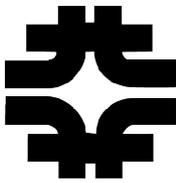


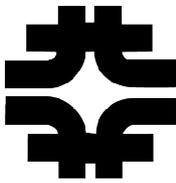
# Nova DAQ Software Development Project Status Update for 09/05/2006

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# Project Deliverables Status

- WBS work is an evolving effort
  - Not yet using it to track (access strictly controlled by project office limits usefulness for L3 managers)
- Many milestones defined in WBS, mostly in the future (a small selection)
  - Documentation (standards, various requirements, various designs)
    - Various stages from not started to addressing review comments
    - Basically behind schedule on Error Handling, Message Passing, Standards
  - Evaluation of packages for control and error messages
    - Elvin done; Siena done; EPICS in progress (no longer ahead of schedule 1 Sep & 4 Oct 2006)
- No one with dedicated large fraction for effort yet
  - Optimize by picking tasks which are better suited for 'picking up where I left off', not strictly as schedule indicates
  - Building foundation for when more dedicated effort becomes available



# Project Milestones

The mission is to provide a performant, robust, and well documented DAQ on an aggressive schedule while appropriately reflecting Computing Division and Laboratory priorities.

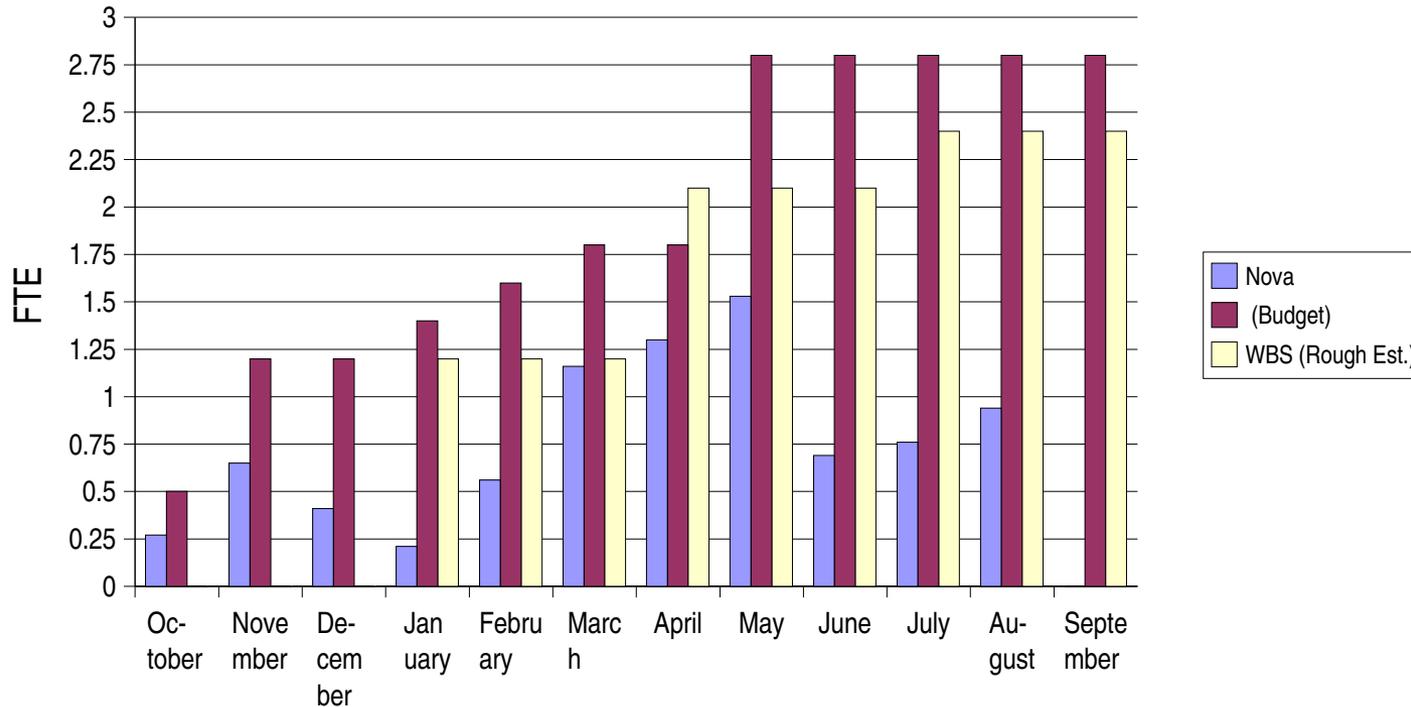
- There are two major milestones for the effort
  - Minimally functioning solution in time for the IPND test running at the end of 2007 (overly aggressive given manpower, trying to improve)
  - Fully functional DAQ system including remote operations support when first 5KT of detector is commissioned near end of 2010
- Bulk of work is really needed for IPND milestone so a very front loaded schedule
  - Not well matched to the project approval process which pushes in opposite direction



# Effort Profile Nova DAQ Software Development

- Jerry's time is mostly WBS and related management activities (0.28 FTE ave)

## Nova DAQ Development





# Risks

- IPND schedule is very aggressive and milestones may be missed
  - No schedule contingency and effort available well below WBS levels
- Message Passing System infrastructure evaluations cause further delay more work
- Front loaded schedule does not match project approval process
  - Not keeping pace in most if not all areas forcing creative task juggling
  - Lack of dedicated manpower means context switching precludes involved tasks
    - Some tasks have larger ramp up time to make progress and are not well suited to frequent switching or short duration attention
  - Some tasks require coordinated effort on several fronts
    - Hard to do efficiently alone
  - Allocation of resources can be delayed waiting for project approval



## Risks (Cont.)

- Higher laboratory/division priorities diverting even more manpower away
- Project office pressure to do it cheaper since it is 'only software'
- Project office strict control of WBS severely limits usefulness to L3 managers
- DOE pressure to keep costs near \$200M
  - De-scoping of detector forcing re-evaluation of needs
    - Pressure to defend costs of DAQ system requires effort that could be used elsewhere
- Project Office using too low FTE cost for CD DAQ Software developers
  - 08/01/2006: email exchanges with M. Smith and S. Pasek