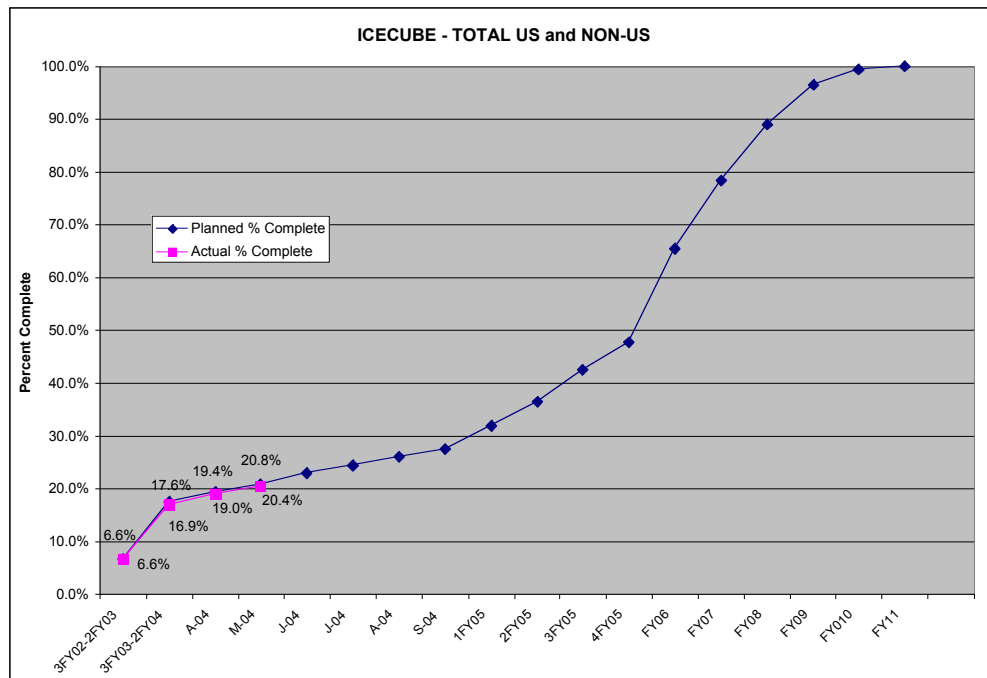


IceCube Project Monthly Report May 2004

Accomplishments

- Several key positions were filled in the last month:
 - Drilling Manager – Alan Elchiekh
 - Deployment Manager – Rob Easter
 - Three drillers
- Started design qualification testing of ten pre-production Digital Optical Modules.
- Developed subsystem milestones for WBS Level 3 elements for project year 3.
- Delivered final project year 2 report to the NSF.
- Delivered initial IceCube resource loaded “on-ice” schedule to the NSF.

IceCube Construction Project Percent Complete



Status and Issues

Implementation – The drill is on schedule for completion of testing. The Rod well system pump functional tests were completed on May 18, Rod well stinger heaters - May 19, power handling system vane pumps - May 19, and power handling system stinger heaters - May 24. Training and packing is planned for July and August. Initial shipments from the UW Physical Sciences Laboratory to Port Hueneme will begin on August 15th.

DOM Production – A Production Readiness Review (PRR) for the initial strings is scheduled for June 8-9th at UW-Madison. The PRR committee includes project staff and external consultants. NSF participants include Jack Lightbody, NSF IceCube Program Manager, Mark Coles, NSF Deputy Director – Large Facility Projects, and Don Hartill, Chair of the Major NSF IceCube Reviews. The PRR is the culmination of a series of

recent DOM reviews including: main board, integrated design, process integration, and final acceptance testing reviews. A cable assembly design review was also held in May. The DOM Production Manager and Quality Assurance Manager conducted production site visits to the European production sites in May. Following the PRR and resolution of action items, DOM production will begin in July. Ten pre-production DOMs are now being tested in the Dark Freezer Laboratory at PSL. Each DOM was taken through 180 hours of qualification testing, including two temperature cycles and 100 hours of cold soak at -45 °C. 250 DOM-hours of data was logged from all ten DOMs using the test data acquisition software system. Data analysis is in progress.

Internal Software Reviews – Internal technical reviews of IceCube software were conducted in May. A Data Acquisition Software Review was held at LBNL on May 7th, and a Data Systems and Detector Verification Review was held at the University of Maryland on May 19- 20th. The review committees included members of the IceCube Project Advisory Panel and other outside experts. The committees supported the basic technical approach and provided a number of useful recommendations.

IceCube Project Baseline – The table below provides project baseline information.

Initial In-Ice Strings & IceTop Tanks Installed	January 2005
Initial Operational Capability	March 2007
Project Completion & Closeout	September 2010
Total Project Cost	\$271.8M
Value of Foreign Contributions	\$29.7M
NSF Funding	\$242.1M
Contingency as % of Remaining Costs	23%
# Strings/Tanks	≥70/140

Quality and Safety – This month the IceCube Safety and Quality Assurance Manager participated in site visits and reviews of DOM production facilities in Sweden and in Germany. There is one final code waiver for the drill pending with the NSF.

Future Meetings and Events

Monthly Status Meetings	June 16, August 8, September 15
Quarterly Review Meetings w/NSF	July 12, October 13*
Sweden DOM Production Site Visit	June 1
Drill Hose Review @ PSL	June 3
DOM Production Readiness Review	June 8 - 9
DOM Hub Hardware Review	June 10
Simulation Integration Workshop @ LBNL	June 28 - 30

* The October 13th Quarterly Status Meeting may be cancelled in deference to the first meeting of the IceCube International Oversight and Finance Group, tentatively scheduled for October 7th in Sweden.