.3 Million Russian SWU

CONCLUSIONS I

- SWU Is Already Used to Meet U Demand
 - Low Cost SWU Competes With Uranium Production
 - 10 to 12 Million SWU Used
 - If Used Efficiently, Could Yield 15,000 tU @ World Avg. Tails of 0.23%
 - But Not Used Efficiently
 - Net Change in U Demand 7,000 – 9,000 tU
 - Effective World Tails Assay 0.28 – 0.29%

CONCLUSIONS II

- Utility Nomination of Lower Transaction Tails
 - Would Not Change U Supply/Demand
 - Enrichers Already At Lower Effective Tails
 - USEC Underfeed
 - European Effective Underfeed via Russia
 - Russian Tails Stripping
 - Uranium Already In Market via Enrichers
 - Enricher "Recycle" Already Reduces Demand on Primary Uranium Production

OUTLOOK I

□ Russian SWU Utilization to be Rationalized

- Russia Rich in SWU, Poor in Uranium
- Russian Conventional SWU Use Growing
- Higher Costs for New SWU Capacity
- Ultimately, Better Integration With World Market
 - Conventional Uranium Enrichment Exports
 - Less Tails Stripping
 - Import Uranium

OUTLOOK II

- No Extension or Addition to HEU Deal
 - Russia Already Using HEU for Domestic Needs
 - Hold For Strategic Defense and Fuel Purposes
 - Tails Stripping for Blend-Stock Ends 2013—Frees 4.3 Million Russian SWU
 - Reduces Supply to Western Markets by 5.5 Million SWU
 - Reduces World Uranium Supply by 9,000 Tonnes