# NCSX June 2007 ETC TABLE IV - Uncertainty of Estimate and Residual Risk Assessment

WBS Number: 133

WBS Title: External Trim Coils

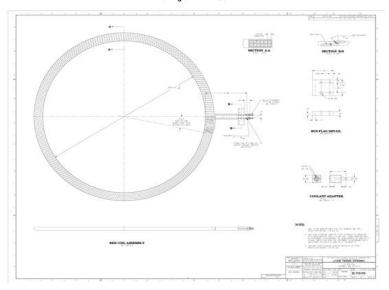
Job Number: 1354

Job Title: Trim Coil Design and Procurement

Job Manager: Mike Kalish

### M&S Estimate Backup

## Estimate for More Complex Coil (based on Jupiter II) Drawing of 4th LTX Coil



#### Backup for LTX Costs

TOP   Deed   Deed	DATE		REQUISITION NO. 404820			FBRFQRFP F-019-W	POISUBCONTRACT	
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2 3 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5				2	\$3,160.00	\$10,236.00	$\overline{}$	
# # Assumed 2 coils # Assumed 2 coils # Assumed 2 coils # BACCOS #	2	LTX SELVE COL		2	\$8,950.00	\$12,450.00		
8 ASSUMED 2 COILS  10 EXCEPTION STATES OF THE STATES OF TH	3							
# Assumed 2 coils # EXCEPTION   EXCEPTION   # Assumed 2 coils ## Assum	4							
7 Assumed 2 coils 10 INACCION SELECTION TOTAL UNIT DESCRIPTION TOTAL DESCRIPTION TOT								
8 Assumed 2 coils 10 SASSUMED 2 COILS 10 SASSU				П				
Assumed 2 coils	7							
10				Г	Assum	ed 2 coils	7	
Tork. \$14,000.00 \$46,970.00   TOR Near					Assuli	16u 2 COIIS		
Form         Died         Died           DELARY         As regired         12 whs           Parsent Texas	10							
Partient Taxes  As required 12 who  Partient Taxes	Tans.			\$24,020.00	\$45,970.00			
Parsagut Tenas	FOS PORT							
				As required	12 wis			
For recovery completions, if are could be about the time, quality, or resourt presences:	PRIME	INT TERMS						
Use of Rough Yardsticks (Describe basis below or on attached sheets)	Use	OF ROUGH YARD	STICKS	(Desce	INC BASIS DO	ILOW OR ON ATTA	CHED SHEETS	

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#### Outomumpo Estimate

Job1354\_R2.xls

FAX 609-243-3248 Tel 609-243-2277 PRINCETON PLASMA PHYSICS RFQ on copper conductor Dear Mike, Please find our offer as follows: Product specification and quantity:
\* CDA102 Copper, soft temper
\* Size 20mm Square with round 9mm ID. Outokumpu tool # 8456 \* In pancake coils of approximately 100 ft \* Qty to be determined later. Up to 500lbs One lump sum \$3,980 plus copper value FAB \$ 4.90Mb plus copper value FAB \$ 3.10Mb plus copper value 1,000lbs 2 000lbs For Silver-bearing copper (CDA 107) add \$0.16/lb The copper value based on the Comex market for November 2004 shipments is currently \$ 1.57/ lb. The copper value may be firmed for the month of shipment the day an order is placed, up to two weeks prior to the confirmed ex mill date, or will be automatically firmed at Outokumpu published price the Friday preceding the confirmed ex mill date. Payment terms: 60 days from the date of invoice. Subject to credit approval. Lead time and delivery terms: Ex mill Pon, Finland, November 4, 2004 plus 4 weeks (estimated) ocean transit. Delivered Duty Paid (DDP Incoterms 2000) to Princeton, NJ. Other Terms:
According to the Outokumpu Poricopper Oy's General Terms for Sales (has been supplied earlier).
The interest rate in the USA for overdue payment is 12%. Sincerely, Outokumpu Copper - Electrical Power & Components Petri Nordling Sales Manager Cc: Asko Hakkinen, Paivi Nieminen, Denise Nolan

OUTOKUMPU COPPER – EPC Europe Division 801 Pittsburgh Drive, Delaware OH 43015 / Tel. 740-368-7946 / Fax 740-363-3847 PPPL Calculation for Conductor Procurement

Copper Cost Estimate for Trim Coils Note : Includes 25% spare in final cost caluculation

Circumference:= (.5m)-x

 $Legth := 4 \hbox{-Circumference}$ 

$$323 \cdot \frac{B_0}{in^3} \left[ (.787in)^2 - \pi \left( \frac{.354 \cdot in}{2} \right)^2 \right] \text{Length} = 41.624B$$

$$Weight := 323 \cdot \frac{lh}{\omega^3} \left[ \left( .787 m \right)^2 - \pi \left( \frac{.354 \cdot in}{2} \right)^2 \right] Length$$

For 2 coils using Outo Kumpu Quote

Weight-2-1.25 
$$\left(\frac{310 + 1.57}{1b}\right) = 485.958$$



Table V - Basis of Estimate 2 of 3 6/29/2007 11:06 AM

# NCSX June 2007 ETC TABLE IV - Uncertainty of Estimate and Residual Risk Assessment

WBS Number: 133

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Job Number: 1354

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### Basis of Tooling Estimate

