



# NOvA Project Status

John Cooper & Ron Ray

June 7, 2006



# Interactions with DOE

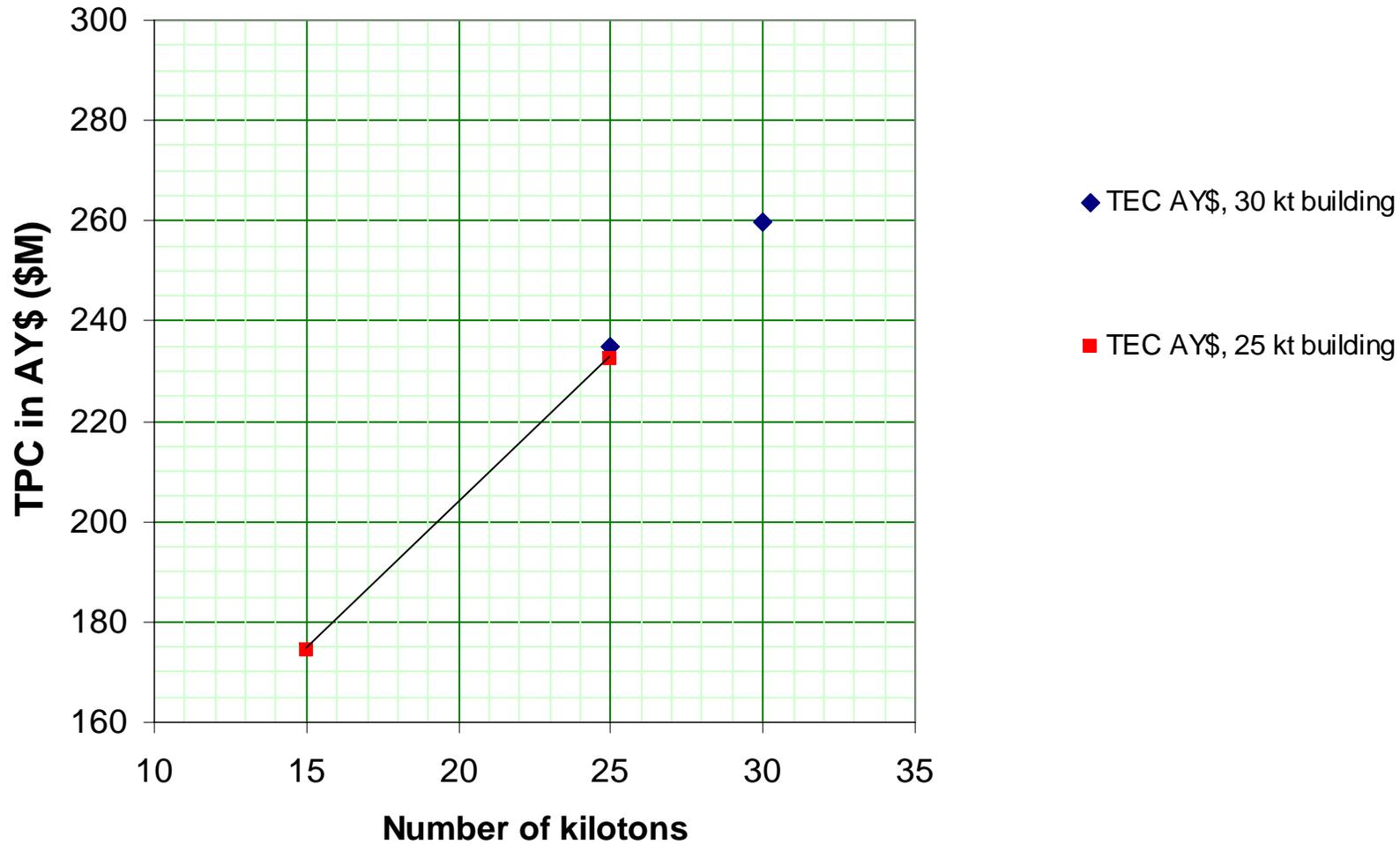
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- June 1: Staffin, Procaro, Oddone, Montgomery, Feldman, Messier, Cooper, Ray
  - Robin asks for the cost of 15 kt in a 25 kt building
- Continuing discussions with Steve Webster, Ron Lutha, Mike Procaro on
  - Status of Acquisition Strategy
  - Status of EA and linkage (if any) to CD schedule
  - Status of Coop Agreement and linkage (if any) to CD schedule



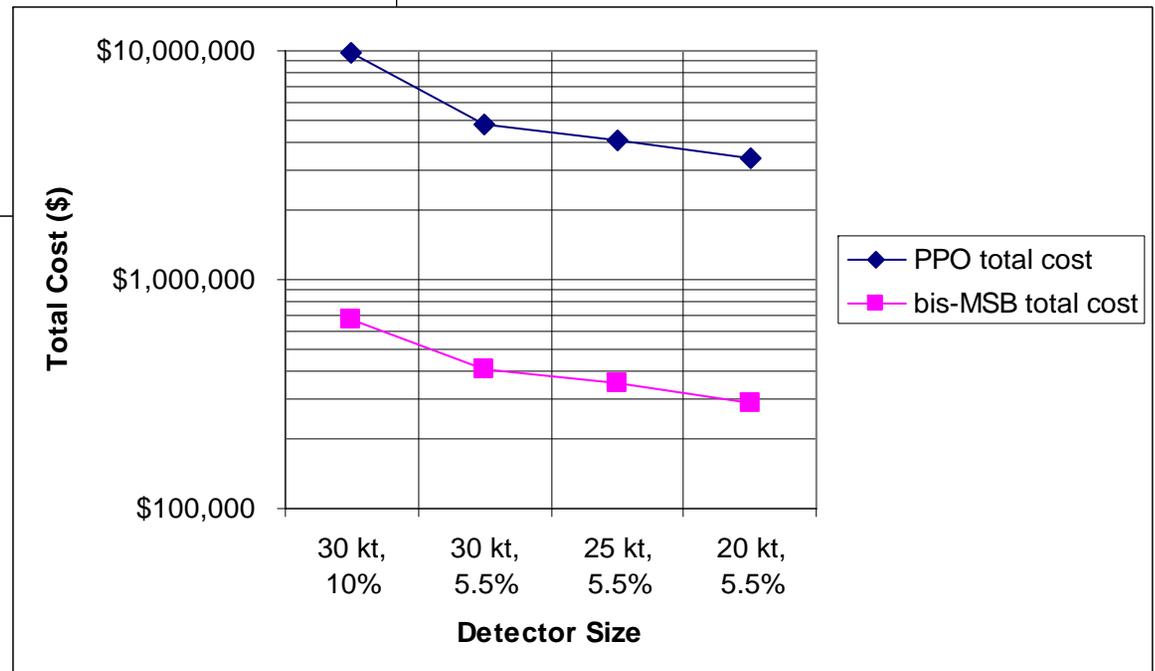
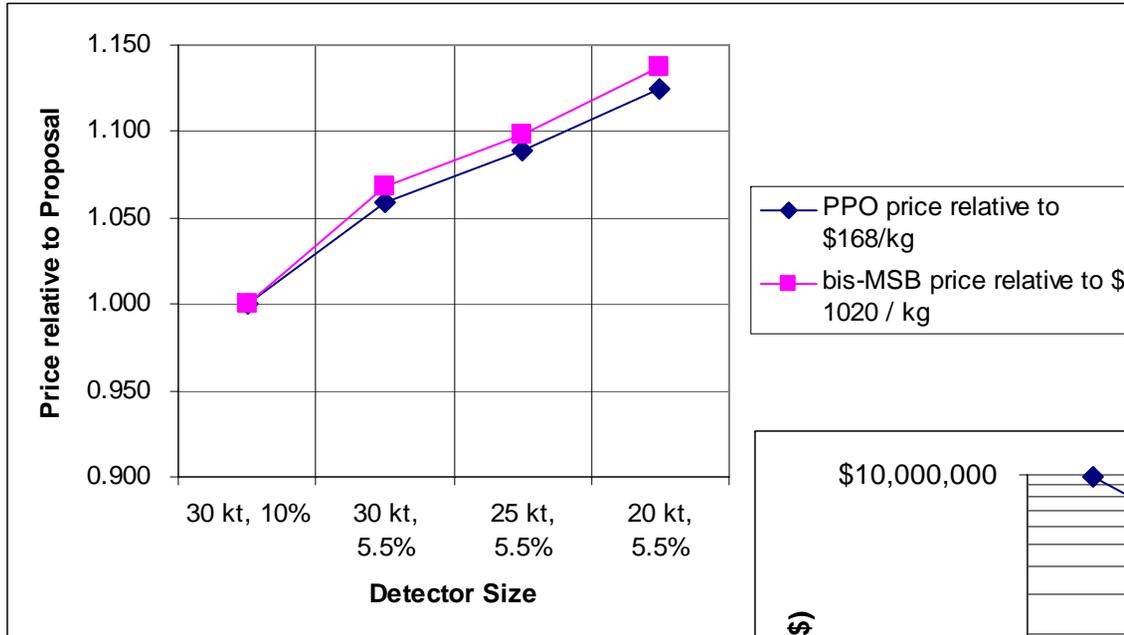
# Smaller Scope Cost Summary

very preliminary





# Smaller detectors don't realize quantity discount prices



# Status of Documents



	Critical Decision Prerequisites	Current Status	Notes	
CD-1	Conceptual Design Report	Done		
	Acquisition Strategy	In progress	Mike --> Aesook --> Mike	
	Baseline range & Cost Estimates and Resource Loaded Schedule	Done	Done at CD1 level.	
	Draft Configuration Management Document	Done	Done at CD1 level. CM manager identified.	
	Preliminary Project Management Plan (PMP)	Done	Done at CD1 level. Some funding profile details still needed.	
	Preliminary Hazard Analysis Report & NEPA	Done		
	Preliminary Project Execution Plan (PEP)	Done	Sent to S. Webster & M. Procaro., <b>Steve has some questions</b>	
	Preliminary Risk Management Plan	Done	Uploaded to docdb	
	Project Data Sheet for design	Done	OHEP	
	Verification of mission need (NuSAG?)	Done	Positive report from NuSAG	
	PARS Reporting		<b>Project Office working on a May narrative summary</b>	
	CD-2	Preliminary Design (Detector TDR)		See 6-1 of DOE M 413.3 (3-28-03), "Preliminary Design" level (Title I, ~ 20-35% complete) vs. Conceptual design (5%)
		Advanced Preliminary Design (Building)		part of TDR
Baseline Cost Estimates and Resource Loaded Schedule			Will move to 20 kt version after Kuraray visit. Have a preliminary budget profile from DOE. <b>Now working on 15 kt version</b>	
Final configuration Mangement Document			need to finalize preliminary	
Final Project Management Plan (PMP)			need to finalize preliminary	
National Environmental Policy Act documentation			from Project, Keith Schuh will take lead, <b>slide coming</b>	
Draft Preliminary Safety Analysis Report			Harry Ferguson has a draft, Keith is looking at it	
Final Design & Procuremnt Packages for Long Lead Time Items			no LLP, therefore no packages	
Performance Mangement System Document (EVMS)			Suzanne Pasek is writing this Has LCLS & BTeV documents, about 50 pages, will steal for 1st draft	
Review of contractor project management system			Ed's timeline shows this in May	
Final Project Execution Plan (PEP) and performance baseline			<b>See above</b> need finalize preliminary which is still draft at CD-1	
Final Risk Management Plan			need to finalize preliminary	
Independent cost estimate (part of EIR?)			This is part of the EIR process	
Project Data Sheet for construction			not needed unless a Line Item	
Verification step?			P5 report in Sept probably part of process (Procaro)	
Performance Baseline External Independent Review		in October, but could slide a couple of months		



# Status of formal EA process

- First, Keith's list of things he doesn't control:

	Status	Milestone date	Finish Date
Write Fermilab Environmental Evaluation Notification Form	Done	5 / 06	5 / 06
Concurrence	Waiting	6 / 06	
Determine Cooperative Agreement Recipient.	Waiting	?	
Determine Responsible Government Unit	Waiting	?	
Select Site	Waiting	?	
Prepare Environmental Assessment Worksheet	Waiting	?	
Tritium Issues resolved	Mike Martens of Steve Holmes task force will provide information for EA	10/ 06	



# Status of formal EA process

	Status	Milestone date	Finish Date
<b>Write NOVA EA</b>			
1. Introduction	Drafted	6 / 06	
2. Purpose and Need for Action	Drafted	6 / 06	
3. Description of Proposed Action, Including the Alternatives	Writing	6 / 06	
3.1 Proposed Action	Writing	6 / 06	
3.2 Range of Reasonable Alternatives	Writing	6 / 06	
3.3 No Action Alternative		6 / 06	
3.4 Describing Alternatives		6 / 06	
4. Affected Environment		8 / 06	
5. Environmental Impacts (Effects)		8 / 06	
5.1 Impact Identification and Quantification		8 / 06	
5.2 Human Health Effects		8 / 06	
5.3 Biological Impacts		8 / 06	
5.4 Transportation Impacts		8 / 06	
5.5 Accident Analysis		8 / 06	
5.6 Environmental Justice		8 / 06	
5.7 Cumulative Impacts		8 / 06	
5.8 Compliance with Other Requirements		8 / 06	
5.8.1 Endangered Species Act		8 / 06	
5.8.2 Clean Air Conformity Requirements		8 / 06	
5.8.3 Floodplain and Wetland Environmental Review Requirements		8 / 06	
5.8.4 National Historic Preservation Act		8 / 06	
5.9 Mitigation		8 / 06	
5.10 Comparison of Impacts		8 / 06	
5.11 Conclusions in EAs and EISs		8 / 06	
6. List of Preparers, List of Agencies and Persons Consulted, and Distribution List		9 / 06	
7. Appendices, References, and Index		9 / 06	
8. Glossary		9 / 06	



# Sufficient Project Personnel?

- Some identified needs
  - **Administrative support high level full time**
    - Req almost in system? (Elaine Phillips)
  - **Help for monthly report startup**
    - Could be admin person
  - **More engineering on Block Raiser**
    - Final design, staged design allowing test phase?
    - Dave Pushka & Vic Guarino taking a few weeks to go back to basics before proceeding -- **Still talking, not yet agreeing**
    - More PPD effort
      - **likely will want FEA to confirm hand calculations**
  - **More engineering & help on Near Detector**
    - Leon Beverly? John Voirin? Both familiar with shaft & tunnel.
      - Installation transport, containment, fire protection, mobility
    - Have Karen Kephart, **lost** Rob Plunkett, have ANL engineers
      - **Peter Lucas is new L3, Vic Guarino looking at issues**



# Sufficient Project Personnel?

- More identified needs
  - **Scintillator Blending**
    - Visit to Renkert Oil April 27: possible blending in Minneapolis
      - Still a **long** way from concluding this could work without substantial risk to performance
    - **Starting to put together an RFP for outside blending to test the waters**
    - **Then** work on structure, containment, pump skid specification if in house
      - **Thinking about prototype mix for early 2007 in house**
      - Involve PPD process control group?
  - **\$ for FESS on “design–build”**
  - **QA person, part time probably OK for now.....**
    - No progress
  - **Electronics infrastructure and Slow Controls**
    - Italy for Slow controls, but when?, Leon Beverly for infrastructure?
    - **Craig Dukes (Univ of Virginia) as new L3**
      - understands Italians eventually, already working with them
    - **I’ve asked John Oliver and Dave Pushka to look harder at the power and cooling issues across L2 boundaries**



## Progress on Response to Recommendations from the Director's and DOE CD-1 Reviews

- Response to Director's CD-1 posted for DOE CD-1
  - NOvA doc # 725, March 17, 2006
- Have not formally considered DOE CD-1 Recommendations yet
  - Just got written version of report yesterday