

6/17/14 DRAFT

## **Mu2E ICE – Documents and On-Site Activities**

Information to be added/revised in Estimate Plan.

Priority Documents for early planning (ASAP):

PEP

WBS dictionary

Schedule File - .xer format

Additional Documents/Information for Review:

Summary and detailed cost estimates

Basis of estimate and assumptions

Vendor quotes for BOP major equipment

Risk Management Plan and risk analysis

Costs to date

Funding profile

Escalation rates

Further information/data for on-site (see sessions listed below):

Basis for labor rates, overheads and other markups. (including the various markups applied to things like self-performed work, procurements, subcontractors, etc.)

Proposed staffing plan covering the project duration, particularly project management.

Equipment List: equipment readily available, off the shelf vs. one-of-a-kind or experimental.  
What are the real problem areas for this project?

### **On-Site:**

Note on Project Team members listed for the above sessions: This listing is the ICE Team's recommendation of the minimum staffing needed for each session. FPD, PM, and others may attend as needed or desired by the FPD/PM.

**Table 3-1. ICE Team Site Visit Schedule**

Day	Date (2014)	Location	Time	Activity
1	July 22	Mu2e Office	8:00 am	Meet at Wilson Building (Room TBD)
			8:15 am – 10:30 am	<ul style="list-style-type: none"> <li>- DOE-APM Team Introduction</li> <li>- Discussion of ICE activities and schedules</li> <li>- FPD/Project Team Overview Briefings:                             <ul style="list-style-type: none"> <li>Overall Project Scope</li> <li>Project Execution/Acquisition Plan</li> <li>Project Cost Estimate</li> <li>Project Schedule</li> <li>Project Risks and Assumptions</li> <li>Project Funding</li> </ul> </li> </ul>
			10:45 am – 12 noon	Scope by WBS Discussions (see below)
			1:00 pm – 3:00 pm	Site Tour (see below)
			3 pm – 4 pm	ICE Team Discussions
2	July 23	Mu2e Office	8 am – 12 noon	Scope/Technical Breakout Discussion (see below)
			1:00 pm – 4:00 pm	Cost Estimate Discussion (see below)
3	July 24	Mu2e Office	8 am – 10 am	Schedule Discussion (see below)
			10 am – 12 noon	Risk Discussion (see below)
			1:00 pm – 3:00 pm	Follow-up on open issues
			3:00 pm – 4:00 pm	Site Visit Closeout Meeting

The following describes in more detail what is intended to be covered by the sessions listed above:

- Scope by WBS Discussions:
  - Using the project briefing provided earlier as a starting point, the ICE Team desires to meet the responsible team lead for each of the WBS Level 2 subprojects (i.e., CAMs) and have them briefly describe the scope of their subproject, any risks or concerns relating to their subproject, and other general information needed to understand what will be seen later in the cost and schedule.
  
- Site Tour
  - The ICE Team desires to visit the intended construction location, generally locate areas for service tie-ins (electrical, water systems, communications, etc.), observe interfaces with other parts of the site, site conditions, etc.
  - The ICE Team desires to see other portions of the site as they interface with the CF, namely the beamline takeoff and construction location.
  - The ICE Team would also like to see other portions of the site that has equipment and systems similar to that to be used in the Mu2e project to get a better understanding of the Mu2e project scope.
  
- Scope/Technical Breakout Session (CF CAM, ICE Team members doing CF estimate)
  - Address any questions the ICE Team may have about the scope (e.g., missing scope, which WBS element certain scope falls within)
  - Discuss any areas where the scope is still uncertain or where potential changes in project requirements may affect the scope
  - Discuss any significant technical issues or concerns that the project team foresees
  - As appropriate, discuss the basis of estimate or sources of costing for major technical components included in each WBS area.
  
- Cost Estimate Discussion (Project Manager, Project Lead Estimator, CF CAM, ICE Team)
  - Generic discussion of the estimating process used for BOP and CF estimates and any differences in approach used.
  - Presentation and explanation of the Basis of Estimate for all elements of the project
  - Project Management estimate approach and staffing plans (both 1.1 and 1.3 portion)

- Project Team describes the internal review processes that have been applied when developing the estimate (e.g., site-wide procedures)
- Project Team describes the overhead factors applied (e.g., site-wide overhead, G&A and others, as applicable)
- Project Team describes the site labor categories and rates
- ICE Teams asks clarifying questions based on the above. Note: Some of this material may be sent in advance and then the session can be questions and answers only and not initial presentation of materials.
- Schedule Breakout Discussion (Project Scheduler, CF Cam, ICE Team scheduler and others, as needed).
  - Overview of approach and basis for CF and overall project schedule development
  - Overview of approach used for overall project schedule development
  - Project Team provides an overview of the critical path
  - Project Team describes how, if at all, they have resource loaded the schedule
  - ICE Teams asks clarifying questions based on the above information (unable to pre-formulate questions given absence of a schedule to review in advance, as of the estimate plan date).
  - Note: The ICE Team is looking for the DOE schedule and related discussion and not the detailed A-E design-construction schedule.
- Risk / Uncertainty Discussion (CF CAM, Project Lead Estimator, Project Risk Manager, ICE Team)
  - Project Team describes the process used for risk management on the project (e.g., development of the Risk Management Plan, risk workshops, site procedures used, risk register maintenance, etc.)
  - Project Team describes the key project risks (threats and opportunities) for the CF as well as the BOP portions of the project.
  - Project Team describes the methods and approach to develop cost and schedule uncertainty
  - Project Team describes how the risk and uncertainty translates into management reserve (MR) and contingency on the project including controls for use of MR and contingency.
  - ICE Teams asks clarifying questions based on the above information