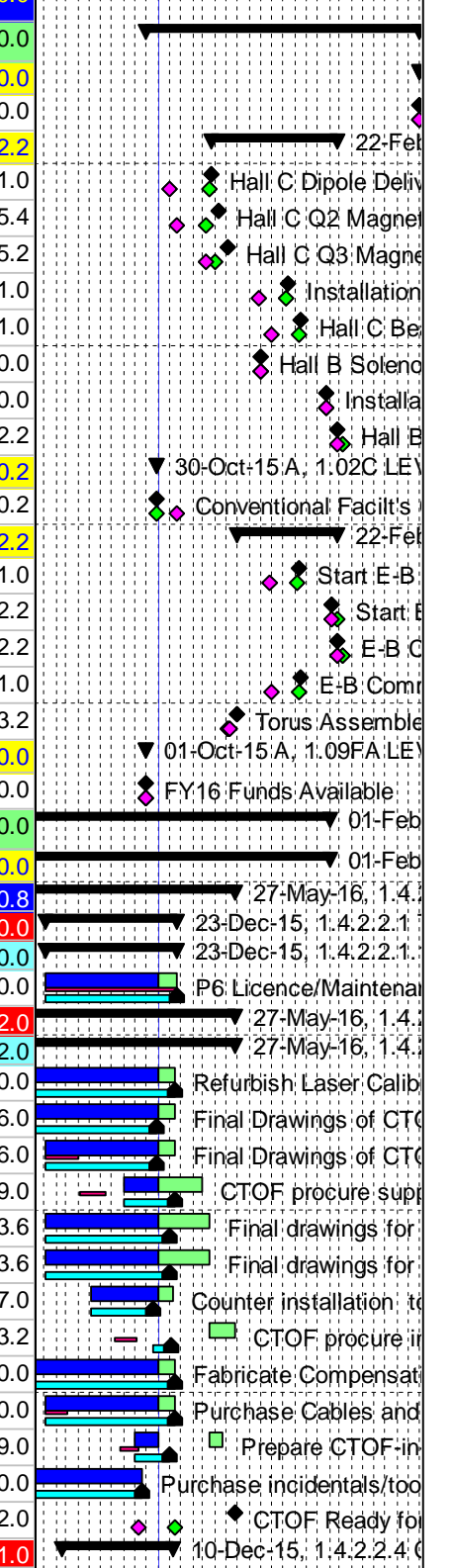


| Activity ID | Acti with Str | EVM Rep Cod | Activity Name | Start | Finish | BL Project Finish | Total Float | Free Float | Physical % Complete | Earned Value Cost | MONTHLY EV COST | BL Project Total Cost | Schedule Variance | Variance - BL1 Finish | FY2015 | FY2016 | FY2017 |
|---|---------------------|-------------------|--|-------|-------------|----------------------|----------------|------------|------------------------|----------------------|--------------------|--------------------------|----------------------|-----------------------------|--------|--------|--------|
| October 15 Progress 12 GeV CR15-010,16-01,02 | | | | | | | | | | | | | | | | | |
| 1.M MILESTONES | | | | | | | | | | | | | | | | | |
| 1.01 LEVEL 1 MILESTONES | | | | | | | | | | | | | | | | | |
| 1-8M | | M | CD-4B (Approve Proj Compltn & Start of Operations) | | 29-Sep-17* | 29-Sep-17 | 0.0 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | 0.0 | | | |
| 1.02H LEVEL 2 HALLS A, B & C MILESTONES | | | | | | | | | | | | | | | | | |
| 2-29M | | M | Hall C Dipole Delivered | | 23-Mar-16 | 02-Dec-15 | 42.4 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | -1.0 | | | |
| 2-30M | | M | Hall C Q2 Magnet Delivered | | 13-Apr-16 | 23-Dec-15 | 48.4 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | -5.4 | | | |
| 2-31M | | M | Hall C Q3 Magnet Delivered | | 05-May-16 | 10-Mar-16 | 47.4 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | -5.2 | | | |
| 2-32M | | M | Installation of Expermental Equipment into H-C is Completed | | 14-Oct-16 | 26-Jul-16 | 42.4 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | -1.0 | | | |
| 2-33M | | M | Hall C Beam Commissioning Complete | | 18-Nov-16 | 30-Aug-16 | 42.4 | 42.4 | 0% | \$0 | \$0 | \$0 | \$0 | -1.0 | | | |
| 2-35M | | M | Hall B Solenoid Cryostated Coil Delivered | | 03-Aug-16 | 03-Aug-16 | 29.8 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | 0.0 | | | |
| 2-36M | | M | Installation of Experimental Equipment into H-B is Completed | | 25-Jan-17 | 25-Jan-17 | 29.6 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | 0.0 | | | |
| 2-37M | | M | Hall B Beam Commissioning Complete | | 22-Feb-17 | 22-Feb-17 | 29.8 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | 2.2 | | | |
| 1.02C LEVEL 2 CIVIL MILESTONES | | | | | | | | | | | | | | | | | |
| 2-38M | | M | Conventional Facilt's Comptd | | 30-Oct-15 A | 22-Dec-15 | | | 100% | \$0 | \$0 | \$0 | \$0 | 0.2 | | | |
| 1.03P LEVEL 3 PHYSICS MILESTONES | | | | | | | | | | | | | | | | | |
| 3P-18M | | M | Start E-B Commsng of H-C Detctr's, Electrnc's, & BL Devices | | 14-Nov-16 | | 42.4 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | -1.0 | | | |
| 3P-20M | | M | Start E-B Commsng of H-B Detctr's, Electrnc's, & BL Devices | | 09-Feb-17 | | 29.8 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | 2.2 | | | |
| 3P-21M | | M | E-B Commsng of H-B Detctr's, Electrnc's, & BL Devices Comptd | | | 22-Feb-17 | 30.8 | 30.8 | 0% | \$0 | \$0 | \$0 | \$0 | 2.2 | | | |
| 3P-22M | | M | E-B Commsng of H-C Detctr's, Electrnc's, & BL Devices Comptd | | | 18-Nov-16 | 42.4 | 42.4 | 0% | \$0 | \$0 | \$0 | \$0 | -1.0 | | | |
| 3P-26M | | M | Torus Assembled and Tested | | 31-May-16 | | 61.8 | 32.0 | 0% | \$0 | \$0 | \$0 | \$0 | -3.2 | | | |
| 1.09FA LEVEL 9 FUNDING AVAILABLE MILESTONES | | | | | | | | | | | | | | | | | |
| 9-160M | | M | FY16 Funds Available | | 01-Oct-15 A | 01-Oct-15 | | | 100% | \$0 | \$0 | \$0 | \$0 | 0.0 | | | |
| 1.4 CONSTRUCTION UPGRADE HALLS A, B, & C | | | | | | | | | | | | | | | | | |
| 1.4.2 CONSTRUCTION HALL B | | | | | | | | | | | | | | | | | |
| 1.4.2.2 DETECTORS | | | | | | | | | | | | | | | | | |
| 1.4.2.2.1 TRACKING | | | | | | | | | | | | | | | | | |
| 1.4.2.2.1.1 SILICON DETECTOR | | | | | | | | | | | | | | | | | |
| 242211950 | | D | P6 Licence/Maintenance | | 05-Jan-15 A | 23-Dec-15 | 82.6 | 52.8 | 75% | \$298 | \$99 | \$397 | \$298 | 0.0 | | | |
| 1.4.2.2.3 TIME OF FLIGHT | | | | | | | | | | | | | | | | | |
| 1.4.2.2.3.1 CENTRAL TOF | | | | | | | | | | | | | | | | | |
| 242231115 | | U | Refurbish Laser Calibration System (New not Refurb) | | 02-Dec-13 A | 15-Dec-15 | 87.8 | 0.0 | 75% | \$18,647 | \$0 | \$24,863 | (\$6,216) | 0.0 | | | |
| 242231260 | | ST | Final Drawings of CTOF Support and Solenoid Harness | | 03-Jan-14 A | 15-Dec-15 | 59.8 | 0.0 | 90% | \$7,387 | \$0 | \$8,208 | (\$821) | -6.0 | | | |
| 242231261 | | ST | Final Drawings of CTOF Support and Solenoid Harness Additional | | 05-Jan-15 A | 15-Dec-15 | 79.8 | 0.0 | 90% | \$11,435 | \$0 | \$12,706 | (\$1,271) | -6.0 | | | |
| 242231265 | | D | CTOF procure support and solenoid harness and interface rings | | 01-Aug-15 A | 26-Feb-16 | 79.8 | 17.4 | 82% | \$38,482 | \$38,482 | \$46,930 | (\$8,447) | -9.0 | | | |
| 242231270 | | ST | Final drawings for counter installation tooling FY14 | | 05-Jan-15 A | 15-Mar-16 | 77.2 | 17.4 | 65% | \$15,662 | \$0 | \$24,096 | (\$8,433) | -13.6 | | | |
| 242231270A | | ST | Final drawings for counter installation tooling FY15 | | 05-Jan-15 A | 15-Mar-16 | 59.8 | 0.0 | 65% | \$354 | \$0 | \$545 | (\$191) | -13.6 | | | |
| 242231272 | | ST | Counter installation tooling Engineering Analysis | | 04-May-15 A | 10-Dec-15 | 71.8 | 12.0 | 33.3% | \$3,978 | \$0 | \$11,947 | (\$7,969) | -7.0 | | | |
| 242231275 | | D | CTOF procure installation tooling | | 16-Mar-16 | 27-May-16 | 59.8 | 0.0 | 0% | \$0 | \$0 | \$11,353 | (\$11,353) | -23.2 | | | |
| 242231300 | | D | Fabricate Compensating Coil Procurement (LMS) | | 06-Oct-14 A | 15-Dec-15 | 87.8 | 0.0 | 13% | \$2,748 | \$0 | \$21,137 | (\$18,390) | 0.0 | | | |
| 242231335A | | D | Purchase Cables and Connectors (LMS) | | 05-Jan-15 A | 15-Dec-15 | 81.8 | 22.0 | 53% | \$9,909 | \$0 | \$18,696 | (\$8,787) | 0.0 | | | |
| 242231425 | | ST | Prepare CTOF-in-Storage-Rack for transportation | | 01-Sep-15 A | 21-Apr-16 | 65.0 | 5.2 | 33.3% | \$5,900 | \$5,900 | \$17,719 | (\$11,819) | -19.0 | | | |
| 242231430 | | D | Purchase incidentals/tools/material (LMS,Mod 48) | | 02-Jul-14 A | 21-Sep-15 | | | 100% | \$19,093 | \$0 | \$19,093 | \$0 | 0.0 | | | |
| 242231470M | | M | CTOF Ready for Installation | | | 27-May-16 | 59.8 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | -22.0 | | | |
| 1.4.2.2.4 CERENKOV | | | | | | | | | | | | | | | | | |
| | | | | | 16-Feb-15 A | 10-Dec-15 | 77.6 | 0.0 | | \$68,974 | \$21,905 | \$112,935 | (\$43,962) | -1.0 | | | |



◆ Primary Baseline Milestone
 ▬ Primary Baseline
 ▬ Remaining Work
▬ Project Baseline Bar
 ▬ Actual Work
 ▬ Critical Remaining ...

| Activity ID | Acti with Str | EVM Rep Cor | Activity Name | Start | Finish | BL Project Finish | Total Float | Free Float | Physical % Complete | Earned Value Cost | MONTHLY EV COST | BL Project Total Cost | Schedule Variance | Variance - BL1 Finish | FY2015 | FY2016 | FY2017 |
|---|---------------------|-------------------|--|-------------|-------------|----------------------|----------------|------------|------------------------|----------------------|--------------------|--------------------------|----------------------|-----------------------------|--------|--------|--------|
| 1.4.2.2.4.2 LOW THRESHOLD CC | | | | 16-Feb-15 A | 10-Dec-15 | 28-Sep-15 | 77.6 | 0.0 | | \$68,974 | \$21,905 | \$112,935 | (\$43,962) | -1.0 | | | |
| 242242595 | ST | S | Sector 2 - Hardware Installation | 03-Jul-15 A | 07-Sep-15 | 24-Mar-15 | | | 100% | \$8,203 | \$0 | \$8,203 | \$0 | 0.0 | | | |
| 242242615 | | H | Sector 2 - Window Installation | 08-Sep-15 A | 14-Sep-15 | 17-Apr-15 | | | 100% | \$2,930 | \$0 | \$2,930 | \$0 | 0.0 | | | |
| 242242620 | | H | Sector 2 - Window Gas Leaks Checks | 14-Sep-15 A | 21-Sep-15 | 24-Apr-15 | | | 100% | \$1,953 | \$0 | \$1,953 | \$0 | 0.0 | | | |
| 242242630 | | M | Sector 2 Complete | | 28-Sep-15 | 24-Apr-15 | | | 100% | \$0 | \$0 | \$0 | \$0 | 0.0 | | | |
| 242242640 | ST | S | Sector 3 - Hardware Installation | 09-Aug-15 A | 13-Oct-15 A | 11-May-15 | | | 100% | \$8,203 | \$968 | \$8,203 | \$0 | 0.2 | | | |
| 242242645 | | H | Sector 3 - Mirror Alignment | 15-Sep-15 A | 21-Sep-15 | 18-May-15 | | | 100% | \$2,908 | \$0 | \$2,908 | \$0 | 0.0 | | | |
| 242242650 | | H | Sector 3 - Fiducialization | 15-Sep-15 A | 15-Sep-15 | 20-May-15 | | | 100% | \$3,021 | \$0 | \$3,021 | \$0 | 0.0 | | | |
| 242242660 | | H | Sector 3 - Window Installation | 16-Oct-15 A | 23-Oct-15 A | 27-May-15 | | | 100% | \$2,930 | \$2,930 | \$2,930 | \$0 | -0.2 | | | |
| 242242665 | | H | Sector 3 - Window Gas Leaks Checks | 24-Oct-15 A | 25-Oct-15 A | 03-Jun-15 | | | 100% | \$1,953 | \$1,953 | \$1,953 | \$0 | 0.2 | | | |
| 242242675 | | M | Sector 3 Complete | | 26-Oct-15 A | 03-Jun-15 | | | 100% | \$0 | \$0 | \$0 | \$0 | 0.0 | | | |
| 242242680 | ST | S | Sector 4 - Prep Box | 23-Feb-15 A | 06-Oct-15 A | 05-May-15 | | | 100% | \$7,813 | \$961 | \$7,813 | \$0 | 0.2 | | | |
| 242242685 | ST | S | Sector 4 - Hardware Installation | 09-Oct-15 A | 19-Oct-15 A | 18-Jun-15 | | | 100% | \$8,203 | \$8,203 | \$8,203 | \$0 | -0.8 | | | |
| 242242690 | | H | Sector 4 - Mirror Alignment | 06-Oct-15 A | 12-Oct-15 A | 25-Jun-15 | | | 100% | \$2,908 | \$2,908 | \$2,908 | \$0 | 1.0 | | | |
| 242242695 | | H | Sector 4 - Fiducialization | 06-Oct-15 A | 15-Oct-15 A | 29-Jun-15 | | | 100% | \$3,021 | \$3,021 | \$3,021 | \$0 | 0.0 | | | |
| 242242705 | | H | Sector 4 - Window Installation | 02-Nov-15 | 12-Nov-15 | 06-Jul-15 | 78.0 | 0.0 | 0% | \$0 | \$0 | \$2,930 | (\$2,930) | -3.6 | | | |
| 242242710 | | H | Sector 4 - Window Gas Leaks Checks | 13-Nov-15 | 16-Nov-15 | 13-Jul-15 | 80.6 | 0.0 | 0% | \$0 | \$0 | \$1,953 | (\$1,953) | -3.6 | | | |
| 242242720 | | M | Sector 4 Complete | | 16-Nov-15 | 13-Jul-15 | 80.6 | 3.2 | 0% | \$0 | \$0 | \$0 | \$0 | -3.6 | | | |
| 242242725 | ST | S | Sector 5 - Prep Box | 16-Feb-15 A | 16-Oct-15 A | 11-Jun-15 | | | 100% | \$7,813 | \$961 | \$7,813 | \$0 | -0.2 | | | |
| 242242730 | ST | S | Sector 5 - Hardware Installation | 02-Nov-15 | 13-Nov-15 | 28-Jul-15 | 78.2 | 0.0 | 0% | \$0 | \$0 | \$8,203 | (\$8,203) | -2.2 | | | |
| 242242735 | | H | Sector 5 - Mirror Alignment | 16-Nov-15 | 20-Nov-15 | 04-Aug-15 | 78.2 | 0.0 | 0% | \$0 | \$0 | \$2,908 | (\$2,908) | -2.2 | | | |
| 242242740 | | H | Sector 5 - Fiducialization | 23-Nov-15 | 24-Nov-15 | 06-Aug-15 | 78.2 | 0.0 | 0% | \$0 | \$0 | \$3,021 | (\$3,021) | -2.2 | | | |
| 242242750 | | H | Sector 5 - Window Installation | 25-Nov-15 | 01-Dec-15 | 12-Aug-15 | 78.2 | 0.0 | 0% | \$0 | \$0 | \$2,930 | (\$2,930) | -2.2 | | | |
| 242242755 | | H | Sector 5 - Window Gas Leaks Checks | 02-Dec-15 | 04-Dec-15 | 19-Aug-15 | 78.2 | 0.0 | 0% | \$0 | \$0 | \$1,953 | (\$1,953) | -2.2 | | | |
| 242242765 | | M | Sector 5 Complete | | 04-Dec-15 | 19-Aug-15 | 78.2 | 0.8 | 0% | \$0 | \$0 | \$0 | \$0 | -2.2 | | | |
| 242242770 | ST | S | Sector 6 - Prep Box | 16-Feb-15 A | 17-Nov-15 | 17-Jul-15 | 77.4 | 0.0 | 87.7% | \$6,852 | \$0 | \$7,813 | (\$961) | -1.0 | | | |
| 242242775 | ST | S | Sector 6 - Hardware Installation | 18-Nov-15 | 30-Nov-15 | 03-Sep-15 | 77.4 | 0.0 | 0% | \$0 | \$0 | \$8,203 | (\$8,203) | -1.0 | | | |
| 242242780 | | H | Sector 6 - Mirror Alignment | 01-Dec-15 | 04-Dec-15 | 11-Sep-15 | 77.4 | 0.0 | 0% | \$0 | \$0 | \$2,908 | (\$2,908) | -1.0 | | | |
| 242242785 | | H | Sector 6 - Fiducialization | 01-Dec-15 | 02-Dec-15 | 15-Sep-15 | 77.4 | 0.0 | 0% | \$0 | \$0 | \$3,021 | (\$3,021) | -1.0 | | | |
| 242242795 | | H | Sector 6 - Window Installation | 03-Dec-15 | 08-Dec-15 | 21-Sep-15 | 77.4 | 0.0 | 0% | \$0 | \$0 | \$2,930 | (\$2,930) | -1.0 | | | |
| 242242800 | | H | Sector 6 - Window Gas Leaks Checks | 09-Dec-15 | 10-Dec-15 | 28-Sep-15 | 77.4 | 0.0 | 0% | \$0 | \$0 | \$1,953 | (\$1,953) | -1.0 | | | |
| 242242805 | | U | Sector 6 - Consumables | 07-Jul-15 A | 23-Nov-15 | 24-Sep-15 | 79.6 | 2.2 | 75% | \$263 | \$0 | \$350 | (\$88) | -0.6 | | | |
| 242242810 | | M | Sector 6 Complete | | 10-Dec-15 | 28-Sep-15 | 77.4 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | -1.0 | | | |
| 242242900M | | M | LTCC Complete | | 10-Dec-15 | 28-Sep-15 | 77.4 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | -1.0 | | | |
| 1.4.2.3 COMPUTING | | | | 01-Oct-14 A | 11-Jul-16 | 31-Mar-16 | 56.2 | 0.0 | | \$151,757 | \$26,233 | \$357,393 | \$65,343 | -17.2 | | | |
| 1.4.2.3.1 TRIGGER SYSTEM (Scintillators) | | | | 07-Mar-15 A | 29-Feb-16 | 31-Mar-16 | 50.0 | 0.0 | | \$33,245 | \$10,420 | \$130,619 | (\$16,374) | -0.4 | | | |
| 24231006 | ST | S | CTP Development including basic trigger firmware | 07-Mar-15 A | 23-Dec-15 | 31-Jul-15 | 57.8 | 8.0 | 67% | \$33,245 | \$10,420 | \$49,619 | (\$16,374) | 0.0 | | | |
| 24231011 | | U | Wait (Wait Period from Funding Milestone) | 01-Sep-15 A | 28-Sep-15 | 04-Nov-15 | | | 100% | \$0 | \$0 | \$0 | \$0 | 0.0 | | | |
| 24231012 | | U | CTP procurement (2 Additional boards) | 21-Sep-15 A | 29-Feb-16 | 31-Mar-16 | 49.8 | 0.0 | 0% | \$0 | \$0 | \$81,000 | \$0 | -0.4 | | | |
| 1.4.2.3.3 ONLINE COMPUTING | | | | 01-Oct-14 A | 11-Jul-16 | 29-Feb-16 | 56.2 | 0.0 | | \$118,513 | \$15,813 | \$226,774 | \$81,717 | -17.2 | | | |
| 24233002 | | U | Wait (Wait Period from Funding Milestone) | 01-Oct-14 A | 14-Mar-16 | 31-Aug-15 | 56.0 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | -17.2 | | | |
| 24233010 | | D | Ethernet wiring inside Hall B (10Gbit) | 21-Sep-15 A | 08-Dec-15 | 22-Dec-15 | 84.8 | 28.8 | 0% | \$0 | \$0 | \$44,722 | \$0 | -1.2 | | | |
| 24233030 | | U | Procure 4-port 10Gbit Blades for BigIron | 03-Aug-15 A | 21-Sep-15 | 22-Dec-15 | | | 100% | \$53,241 | \$0 | \$53,241 | \$53,241 | 0.0 | | | |
| 24233040 | | D | Procure Ethernet fibers/Cu wires (Short Jumpers) | 15-Mar-16 | 11-May-16 | 22-Dec-15 | 56.0 | 0.0 | 0% | \$0 | \$0 | \$22,361 | \$0 | -17.2 | | | |

◆ Primary Baseline Milestone
 ▬ Primary Baseline
 ▬ Remaining Work
▬ Project Baseline Bar
 ▬ Actual Work
 ▬ Critical Remaining ...

| Activity ID | Acti with Ster | EVA Rep. Coc | Activity Name | Start | Finish | BL Project Finish | Total Float | Free Float | Physical % Complete | Earned Value Cost | MONTHLY EV COST | BL Project Total Cost | Schedule Variance | Variance - BL1 Finish | FY2015 | FY2016 | FY2017 |
|---|----------------|--------------|--|-------------|-------------|-------------------|-------------|------------|---------------------|-------------------|-----------------|-----------------------|-------------------|-----------------------|--------|--------|--------|
| 24233045 | | H | Install Ethernet fibers/Cu wires (Short Jumpers) | 12-May-16 | 11-Jul-16 | 29-Feb-16 | 56.0 | 0.0 | 0% | \$0 | \$0 | \$6,404 | \$0 | -17.2 | | | |
| 24233055 | | H | Install Terminal servers (Etherlite32) (10) | 04-Jan-16 | 25-Jan-16 | 25-Jun-15 | 79.6 | 23.6 | 0% | \$0 | \$0 | \$3,103 | (\$3,103) | -7.0 | | | |
| 24233068 | | D | Trigger system fibers wiring | 01-Jun-15 A | 29-Jan-16 | 23-Oct-15 | 78.8 | 22.8 | 6% | \$2,022 | \$0 | \$33,692 | (\$31,670) | -3.8 | | | |
| 24233069 | | U | Procure CISCO 2960S switches (24 Cu ports) (15) | 02-Aug-15 A | 26-Oct-15 A | 22-Dec-15 | | | 100% | \$63,250 | \$15,813 | \$63,250 | \$63,250 | 7.8 | | | |
| 24233070M | | M | Online computing infrastructure complete | | 11-Jul-16 | 29-Feb-16 | 56.0 | 26.2 | 0% | \$0 | \$0 | \$0 | \$0 | -17.2 | | | |
| 1.4.2.4 ELECTRONICS | | | | 07-Apr-14 A | 20-Jan-17 | 31-Mar-16 | 30.4 | 0.0 | | \$100,268 | \$741 | \$179,122 | (\$6,335) | -39.2 | | | |
| 1.4.2.4.2 TDC AND DISCRIMINATORS | | | | 02-Nov-15 A | 20-Jan-17 | 11-Jun-15 | 30.4 | 0.0 | | \$0 | \$0 | \$14,859 | (\$14,859) | -39.2 | | | |
| 24242003 | | Z | Wait (Wait Period From Funding Milestone) | 02-Nov-15 A | 13-Jul-16 A | 04-Jun-15 | | | 100% | \$0 | \$0 | \$0 | \$0 | -14.8 | | | |
| 24242040a | ST | S | JLab Discriminator (12) and Flash FADC (12) test/install (SF) | 04-Jan-16 | 25-Jan-16 | 30-Sep-14 | 79.6 | 49.2 | 0% | \$0 | \$0 | \$3,715 | (\$3,715) | -7.0 | | | |
| 24242055 | ST | S | ORTEC 935F Discriminators (24) Test/Install (SF) | 21-Dec-16 | 20-Jan-17 | 30-Sep-14 | 30.4 | 0.0 | 0% | \$0 | \$0 | \$11,145 | (\$11,145) | -56.2 | | | |
| 24242060M | | M | TDC and Discriminators Complete | | 20-Jan-17 | 11-Jun-15 | 30.4 | 0.6 | 0% | \$0 | \$0 | \$0 | \$0 | -39.0 | | | |
| 1.4.2.4.3 SCALERS | | | | 17-Aug-15 A | 03-Feb-16 | 31-Mar-16 | 78.4 | 0.0 | | \$23,134 | \$0 | \$72,520 | \$23,134 | -4.4 | | | |
| 24243010 | ST | S | SCALERS - Procurement/Install (SF) | 17-Aug-15 A | 03-Feb-16 | 31-Mar-16 | 78.2 | 48.4 | 31.9% | \$23,134 | \$0 | \$72,520 | \$23,134 | -4.4 | | | |
| 1.4.2.4.4 HIGH VOLTAGE | | | | 07-Apr-14 A | 16-Nov-15 | 30-Sep-14 | 87.8 | 0.0 | | \$11,884 | \$741 | \$13,002 | (\$1,118) | -4.4 | | | |
| 24244030 | ST | S | CAEN 1527 HV mainframes install (12) (FC), (2) (SF) installation | 07-Apr-14 A | 16-Nov-15 | 30-Sep-14 | 87.6 | 57.8 | 91.4% | \$11,884 | \$741 | \$13,002 | (\$1,118) | -4.4 | | | |
| 1.4.2.4.7 CRATES, RACKS | | | | 04-Jul-15 A | 29-Jan-16 | 24-Jul-15 | 79.0 | 0.0 | | \$65,250 | \$0 | \$78,741 | (\$13,491) | -7.0 | | | |
| 24247005a | ST | S | Wiener VME64x crates install (2) (SF) FY14 | 04-Jan-16 | 29-Jan-16 | 30-Sep-14 | 78.8 | 0.0 | 0% | \$0 | \$0 | \$1,035 | (\$1,035) | -7.0 | | | |
| 24247005aB | ST | S | Wiener VME64x crates install (2) (SF) FY15 | 04-Jan-16 | 29-Jan-16 | 17-Dec-14 | 78.8 | 0.0 | 0% | \$0 | \$0 | \$848 | (\$848) | -7.0 | | | |
| 24247030 | ST | S | NIM crates (2) install (SF) | 04-Jan-16 | 29-Jan-16 | 30-Sep-14 | 78.8 | 0.0 | 0% | \$0 | \$0 | \$1,857 | (\$1,857) | -7.0 | | | |
| 24247053 | | D | Subway electrical power distribution | 04-Jul-15 A | 23-Dec-15 | 24-Jul-15 | 74.4 | 0.0 | 87% | \$65,250 | \$0 | \$75,000 | (\$9,750) | -7.0 | | | |
| 24247060M | | M | Crates and Racks Complete | | 29-Jan-16 | 24-Jul-15 | 78.8 | 49.0 | 0% | \$0 | \$0 | \$0 | \$0 | -7.0 | | | |
| 1.4.2.5 BEAMLINE | | | | 25-Aug-15 A | 31-Jan-17 | 31-Jan-17 | 31.0 | 0.0 | | \$72,653 | \$67,612 | \$254,415 | \$51,705 | -24.2 | | | |
| 1.4.2.5.4 BEAMLINE COMPONENTS | | | | 25-Aug-15 A | 31-Jan-17 | 31-Jan-17 | 31.0 | 0.0 | | \$72,653 | \$67,612 | \$254,415 | \$51,705 | -24.2 | | | |
| 24254000 | | D | Faraday Cup Materials | 04-Nov-15 | 18-Dec-15 | 12-Nov-15 | 75.2 | 0.0 | 0% | \$0 | \$0 | \$2,198 | (\$1,560) | -4.8 | | | |
| 24254005 | | H | Faraday Cup Labor | 21-Dec-15 | 24-Feb-16 | 21-Jan-16 | 75.2 | 45.4 | 0% | \$0 | \$0 | \$7,203 | \$0 | -4.8 | | | |
| 24254020 | | H | Downstream Viewer Assembly | 25-Aug-15 A | 31-Aug-15 | 13-May-16 | | | 100% | \$2,016 | \$0 | \$2,016 | \$2,016 | 0.0 | | | |
| 24254025 | ST | S | Moller polarimeter upgrade Manufacturing Design | 01-Sep-15 A | 22-Oct-15 A | 18-Nov-15 | | | 100% | \$15,123 | \$12,099 | \$15,123 | \$5,617 | 3.8 | | | |
| 24254030 | | D | Moller polarimeter upgrade Procurement | 12-Oct-15 A | 09-Feb-16 | 24-Feb-16 | 65.4 | 0.0 | 66.67% | \$43,954 | \$43,954 | \$65,927 | \$43,954 | 2.2 | | | |
| 24254035 | ST | S | Moller polarimeter upgrade Installation | 08-Oct-15 A | 28-Apr-16 | 13-May-16 | 65.4 | 0.0 | 50% | \$10,190 | \$10,190 | \$20,380 | \$10,190 | 2.2 | | | |
| 24254040 | ST | S | Moller Shielding Manufacturing Design | 04-Nov-15 | 15-Feb-16 | 11-Jan-16 | 66.0 | 0.0 | 0% | \$0 | \$0 | \$24,729 | (\$8,501) | -4.8 | | | |
| 24254045 | | D | Moller Shielding Procurement | 16-Feb-16 | 05-May-16 | 01-Apr-16 | 66.0 | 35.0 | 0% | \$0 | \$0 | \$34,053 | \$0 | -4.8 | | | |
| 24254050 | ST | S | Moller Shielding Installation | 25-Jan-17 | 31-Jan-17 | 31-Jan-17 | 31.0 | 1.2 | 0% | \$0 | \$0 | \$35,452 | \$0 | -24.0 | | | |
| 24254055 | | Z | Downstream Vacuum System Procurement | 04-Nov-15 | 04-Feb-16 | 21-Dec-15 | 69.8 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | -4.8 | | | |
| 24254060 | | Z | Downstream Vacuum System Installation | 05-Feb-16 | 01-Apr-16 | 26-Feb-16 | 69.8 | 40.0 | 0% | \$0 | \$0 | \$0 | \$0 | -4.8 | | | |
| 24254065 | | Z | Upstream Vacuum System Procurement | 04-Nov-15 | 04-Feb-16 | 21-Dec-15 | 74.0 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | -4.8 | | | |
| 24254070 | | Z | Upstream Vacuum System Installation | 05-Feb-16 | 03-Mar-16 | 28-Jan-16 | 74.0 | 44.2 | 0% | \$0 | \$0 | \$0 | \$0 | -4.8 | | | |
| 24254075 | | Z | Beam Offset Monitor Procurement | 04-Nov-15 | 04-Feb-16 | 21-Dec-15 | 70.0 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | -4.8 | | | |
| 24254080 | | Z | Beam Offset Monitor Installation | 05-Feb-16 | 31-Mar-16 | 25-Feb-16 | 70.0 | 40.2 | 0% | \$0 | \$0 | \$0 | \$0 | -4.8 | | | |
| 24254082 | | Z | Wait (Wait Activity from Funding Milestone) | 01-Oct-15 A | 23-Dec-15 | 25-Feb-16 | 78.8 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | 7.8 | | | |
| 24254085 | | D | 2C24 girder move Procurement | 04-Jan-16 | 29-Jan-16 | 21-Dec-15 | 78.8 | 0.0 | 0% | \$0 | \$0 | \$13,185 | \$0 | -4.2 | | | |
| 24254090 | ST | S | 2C24 girder move Labor | 08-Jan-16 | 29-Jan-16 | 21-Jan-16 | 78.8 | 49.0 | 0% | \$0 | \$0 | \$21,342 | \$0 | -1.2 | | | |
| 24254095 | | Z | Upstream beam blocker and vacuum box Manufacturing Design | 04-Nov-15 | 24-Nov-15 | 21-Oct-15 | 53.6 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | -4.8 | | | |
| 24254100 | | Z | Upstream beam blocker and vacuum box Procurement | 25-Nov-15 | 04-Apr-16 | 01-Mar-16 | 53.6 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | -4.8 | | | |
| 24254105 | | Z | Upstream beam blocker and vacuum box Installation | 05-Apr-16 | 27-Jul-16 | 21-Jul-16 | 53.6 | 23.8 | 0% | \$0 | \$0 | \$0 | \$0 | -4.8 | | | |
| 24254110 | | Z | Upstream Shielding Wall Procurement | 04-Nov-15 | 09-Jun-16 | 05-May-16 | 56.2 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | -4.8 | | | |



| Activity ID | Acti with Ster | EVA Rep Cor | Activity Name | Start | Finish | BL Project Finish | Total Float | Free Float | Physical % Complete | Earned Value Cost | MONTHLY EV COST | BL Project Total Cost | Schedule Variance | Variance - BL1 Finish | FY2015 | FY2016 | FY2017 |
|--|----------------------|-------------------|---|-------------|-------------|----------------------|----------------|------------|------------------------|----------------------|--------------------|--------------------------|----------------------|-----------------------------|--------|--------|--------|
| 24254115 | | Z | Upstream Shielding Wall Installation | 10-Jun-16 | 08-Jul-16 | 03-Jun-16 | 56.2 | 26.4 | 0% | \$0 | \$0 | \$0 | \$0 | -4.8 | | | |
| 24254120 | | Z | Procurement of Beamline Devices | 04-Nov-15 | 31-Aug-16 | 28-Jul-16 | 48.0 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | -4.8 | | | |
| 24254125 | | E | Labor to Support The Procurement Process | 01-Oct-15 A | 01-Aug-16 | 28-Jul-16 | 53.0 | 23.2 | 10.7% | \$1,370 | \$1,370 | \$12,808 | (\$11) | -0.4 | | | |
| 1.4.2.6 INFRASTRUCTURE | | | | 01-Oct-14 A | 27-Jan-17 | 27-Jan-17 | 31.4 | 0.0 | | \$561,925 | \$81,249 | \$1,423,960 | (\$120,208) | 0.0 | | | |
| 1.4.2.6.5 TORUS INSTALLATION | | | | 01-Oct-14 A | 23-Jun-16 | 23-Jun-16 | 58.4 | 0.0 | | \$320,952 | \$56,140 | \$578,358 | \$60,490 | 0.0 | | | |
| 24265005 | ST | S | Labor to Support The Torus Installation, Cooldown and Test FY15 | 16-Feb-15 A | 21-Sep-15 | 30-Sep-15 | | | 100% | \$148,992 | \$0 | \$148,992 | \$0 | 0.0 | | | |
| 24265010 | ST | S | Labor to Support The Torus Installation, Cooldown and Test FY16 | 21-Sep-15 A | 23-Jun-16 | 23-Jun-16 | 58.2 | 28.4 | 34.2% | \$52,580 | \$22,139 | \$153,744 | \$33,790 | 0.0 | | | |
| 24265025 | | Z | Wait (Wait Period from Funding Milestone) | 01-Oct-14 A | 03-Nov-15 | 27-Feb-15 | 53.8 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | -4.4 | | | |
| 24265030 | ST | S | Produce Manufacturing Drawings for brackets to allow removal of | 03-Aug-15 A | 14-Sep-15 | 30-Jun-15 | | | 100% | \$8,515 | \$0 | \$8,515 | \$0 | 0.0 | | | |
| 24265040 | | D | Procure brackets to allow removal of Spit | 17-Aug-15 A | 21-Sep-15 | 11-Sep-15 | | | 100% | \$4,000 | \$0 | \$4,000 | \$0 | 0.0 | | | |
| 24265086H20A | | H | Pre Assembly of US and DS U-Shaped VJ #5 FY16 | 01-Oct-15 A | 01-Oct-15 A | 01-Oct-15 | | | 100% | \$1,071 | \$0 | \$1,071 | \$0 | 0.0 | | | |
| 24265345 | | H | Install U-Shaped VJ's/skip weld/ After 2nd one start welding in tub | 01-Sep-15 A | 02-Sep-15 | 29-Sep-15 | | | 100% | \$7,401 | \$0 | \$7,401 | \$0 | 0.0 | | | |
| 24265345A | | H | Install U-Shaped VJ's/skip weld/ After 2nd one start welding in tub | 05-Sep-15 A | 06-Sep-15 | 30-Sep-15 | | | 100% | \$3,700 | \$0 | \$3,700 | \$0 | 0.0 | | | |
| 24265345A5 | | H | Install U-Shaped VJ's/skip weld/ After 2nd one start welding in tub | 01-Oct-15 A | 01-Oct-15 A | 01-Oct-15 | | | 100% | \$3,819 | \$0 | \$3,819 | \$0 | 0.0 | | | |
| 24265345B | | H | Install U-Shaped VJ's/skip weld/ After 2nd one start welding in tub | 07-Sep-15 A | 08-Sep-15 | 05-Oct-15 | | | 100% | \$7,287 | \$0 | \$7,287 | \$0 | 0.0 | | | |
| 24265345C | | H | Install U-Shaped VJ's/skip weld/ After 2nd one start welding in tub | 09-Sep-15 A | 12-Sep-15 | 07-Oct-15 | | | 100% | \$7,133 | \$0 | \$7,133 | \$0 | 0.0 | | | |
| 24265345D | | H | Install U-Shaped VJ's/skip weld/ After 2nd one start welding in tub | 21-Sep-15 A | 23-Sep-15 | 09-Oct-15 | | | 100% | \$7,133 | \$0 | \$7,133 | \$0 | 0.0 | | | |
| 24265345F | | H | Install U-Shaped VJ's/skip weld/ After 2nd one start welding in tub | 28-Sep-15 A | 02-Oct-15 A | 13-Oct-15 | | | 100% | \$7,133 | \$3,567 | \$7,133 | \$0 | 0.0 | | | |
| 24265346 | | H | Pressure/leak test. | 04-Oct-15 A | 07-Oct-15 A | 16-Oct-15 | | | 100% | \$4,932 | \$4,932 | \$4,932 | \$0 | 0.0 | | | |
| 24265350 | | H | Install cold to warm supports | 09-Oct-15 A | 10-Oct-15 A | 20-Oct-15 | | | 100% | \$3,691 | \$3,691 | \$3,691 | \$0 | 0.0 | | | |
| 24265355 | | H | Insulate cold to warm supports | 11-Oct-15 A | 12-Oct-15 A | 22-Oct-15 | | | 100% | \$6,110 | \$6,110 | \$6,110 | \$0 | 0.2 | | | |
| 24265360 | ST | S | Survey assembly for symmetry | 13-Oct-15 A | 04-Nov-15 | 27-Oct-15 | 53.6 | 0.0 | 50% | \$4,401 | \$4,401 | \$8,802 | (\$4,401) | -2.6 | | | |
| 24265365 | | H | Route instrumentation wires, make electrical connections at feedtl | 21-Sep-15 A | 10-Nov-15 | 02-Nov-15 | 53.6 | 0.0 | 50% | \$2,797 | \$0 | \$5,593 | (\$1,398) | -2.6 | | | |
| 24265370 | | U | Install brackets to complete vacuum jacket welding | 23-Sep-15 A | 28-Sep-15 | 06-Nov-15 | | | 100% | \$21,198 | \$0 | \$21,198 | \$21,198 | 0.0 | | | |
| 24265380 | ST | S | Insulate Jumper Piping | 14-Oct-15 A | 10-Nov-15 | 12-Nov-15 | 53.6 | 0.0 | 60% | \$3,628 | \$3,628 | \$6,047 | \$3,628 | -1.8 | | | |
| 24265385 | | U | install jumper vacuum jackets | 26-Oct-15 A | 10-Nov-15 | 18-Nov-15 | 53.6 | 0.0 | 50% | \$7,673 | \$7,673 | \$15,346 | \$7,673 | -1.0 | | | |
| 24265390 | | U | Complete all welding to finish vacuum jacket | 11-Nov-15 | 03-Dec-15 | 11-Dec-15 | 53.6 | 0.0 | 0% | \$0 | \$0 | \$42,485 | \$0 | -1.0 | | | |
| 24265395 | | H | Orient assembly, survey, and lock rotation | 04-Dec-15 | 07-Dec-15 | 15-Dec-15 | 53.6 | 0.0 | 0% | \$0 | \$0 | \$8,528 | \$0 | -1.0 | | | |
| 24265400 | ST | S | installation of torus legs - connection to subway | 08-Dec-15 | 11-Dec-15 | 21-Dec-15 | 53.6 | 0.0 | 0% | \$0 | \$0 | \$14,137 | \$0 | -1.0 | | | |
| 24265402M | | M | Torus Control System Ready for Installation | 16-Feb-16 | | | 55.2 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | -11.0 | | | |
| 24265404 | | Z | Install Torus Control System | 16-Feb-16 | 14-Mar-16 | 08-Dec-15 | 55.2 | 6.4 | 0% | \$0 | \$0 | \$0 | \$0 | -11.0 | | | |
| 24265405 | | H | Run Wires, Connect instruments, verify OOPS operation | 14-Dec-15 | 15-Dec-15 | 23-Dec-15 | 53.6 | 0.8 | 0% | \$0 | \$0 | \$5,292 | \$0 | 0.6 | | | |
| 24265410 | | H | Pre-load vertical supports | 22-Dec-15 | 04-Jan-16 | 06-Jan-16 | 52.8 | 0.0 | 0% | \$0 | \$0 | \$7,445 | \$0 | 0.0 | | | |
| 24265415 | | H | Remove spit | 05-Jan-16 | 05-Jan-16 | 07-Jan-16 | 52.8 | 0.0 | 0% | \$0 | \$0 | \$7,149 | \$0 | 0.0 | | | |
| 24265420 | | H | Adjust OOPS position | 06-Jan-16 | 07-Jan-16 | 11-Jan-16 | 52.8 | 0.0 | 0% | \$0 | \$0 | \$7,149 | \$0 | 0.0 | | | |
| 24265425 | ST | S | Remove 1-8 rods and adjust all supports to position cold mass | 08-Jan-16 | 15-Jan-16 | 20-Jan-16 | 52.8 | 0.6 | 0% | \$0 | \$0 | \$8,141 | \$0 | 0.0 | | | |
| 24265430 | ST | S | install hub shield, MLI, warm bore endplates and close 1-8" holes | 08-Jan-16 | 14-Jan-16 | 19-Jan-16 | 52.8 | 0.0 | 0% | \$0 | \$0 | \$9,351 | \$0 | 0.0 | | | |
| 24265435 | | H | install cryoduct support | 15-Jan-16 | 15-Jan-16 | 20-Jan-16 | 52.8 | 0.6 | 0% | \$0 | \$0 | \$1,326 | \$0 | 0.0 | | | |
| 24265440 | ST | S | Locate/install service tower and cryoduct | 22-Jan-16 | 11-Feb-16 | 10-Feb-16 | 52.2 | 0.0 | 0% | \$0 | \$0 | \$12,629 | \$0 | 0.0 | | | |
| 24265445 | | H | Install and wire up Torus PS | 10-Aug-15 A | 21-Sep-15 | 06-Apr-15 | | | 100% | \$7,758 | \$0 | \$7,758 | \$0 | 0.0 | | | |
| 24265450 | | H | Close VJ at cryoduct and chimney | 04-Mar-16 | 07-Mar-16 | 04-Mar-16 | 52.2 | 0.0 | 0% | \$0 | \$0 | \$8,009 | \$0 | 0.0 | | | |
| 24265455 | | H | Install Vacuum pumping system | 08-Mar-16 | 08-Mar-16 | 07-Mar-16 | 52.2 | 0.0 | 0% | \$0 | \$0 | \$7,313 | \$0 | 0.0 | | | |
| 1.4.2.6.6 SOLENOID INSTALLATION | | | | 04-Nov-15 | 31-Oct-16 | 31-Oct-16 | 33.6 | 0.0 | | \$0 | \$0 | \$89,252 | (\$4,200) | 0.0 | | | |
| 24266010 | | H | Solenoid - procure heater system for warm bore | 04-Nov-15 | 09-Dec-15 | 06-Jul-15 | 62.8 | 33.0 | 0% | \$0 | \$0 | \$4,200 | (\$4,200) | -4.8 | | | |

◆ Primary Baseline Milestone
 — Primary Baseline
 ■ Remaining Work
— Project Baseline Bar
 ■ Actual Work
 ■ Critical Remaining ...

| Activity ID | Acti with Str | EVA Rep Cor | Activity Name | Start | Finish | BL Project Finish | Total Float | Free Float | Physical % Complete | Earned Value Cost | MONTHLY EV COST | BL Project Total Cost | Schedule Variance | Variance - BL1 Finish | FY2015 | FY2016 | FY2017 |
|---|---------------------|-------------------|--|--------------------|------------------|----------------------|----------------|------------|------------------------|----------------------|--------------------|--------------------------|----------------------|-----------------------------|--------|--------|--------|
| 24266015 | ST | S | Receive and inspect solenoid magnet from Vendor | 04-Aug-16 | 10-Aug-16 | 10-Aug-16 | 29.8 | 0.0 | 0% | \$0 | \$0 | \$18,426 | \$0 | -0.8 | | | |
| 24266020 | | M | Start Installation of Solenoid | 11-Aug-16 | | | 29.8 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | -0.8 | | | |
| 24266025 | | H | Install Solenoid on cart | 11-Aug-16 | 11-Aug-16 | 11-Aug-16 | 29.8 | 0.0 | 0% | \$0 | \$0 | \$1,612 | \$0 | -0.8 | | | |
| 24266030 | | H | Position CryoCan atop the Solenoid | 25-Aug-16 | 31-Aug-16 | 31-Aug-16 | 29.8 | 0.0 | 0% | \$0 | \$0 | \$9,408 | \$0 | 0.0 | | | |
| 24266050 | | H | Connect solenoid magnet cryogenic circuits to CryoCan | 01-Sep-16 | 15-Sep-16 | 15-Sep-16 | 29.8 | 0.0 | 0% | \$0 | \$0 | \$9,094 | \$0 | 0.0 | | | |
| 24266060 | ST | S | Connect solenoid magnet power leads to CryoCan | 23-Sep-16 | 29-Sep-16 | 29-Sep-16 | 29.8 | 0.0 | 0% | \$0 | \$0 | \$17,372 | \$0 | 0.0 | | | |
| 24266065 | ST | S | Insulate & close up interface from solenoid magnet to CryoCan | 30-Sep-16 | 13-Oct-16 | 13-Oct-16 | 29.8 | 0.0 | 0% | \$0 | \$0 | \$10,387 | \$0 | 0.0 | | | |
| 24266075 | | H | Connect Cryo instrumentation from solenoid magnet to control sys | 21-Oct-16 | 24-Oct-16 | 24-Oct-16 | 29.8 | 0.0 | 0% | \$0 | \$0 | \$6,363 | \$0 | 0.0 | | | |
| 24266080 | | H | Connect Power leads from Cryocan to PS | 25-Oct-16 | 31-Oct-16 | 31-Oct-16 | 33.4 | 0.0 | 0% | \$0 | \$0 | \$12,388 | \$0 | 0.0 | | | |
| 1.4.2.6.7 DETECTOR AND FIXTURES INSTALLATION | | | | 05-Jan-15 A | 27-Jan-17 | 27-Jan-17 | 31.4 | 0.0 | | \$240,973 | \$25,109 | \$756,351 | (\$176,498) | 0.0 | | | |
| 24267010M | | M | CTOF Ready for Installation | 31-May-16 | | | 59.8 | 30.0 | 0% | \$0 | \$0 | \$0 | \$0 | -22.0 | | | |
| 24267020M | | M | LTCC - Last 3 units Ready for Installation | 11-Dec-15 | | | 77.4 | 16.8 | 0% | \$0 | \$0 | \$0 | \$0 | -1.0 | | | |
| 24267035 | | E | Installation Engineering Oversight FY15 | 05-Jan-15 A | 30-Sep-15 | 30-Sep-15 | | | 100% | \$107,870 | \$0 | \$107,870 | \$0 | 0.0 | | | |
| 24267040 | | Z | Wait (Wait Period from Between FY15 and Fy16 Engineering Over | 01-Oct-15 A | 25-May-16 | 25-May-16 | 44.4 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | 0.0 | | | |
| 24267045 | ST | S | Installation Engineering Oversight FY16 | 26-May-16 | 30-Sep-16 | 30-Sep-16 | 44.4 | 14.6 | 0% | \$0 | \$0 | \$42,140 | \$0 | 0.0 | | | |
| 24267050 | ST | S | DC - Produce Manufacturing Drawings for cable trays and gas sys | 05-Jan-15 A | 02-Dec-15 | 30-Jun-15 | 61.4 | 0.0 | 95% | \$20,018 | \$0 | \$21,071 | (\$1,054) | -4.4 | | | |
| 24267055 | ST | S | DC - cable trays and gas system mounts Engineering Analysis | 05-Jan-15 A | 19-Oct-15 A | 15-Apr-15 | | | 100% | \$15,410 | \$1,541 | \$15,410 | \$0 | 0.0 | | | |
| 24267060 | ST | S | DC - procure cable trays and gas system mounts (Gas System Us | 01-Jun-15 A | 22-Jan-16 | 13-Oct-15 | 61.4 | 0.0 | 10% | \$3,564 | \$0 | \$35,638 | (\$32,075) | 0.0 | | | |
| 24267065 | ST | S | Install DC signal cable trays and gas lines (Gas System Use) | 01-Jun-15 A | 11-Mar-16 | 03-Dec-15 | 61.4 | 0.0 | 20% | \$11,612 | \$0 | \$58,059 | (\$8,102) | 0.0 | | | |
| 24267070 | ST | S | Route DC Signal Cables | 25-Jan-16 | 11-Mar-16 | 03-Dec-15 | 61.4 | 0.0 | 0% | \$0 | \$0 | \$24,187 | (\$8,984) | 0.0 | | | |
| 24267075 | | H | Install DC HV/LV Racks and cable trays | 14-Oct-15 A | 12-Apr-16 | 13-Jan-16 | 61.4 | 12.6 | 50% | \$4,837 | \$4,837 | \$9,675 | \$4,837 | 0.0 | | | |
| 24267080 | ST | S | DC - Produce Manufacturing Drawings for mounts and adjusters fc | 05-Jan-15 A | 02-Dec-15 | 30-Jun-15 | 72.8 | 0.0 | 95% | \$11,732 | \$0 | \$12,350 | (\$617) | -4.4 | | | |
| 24267085 | | D | DC - procure mounts and adjusters for DC to Torus | 03-Aug-15 A | 07-Jan-16 | 03-Sep-15 | 72.8 | 24.0 | 10% | \$13,115 | \$0 | \$131,145 | (\$118,031) | -4.4 | | | |
| 24267150 | ST | S | DC - design maintenance platforms | 12-Jan-15 A | 29-Jan-16 | 26-Aug-15 | 60.6 | 0.0 | 30% | \$4,966 | \$0 | \$16,555 | (\$11,588) | -11.0 | | | |
| 24267155 | | D | DC - procure maintenance platforms | 01-Feb-16 | 18-Apr-16 | 13-Nov-15 | 60.6 | 11.8 | 0% | \$0 | \$0 | \$20,469 | \$0 | -11.0 | | | |
| 24267165 | ST | S | Produce Manufacturing Drawings for and install HTCC gas system | 09-Jun-15 A | 24-Oct-15 A | 14-Aug-15 | | | 100% | \$18,072 | \$7,229 | \$18,072 | \$0 | 0.0 | | | |
| 24267175 | | H | Design LTCC nose mount | 13-Jul-15 A | 19-Oct-15 A | 17-Jul-15 | | | 100% | \$7,317 | \$3,659 | \$7,317 | \$0 | 1.6 | | | |
| 24267180 | | D | Procure LTCC nose mounts | 02-Nov-15 | 13-Jan-16 | 18-Sep-15 | 75.4 | 14.8 | 0% | \$0 | \$0 | \$4,015 | (\$4,015) | -0.2 | | | |
| 24267190 | | H | Design LTCC installation tooling adapters | 16-Aug-15 A | 19-Oct-15 A | 07-Aug-15 | | | 100% | \$9,435 | \$4,717 | \$9,435 | \$0 | 1.6 | | | |
| 24267195 | | H | Procure LTCC installation tooling adapters | 02-Nov-15 | 12-Jan-16 | 08-Oct-15 | 75.6 | 15.0 | 0% | \$0 | \$0 | \$1,832 | (\$1,832) | -0.2 | | | |
| 24267210 | | H | Modify Space Frame Level 3 deck For Torus Cryo | 11-Nov-15 | 10-Dec-15 | 28-Oct-15 | 54.6 | 2.6 | 0% | \$0 | \$0 | \$8,062 | (\$8,062) | 0.6 | | | |
| 24267215 | ST | S | Transport and Install LTCC | 28-Apr-16 | 11-May-16 | 13-Jan-16 | 60.6 | 0.0 | 0% | \$0 | \$0 | \$16,125 | \$0 | -3.2 | | | |
| 24267230 | | H | Transport and Install TOF Panel 2 and align relative to panel 1a | 17-May-16 | 24-May-16 | 27-Jan-16 | 60.6 | 0.0 | 0% | \$0 | \$0 | \$9,675 | \$0 | -3.2 | | | |
| 24267235 | | Z | Wait (Wait Period from Start of 24267230 to Start of 2822X080) | 17-May-16 | 17-May-16 | 20-Jan-16 | 62.2 | 1.6 | 0% | \$0 | \$0 | \$0 | \$0 | | | | |
| 24267255 | ST | S | Install mounting adapters for drift chambers | 28-Aug-15 A | 12-Jul-16 | 21-Jun-16 | 48.8 | 0.0 | 50% | \$13,024 | \$3,126 | \$26,049 | \$13,024 | -3.2 | | | |
| 24267265M | | M | Start Installation of Drift Chambers | 13-Jul-16 | | | 48.8 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | -3.2 | | | |
| 24267270 | ST | S | Install Region 2 Drift Chamber | 13-Jul-16 | 26-Jul-16 | 06-Jul-16 | 48.8 | 0.0 | 0% | \$0 | \$0 | \$27,412 | \$0 | -3.2 | | | |
| 24267275 | | Z | Wait (Wait Period from start of 24267270 to start of 2822X090) | 13-Jul-16 | 19-Jul-16 | 28-Jun-16 | 48.8 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | | | | |
| 24267280 | ST | S | Install Region 1 Drift Chamber | 27-Jul-16 | 09-Aug-16 | 20-Jul-16 | 48.8 | 0.0 | 0% | \$0 | \$0 | \$27,412 | \$0 | -3.2 | | | |
| 24267285 | | Z | Wait (Wait Period from start of 24267280 to start of 2822X095) | 27-Jul-16 | 28-Jul-16 | 08-Jul-16 | 48.8 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | | | | |
| 24267290 | ST | S | Install Region 3 Drift Chamber | 05-Aug-16 | 18-Aug-16 | 29-Jul-16 | 48.8 | 0.0 | 0% | \$0 | \$0 | \$27,412 | \$0 | -3.2 | | | |
| 24267295 | | Z | Wait (Wait Period from start of 24267290 to start of 2822X100) | 05-Aug-16 | 09-Aug-16 | 20-Jul-16 | 48.8 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | | | | |
| 24267300 | | H | Connect / Cable Drift Chambers | 17-Aug-16 | 30-Aug-16 | 10-Aug-16 | 48.8 | 19.0 | 0% | \$0 | \$0 | \$10,407 | \$0 | -3.2 | | | |
| 24267355 | | H | Rig and Transport HTCC to Hall | 05-Aug-16 | 08-Aug-16 | 19-Jul-16 | 50.6 | 0.0 | 0% | \$0 | \$0 | \$2,016 | \$0 | -3.2 | | | |

◆ Primary Baseline Milestone
 ▬ Primary Baseline
 ▬ Remaining Work
▬ Project Baseline Bar
 ▬ Actual Work
 ▬ Critical Remaining ...

| Activity ID | Acti with Str | EVA Rep Cor | Activity Name | Start | Finish | BL Project Finish | Total Float | Free Float | Physical % Complete | Earned Value Cost | MONTHLY EV COST | BL Project Total Cost | Schedule Variance | Variance - BL1 Finish | FY2015 | FY2016 | FY2017 |
|--|---------------------|-------------------|--|--------------------|------------------|----------------------|----------------|------------|------------------------|----------------------|--------------------|--------------------------|----------------------|-----------------------------|--------|--------|--------|
| 242761170 | ST | S | Install Distribution Can | 08-Jan-16 | 29-Jan-16 | 17-Dec-15 | 52.0 | 0.0 | 0% | \$0 | \$0 | \$12,094 | \$0 | 0.0 | | | |
| 242761175 | ST | S | Weld Distribution Can to Transfer Line | 01-Feb-16 | 11-Mar-16 | 09-Feb-16 | 52.0 | 0.0 | 0% | \$0 | \$0 | \$12,094 | \$0 | 0.0 | | | |
| 242761180 | | H | Weld Distribution Can Test and QC | 14-Mar-16 | 18-Mar-16 | 16-Feb-16 | 52.0 | 0.0 | 0% | \$0 | \$0 | \$4,031 | \$0 | 0.0 | | | |
| 242761185 | | H | 4 atmosphere supply fab and install | 01-Feb-16 | 26-Feb-16 | 26-Jan-16 | 53.0 | 0.0 | 0% | \$0 | \$0 | \$8,062 | \$0 | 0.0 | | | |
| 242761190 | | H | 4 atmosphere supply test and QC | 29-Feb-16 | 04-Mar-16 | 02-Feb-16 | 53.0 | 1.0 | 0% | \$0 | \$0 | \$2,016 | \$0 | 0.0 | | | |
| 242761200 | | H | Distribution Can - Connect Instrumentation and valves | 14-Mar-16 | 18-Mar-16 | 16-Feb-16 | 52.0 | 0.0 | 0% | \$0 | \$0 | \$8,062 | \$0 | 0.0 | | | |
| 1.4.2.7.6.2 CRYO CONTROL CAN | | | | 18-Apr-15 A | 21-Dec-15 | 16-Dec-15 | 52.4 | 0.0 | | \$202,539 | \$21,973 | \$262,213 | (\$38,478) | 0.0 | | | |
| 242762115 | ST | S | TSTD - Assembly Drawings | 02-May-15 A | 21-Sep-15 | 22-Jun-15 | | | 100% | \$18,482 | \$0 | \$18,482 | \$0 | 0.0 | | | |
| 242762200 | ST | S | TSTD - Final Drawing Review / Update Cycle | 01-Jun-15 A | 17-Oct-15 A | 30-Jun-15 | | | 100% | \$14,978 | \$2,471 | \$14,978 | \$0 | 0.0 | | | |
| 242762235 | | H | TSTP - Procurement Prep and Oversight of Raw Materials | 02-May-15 A | 10-Nov-15 | 30-Jun-15 | 52.2 | 0.0 | 50% | \$2,697 | \$0 | \$5,394 | (\$2,697) | -3.6 | | | |
| 242762240 | | D | TSTP - Procure Raw Materials | 18-Apr-15 A | 10-Nov-15 | 30-Jun-15 | 52.2 | 0.0 | 90% | \$58,500 | \$0 | \$65,000 | (\$6,500) | -3.6 | | | |
| 242762260 | ST | S | TSTF - Fabricate Tower Major Components and Initial Assembly F | 14-Jun-15 A | 10-Nov-15 | 30-Sep-15 | 52.2 | 0.0 | 50% | \$20,399 | \$0 | \$40,798 | (\$20,399) | -3.4 | | | |
| 242762260A | ST | S | TSTF - Fabricate Tower Major Components and Initial Assembly F | 01-Oct-15 A | 10-Nov-15 | 09-Oct-15 | 52.2 | 0.0 | 50% | \$2,729 | \$0 | \$5,458 | (\$2,729) | | | | |
| 242762265 | ST | S | TSTF - Fabricate Tower Piping Spools FY15 | 19-Jun-15 A | 21-Sep-15 | 30-Sep-15 | | | 100% | \$17,532 | \$0 | \$17,532 | \$0 | 0.0 | | | |
| 242762265A | ST | S | TSTF - Fabricate Tower Piping Spools FY16 | 01-Oct-15 A | 01-Oct-15 A | 19-Oct-15 | | | 100% | \$8,711 | \$0 | \$8,711 | \$0 | | | | |
| 242762270 | ST | S | TSTF - Final Assembly | 11-Nov-15 | 21-Dec-15 | 16-Dec-15 | 52.2 | 0.0 | 0% | \$0 | \$0 | \$27,350 | (\$6,154) | 0.0 | | | |
| 242762275 | ST | S | TSTF - Fabricate Tower Cryo Duct FY15 | 02-Aug-15 A | 19-Oct-15 A | 30-Sep-15 | | | 100% | \$49,026 | \$16,340 | \$49,026 | \$0 | 4.3 | | | |
| 242762275A | ST | S | TSTF - Fabricate Tower Cryo Duct FY16 | 01-Oct-15 A | 19-Oct-15 A | 16-Oct-15 | | | 100% | \$9,486 | \$3,162 | \$9,486 | \$0 | | | | |
| 1.4.2.7.7 TORUS INSTRUMENTATION AND CONTROL | | | | 01-May-14 A | 19-Jan-17 | 27-Jun-16 | 30.6 | 0.0 | | \$267,906 | \$74,349 | \$553,201 | (\$117,075) | -4.6 | | | |
| 1.4.2.7.7.1 TORUS INSTRUMENTATION AND CONTROL | | | | 01-May-14 A | 19-Jan-17 | 27-Jun-16 | 30.6 | 0.0 | | \$267,906 | \$74,349 | \$553,201 | (\$117,075) | -4.6 | | | |
| 242771055 | | D | Torus - Vend Fab Power Supply - Peg Point #4 - Acceptance Test | 01-May-14 A | 19-Jan-17 | 27-Jun-16 | 30.6 | 0.8 | 0% | \$0 | \$0 | \$19,905 | \$0 | -4.4 | | | |
| 242771155 | | H | Drawing review and approvals | 15-Mar-15 A | 14-Sep-15 | 28-May-15 | | | 100% | \$1,924 | \$0 | \$1,924 | \$0 | 0.0 | | | |
| 242771165 | ST | S | Copper lugs for connections | 02-Sep-15 A | 30-Nov-15 | 23-Apr-15 | 61.0 | 0.0 | 0% | \$0 | \$0 | \$3,046 | (\$3,046) | 0.0 | | | |
| 242771170 | | H | LCW lines (Water Cooled Bus) | 02-Mar-15 A | 30-Nov-15 | 12-Mar-15 | 61.0 | 0.0 | 50% | \$2,250 | \$0 | \$4,500 | (\$2,250) | 0.0 | | | |
| 242771175 | ST | S | PLC Programming | 05-Jan-15 A | 15-Feb-16 | 29-May-15 | 47.2 | 0.0 | 55% | \$34,113 | \$0 | \$62,024 | (\$27,911) | -11.0 | | | |
| 242771180 | | H | EPICS Specification | 14-Sep-15 A | 16-Nov-15 | 27-Apr-15 | 61.4 | 0.0 | 50% | \$1,516 | \$0 | \$3,033 | (\$1,516) | 0.0 | | | |
| 242771190 | ST | S | PLC Logic Documentation FY15 | 03-Aug-15 A | 15-Feb-16 | 30-Sep-15 | 76.6 | 0.0 | 20% | \$1,076 | \$0 | \$5,381 | (\$4,305) | -9.4 | | | |
| 242771190A | ST | S | PLC Logic Documentation FY16 | 01-Oct-15 A | 15-Feb-16 | 06-Nov-15 | 76.6 | 46.8 | 20% | \$166 | \$0 | \$828 | (\$509) | | | | |
| 242771200 | ST | S | EPICS Programming | 16-Aug-15 A | 15-Feb-16 | 05-Jun-15 | 61.4 | 0.0 | 10% | \$2,019 | \$0 | \$20,188 | (\$18,169) | -7.2 | | | |
| 242771205 | ST | S | FAST DAQ Programming | 09-Mar-15 A | 11-Jan-16 | 02-Jul-15 | 56.6 | 0.0 | 30% | \$3,200 | \$0 | \$10,666 | (\$7,466) | -7.6 | | | |
| 242771210 | | H | FAST DAQ Hardware/Software Integration debugging | 12-Jan-16 | 29-Jan-16 | 17-Jul-15 | 56.6 | 0.0 | 0% | \$0 | \$0 | \$6,543 | (\$6,543) | -7.2 | | | |
| 242771220 | ST | S | Populate Racks and Wire Back Panels | 16-Mar-15 A | 30-Nov-15 | 21-Aug-15 | 61.0 | 0.0 | 75% | \$45,586 | \$0 | \$60,781 | (\$15,195) | -1.6 | | | |
| 242771230 | | D | Wait (Wait Period from Funding Milestone) | 01-Oct-14 A | 14-Sep-15 | 02-Mar-15 | | | 100% | \$0 | \$0 | \$0 | \$0 | 0.0 | | | |
| 242771235 | ST | S | Harness Builds | 17-Jul-15 A | 30-Nov-15 | 24-Aug-15 | 52.8 | 0.0 | 93.6% | \$26,753 | \$0 | \$28,582 | (\$1,829) | -3.6 | | | |
| 242771240 | ST | S | Interface with Cryo | 25-Mar-15 A | 05-Nov-15 | 22-Jun-15 | 61.4 | 6.0 | 75% | \$12,272 | \$0 | \$16,363 | (\$4,091) | -2.2 | | | |
| 242771250 | ST | S | Test Box Build | 15-Jun-15 A | 11-Oct-15 A | 08-Apr-15 | | | 100% | \$11,921 | \$2,384 | \$11,921 | \$0 | 0.2 | | | |
| 242771260 | ST | S | Fast DAQ wiring FY15 | 10-Aug-15 A | 30-Nov-15 | 30-Sep-15 | 61.0 | 0.0 | 40% | \$2,040 | \$1,530 | \$5,101 | (\$3,061) | 0.0 | | | |
| 242771260A | ST | S | Fast DAQ wiring FY16 | 01-Oct-15 A | 30-Nov-15 | 07-Oct-15 | 61.0 | 0.0 | 40% | \$2,632 | \$1,974 | \$6,580 | (\$3,948) | | | | |
| 242771265 | ST | S | Cabling in Hall | 14-Sep-15 A | 21-Dec-15 | 15-Sep-15 | 52.8 | 0.0 | 36% | \$21,961 | \$21,961 | \$61,003 | (\$39,042) | 0.0 | | | |
| 242771270 | ST | S | Power Supply Integration/installation | 13-Jul-15 A | 18-Dec-15 | 18-Nov-15 | 61.0 | 0.0 | 56% | \$10,707 | \$3,059 | \$19,120 | (\$127) | 0.0 | | | |
| 242771275 | ST | S | Cryo Service Box Installation (Electrical/controls) | 22-Dec-15 | 20-Jan-16 | 16-Dec-15 | 55.4 | 3.2 | 0% | \$0 | \$0 | \$82,947 | (\$25,806) | 1.6 | | | |
| 242771280 | ST | S | Current Leads Power & voltage tap | 02-Feb-15 A | 15-Dec-15 | 11-Jan-16 | 61.6 | 5.0 | 92% | \$10,848 | \$2,594 | \$11,791 | \$10,848 | 7.4 | | | |
| 242771295 | ST | S | Hall B CRYO Distribution Box I and C | 09-Mar-15 A | 06-Jan-16 | 21-Dec-15 | 59.8 | 3.2 | 52% | \$36,891 | \$21,283 | \$70,944 | \$36,891 | -0.8 | | | |
| 242771325 | ST | S | CCM6 - Instrumenting and LV data acquisition chassis | 18-May-15 A | 08-Oct-15 A | 30-Apr-15 | | | 100% | \$22,016 | \$9,907 | \$22,016 | \$0 | 7.0 | | | |

◆ Primary Baseline Milestone
 Primary Baseline
 Remaining Work
 Project Baseline Bar
 Actual Work
 Critical Remaining ...

| Activity ID | Acti with Str | EV Rep Cor | Activity Name | Start | Finish | BL Project Finish | Total Float | Free Float | Physical % Complete | Earned Value Cost | MONTHLY EV COST | BL Project Total Cost | Schedule Variance | Variance - BL1 Finish | FY2015 | FY2016 | FY2017 |
|--------------|---------------------|------------------|---|-------------|-------------|----------------------|----------------|------------|------------------------|----------------------|--------------------|--------------------------|----------------------|-----------------------------|--------|--------|--------|
| 242710.1070 | | D | Wait (Wait Period from Funding Milestone) | 01-Oct-14 A | 03-Nov-15 | 04-May-15 | 40.4 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | -4.4 | | | |
| 242710.1075 | ST | S | System FMEA (Magnet + Cryogenics) | 01-Oct-15 A | 23-Dec-15 | 15-May-15 | 40.4 | 0.0 | 17% | \$1,394 | \$1,394 | \$8,200 | (\$6,806) | 1.2 | | | |
| 242710.1078 | | Z | Wait (Wait Period from Funding Milestone) | 01-Oct-14 A | 17-Oct-15 A | 17-Aug-15 | | | 100% | \$0 | \$0 | \$0 | \$0 | 0.0 | | | |
| 242710.1080 | | H | Magnet Instrumentation Review | 19-Oct-15 A | 13-Nov-15 | 27-Aug-15 | 40.4 | 0.0 | 50% | \$3,096 | \$3,096 | \$6,193 | (\$3,096) | -0.4 | | | |
| 242710.1085 | ST | S | Instrumentation List (Cryogenics) | 13-Apr-15 A | 15-Sep-15 | 02-Jun-15 | | | 100% | \$12,823 | \$0 | \$12,823 | \$0 | 0.0 | | | |
| 242710.1090 | | H | Cryogenics Instrumentation Review | 16-Oct-15 A | 13-Nov-15 | 03-Sep-15 | 40.4 | 0.0 | 50% | \$3,087 | \$3,087 | \$6,174 | (\$3,087) | 0.6 | | | |
| 242710.1095 | | H | MPS, SOE and PLC Design | 13-Apr-15 A | 15-Sep-15 | 02-Jul-15 | | | 100% | \$7,606 | \$0 | \$7,606 | \$0 | 0.0 | | | |
| 242710.1100 | | H | MPS, SOE and PLC Hardware Selection | 13-Apr-15 A | 15-Sep-15 | 06-Jul-15 | | | 100% | \$1,541 | \$0 | \$1,541 | \$0 | 0.0 | | | |
| 242710.1105 | | H | Racking Design | 11-Oct-15 A | 23-Oct-15 A | 17-Sep-15 | | | 100% | \$2,359 | \$2,359 | \$2,359 | \$0 | 5.4 | | | |
| 242710.1110 | | H | Racking Hardware Selection | 24-Oct-15 A | 24-Oct-15 A | 18-Sep-15 | | | 100% | \$771 | \$771 | \$771 | \$0 | 5.6 | | | |
| 242710.1115 | | Z | Wait (Wait Period from Funding Milestone) | 01-Oct-14 A | 16-Oct-15 A | 17-Aug-15 | | | 100% | \$0 | \$0 | \$0 | \$0 | -0.2 | | | |
| 242710.1120 | ST | S | Quench Protection Design | 17-Oct-15 A | 30-Nov-15 | 14-Sep-15 | 62.4 | 0.0 | 20% | \$1,334 | \$1,334 | \$6,669 | (\$5,335) | -2.2 | | | |
| 242710.1125 | | H | Quench Protection Review | 01-Dec-15 | 01-Dec-15 | 15-Sep-15 | 62.4 | 0.0 | 0% | \$0 | \$0 | \$1,240 | (\$1,240) | -2.2 | | | |
| 242710.1130 | ST | S | Voltage, Temp, strain, Load, flow, etc. requirement | 06-Jun-15 A | 19-Oct-15 A | 29-May-15 | | | 100% | \$11,169 | \$1,843 | \$11,169 | \$0 | 1.8 | | | |
| 242710.1135 | ST | S | Wiring Maps | 07-Sep-15 A | 08-Dec-15 | 25-Sep-15 | 40.4 | 0.0 | 33.33% | \$4,821 | \$0 | \$14,464 | (\$9,643) | 0.6 | | | |
| 242710.1140 | ST | S | Wiring Diagrams FY15 | 09-Dec-15 | 11-Dec-15 | 30-Sep-15 | 57.0 | 0.0 | 0% | \$0 | \$0 | \$4,006 | (\$4,006) | 2.0 | | | |
| 242710.1140A | ST | S | Wiring Diagrams FY16 | 14-Dec-15 | 22-Dec-15 | 09-Oct-15 | 57.0 | 0.0 | 0% | \$0 | \$0 | \$9,646 | (\$9,646) | | | | |
| 242710.1145 | ST | S | Rack Maps | 16-Oct-15 A | 04-Dec-15 | 18-Sep-15 | 59.4 | 2.4 | 60% | \$4,683 | \$4,683 | \$7,804 | (\$3,122) | 0.0 | | | |
| 242710.1150 | ST | S | Cable Harnesses Design and Materials | 08-Jan-16 | 21-Jan-16 | 29-Oct-15 | 40.4 | 0.0 | 0% | \$0 | \$0 | \$24,036 | (\$24,036) | 0.6 | | | |
| 242710.1155 | ST | S | Hall Cable Layouts FY15 | 09-Dec-15 | 11-Dec-15 | 30-Sep-15 | 40.4 | 0.0 | 0% | \$0 | \$0 | \$2,449 | (\$2,449) | 3.0 | | | |
| 242710.1155A | ST | S | Hall Cable Layouts FY16 | 14-Dec-15 | 07-Jan-16 | 16-Oct-15 | 40.4 | 0.0 | 0% | \$0 | \$0 | \$10,108 | (\$10,108) | | | | |
| 242710.1160 | | H | Drawing review and approvals | 22-Jan-16 | 28-Jan-16 | 05-Nov-15 | 40.4 | 0.0 | 0% | \$0 | \$0 | \$1,985 | (\$397) | 0.6 | | | |
| 242710.1165 | | H | Racking Procurement Preparation | 16-Oct-15 A | 20-Oct-15 A | 25-Sep-15 | | | 100% | \$771 | \$771 | \$771 | \$0 | 7.2 | | | |
| 242710.1170 | | D | Racking Procurement (Sub Racks) | 23-Oct-15 A | 08-Dec-15 | 16-Oct-15 | 59.0 | 2.0 | 0% | \$0 | \$0 | \$7,000 | (\$7,000) | 3.6 | | | |
| 242710.1175 | | H | MPS, PLC and SOE procurement preparation | 20-Jul-15 A | 10-Nov-15 | 21-Sep-15 | 60.6 | 0.0 | 50% | \$385 | \$0 | \$771 | (\$385) | -4.4 | | | |
| 242710.1180 | ST | S | MPS, SOE and PLC Delivery to Jlab | 27-Jul-15 A | 24-Nov-15 | 12-Oct-15 | 60.6 | 3.6 | 30% | \$25,500 | \$0 | \$85,000 | (\$59,500) | -4.4 | | | |
| 242710.1185 | | Z | Wait (Wait Period from Funding Milestone) | 01-Oct-14 A | 25-Jan-16 | 14-Dec-15 | 62.8 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | -4.4 | | | |
| 242710.1190 | | D | Purchase/Fabricate Copper lugs for connections | 09-Feb-16 | 22-Feb-16 | 21-Jan-16 | 62.8 | 5.8 | 0% | \$0 | \$0 | \$3,143 | \$0 | -4.4 | | | |
| 242710.1195 | | H | LCW lines | 26-Jan-16 | 08-Feb-16 | 06-Jan-16 | 62.8 | 0.0 | 0% | \$0 | \$0 | \$6,191 | \$0 | -4.4 | | | |
| 242710.1200 | ST | S | PLC Programming FY15 | 13-Jul-15 A | 07-Jun-16 | 30-Sep-15 | 47.2 | 0.0 | 5% | \$190 | \$0 | \$3,798 | (\$3,608) | -17.2 | | | |
| 242710.1200A | ST | S | PLC Programming FY16 | 01-Oct-15 A | 07-Jun-16 | 20-Jan-16 | 47.2 | 0.0 | 5% | \$1,143 | \$0 | \$22,865 | (\$6,043) | | | | |
| 242710.1205 | | Z | Wait (Wait Period from Funding Milestone) | 04-Nov-15 | 13-Jan-16 | 11-Jan-16 | 40.8 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | -0.4 | | | |
| 242710.1210 | | H | EPICS Specification | 14-Jan-16 | 28-Jan-16 | 26-Jan-16 | 40.8 | 0.0 | 0% | \$0 | \$0 | \$1,539 | \$0 | -0.4 | | | |
| 242710.1215 | ST | S | PLC Logic Documentation | 08-Jun-16 | 27-Jun-16 | 30-Mar-16 | 47.2 | 6.8 | 0% | \$0 | \$0 | \$6,380 | \$0 | -10.0 | | | |
| 242710.1220 | ST | S | EPICS Programming | 29-Jan-16 | 28-Mar-16 | 16-Feb-16 | 40.8 | 0.0 | 0% | \$0 | \$0 | \$17,856 | \$0 | -5.8 | | | |
| 242710.1225 | ST | S | FAST DAQ Programming | 29-Mar-16 | 14-Apr-16 | 04-Mar-16 | 53.4 | 13.0 | 0% | \$0 | \$0 | \$11,007 | \$0 | -5.8 | | | |
| 242710.1230 | ST | S | Populate Racks and Wire Back Panels | 23-Dec-15 | 15-Feb-16 | 02-Dec-15 | 57.0 | 0.0 | 0% | \$0 | \$0 | \$32,295 | (\$10,418) | 1.6 | | | |
| 242710.1235 | ST | S | Sequence of Events Monitor Build | 16-Feb-16 | 18-Mar-16 | 14-Jan-16 | 57.0 | 0.0 | 0% | \$0 | \$0 | \$12,354 | \$0 | 1.6 | | | |
| 242710.1240 | ST | S | Harness Builds | 29-Jan-16 | 21-Mar-16 | 08-Jan-16 | 40.4 | 0.0 | 0% | \$0 | \$0 | \$21,239 | \$0 | 0.6 | | | |
| 242710.1245 | ST | S | Interface with Cryo | 29-Mar-16 | 07-Apr-16 | 26-Feb-16 | 40.8 | 0.4 | 0% | \$0 | \$0 | \$18,092 | \$0 | -5.8 | | | |
| 242710.1250 | | H | Test Box Design FY15 | 02-Dec-15 | 16-Dec-15 | 30-Sep-15 | 62.4 | 0.0 | 0% | \$0 | \$0 | \$5,977 | (\$5,977) | -1.4 | | | |
| 242710.1250A | | H | Test Box Design FY16 | 17-Dec-15 | 22-Dec-15 | 06-Oct-15 | 62.4 | 0.0 | 0% | \$0 | \$0 | \$2,243 | (\$2,243) | | | | |
| 242710.1255 | ST | S | Test Box Build | 23-Dec-15 | 29-Jan-16 | 03-Nov-15 | 62.4 | 22.0 | 0% | \$0 | \$0 | \$12,023 | (\$10,820) | -2.2 | | | |
| 242710.1260 | ST | S | FAST DAQ Wiring | 21-Mar-16 | 01-Apr-16 | 29-Jan-16 | 57.0 | 0.0 | 0% | \$0 | \$0 | \$12,875 | \$0 | 1.6 | | | |

◆ Primary Baseline Milestone
 ▬ Primary Baseline
 ▬ Remaining Work
▬ Project Baseline Bar
 ▬ Actual Work
 ▬ Critical Remaining ...

| Activity ID | Acti with Str | EVA Rep Cor | Activity Name | Start | Finish | BL Project Finish | Total Float | Free Float | Physical % Complete | Earned Value Cost | MONTHLY EV COST | BL Project Total Cost | Schedule Variance | Variance - BL1 Finish | FY2015 | FY2016 | FY2017 |
|----------------------------------|---------------------|-------------------|---|-------------|-------------|----------------------|----------------|------------|------------------------|----------------------|--------------------|--------------------------|----------------------|-----------------------------|--------|--------|--------|
| 242710.1265 | ST | S | Cabling in Hall | 22-Mar-16 | 11-Apr-16 | 01-Feb-16 | 40.4 | 0.0 | 0% | \$0 | \$0 | \$14,748 | \$0 | 0.6 | | | |
| 242710.1270 | ST | S | Power Supply Integration/installation | 10-Aug-15 A | 18-Apr-16 | 15-Feb-16 | 57.0 | 7.0 | 46% | \$7,394 | \$4,179 | \$16,075 | \$7,394 | 1.6 | | | |
| 242710.1275 | ST | S | Cryo Service Box Installation (Electrical/controls) | 12-Apr-16 | 20-May-16 | 07-Apr-16 | 40.4 | 0.0 | 0% | \$0 | \$0 | \$58,636 | \$0 | 0.6 | | | |
| 242710.1280 | ST | S | Current Leads Power & voltage tap | 17-Oct-15 A | 05-Jul-16 | 23-Jun-16 | 40.4 | 0.0 | 6% | \$705 | \$705 | \$11,750 | \$705 | 0.6 | | | |
| 242710.1285 | ST | S | Final Verification Point-to-Point | 06-Jul-16 | 18-Jul-16 | 07-Jul-16 | 40.4 | 0.0 | 0% | \$0 | \$0 | \$15,043 | \$0 | 0.6 | | | |
| 242710.1290 | | H | FAST DAQ Hardware/Software Integration debugging | 19-Jul-16 | 15-Aug-16 | 01-Apr-16 | 40.4 | 0.0 | 0% | \$0 | \$0 | \$2,301 | \$0 | 0.6 | | | |
| 242710.1295 | ST | S | Solenoid - I and C Commissioning | 16-Aug-16 | 13-Sep-16 | 04-Aug-16 | 40.4 | 10.6 | 0% | \$0 | \$0 | \$114,694 | \$0 | 0.6 | | | |
| 1.4.3 CONSTRUCTION HALL C | | | | 03-Sep-13 A | 12-Oct-16 | 30-Sep-16 | 48.0 | 0.0 | | \$1,518,516 | \$78,441 | \$4,465,055 | \$1,098,274 | -1.0 | | | |
| 1.4.3.1 MAGNET | | | | 03-Sep-13 A | 30-Sep-16 | 30-Sep-16 | 49.6 | 0.0 | | \$1,056,303 | \$40,944 | \$3,183,070 | \$1,054,220 | 0.0 | | | |
| 1.4.3.1.1 HB MAGNET | | | | 01-Apr-15 A | 30-Nov-15 | 09-Jul-15 | 79.2 | 0.0 | | \$48,750 | \$0 | \$65,000 | (\$16,250) | 0.0 | | | |
| 24311195 | | D | Vend Fab HB Magnet Peg Point #21 Aceptance, Setup, Testing, a | 01-Apr-15 A | 30-Nov-15 | 09-Jul-15 | 79.0 | 36.6 | 75% | \$48,750 | \$0 | \$65,000 | (\$16,250) | 0.0 | | | |
| 1.4.3.1.3 Q2-3 QUADRUPOLE | | | | 05-Jan-15 A | 30-Sep-16 | 30-Sep-16 | 49.6 | 0.0 | | \$412,169 | \$15,170 | \$1,978,479 | (\$696,445) | 0.0 | | | |
| 24313008M | | P | Q2 Factory Assembly Complete | | 17-Feb-16 | 13-Nov-15 | 76.4 | 3.0 | 0% | \$0 | \$0 | \$0 | \$0 | -4.2 | | | |
| 24313010M | | P | Q3 Factory Assembly Complete | | 09-Mar-16 | 28-Jan-16 | 73.4 | 19.2 | 0% | \$0 | \$0 | \$0 | \$0 | -4.0 | | | |
| 24313315 | | P | Coil Q3 Collared | 01-Apr-15 A | 17-Sep-15 | 07-Aug-15 | | | 100% | \$264,200 | \$0 | \$264,200 | \$0 | 0.0 | | | |
| 24313320 | | P | Helium Vessel and Radiation Screen Q2 Welded | 02-Nov-15 | 08-Jan-16 | 11-Aug-15 | 48.4 | 0.0 | 0% | \$0 | \$0 | \$216,125 | (\$216,125) | -4.0 | | | |
| 24313325 | | P | Cryostat Q2 Closed and Tested | 11-Jan-16 | 10-Feb-16 | 24-Sep-15 | 48.4 | 0.0 | 0% | \$0 | \$0 | \$264,200 | (\$264,200) | -4.2 | | | |
| 24313327 | | P | Q2: Connect CCR, Final Tests, Measurements, Fiducialize | 11-Feb-16 | 02-Mar-16 | 13-Nov-15 | 48.4 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | -5.4 | | | |
| 24313330 | | P | Helium Vessel and Radiation Screen Q3 Welded | 02-Nov-15 | 29-Jan-16 | 13-Oct-15 | 47.4 | 0.0 | 0% | \$0 | \$0 | \$216,125 | (\$216,125) | -3.8 | | | |
| 24313335 | | P | Cryostat Q3 Closed and Tested | 01-Feb-16 | 02-Mar-16 | 08-Dec-15 | 47.4 | 0.0 | 0% | \$0 | \$0 | \$264,200 | \$0 | -4.0 | | | |
| 24313337 | | P | Q3: Connect CCR, Final Tests, Measurements, Fiducialize | 03-Mar-16 | 24-Mar-16 | 28-Jan-16 | 47.4 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | -5.2 | | | |
| 24313340 | | P | Q2 Crating and Transportation | 03-Mar-16 | 13-Apr-16 | 23-Dec-15 | 48.4 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | -5.4 | | | |
| 24313345 | | P | Q3 Crating and Transportation | 25-Mar-16 | 05-May-16 | 10-Mar-16 | 47.4 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | -5.2 | | | |
| 24313350 | | P | Final Acceptance of Q2 and Q3 | 22-Jul-16 | 22-Jul-16 | 03-Jun-16 | 54.2 | 0.0 | 0% | \$0 | \$0 | \$410,300 | \$0 | -5.2 | | | |
| 24313375M | | M | Q2 and Q3 Contract complete | | 22-Jul-16 | 03-Jun-16 | 54.2 | 11.8 | 0% | \$0 | \$0 | \$0 | \$0 | -5.2 | | | |
| 24313385 | | Z | Wait (Wait Period from Funding Milestone) | 05-Jan-15 A | 26-Oct-15 A | 15-Jun-15 | | | 100% | \$0 | \$0 | \$0 | \$0 | 2.6 | | | |
| 24313390 | | H | Q2 and Q3- Insp Cold Mass | 26-Oct-15 A | 29-Oct-15 A | 19-Aug-15 | | | 100% | \$0 | \$0 | \$0 | \$0 | 3.0 | | | |
| 24313395 | | H | Q2 and Q3 witness Pressure Tests | 03-Mar-16 | 31-Mar-16 | 29-Jun-15 | 70.0 | 15.8 | 0% | \$0 | \$0 | \$0 | \$0 | -6.6 | | | |
| 24313400LOE | | E | Q2&3- Vendor Oversight FY16 | 04-Jan-16 | 31-May-16 | 31-May-16 | 61.6 | 19.2 | 0% | \$0 | \$0 | \$69,161 | \$0 | 0.0 | | | |
| 24313P6LOE5 | | E | Q2&3- P-6 Contract Mngmnt for Q2-3 | 05-Jan-15 A | 30-Sep-15 | 30-Sep-15 | | | 100% | \$50,853 | \$0 | \$50,853 | \$0 | 0.0 | | | |
| 24313P7LOE | | E | Q2&3- P-7 Contract Mngmnt for Q2-3 | 01-Oct-15 A | 31-Mar-16 | 31-Mar-16 | 75.0 | 75.0 | 18.18% | \$5,204 | \$5,204 | \$28,624 | (\$1) | 0.0 | | | |
| 24313QLOE | | E | Q1- FY15 Proj Mngmnt H-C upgrade (Hall C CAM) | 05-Jan-15 A | 30-Sep-15 | 30-Sep-15 | | | 100% | \$81,946 | \$0 | \$81,946 | \$0 | 0.0 | | | |
| 24313QLOE5 | | E | Q1- FY16 Proj Mngmnt H-C upgrade (Hall C CAM) | 01-Oct-15 A | 30-Sep-16 | 30-Sep-16 | 49.4 | 49.4 | 8.84% | \$9,967 | \$9,967 | \$112,746 | \$5 | 0.0 | | | |
| 1.4.3.1.4 DIPOLE | | | | 03-Sep-13 A | 08-Sep-16 | 26-May-16 | 48.0 | 0.0 | | \$595,384 | \$25,773 | \$1,139,592 | (\$341,524) | -1.0 | | | |
| 24314025 | ST | S | Vend Fab Dipole Outer Vessel Completed Peg Point #5 (F-12) | 05-Jan-15 A | 22-Sep-15 | 10-Apr-15 | | | 100% | \$436,875 | \$0 | \$436,875 | \$0 | 0.0 | | | |
| 24314029 | | P | Assembly Complete | 03-Sep-13 A | 27-Jan-16 | 10-Aug-15 | 42.4 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | 1.0 | | | |
| 24314030 | ST | S | Vend Fab Dipole Factory Test Completed Peg Point #6 | 03-Sep-13 A | 10-Feb-16 | 28-Sep-15 | 42.4 | 0.0 | 0% | \$0 | \$0 | \$333,300 | (\$333,300) | -1.0 | | | |
| 24314030a | | Z | Dipole Magnet Shipping | 11-Feb-16 | 23-Mar-16 | 02-Dec-15 | 42.4 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | -1.0 | | | |
| 24314035 | | P | Vend Fab Dipole Magnet Accepted Peg Point #7 | 03-Sep-13 A | 18-Aug-16 | 25-May-16 | 50.4 | 8.0 | 0% | \$0 | \$0 | \$159,910 | \$0 | -1.0 | | | |
| 24314035a | | H | Dipole HC Test | 19-Aug-16 | 25-Aug-16 | 16-May-16 | 42.4 | 0.0 | 0% | \$0 | \$0 | \$8,376 | \$0 | -1.0 | | | |
| 24314045 | | H | Dipole Inspect Cold Mass | 20-Jul-15 A | 22-Sep-15 | 24-Apr-15 | | | 100% | \$8,145 | \$0 | \$8,145 | \$0 | 0.0 | | | |
| 24314049 | | H | Dipole Witness Final Factory Tests | 03-Feb-16 | 10-Feb-16 | 28-Sep-15 | 77.2 | 29.4 | 0% | \$0 | \$0 | \$8,224 | (\$8,224) | -1.0 | | | |
| 24314050M | | M | Dipole Ready for Installation | 31-Mar-16 | | | 42.4 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | -1.0 | | | |
| 24314051M | | M | Dipole Contract Complete | 08-Sep-16 | | | 47.8 | 5.4 | 0% | \$0 | \$0 | \$0 | \$0 | -1.0 | | | |
| 2431422LOE | | E | Dipole - Vendor Oversight FY15 | 01-Jul-15 A | 30-Sep-15 | 30-Sep-15 | | | 100% | \$42,645 | \$0 | \$42,645 | \$0 | 0.0 | | | |



| Activity ID | Acti with Str | EV Rep Cor | Activity Name | Start | Finish | BL Project Finish | Total Float | Free Float | Physical % Complete | Earned Value Cost | MONTHLY EV COST | BL Project Total Cost | Schedule Variance | Variance - BL Finish | FY2015 | FY2016 | FY2017 |
|---|---------------------|------------------|--|-------------|-----------|----------------------|----------------|------------|------------------------|----------------------|--------------------|--------------------------|----------------------|----------------------------|--------|--------|--------|
| 2431425LOE | | E | Dipole - Vendor Oversight FY16 | 01-Oct-15 A | 23-Dec-15 | 23-Dec-15 | 61.6 | 0.0 | 37.93% | \$15,708 | \$15,708 | \$41,414 | \$0 | 0.0 | | | |
| 24314P6LOE5 | | E | Dipole- P-6 Contract Mngmnt for Dipole | 05-Jan-15 A | 30-Sep-15 | 30-Sep-15 | | | 100% | \$81,946 | \$0 | \$81,946 | \$0 | 0.0 | | | |
| 24314P7LOE | | E | Dipole- P-7 Contract Mngmnt for Dipole | 01-Oct-15 A | 30-Nov-15 | 30-Nov-15 | 86.0 | 43.6 | 53.66% | \$10,065 | \$10,065 | \$18,757 | \$0 | 0.0 | | | |
| 1.4.3.2 DETECTOR | | | | 05-Jan-15 A | 25-Sep-15 | 15-Apr-15 | | 0.0 | | \$48,883 | \$0 | \$48,883 | \$0 | 0.0 | | | |
| 1.4.3.2.3 NOBLE GAS CERENKOV | | | | 05-Jan-15 A | 25-Sep-15 | 15-Apr-15 | | 0.0 | | \$48,883 | \$0 | \$48,883 | \$0 | 0.0 | | | |
| 24323040 | | D | Completion of Noble Gas Cerenkov | 05-Jan-15 A | 25-Sep-15 | 15-Apr-15 | | | 100% | \$48,883 | \$0 | \$48,883 | \$0 | 0.0 | | | |
| 1.4.3.5 BEAMLINE | | | | 02-Jun-14 A | 18-Aug-16 | 26-Feb-16 | 55.6 | 0.0 | | \$142,969 | \$5,600 | \$214,032 | (\$34,659) | -0.4 | | | |
| 1.4.3.5.3 MAPPING | | | | 28-Aug-15 A | 02-Dec-15 | 02-Nov-15 | 75.8 | 0.0 | | \$4,970 | \$0 | \$9,941 | (\$4,682) | -2.0 | | | |
| 24353040 | | H | Fab Mapper Support for Dipole Magnet FY15 | 28-Aug-15 A | 30-Nov-15 | 30-Sep-15 | 76.0 | 0.0 | 50% | \$1,653 | \$0 | \$3,307 | (\$1,653) | -1.6 | | | |
| 24353040A | | H | Fab Mapper Support for Dipole Magnet FY16 | 01-Oct-15 A | 30-Nov-15 | 02-Nov-15 | 76.0 | 33.6 | 50% | \$934 | \$0 | \$1,869 | (\$853) | | | | |
| 24353045 | | H | Fab Mapper Support for Q2/Q3 Magnets | 01-Sep-15 A | 02-Dec-15 | 02-Nov-15 | 75.6 | 27.2 | 50% | \$2,382 | \$0 | \$4,765 | (\$2,175) | -2.0 | | | |
| 1.4.3.5.4 SCATTERING CHAMBER | | | | 05-Jan-15 A | 18-Aug-16 | 27-Oct-15 | 55.6 | 0.0 | | \$43,409 | \$0 | \$56,586 | (\$13,176) | -0.4 | | | |
| 24354015C | | U | Fabricate New Seals / Flanges Procurement | 05-Jan-15 A | 28-Sep-15 | 31-Oct-14 | | | 100% | \$40,000 | \$0 | \$40,000 | \$0 | 0.0 | | | |
| 24354020A | | U | Procure Seal Supplies FY15 | 05-Jan-15 A | 15-Jun-16 | 31-Oct-14 | 64.4 | 0.0 | 40% | \$3,409 | \$0 | \$8,523 | (\$5,114) | 0.0 | | | |
| 24354030b5 | | H | Install Valves, Gauges, Fittings on SC | 20-Jun-16 | 18-Aug-16 | 27-Oct-15 | 50.4 | 8.0 | 0% | \$0 | \$0 | \$8,062 | (\$8,062) | -0.4 | | | |
| 1.4.3.5.5 BEAM PIPE & STANDS | | | | 02-Jun-14 A | 13-May-16 | 26-Feb-16 | 64.0 | 0.0 | | \$94,589 | \$5,600 | \$147,506 | (\$16,800) | 0.0 | | | |
| 24355000 | ST | S | Produce Manufacturing Drawings for Beam Pipe, Stands, Fittings | 02-Jun-14 A | 29-Jan-16 | 30-Sep-14 | 74.8 | 0.0 | 70% | \$38,579 | \$5,511 | \$55,113 | (\$16,534) | 0.0 | | | |
| 24355000A | ST | S | Produce Manufacturing Drawings for Beam Pipe, Stands, Fittings | 02-Jun-14 A | 29-Jan-16 | 01-Oct-14 | 63.8 | 0.0 | 70% | \$622 | \$89 | \$888 | (\$267) | 0.0 | | | |
| 24355015 | ST | S | Proc 3rd Section of Beam Pipe (Beam Pipe) | 09-Mar-15 A | 28-Sep-15 | 02-Mar-15 | | | 100% | \$55,388 | \$0 | \$55,388 | \$0 | 0.0 | | | |
| 24355025 | | D | Procure small-angle DS beampipe system | 01-Feb-16 | 13-May-16 | 26-Feb-16 | 63.8 | 21.4 | 0% | \$0 | \$0 | \$36,117 | \$0 | 0.0 | | | |
| 1.4.3.6 INFRASTRUCTURE | | | | 05-Jan-15 A | 12-Oct-16 | 30-Sep-16 | 48.0 | 0.0 | | \$270,361 | \$31,897 | \$1,019,070 | (\$9,396) | -1.0 | | | |
| 1.4.3.6.5 VACUUM SYSTEM | | | | 02-Feb-15 A | 31-Mar-16 | 03-Dec-15 | 64.0 | 0.0 | | \$13,936 | \$0 | \$54,143 | (\$3,059) | -0.2 | | | |
| 24365065 | ST | S | Detail Spool Pieces Q1Q2 Q2Q3 Q3D FY15 | 02-Feb-15 A | 29-Feb-16 | 30-Sep-15 | 63.8 | 0.0 | 82% | \$12,502 | \$0 | \$15,247 | (\$2,744) | -3.6 | | | |
| 24365065A | ST | S | Detail Spool Pieces Q1Q2 Q2Q3 Q3D FY16 | 01-Oct-15 A | 29-Feb-16 | 06-Oct-15 | 63.8 | 0.0 | 82% | \$1,433 | \$0 | \$1,748 | (\$315) | | | | |
| 24365070 | | D | Procure/Fab Spool Pieces | 01-Oct-15 A | 31-Mar-16 | 03-Dec-15 | 63.8 | 9.0 | 0% | \$0 | \$0 | \$37,148 | \$0 | -0.2 | | | |
| 1.4.3.6.8 INSTALLATION | | | | 05-Jan-15 A | 12-Oct-16 | 30-Sep-16 | 48.0 | 0.0 | | \$256,425 | \$31,897 | \$964,926 | (\$6,337) | -1.0 | | | |
| 24368110 | | H | Install Roof Beams and Wall Blocks in Shield House | 25-Jul-16 | 25-Jul-16 | 29-Jun-16 | 54.0 | 11.6 | 0% | \$0 | \$0 | \$806 | \$0 | -1.0 | | | |
| 24368157 | ST | S | Install Cables & Produce Final Drawings (CABLING) | 05-Jan-15 A | 28-Sep-15 | 31-Jul-15 | | | 100% | \$67,922 | \$0 | \$67,922 | \$0 | 0.0 | | | |
| 24368298LOE5 | | E | HB Contract Mngmnt & Vendor Oversight (During Cooldown and / | 05-May-15 A | 04-Sep-15 | 04-Sep-15 | | | 100% | \$25,735 | \$0 | \$25,735 | \$0 | 0.0 | | | |
| 24368302 | ST | S | Dipole Arrival Tests and Fiducialize Centerline | 24-Mar-16 | 30-Mar-16 | 09-Dec-15 | 42.4 | 0.0 | 0% | \$0 | \$0 | \$11,243 | \$0 | -1.0 | | | |
| 24368303LOE | | E | Dipole- P-7 Contract Mngmnt for Dipole (Upon Arrival) | 24-Mar-16 | 09-Jun-16 | 29-Feb-16 | 42.8 | 0.0 | 0% | \$0 | \$0 | \$25,624 | \$0 | -1.0 | | | |
| 24368303LOE5 | | E | Dipole- P-7 Contract Mngmnt for Dipole (During Cooldown and Acc | 10-Jun-16 | 12-Oct-16 | 30-Jun-16 | 42.8 | 0.4 | 0% | \$0 | \$0 | \$39,717 | \$0 | -1.0 | | | |
| 24368305 | ST | S | Mount Dipole on Support Carriage w/Yoke | 31-Mar-16 | 06-Apr-16 | 16-Dec-15 | 42.4 | 0.0 | 0% | \$0 | \$0 | \$22,157 | \$0 | -1.0 | | | |
| 24368307 | ST | S | Dipole Final Assembly: Cryo Stalk & CCR | 07-Apr-16 | 02-Jun-16 | 22-Feb-16 | 42.4 | 0.0 | 0% | \$0 | \$0 | \$88,145 | \$0 | -1.0 | | | |
| 24368340 | ST | S | Q2 Arrival Tests, Mount w/ Yoke, Connect and Fiducialize Centerli | 06-Jul-15 A | 27-Apr-16 | 15-Jan-16 | 48.4 | 0.0 | 23% | \$8,307 | \$0 | \$36,118 | \$8,307 | -5.4 | | | |
| 24368370 | ST | S | Q3 Arrival Tests, Mount w/ Yoke, Connect and Fiducialize Centerli | 06-May-16 | 19-May-16 | 24-Mar-16 | 47.4 | 0.0 | 0% | \$0 | \$0 | \$36,118 | \$0 | -5.2 | | | |
| 24368371LOE | | E | Q2&3- P-7 Contract Mngmnt for Q2-3 (Upon Arrival) | 14-Apr-16 | 16-May-16 | 04-Feb-16 | 55.0 | 0.0 | 0% | \$0 | \$0 | \$12,722 | \$0 | -5.4 | | | |
| 24368371LOE5 | | E | Q2&3- P-7 Contract Mngmnt for Q2-3 (During Cooldown and Acce | 17-May-16 | 18-Jul-16 | 05-Apr-16 | 55.0 | 12.6 | 0% | \$0 | \$0 | \$24,171 | \$0 | -5.4 | | | |
| 24368430 | | H | Fiducialize SHMS Drift Ch's, Hodoscopes, Cerenkovs, Preshower | 01-Aug-15 A | 09-Jun-16 | 29-Feb-16 | 50.8 | 0.0 | 50% | \$5,124 | \$0 | \$10,248 | \$5,124 | -1.0 | | | |
| 24368445A | ST | S | Install Detctr's in Shield House FWD | 10-Jun-16 | 22-Jul-16 | 28-Jun-16 | 50.8 | 0.0 | 0% | \$0 | \$0 | \$52,944 | \$0 | -1.0 | | | |
| 24368448 | | Z | Wait (Wait Period from Start of (Install Detctr's in Shield House Fl | 10-Jun-16 | 20-Jun-16 | 27-May-16 | 50.8 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | -1.0 | | | |
| 24368450 | ST | S | Hot Check-out of Detctr's in Shield House | 21-Jun-16 | 16-Aug-16 | 26-Jul-16 | 50.8 | 8.4 | 0% | \$0 | \$0 | \$12,010 | \$0 | -1.0 | | | |
| 24368465 | ST | S | Install Downstream Beam Stands (Beam Pipe) | 20-May-16 | 26-May-16 | 31-Mar-16 | 53.0 | 0.0 | 0% | \$0 | \$0 | \$10,587 | \$0 | -5.2 | | | |
| 24368472 | ST | S | Install Windows & Flanges on Spectrometer Vacuum System for t | 01-Dec-15 | 21-Jan-16 | 20-Aug-15 | 78.0 | 23.0 | 0% | \$0 | \$0 | \$18,376 | (\$18,376) | 0.0 | | | |
| 24368475 | | Z | Beam-Dump Modifications & Upgrades (6GEV) | 01-Jun-15 A | 31-Mar-16 | 11-Apr-14 | 70.0 | 27.6 | 0% | \$0 | \$0 | \$0 | \$0 | 0.0 | | | |



| Activity ID | Acti with Str | EV Rep Cor | Activity Name | Start | Finish | BL Project Finish | Total Float | Free Float | Physical % Complete | Earned Value Cost | MONTHLY EV COST | BL Project Total Cost | Schedule Variance | Variance - BL1 Finish | FY2015 | FY2016 | FY2017 |
|---|---------------------|------------------|---|-------------|-------------|----------------------|----------------|------------|------------------------|----------------------|--------------------|--------------------------|----------------------|-----------------------------|--------|--------|-------------------------------|
| 24368480 | ST | S | Install Downstream Beam Pipe and Vac Fittings | 27-May-16 | 03-Jun-16 | 07-Apr-16 | 53.0 | 0.0 | 0% | \$0 | \$0 | \$14,157 | \$0 | -5.2 | | | Install Downstre |
| 24368485 | ST | S | Connect Additional Quad for Moeller polarimeter | 10-Feb-16 | 02-Mar-16 | 14-Aug-14 | 74.2 | 31.8 | 0% | \$0 | \$0 | \$17,776 | (\$17,776) | -0.4 | | | Connect Additional |
| 24368490 | ST | S | Leak Test Downstream Beam Pipe Vac Sys | 06-Jun-16 | 10-Jun-16 | 21-Apr-16 | 53.0 | 0.0 | 0% | \$0 | \$0 | \$10,126 | \$0 | -5.2 | | | Leak Test Down |
| 24368500 | | Z | Install Beam Line upstream of Target (6GeV) | 01-Oct-15 A | 01-Apr-16 | 24-Jan-14 | 57.2 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | 0.0 | | | Install Beam Line |
| 24368505 | | Z | Install, Align, Leak-check Upstream Beam-Pipes & Girders (6GEV) | 04-Apr-16 | 30-Jun-16 | 07-Feb-14 | 57.2 | 14.8 | 0% | \$0 | \$0 | \$0 | \$0 | 0.0 | | | Install, Align, L |
| 24368510 | | Z | Install Target Scattering Chamber (6GEV) | 06-Jun-16 | 10-Jun-16 | 07-Oct-15 | 50.4 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | -0.4 | | | Install Target Sc |
| 24368515 | | Z | Align Target Scattering Chamber (6GEV) | 13-Jun-16 | 17-Jun-16 | 14-Oct-15 | 50.4 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | -0.4 | | | Align Target Sc |
| 24368530 | ST | S | Install & Connect Spectrometer Vac system | 13-Jun-16 | 18-Jul-16 | 26-May-16 | 53.0 | 0.0 | 0% | \$0 | \$0 | \$57,704 | \$0 | -5.2 | | | Install & Conn |
| 24368535 | ST | S | Install Spool & Bellows for All Magnets | 06-Jun-16 | 05-Jul-16 | 19-Jan-16 | 54.8 | 1.8 | 0% | \$0 | \$0 | \$34,508 | \$0 | -0.4 | | | Install Spool & |
| 24368540A | ST | S | Install Slit Controls | 19-Aug-16 | 01-Sep-16 | 10-Jun-16 | 48.4 | 6.0 | 0% | \$0 | \$0 | \$7,229 | \$0 | -1.0 | | | Install Slit C |
| 24368545 | ST | S | Install Sieve Slit Sys | 01-Oct-15 A | 18-Jul-16 | 10-Jun-16 | 55.0 | 12.6 | 30% | \$17,608 | \$17,608 | \$58,693 | \$17,608 | -2.2 | | | Install Sieve S |
| 24368575 | | U | Erect Shield Wall behind SHMS | 01-Aug-15 A | 25-Sep-15 | 23-Jun-15 | | | 100% | \$14,801 | \$0 | \$14,801 | \$0 | 0.0 | | | Erect Shield Wall behind |
| 24368590LOE | | E | Installation Management FY15 | 05-Jan-15 A | 30-Sep-15 | 30-Sep-15 | | | 100% | \$102,639 | \$0 | \$102,639 | \$0 | 0.0 | | | Installation Management |
| 24368595LOE | | E | Installation Management FY16 | 01-Oct-15 A | 30-Sep-16 | 30-Sep-16 | 49.4 | 49.4 | 8.84% | \$13,059 | \$13,059 | \$147,730 | \$7 | 0.0 | | | Installation |
| 24368620 | | H | EESSAF RELOCATE PSS EQPT ON SOUTH WALL | 26-Oct-15 A | 02-Dec-15 | 28-Oct-15 | 85.6 | 43.2 | 50% | \$1,230 | \$1,230 | \$2,460 | (\$1,230) | -4.6 | | | EESSAF RELOCATE |
| 24368630 | | H | ESSAF INSTALL PSS - FINAL DETAILING AFTER MAGNETS IN | 20-May-16 | 03-Jun-16 | 07-Apr-16 | 65.0 | 22.6 | 0% | \$0 | \$0 | \$2,460 | \$0 | -5.2 | | | ESSAF INSTAL |
| 1.5 CONSTRUCTION HALL D | | | | 05-Jan-15 A | 28-Sep-15 | 31-Mar-15 | | 0.0 | | \$49,494 | \$0 | \$49,494 | \$0 | 0.0 | | | 28-Sep-15 A; 1.5 CONST |
| 1.5.5 BEAMLINE | | | | 05-Jan-15 A | 28-Sep-15 | 31-Mar-15 | | 0.0 | | \$49,494 | \$0 | \$49,494 | \$0 | 0.0 | | | 28-Sep-15 A; 1.5.5 BEAM |
| 1.5.5.3 BEAMLINE COMPONENTS | | | | 05-Jan-15 A | 28-Sep-15 | 31-Mar-15 | | 0.0 | | \$49,494 | \$0 | \$49,494 | \$0 | 0.0 | | | 28-Sep-15 A; 1.5.5.3 BE |
| 2553010b | | D | Thinning-Characterization-Mounting of Radiator Diamond Crystals | 05-Jan-15 A | 28-Sep-15 | 31-Mar-15 | | | 100% | \$49,494 | \$0 | \$49,494 | \$0 | 0.0 | | | Thinning-Characterizati |
| 1.6 CONVENTIONAL FACILITIES | | | | 05-Jan-15 A | 30-Oct-15 A | 22-Dec-15 | | 0.0 | | \$288,420 | \$14,392 | \$288,420 | \$35,784 | 0.0 | | | 30-Oct-15 A; 1.6 CONVE |
| 1.6.1 ACCELERATOR | | | | 05-Jan-15 A | 30-Oct-15 A | 22-Dec-15 | | 0.0 | | \$288,420 | \$14,392 | \$288,420 | \$35,784 | 0.0 | | | 30-Oct-15 A; 1.6.1 ACC |
| 1.6.1.1 BUILDINGS | | | | 05-Jan-15 A | 30-Oct-15 A | 22-Dec-15 | | 0.0 | | \$288,420 | \$14,392 | \$288,420 | \$35,784 | 0.0 | | | 30-Oct-15 A; 1.6.1.1 BU |
| 1.6.1.1.2 NORTH & SOUTH ACCESS BUILDING UTILITIES | | | | 01-Oct-15 A | 01-Oct-15 A | 01-Oct-15 | | 0.0 | | \$258 | \$0 | \$258 | \$0 | | | | 01-Oct-15 A; 1.6.1.1.2 N |
| 26112013A | | E | Redundant Cooling Towers Construction Management FY16 | 01-Oct-15 A | 01-Oct-15 A | 01-Oct-15 | | | 100% | \$258 | \$0 | \$258 | \$0 | | | | Redundant Cooling Towe |
| 1.6.1.1.4 TUNNEL AIR CONDITIONING | | | | 05-Jan-15 A | 30-Oct-15 A | 22-Dec-15 | | 0.0 | | \$288,163 | \$14,392 | \$288,163 | \$35,784 | 0.0 | | | 30-Oct-15 A; 1.6.1.1.4 |
| 26114100 | | C | Controls - Material Delivery | 01-Jun-15 A | 15-Sep-15 | 30-Jun-15 | | | 100% | \$66,448 | \$0 | \$66,448 | \$0 | 0.0 | | | Controls - Material Delive |
| 26114125 | | C | Electrical finish for chillers | 05-Jan-15 A | 06-Sep-15 | 31-Jul-15 | | | 100% | \$20,121 | \$0 | \$20,121 | \$0 | 0.0 | | | Electrical finish for chiller |
| 26114130 | | C | Startup | 16-Aug-15 A | 06-Sep-15 | 21-Oct-15 | | | 100% | \$22,000 | \$0 | \$22,000 | \$0 | 0.0 | | | Startup |
| 26114135 | | C | Testing & Balancing | 01-Sep-15 A | 15-Sep-15 | 05-Nov-15 | | | 100% | \$9,000 | \$0 | \$9,000 | \$9,000 | 0.0 | | | Testing & Balancing |
| 26114140 | | C | Contract Closeout | 16-Sep-15 A | 30-Oct-15 A | 08-Dec-15 | | | 100% | \$4,000 | \$3,000 | \$4,000 | \$4,000 | -2.0 | | | Contract Closeout |
| 26114145 | | C | Contract Modifications | 05-Jan-15 A | 28-Sep-15 | 15-Oct-15 | | | 100% | \$59,975 | \$0 | \$59,975 | \$0 | 0.0 | | | Contract Modifications |
| 26114150 | | D | Tunnel A/C Bldng Cmmssng | 01-Jun-15 A | 30-Oct-15 A | 15-Dec-15 | | | 100% | \$16,423 | \$8,212 | \$16,423 | \$16,423 | 0.0 | | | Tunnel A/C Bldng Cm |
| 26114155 | | E | Tunnel A/C Constrctn Mngmnt FY15 | 05-Jan-15 A | 30-Sep-15 | 30-Sep-15 | | | 100% | \$79,061 | \$0 | \$79,061 | \$0 | 2.2 | | | Tunnel A/C Constrctn M |
| 26114155A | | E | Tunnel A/C Constrctn Mngmnt FY16 | 01-Oct-15 A | 15-Oct-15 A | 15-Oct-15 | | | 100% | \$4,774 | \$0 | \$4,774 | \$0 | | | | Tunnel A/C Constrctn M |
| 26114160 | | H | Tunnel A/C Beneficial Occupancy | 17-Aug-15 A | 30-Oct-15 A | 22-Dec-15 | | | 100% | \$6,361 | \$3,180 | \$6,361 | \$6,361 | 0.0 | | | Tunnel A/C Beneficial |
| 26114200M | | M | Tunnel A/C Constr Comp | | 30-Oct-15 A | 22-Dec-15 | | | 100% | \$0 | \$0 | \$0 | \$0 | 0.2 | | | Tunnel A/C Constr Co |
| 1.7 PROJECT MANAGEMENT | | | | 01-Apr-15 A | 30-Jun-16 | 30-Jun-16 | 62.4 | 0.0 | | \$198,163 | \$19,467 | \$322,928 | (\$1) | 0.0 | | | 30-Jun-16; 1.7 |
| 1.7.1 PROJECT OFFICE | | | | 01-Apr-15 A | 30-Jun-16 | 30-Jun-16 | 62.4 | 0.0 | | \$198,163 | \$19,467 | \$322,928 | (\$1) | 0.0 | | | 30-Jun-16; 1.7 |
| 271915LOE7 | | E | FY15 Constrctn Proj Office Proj Mngmnt FQ3 & FQ4 | 01-Apr-15 A | 30-Sep-15 | 30-Sep-15 | | | 100% | \$178,696 | \$0 | \$178,696 | \$0 | 0.0 | | | FY15 Constrctn Proj Off |
| 271916LOE | | E | FY16 Constrctn Proj Office Proj Mngmnt | 01-Oct-15 A | 23-Dec-15 | 23-Dec-15 | 62.2 | 0.0 | 37.93% | \$19,467 | \$19,467 | \$51,324 | (\$1) | 0.0 | | | FY16 Constrctn Proj |
| 271916LOE5 | | E | FY16 Constrctn Proj Office Proj Mngmnt FQ2 and FQ3 | 04-Jan-16 | 30-Jun-16 | 30-Jun-16 | 62.2 | 62.2 | 0% | \$0 | \$0 | \$92,908 | \$0 | 0.0 | | | FY16 Constrct |
| 1.8 CONSTRUCTION PRE-OPS | | | | 05-Jan-15 A | 31-Mar-17 | 31-Mar-17 | 25.4 | 0.0 | | \$912,834 | \$154,553 | \$4,881,501 | (\$41,994) | -2.2 | | | 31-M |
| 1.8.1 CONSTRUCTION ACCELERATOR PRE-OPS | | | | 19-Sep-16 | 22-Feb-17 | 22-Feb-17 | 30.8 | 0.0 | | \$0 | \$0 | \$896,196 | \$0 | 2.2 | | | 22-Fet |
| 1.8.1.1 CONSTRUCTION ACCELERATOR PRE-OPS BEAM COMMISIONING | | | | 19-Sep-16 | 22-Feb-17 | 22-Feb-17 | 30.8 | 0.0 | | \$0 | \$0 | \$177,588 | \$0 | 2.2 | | | 22-Fet |

◆ Primary Baseline Milestone
 ▬ Primary Baseline
 ▬ Remaining Work
▬ Project Baseline Bar
 ▬ Actual Work
 ▬ Critical Remaining ...

| Activity ID | Acti with Str | EV Rep Cor | Activity Name | Start | Finish | BL Project Finish | Total Float | Free Float | Physical % Complete | Earned Value Cost | MONTHLY EV COST | BL Project Total Cost | Schedule Variance | Variance - BL1 Finish | FY2015 | FY2016 | FY2017 |
|---|---------------------|------------------|--|-------------|-------------|----------------------|----------------|------------|------------------------|----------------------|--------------------|--------------------------|----------------------|-----------------------------|--------|--------|-------------------------|
| 2811034 | | Z | H-B ARR Process | 19-Sep-16 | 14-Oct-16 | 26-Jul-16 | 44.4 | 14.6 | 0% | \$0 | \$0 | \$0 | \$0 | 16.8 | | | H-B ARR |
| 2811035 | | S | H-B Beam Cmmssng | 09-Feb-17 | 22-Feb-17 | 22-Feb-17 | 29.8 | 0.0 | 0% | \$0 | \$0 | \$118,392 | \$0 | 2.2 | | | H-B Beam |
| 2811049 | | Z | H-C ARR Process | 19-Sep-16 | 11-Nov-16 | 23-Aug-16 | 42.4 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | -1.0 | | | H-C ARR |
| 2811050 | | S | H-C Beam Cmmssng | 14-Nov-16 | 18-Nov-16 | 30-Aug-16 | 42.4 | 0.0 | 0% | \$0 | \$0 | \$59,196 | \$0 | -1.0 | | | H-C Beam |
| 1.8.1.2 CONSTRUCTION ACCELERATOR PRE-OPS UTILITIES | | | | 14-Nov-16 | 22-Feb-17 | 22-Feb-17 | 30.8 | 0.0 | | \$0 | \$0 | \$718,608 | \$0 | 2.2 | | | 22-Feb-17 |
| 2812020 | | S | H-B Beam Cmmssng (Utilities) | 09-Feb-17 | 22-Feb-17 | 22-Feb-17 | 29.8 | 0.0 | 0% | \$0 | \$0 | \$424,239 | \$0 | 2.2 | | | H-B Beam |
| 2812035 | | S | H-C Beam Cmmssng (Utilities) | 14-Nov-16 | 18-Nov-16 | 30-Aug-16 | 42.4 | 0.0 | 0% | \$0 | \$0 | \$294,369 | \$0 | -1.0 | | | H-C Beam |
| 1.8.2 HALLS PRE-OPS | | | | 05-Jan-15 A | 01-Mar-17 | 01-Mar-17 | 29.8 | 0.0 | | \$250,712 | \$49,041 | \$1,614,577 | (\$41,991) | 2.2 | | | 01-Mar-17 |
| 1.8.2.2 HALL B CHECKOUT AND BEAM COMMISSIONING | | | | 02-Feb-15 A | 01-Mar-17 | 01-Mar-17 | 29.8 | 0.0 | | \$203,003 | \$45,064 | \$1,220,296 | \$283 | 2.2 | | | 01-Mar-17 |
| 1.8.2.2.X HALL B COMMISSIONING WITH BEAM | | | | 21-Apr-15 A | 01-Mar-17 | 01-Mar-17 | 29.8 | 0.0 | | \$29,190 | \$605 | \$235,087 | (\$7,897) | 2.2 | | | 01-Mar-17 |
| 2822X000 | | Z | Hall B ERR | 26-Jan-17 | 08-Feb-17 | 08-Feb-17 | 29.8 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | 4.2 | | | Hall B ERR |
| 2822X002 | ST | S | H-B PRE-OPS Cmmssn with Beam | 09-Feb-17 | 22-Feb-17 | 22-Feb-17 | 29.8 | 0.0 | 0% | \$0 | \$0 | \$108,413 | \$0 | | | | H-B PRE-OPS |
| 2822X040 | ST | S | HTCC - Optical tests of mirror geometry in situ - Lab | 01-Sep-15 A | 02-Dec-15 | 16-Jul-15 | 83.8 | 0.0 | 92.3% | \$10,010 | \$0 | \$10,845 | (\$835) | -4.4 | | | HTCC - Optical tests |
| 2822X050 | ST | S | LTCC - Calibration Test | 21-Apr-15 A | 21-Sep-15 | 16-Jun-15 | | | 100% | \$18,576 | \$0 | \$18,576 | \$0 | 0.0 | | | LTCC - Calibration Test |
| 2822X055 | ST | S | TDC and DISCRIMINATORS - CAEN v1190 (1) and v1290N (7) TC | 04-Jan-16 | 08-Jan-16 | 11-Jun-15 | 81.6 | 51.2 | 0% | \$0 | \$0 | \$5,750 | (\$5,750) | 12.2 | | | TDC and DISCRIM |
| 2822X060 | ST | S | TDC and DISCRIMINATORS -JLab TDC Fanout (2) test/install (SF) | 04-Jan-16 | 08-Jan-16 | 11-Jun-15 | 81.6 | 51.2 | 0% | \$0 | \$0 | \$1,917 | (\$1,917) | 12.2 | | | TDC and DISCRIM |
| 2822X065 | | H | Survey (as found location) LTCC positions | 12-May-16 | 16-May-16 | 19-Jan-16 | 60.6 | 0.0 | 0% | \$0 | \$0 | \$3,628 | \$0 | -3.2 | | | Survey (as found |
| 2822X067 | | Z | Wait (Wait Period from start of 2822X065 to start of 2822X070) | 12-May-16 | 13-May-16 | 15-Jan-16 | 62.6 | 0.2 | 0% | \$0 | \$0 | \$0 | \$0 | | | | Wait (Wait Period |
| 2822X070 | | H | Cable/test/repair LTCC's | 17-May-16 | 24-May-16 | 26-Jan-16 | 62.4 | 32.6 | 0% | \$0 | \$0 | \$8,680 | \$0 | -3.4 | | | Cable/test/repair |
| 2822X075 | | H | Final Survey TOF panel 2's Positions | 25-May-16 | 27-May-16 | 01-Feb-16 | 60.6 | 0.0 | 0% | \$0 | \$0 | \$3,628 | \$0 | -3.2 | | | Final Survey TOF |
| 2822X080 | | H | Cable/test/repair Panel 2 TOFs | 31-May-16 | 07-Jun-16 | 09-Feb-16 | 60.6 | 30.8 | 0% | \$0 | \$0 | \$8,680 | \$0 | -3.2 | | | Cable/test/repair |
| 2822X085 | | H | Align Goni and Moeller Quads | 05-Oct-15 A | 03-May-16 | 18-May-16 | 65.4 | 35.6 | 50% | \$605 | \$605 | \$1,209 | \$605 | 2.2 | | | Align Goni and M |
| 2822X090 | ST | S | Survey/align R2 Drift chambers | 20-Jul-16 | 26-Jul-16 | 06-Jul-16 | 48.8 | 0.0 | 0% | \$0 | \$0 | \$12,094 | \$0 | -3.2 | | | Survey/align R2 |
| 2822X095 | ST | S | Survey/align R1 Drift chambers | 29-Jul-16 | 04-Aug-16 | 15-Jul-16 | 48.8 | 0.0 | 0% | \$0 | \$0 | \$12,094 | \$0 | -3.2 | | | Survey/align R1 |
| 2822X100 | ST | S | Survey/align R3 Drift chambers | 10-Aug-16 | 16-Aug-16 | 27-Jul-16 | 48.8 | 0.0 | 0% | \$0 | \$0 | \$12,094 | \$0 | -3.2 | | | Survey/align R3 |
| 2822X1005 | | Z | Wait (Wait Period from Funding Milestone) | 01-Oct-15 A | 01-Apr-16 | 30-Mar-16 | 66.8 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | -0.4 | | | Wait (Wait Period |
| 2822X110 | ST | S | Initial Mount, cable and check SVT system | 02-May-16 A | 22-Apr-16 | 20-Apr-16 | 66.8 | 37.0 | 0% | \$0 | \$0 | \$22,501 | \$0 | -0.4 | | | Initial Mount, cab |
| 2822X115 | ST | S | Roll in and Align SVT Sytem After Beam Run | 23-Feb-17 | 01-Mar-17 | 01-Mar-17 | 29.8 | 29.8 | 0% | \$0 | \$0 | \$4,980 | \$0 | 2.2 | | | Roll in and Align |
| 1.8.2.2.3 HALL B TRIGGER, DAQ AND ONLINE SOFTWARE CHECKOUT | | | | 02-Feb-15 A | 23-Aug-16 | 22-Aug-16 | 52.0 | 0.0 | | \$153,054 | \$44,459 | \$358,982 | \$17,245 | -0.4 | | | 23-Aug-16: 1 |
| 28223000 | | U | CTP testing of 22 boards | 01-Mar-16 | 27-May-16 | 30-Jun-16 | 49.8 | 0.0 | 0% | \$0 | \$0 | \$51,216 | \$0 | -0.4 | | | CTP testing of |
| 28223025A | ST | S | DAQ Commissioning FY15 | 02-Mar-15 A | 21-Sep-15 | 30-Sep-15 | | | 100% | \$34,309 | \$0 | \$34,309 | \$0 | 0.0 | | | DAQ Commissioning FY |
| 28223025B | | H | DAQ Commissioning FY16 | 02-Oct-15 A | 26-Oct-15 A | 02-Oct-15 | | | 100% | \$288 | \$288 | \$288 | \$0 | -3.2 | | | DAQ Commissioning F |
| 28223030A | ST | S | CLAS12 DAQ/online software updates FY15 | 02-Mar-15 A | 21-Sep-15 | 30-Sep-15 | | | 100% | \$51,070 | \$0 | \$51,070 | \$0 | 0.0 | | | CLAS12 DAQ/online sof |
| 28223030B | | H | CLAS12 DAQ/online software updates FY16 | 02-Oct-15 A | 05-Oct-15 A | 02-Oct-15 | | | 100% | \$428 | \$428 | \$428 | \$0 | -0.2 | | | CLAS12 DAQ/online sof |
| 28223040 | ST | S | Trigger system commissioning | 05-Oct-15 A | 23-Aug-16 | 22-Aug-16 | 49.8 | 20.0 | 22.4% | \$30,969 | \$30,969 | \$138,256 | \$30,969 | -0.4 | | | Trigger syste |
| 28223045 | | U | DAQ - Install GE VME controllers (53) | 02-Feb-15 A | 01-Feb-16 | 12-Aug-15 | 78.6 | 48.8 | 67.92% | \$16,862 | \$0 | \$24,826 | (\$7,964) | -7.0 | | | DAQ - Install GE VM |
| 28223050 | ST | S | Online Computing - Install CISCO 2960S switches (24 Cu ports) (' | 02-Nov-15 | 08-Jan-16 | 29-Feb-16 | 81.6 | 25.6 | 0% | \$0 | \$0 | \$12,808 | \$0 | 7.0 | | | Online Computing - |
| 28223055 | | H | Online Computing - Install 4-port 10Gbit Blades for BigIron | 02-Nov-15 | 01-Dec-15 | 29-Jan-16 | 85.8 | 29.8 | 0% | \$0 | \$0 | \$3,202 | \$0 | -4.4 | | | Online Computing - |
| 28223065 | ST | S | SLOW CNTL (EPICS device drivers and Interlocks) FY 15 | 03-Jul-15 A | 02-Dec-15 | 30-Sep-15 | 67.6 | 0.0 | 50% | \$10,478 | \$6,287 | \$20,955 | (\$10,478) | -4.4 | | | SLOW CNTL (EPICS |
| 28223070 | ST | S | SLOW CNTL (EPICS device drivers and Interlocks) FY 16 | 01-Aug-15 A | 02-May-16 | 31-Mar-16 | 67.6 | 37.8 | 40% | \$8,649 | \$6,487 | \$21,623 | \$4,718 | -0.2 | | | SLOW CNTL (EP |
| 1.8.2.2.6 HALL B MAGNET INSTALLATION TESTING | | | | 02-Feb-15 A | 04-Jan-17 | 04-Jan-17 | 29.8 | 0.0 | | \$20,759 | \$0 | \$626,227 | (\$9,065) | 0.0 | | | 04-Jan-17 |
| 28226000 | ST | S | OSP for Cooldown | 18-Mar-16 | 24-Mar-16 | 19-Feb-16 | 48.8 | 0.0 | 0% | \$0 | \$0 | \$13,514 | \$0 | -4.8 | | | OSP for Cooldown |
| 28226001 | ST | S | Reviews Prior to Cooldown | 25-Mar-16 | 07-Apr-16 | 04-Mar-16 | 48.8 | 0.0 | 0% | \$0 | \$0 | \$23,010 | \$0 | -4.8 | | | Reviews Prior to C |
| 28226002 | | H | Prepare Final Documentation | 08-Apr-16 | 14-Apr-16 | 11-Mar-16 | 48.8 | 0.0 | 0% | \$0 | \$0 | \$8,943 | \$0 | -4.8 | | | Prepare Final Doc |
| 28226002A | ST | S | Service tower/cryoduct Instrumentation testing | 12-Feb-16 | 03-Mar-16 | 02-Mar-16 | 52.2 | 0.0 | 0% | \$0 | \$0 | \$30,905 | \$0 | 0.0 | | | Service tower/cryo |

◆ Primary Baseline Milestone
 ▬ Primary Baseline
 ▬ Remaining Work
▬ Project Baseline Bar
 ▬ Actual Work
 ▬ Critical Remaining ...

| Activity ID | Acti with Str | EVA Rep Cor | Activity Name | Start | Finish | BL Project Finish | Total Float | Free Float | Physical % Complete | Earned Value Cost | MONTHLY EV COST | BL Project Total Cost | Schedule Variance | Variance - BL1 Finish | FY2015 | FY2016 | FY2017 |
|-------------|---------------------|-------------------|--|-------------|-----------|----------------------|----------------|------------|------------------------|----------------------|--------------------|--------------------------|----------------------|-----------------------------|--------|--------|--------|
| 28226002B | | H | Pump vacuum | 09-Mar-16 | 15-Mar-16 | 14-Mar-16 | 52.2 | 0.0 | 0% | \$0 | \$0 | \$4,614 | \$0 | 0.0 | | | |
| 28226002C | | H | Leak tests while pumping | 16-Mar-16 | 17-Mar-16 | 16-Mar-16 | 52.2 | 0.0 | 0% | \$0 | \$0 | \$3,055 | \$0 | 0.0 | | | |
| 28226002D | | H | Pump down vacuum and Final Leak Check | 18-Mar-16 | 31-Mar-16 | 30-Mar-16 | 52.6 | 3.8 | 0% | \$0 | \$0 | \$5,621 | \$0 | 0.0 | | | |
| 28226002F | | H | Purify Entire Torus System | 21-Mar-16 | 23-Mar-16 | 21-Mar-16 | 52.0 | 3.2 | 0% | \$0 | \$0 | \$3,659 | \$0 | 0.0 | | | |
| 28226003 | | H | Commission Cryogenic System (Pump/Backfill, U-tubes, Circulate | 15-Apr-16 | 21-Apr-16 | 28-Mar-16 | 48.8 | 0.0 | 0% | \$0 | \$0 | \$6,596 | \$0 | -3.2 | | | |
| 28226004 | | H | Test Cooling System down to 0 c/273 K | 22-Apr-16 | 27-Apr-16 | 04-Apr-16 | 48.8 | 0.0 | 0% | \$0 | \$0 | \$4,766 | \$0 | -3.2 | | | |
| 28226005 | ST | S | Torus Cooldown | 28-Apr-16 | 18-May-16 | 25-Apr-16 | 48.8 | 0.0 | 0% | \$0 | \$0 | \$65,263 | \$0 | -3.2 | | | |
| 28226010 | ST | S | Torus Operational Tests | 19-May-16 | 27-May-16 | 09-May-16 | 48.8 | 0.0 | 0% | \$0 | \$0 | \$37,736 | \$0 | -3.2 | | | |
| 28226011 | | M | Torus Assembled and Tested | | 27-May-16 | 10-May-16 | 48.8 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | -3.2 | | | |
| 28226015 | | Z | Wait (Wait Period from Funding Milestone) | 04-Nov-15 | 17-Mar-16 | 12-Feb-16 | 48.8 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | -4.8 | | | |
| 28226020 | | H | Sol TST & COMM: Install U-tubes to Solenoid CryoCan | 28-Oct-16 | 28-Oct-16 | 28-Oct-16 | 29.8 | 0.0 | 0% | \$0 | \$0 | \$2,243 | \$0 | 0.0 | | | |
| 28226025 | | H | Sol TST & COMM: Start Slow-cool of Solenoid Magnet System | 31-Oct-16 | 29-Nov-16 | 29-Nov-16 | 29.8 | 0.0 | 0% | \$0 | \$0 | \$7,198 | \$0 | 0.0 | | | |
| 28226030 | | H | Sol TST & COMM: Assemble Field measurement hardware | 31-Oct-16 | 04-Nov-16 | 04-Nov-16 | 32.8 | 3.0 | 0% | \$0 | \$0 | \$4,017 | \$0 | 0.0 | | | |
| 28226035 | | H | Sol TST & COMM: Incrementally Power Solenoid Magnet to full | 30-Nov-16 | 06-Dec-16 | 06-Dec-16 | 29.8 | 0.0 | 0% | \$0 | \$0 | \$7,126 | \$0 | 0.0 | | | |
| 28226040 | | H | Sol TST & COMM: Map CLAS12 Solenoid at full field for both p | 07-Dec-16 | 13-Dec-16 | 13-Dec-16 | 29.8 | 0.0 | 0% | \$0 | \$0 | \$9,142 | \$0 | 0.0 | | | |
| 28226045 | ST | S | Sol TST & COMM: Map CLAS12 Solenoid at incremental fields | 14-Dec-16 | 20-Dec-16 | 20-Dec-16 | 29.8 | 0.0 | 0% | \$0 | \$0 | \$13,159 | \$0 | 0.0 | | | |
| 28226050 | ST | S | Sol TST & COMM: Map CLAS12 Solenoid field at Detector loca | 21-Dec-16 | 22-Dec-16 | 22-Dec-16 | 29.8 | 0.0 | 0% | \$0 | \$0 | \$13,159 | \$0 | 0.0 | | | |
| 28226055 | ST | S | Sol TST & COMM: Re-map CLAS12 Solenoid fields as per resu | 03-Jan-17 | 04-Jan-17 | 04-Jan-17 | 29.8 | 0.0 | 0% | \$0 | \$0 | \$13,159 | \$0 | 0.0 | | | |
| 28226175 | | H | Torus mapping at 100A | 31-May-16 | 02-Jun-16 | 12-May-16 | 48.8 | 0.0 | 0% | \$0 | \$0 | \$5,448 | \$0 | -3.2 | | | |
| 28226180 | | H | Torus 1st Sector Measurement | 03-Jun-16 | 07-Jun-16 | 17-May-16 | 48.8 | 0.0 | 0% | \$0 | \$0 | \$6,394 | \$0 | -3.2 | | | |
| 28226185 | | H | Torus 2nd Sector Measurement | 08-Jun-16 | 10-Jun-16 | 20-May-16 | 48.8 | 0.0 | 0% | \$0 | \$0 | \$6,394 | \$0 | -3.2 | | | |
| 28226190 | | H | Torus 3rd Sector Measurement | 13-Jun-16 | 15-Jun-16 | 25-May-16 | 48.8 | 0.0 | 0% | \$0 | \$0 | \$6,394 | \$0 | -3.2 | | | |
| 28226195 | | H | Torus 4th Sector Measurement | 16-Jun-16 | 17-Jun-16 | 27-May-16 | 48.8 | 0.0 | 0% | \$0 | \$0 | \$6,394 | \$0 | -3.2 | | | |
| 28226200 | | H | Torus 5th Sector Measurement | 20-Jun-16 | 21-Jun-16 | 01-Jun-16 | 48.8 | 0.0 | 0% | \$0 | \$0 | \$6,394 | \$0 | -3.2 | | | |
| 28226205 | | H | Torus 6th Sector Measurement | 22-Jun-16 | 23-Jun-16 | 03-Jun-16 | 48.8 | 0.0 | 0% | \$0 | \$0 | \$6,394 | \$0 | -3.2 | | | |
| 28226210 | | H | Torus Bore Measurement | 24-Jun-16 | 27-Jun-16 | 07-Jun-16 | 48.8 | 0.0 | 0% | \$0 | \$0 | \$6,394 | \$0 | -3.2 | | | |
| 28226235 | | H | Align Solenoid - Initial | 12-Aug-16 | 16-Aug-16 | 16-Aug-16 | 29.8 | 0.0 | 0% | \$0 | \$0 | \$4,320 | \$0 | -0.8 | | | |
| 28226240 | | H | Independent leak check solenoid magnet cryogenic circuits | 17-Aug-16 | 24-Aug-16 | 24-Aug-16 | 29.8 | 0.0 | 0% | \$0 | \$0 | \$3,048 | \$0 | -1.0 | | | |
| 28226245 | | H | Independent electrical check solenoid instrumentaion | 17-Aug-16 | 24-Aug-16 | 24-Aug-16 | 29.8 | 0.0 | 0% | \$0 | \$0 | \$5,083 | \$0 | 0.0 | | | |
| 28226250 | ST | S | Leak check solenoid magnet/cryocan circuits | 16-Sep-16 | 22-Sep-16 | 22-Sep-16 | 29.8 | 0.0 | 0% | \$0 | \$0 | \$14,297 | \$0 | 0.0 | | | |
| 28226255 | | H | Leak check solenoid magnet/cryocan circuits & InsVac | 14-Oct-16 | 20-Oct-16 | 20-Oct-16 | 29.8 | 0.0 | 0% | \$0 | \$0 | \$5,063 | \$0 | 0.0 | | | |
| 28226260 | ST | S | Connect and Checkout instrumentation from solenoid magnet syst | 31-Oct-16 | 07-Nov-16 | 07-Nov-16 | 32.6 | 2.8 | 0% | \$0 | \$0 | \$15,522 | \$0 | 0.0 | | | |
| 28226265 | | H | Checkout cryogenic signal readbacks & valve operations | 25-Oct-16 | 27-Oct-16 | 27-Oct-16 | 29.8 | 0.0 | 0% | \$0 | \$0 | \$7,252 | \$0 | 0.0 | | | |
| 28226270 | | H | Align Solenoid - Final | 01-Nov-16 | 01-Nov-16 | 01-Nov-16 | 33.4 | 3.6 | 0% | \$0 | \$0 | \$5,019 | \$0 | 0.0 | | | |
| 28226275 | | H | Evacuate and purge all cryogenic circuits | 21-Oct-16 | 24-Oct-16 | 24-Oct-16 | 30.4 | 0.6 | 0% | \$0 | \$0 | \$1,209 | \$0 | 0.0 | | | |
| 28226310 | | D | Receipt Inspection of Hall B Cryo Distribution Can | 11-Dec-15 | 17-Dec-15 | 19-Nov-15 | 56.6 | 1.4 | 0% | \$0 | \$0 | \$5,809 | \$0 | 0.6 | | | |
| 28226320 | NB | S | TSTF - Receipt Inspection of Components and Material | 02-Feb-15 A | 01-Dec-15 | 28-Aug-15 | 55.0 | 2.8 | 96.93% | \$17,039 | \$0 | \$17,579 | (\$540) | -4.4 | | | |
| 28226325 | | D | TSTF - Verification Testing | 22-Dec-15 | 21-Jan-16 | 15-Jan-16 | 52.2 | 0.0 | 0% | \$0 | \$0 | \$27,537 | \$0 | 0.0 | | | |
| 28226330 | ST | S | Torus I&C -Final Verification Point-to-Point | 01-Feb-16 | 25-Feb-16 | 08-Feb-16 | 56.6 | 0.0 | 0% | \$0 | \$0 | \$26,500 | \$0 | 2.4 | | | |
| 28226335 | ST | S | Torus - I and C Commissioning (De-Bug PLC, EPICS, Fast DAQ) | 26-Feb-16 | 24-Mar-16 | 07-Mar-16 | 56.6 | 7.8 | 0% | \$0 | \$0 | \$102,938 | \$0 | 2.4 | | | |
| 28226340 | ST | S | Solenoid Commissioning - Design & Documentation FY16 | 04-Jan-16 | 30-Aug-16 | 30-Aug-16 | 43.2 | 13.4 | 0% | \$0 | \$0 | \$35,376 | (\$3,429) | 0.0 | | | |
| 28226345 | NB | S | SSTF - Receipt Inspection of Components and Material FY15 | 02-Feb-15 A | 25-Jan-16 | 30-Sep-15 | 57.2 | 0.0 | 42.19% | \$3,350 | \$0 | \$7,940 | (\$4,590) | -4.4 | | | |
| 28226345A | NB | S | SSTF - Receipt Inspection of Components and Material FY16 | 01-Oct-15 A | 25-Jan-16 | 23-Oct-15 | 57.2 | 22.0 | 42.19% | \$370 | \$0 | \$876 | (\$507) | -4.4 | | | |
| 28226350 | | D | SSTF - Verification Testing | 29-Jun-16 | 18-Jul-16 | 11-Mar-16 | 35.2 | 5.4 | 0% | \$0 | \$0 | \$13,769 | \$0 | -4.4 | | | |

◆ Primary Baseline Milestone
 ▬ Primary Baseline
 ▬ Remaining Work
▬ Project Baseline Bar
 ▬ Actual Work
 ▬ Critical Remaining ...

| Activity ID | Acti with Str | EV Rep Cod | Activity Name | Start | Finish | BL Project Finish | Total Float | Free Float | Physical % Complete | Earned Value Cost | MONTHLY EV COST | BL Project Total Cost | Schedule Variance | Variance - BL1 Finish | FY2015 | FY2016 | FY2017 |
|--|---------------------|------------------|--|-------------|-----------|----------------------|----------------|------------|------------------------|----------------------|--------------------|--------------------------|----------------------|-----------------------------|--------|--------|-------------------------|
| 1.8.2.3 HALL C CHECKOUT AND BEAM COMMISSIONING | | | | 05-Jan-15 A | 18-Nov-16 | 30-Aug-16 | 42.6 | 0.0 | | \$47,709 | \$3,977 | \$394,281 | (\$42,274) | -1.0 | | | 18-Nov-16 |
| 1.8.2.3.X HALL C COMMISSIONING WITH BEAM | | | | 14-Nov-16 | 18-Nov-16 | 30-Aug-16 | 42.6 | 0.0 | | \$0 | \$0 | \$46,838 | \$0 | -1.0 | | | 18-Nov-16 |
| 2823X000 | ST | S | H-C PRE-OPS Cmmssn with Beam | 14-Nov-16 | 18-Nov-16 | 30-Aug-16 | 42.4 | 0.0 | 0% | \$0 | \$0 | \$46,838 | \$0 | -1.0 | | | H-C PRE- |
| 1.8.2.3.1 HALL C HB AND Q1 TESTING | | | | 05-Jan-15 A | 29-Jan-16 | 27-Jul-15 | 79.0 | 0.0 | | \$43,733 | \$0 | \$74,385 | (\$30,652) | -7.2 | | | 29-Jan-16 1.8.2.3.1 |
| 28231025 | ST | S | Test & Integrate DC Pwr Sys for all magnets | 05-Jan-15 A | 29-Jan-16 | 27-Jul-15 | 78.8 | 49.0 | 66.6% | \$17,122 | \$0 | \$25,708 | (\$8,586) | -12.0 | | | Test & Integrate DC |
| 28231060 | ST | S | HB Power Tests | 04-May-15 A | 30-Nov-15 | 24-Jun-15 | 58.2 | 0.0 | 50% | \$7,553 | \$0 | \$15,106 | (\$7,553) | -3.8 | | | HB Power Tests |
| 28231065 | | H | HB Acceptance Test w/Fiducialization & Mapping | 10-Nov-15 | 30-Nov-15 | 09-Jul-15 | 58.2 | 0.0 | 0% | \$0 | \$0 | \$8,160 | (\$8,160) | 0.0 | | | HB Acceptance Test w |
| 28231070 | | U | HB Drawing Validation | 17-Mar-15 A | 13-Nov-15 | 17-Jul-15 | 87.8 | 45.4 | 75% | \$19,058 | \$0 | \$25,411 | (\$6,353) | -4.4 | | | HB Drawing Validation |
| 1.8.2.3.6 HALL C DIPOLE AND Q2Q3 MAGNET TESTING | | | | 23-Oct-15 A | 14-Oct-16 | 18-Jul-16 | 42.6 | 0.0 | | \$3,977 | \$3,977 | \$273,058 | (\$11,622) | -1.0 | | | 14-Oct-16 |
| 28236000 | ST | S | Dipole Cryo & Electrical Tests | 03-Jun-16 | 23-Jun-16 | 14-Mar-16 | 42.4 | 0.0 | 0% | \$0 | \$0 | \$23,383 | \$0 | -1.0 | | | Dipole Cryo & E |
| 28236002 | ST | S | Cool Down Dipole Magnet | 24-Jun-16 | 15-Jul-16 | 04-Apr-16 | 42.4 | 0.0 | 0% | \$0 | \$0 | \$16,706 | \$0 | -1.0 | | | Cool Down Dip |
| 28236005 | ST | S | Dipole Power Tests | 18-Jul-16 | 04-Aug-16 | 25-Apr-16 | 42.4 | 0.0 | 0% | \$0 | \$0 | \$15,588 | \$0 | -1.0 | | | Dipole Power |
| 28236007 | | H | Dipole Acceptance Test w/Fiducialization & Mapping | 05-Aug-16 | 18-Aug-16 | 09-May-16 | 42.4 | 0.0 | 0% | \$0 | \$0 | \$10,392 | \$0 | -1.0 | | | Dipole Accep |
| 28236010 | ST | S | Q2 Cryo & Electrical Tests | 28-Apr-16 | 10-May-16 | 01-Feb-16 | 48.4 | 0.0 | 0% | \$0 | \$0 | \$23,383 | \$0 | -5.4 | | | Q2 Cryo & Elect |
| 28236012 | | Z | Wait (Wait Period from Start of 28236010 to start of 28236015) | 28-Apr-16 | 04-May-16 | 25-Jan-16 | 49.2 | 0.8 | 0% | \$0 | \$0 | \$0 | \$0 | | | | Wait (Wait Peri |
| 28236015 | ST | S | Q2 Cooldown | 11-May-16 | 01-Jun-16 | 15-Feb-16 | 48.4 | 0.0 | 0% | \$0 | \$0 | \$17,604 | \$0 | -5.4 | | | Q2 Cooldown |
| 28236020 | ST | S | Q2 Power Tests | 02-Jun-16 | 15-Jun-16 | 29-Feb-16 | 48.4 | 0.0 | 0% | \$0 | \$0 | \$15,588 | \$0 | -5.4 | | | Q2 Power Tests |
| 28236022 | | Z | Wait (Wait Period from Start of 28236020 to start of 28236025) | 16-Jun-16 | 22-Jun-16 | 22-Feb-16 | 48.4 | 0.0 | 0% | \$0 | \$0 | \$0 | \$0 | | | | Wait (Wait Peri |
| 28236025 | | H | Q2-Acceptance Test w/Fiducialization & Mapping | 23-Jun-16 | 14-Jul-16 | 07-Mar-16 | 48.4 | 1.0 | 0% | \$0 | \$0 | \$8,421 | \$0 | -7.4 | | | Q2-Acceptanc |
| 28236030 | ST | S | Q3 Cryo & Electrical Tests | 20-May-16 | 03-Jun-16 | 07-Apr-16 | 47.4 | 0.0 | 0% | \$0 | \$0 | \$23,383 | \$0 | -5.2 | | | Q3 Cryo & Elec |
| 28236035 | ST | S | Q3 Cooldown | 06-Jun-16 | 24-Jun-16 | 28-Apr-16 | 47.4 | 0.0 | 0% | \$0 | \$0 | \$17,604 | \$0 | -5.2 | | | Q3 Cooldown |
| 28236040 | ST | S | Q3 Power Tests | 27-Jun-16 | 11-Jul-16 | 12-May-16 | 47.4 | 0.0 | 0% | \$0 | \$0 | \$15,588 | \$0 | -5.2 | | | Q3 Power Tes |
| 28236045 | | H | Q3-Acceptance Test w/Fiducialization & Mapping | 12-Jul-16 | 21-Jul-16 | 26-May-16 | 47.4 | 0.0 | 0% | \$0 | \$0 | \$8,421 | \$0 | -5.2 | | | Q3-Acceptanc |
| 28236060 | ST | S | Power all Magnets together | 23-Oct-15 A | 14-Oct-16 | 18-Jul-16 | 42.4 | 0.0 | 16% | \$3,977 | \$3,977 | \$24,854 | \$3,977 | -1.0 | | | Power all M |
| 28236065 | | U | Q2&Q3 Drawing Validation FY15 | 11-Jan-16 | 29-Feb-16 | 30-Sep-15 | 62.6 | 0.0 | 0% | \$0 | \$0 | \$9,461 | (\$9,461) | 7.8 | | | Q2&Q3 Drawing |
| 28236065A | | U | Q2&Q3 Drawing Validation FY16 | 01-Mar-16 | 20-May-16 | 04-Jan-16 | 62.6 | 8.4 | 0% | \$0 | \$0 | \$16,459 | (\$6,137) | | | | Q2&Q3 Drawing |
| 28236070 | | U | Dipole Drawing Validation | 24-Mar-16 | 07-Sep-16 | 25-May-16 | 47.8 | 0.0 | 0% | \$0 | \$0 | \$26,222 | \$0 | -1.0 | | | Dipole Draw |
| 1.8.3 PRE-OPS SUPPORT | | | | 01-Apr-15 A | 31-Mar-17 | 31-Mar-17 | 25.4 | 0.0 | | \$662,121 | \$105,513 | \$2,370,728 | (\$3) | -12.8 | | | 31-M |
| 1.8.3.1 PRE-OPS SUPPORT - PROJECT OFFICE | | | | 01-Apr-15 A | 31-Mar-17 | 31-Mar-17 | 25.4 | 0.0 | | \$662,121 | \$105,513 | \$2,370,728 | (\$3) | -12.8 | | | 31-M |
| 2831915LOE7 | | E | FY15 Pre-Ops Supprt - Proj Office Part FQ3 & FQ4 | 01-Apr-15 A | 30-Sep-15 | 30-Sep-15 | | | 100% | \$556,609 | \$0 | \$556,609 | \$0 | 0.0 | | | FY15:Pre-Ops Supprt - F |
| 2831916LOE | | E | FY16 Pre-Ops Supprt - Proj Office FQ1 | 01-Oct-15 A | 23-Dec-15 | 23-Dec-15 | 25.4 | 0.0 | 37.93% | \$105,513 | \$105,513 | \$278,177 | (\$3) | 0.0 | | | FY16 Pre-Ops Supprt |
| 2831916LOE5 | | E | FY16 Pre-Ops Supprt - Proj Office FQ2, FQ3 & FQ4 | 04-Jan-16 | 30-Sep-16 | 30-Sep-16 | 25.4 | 0.0 | 0% | \$0 | \$0 | \$920,785 | \$0 | 0.0 | | | FY16:Pre-C |
| 2831917LOE | | E | FY17 Pre-Ops Supprt - Proj Office | 03-Oct-16 | 31-Mar-17 | 31-Mar-17 | 25.4 | 25.4 | 0% | \$0 | \$0 | \$615,156 | \$0 | -12.6 | | | FY17 |

◆ Primary Baseline Milestone
 ▬ Primary Baseline
 ▬ Remaining Work
▬ Project Baseline Bar
 ▬ Actual Work
 ▬ Critical Remaining ...