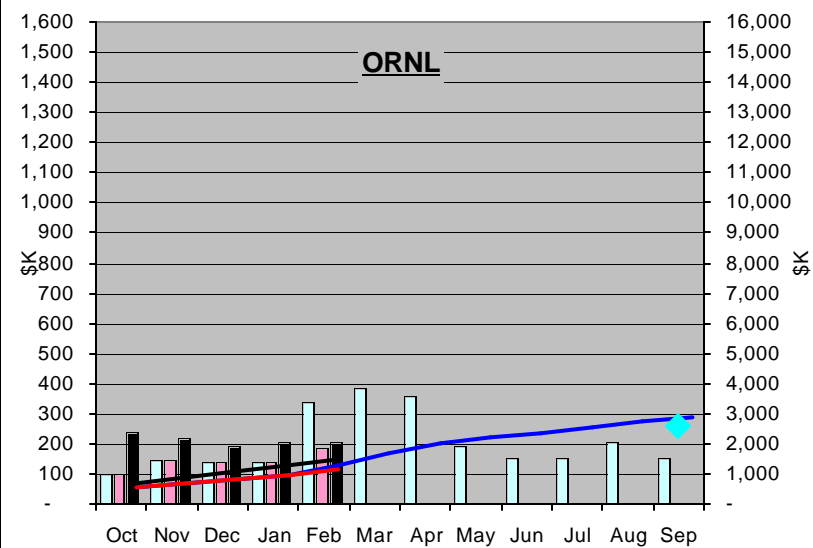
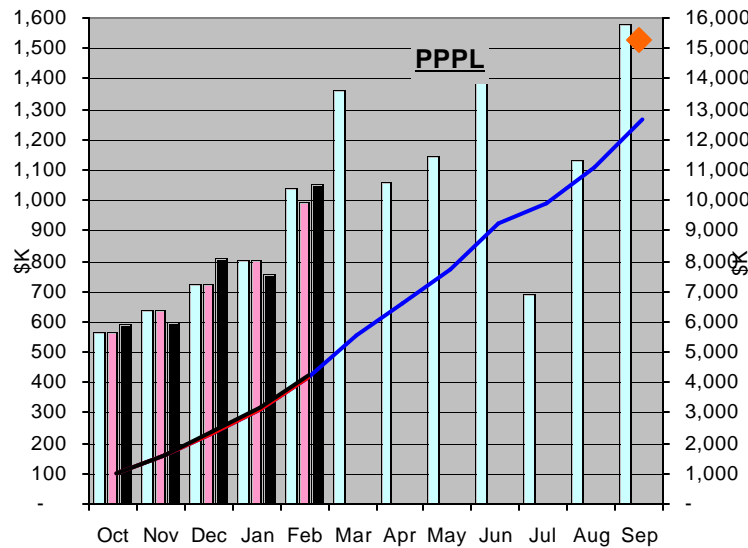
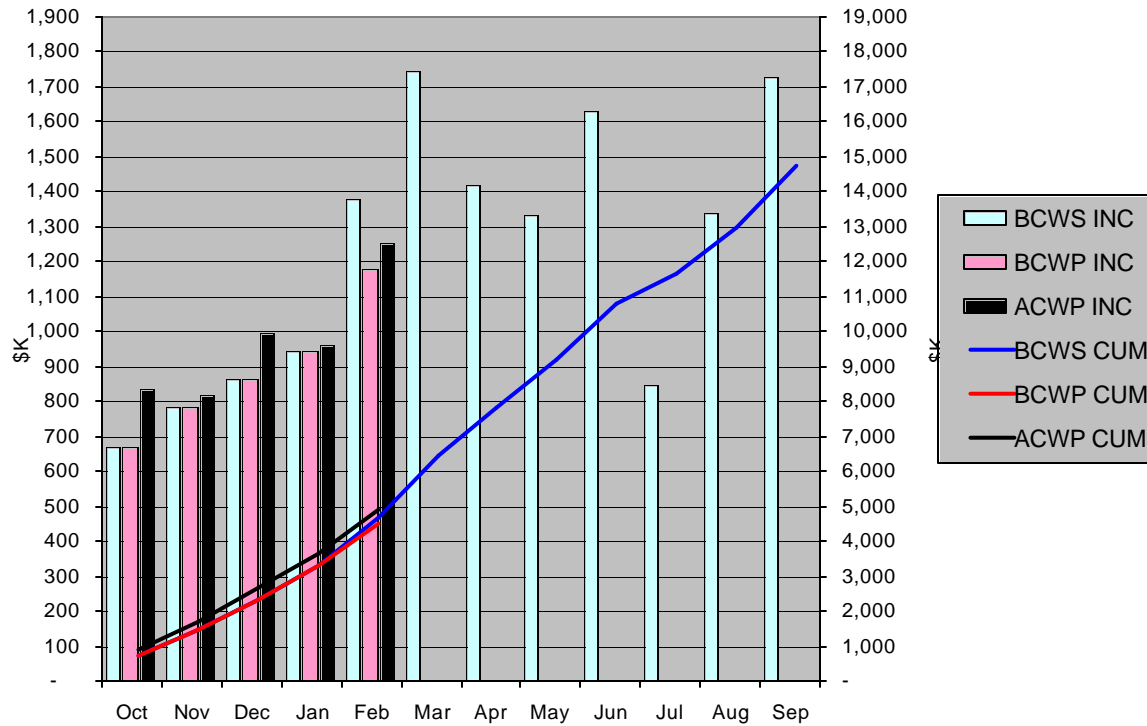


| NCSX | | | | | | | | | | | | |
|-----------------------------------|----------------------------------|--------------|--------------|--------------|--------------------|------------|-------------------|------------|--|---|--|---|
| Summary Cost Performance Analysis | | | | | | | | | | | | |
| March 1st, 2004 | | | | | | | | | | | | |
| | | <u>BCWS</u> | <u>BCWP</u> | <u>ACWP</u> | <u>Sched Vari.</u> | <u>SPI</u> | <u>Cost Vari.</u> | <u>CPI</u> | <u>Schedule:</u> | <u>Cost:</u> | <u>ETC:</u> | <u>Issues:</u> |
| Total Project | | 10573 | 10377 | 10776 | -196 | 1 | -399 | 1 | Modular Coil Final Design | Modular Coil Final Design-\$443k Is this a future call on contingency? | + \$231k increase (forecast draw on contingency) | Manpower to support schedule |
| | | | | | | | | | | | | Current costing rate. |
| | | | | | | | | | | | | Management reserve balance |
| Job 1202 | Vacuum Vessel R&D | 1305 | 1247 | 1294 | -58 | 0.96 | -47 | 0.96 | Rohwedder behind. Delivery April 4th | Both Rohwedder and Major tool accrued more than earned. Rohwedder forecast to exceed contract cost. | Rohwedder ==+ \$45k | |
| | | | | | | | | | Field weld Joint Design behind 2 weeks. | | Inspection Plans & Inspection report = + \$22k Weld Joint Procedure & Report = + \$5k | |
| Job 1203 | VVSA Final Design | 217 | 205 | 202 | -12 | 0.94 | 3 | 1.01 | VVSA Drawings and structural analysis of vessel behind but forecast to finish by end of April | | | Dahlgren labor loading in March and April plan at 130% level. Assigned to perform structural analysis |
| Job 1301 | Conventional Coils Design | 278 | 300 | 194 | 22 | 1.08 | 106 | 1.55 | | | | Kalish loading planned at 145% through the PDR now delayed to end of June. |
| Job: 1403 | Modular Coil Design and analyses | 393 | 262 | 706 | -131 | 0.67 | -444 | 0.37 | Winding form drawings, thermal, electrical and structural analyses behind schedule. | | While no revised estimate was provided this job is currently showing a \$444k cost variance! | Labor loading concerns through April |
| | | | | | | | | | Still forecast to support May FDR. | Significantly more labor being spent than planned. | | Fan = 170%, Hargrove= 130% ,Lovett=130% Williamson ==>>1 |
| | | | | | | | | | Prototype drawings for chill plates, clamps, lead hardware behind schedule. Must start fabrication | | | |
| | | | | | | | | | soon to support prototype winding in August | | | |
| Job 1404 | Modular Coil Prototype | 1087 | 1016 | 1143 | -71 | 0.93 | -127 | 0.89 | | Cost variance of 127k attributed to ORNL design of prototype during October and November as well as EIO's accruals vs earned value. | EIO forecast to cost additional \$29k above plan | |
| | | | | | | | | | | | + \$36k for 2 prototype inspections and evaluation reports (PPPL/ORNL labor) | |

| NCSX | | | | | | | | | | | | |
|--|--|-------------|-------------|-------------|--------------------|------------|-------------------|------------|---|--------------|--|---|
| Summary Cost Performance Analysis | | | | | | | | | | | | |
| March 1st, 2004 | | | | | | | | | | | | |
| | | <u>BCWS</u> | <u>BCWP</u> | <u>ACWP</u> | <u>Sched Vari.</u> | <u>SPI</u> | <u>Cost Vari.</u> | <u>CPI</u> | <u>Schedule:</u> | <u>Cost:</u> | <u>ETC:</u> | <u>Issues:</u> |
| Job:1406 | Modular coil in-house winding R&D activities | 1290 | 1175 | 1163 | -115 | 0.91 | 12 | 1.01 | Twisted racetrack design of chill plates/clamps, and test plan behind | | | |
| | | | | | | | | | Conductor Property testing FDR slipped from mid April to mid May | | | |
| | | | | | | | | | Inch worm winding slipped to end of March | | | |
| Job:1409 | Coil Test Stand | 176 | 195 | 201 | 19 | 1.11 | -6 | 0.97 | | | Additional \$84k forecast for system testing, I2t reqmnts, and N2 ejection. Cost has grown from \$161k in December to \$262 current budget to \$346 k current forecast. | |
| Job:1701 | Cryostat & Base support structure | | | | | | | | | | | Gettelfinger ability to support preliminary design schedule to start in May. Geoff is req'd 100% in addition to his COE duties which currently account for 25%. |
| Jobs 1803 | Field Period Assy | 57 | 4 | 3 | -53 | 0.07 | 1 | 1.33 | Tooling design/mockup design not started. | | | |
| Jobs:4xxx | Electrical Power Systems | 169 | 150 | 151 | -19 | 0.89 | -1 | 0.99 | | | | Ramp up in design planned to begin in March. Raki is currently planned at the 120% level. Needed to identify 1-2 other engineers to support Raki to ensure plan can be met. |
| Other ; | | | | | | | | | | | | |
| Costing over the last 3 months December= \$1.0m, Jan = \$.96m and Feb=\$1.25m. To cost out our budget would req'd spending at the rate of \$1.4m/month for the remainnder of the FY just to support current plan. | | | | | | | | | | | | |
| Current management reserve account stands at \$2.18m. There are no plans in place to support this costing (an add'I \$310k/mo) | | | | | | | | | | | | |
| 1) Potential work scope that could be performed include fabrication of chill plates, MCWF clamps, lead hardware for the production MC's. | | | | | | | | | | | | |
| Requires fabrication drawings to be issued. | | | | | | | | | | | | |
| Tech labor falls off after June and this would be a good fit to keep dedicated technicians assigned to NCSX | | | | | | | | | | | | |
| Williamson and Chrzanowski should review current schedules and determine feasibility. Adjust current schedules to reflect acceleration of tasks. | | | | | | | | | | | | |
| 2) Accelerate electrical design. Raki should be directed to identify 2 engineers and designer reqmnts along with selecting tasks that could be accomplished. | | | | | | | | | | | | |

NCSX PPPL & ORNL MIE FY 2004 Cost Performance



| | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R |
|----|---------|--|-------------|-------------|-------------|-------------|-------------|-------------|--------------|----------|----------|----------|----------|----------|----------|-----------|-------|
| 5 | | NCSX FUNDS -to-Go Metrics | | | | | ECP4 | ECP5 | Feb | | | | | | | | |
| 6 | | | CD-1 | PDR | | EIR/PBR | CD-2 | | Status | | | | | | | | |
| 7 | | | 4/1/2003 | 10/1/2003 | 11/1/2003 | 12/1/2003 | 1/1/2004 | 2/1/2004 | 3/1/2004 | 4/1/2004 | 5/1/2004 | 6/1/2004 | 7/1/2004 | 8/1/2004 | 9/1/2004 | 10/1/2004 | |
| 8 | | TEC | 73.50 | 80.95 | 80.95 | 86.30 | 86.30 | 86.30 | 86.30 | 86.30 | 86.30 | 86.30 | 86.30 | 86.30 | 86.30 | 86.30 | 86.30 |
| 9 | | Budgeted Contingency | 16.30 | 16.54 | 16.54 | 17.20 | 15.91 | 15.30 | 15.30 | 15.30 | 15.30 | 15.30 | 15.30 | 15.30 | 15.30 | 15.30 | 15.30 |
| 10 | 8 - 9 | Budgeted Scope | 57.20 | 64.41 | 64.41 | 69.10 | 70.39 | 71.00 | 71.00 | 71.00 | 71.00 | 71.00 | 71.00 | 71.00 | 71.00 | 71.00 | 71.00 |
| 11 | | ACWP + accrued cost | 0.00 | 5.94 | 6.64 | 7.32 | 8.46 | 9.55 | 10.78 | | | | | | | | |
| 12 | | BCWP | 0.00 | 5.94 | 6.60 | 7.41 | 8.16 | 9.24 | 10.38 | 12.27 | 13.80 | 15.11 | 16.55 | 17.45 | 18.79 | 20.54 | |
| 13 | 10 - 12 | BCWR | 57.20 | 58.47 | 57.81 | 61.69 | 62.23 | 61.76 | 60.62 | 58.73 | 57.20 | 55.89 | 54.45 | 53.55 | 52.21 | 50.46 | |
| 14 | | +ETC | 0.00 | 0.00 | 0.00 | 1.29 | 0.60 | | 0.23 | | | | | | | | |
| 15 | 13 + 14 | ECWR | 57.20 | 58.47 | 57.81 | 62.98 | 62.83 | 61.76 | 60.85 | 58.73 | 57.20 | 55.89 | 54.45 | 53.55 | 52.21 | 50.46 | |
| 16 | 9 | Budgeted Cont \$ to go | 16.30 | 16.54 | 16.54 | 17.20 | 15.91 | 15.30 | 15.30 | 15.30 | 15.30 | 15.30 | 15.30 | 15.30 | 15.30 | 15.30 | 15.30 |
| 17 | 16 / 15 | Budgeted Cont % to go (cont\$/ECWR) | 28.5% | 28.3% | 28.6% | 27.3% | 25.3% | 24.8% | 25.1% | 26.1% | 26.7% | 27.4% | 28.1% | 28.6% | 29.3% | 30.3% | |
| 18 | 8 - 11 | Funds Remain (TEC-ACWP) | 73.50 | 75.01 | 74.31 | 78.98 | 77.84 | 76.75 | 75.52 | | | | | | | | |
| 19 | 18 - 15 | Free Balance Cont \$ (Funds remain-ECWR) | 16.30 | 16.54 | 16.50 | 16.00 | 15.01 | 14.99 | 14.66 | | | | | | | | |
| 20 | 19 / 15 | Free Balance (% of ECWR) | 28.5% | 28.3% | 28.5% | 25.4% | 23.9% | 24.3% | 24.1% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | |

