BOE Discussion

Paul Derwent

17 May 2017

- BOE needs WBS defined
  - Describe work associated with project scope

WBS Dictionary: Defining to Level 5

	Activity ID	Dictionary Entry	Responsible Party	Named Party
2	121 PIP-II Project	In collaboration with international partners, the PIP-II Project will enhance the Fermilab accelerator complex to deliver higher-power proton beams to the neutrino-generating target that serves the LBNF/DUNE program, enabling a capability of 1.2 MW on target at 120 GeV. The PIP-II Project comprises a 800 MeV superconducting radio frequency (SRF) linac, transfer line to the Booster enclosure, upgrades to the Booster, Recycler, and Main Injector synchrotrons for increased intensity, associated buildings and infrastructure, and all project management.	PIP-II Project Manager	Steve Holmes
3	121.1 PIP-II - Major Milestones	This WBS entry covers all major milestones tracked by the project, no costs or effort are included in this section.	PIP-II Project Manager	Steve Holmes
4	121.2 PIP-II - Project Management	This WBS entry covers the labor, materials, travel, and fixed costs associated with operations of the PIP-II Project Office, including the offices of the Project manager and staff; the project support functions; coordination with international partners; environment, safety, and health; quality assurance; configuration management; and document control.	PIP-II Project Manager	Steve Holmes
5	121.2.2 PM Fermi & USA Coordination	This WBS entry covers the project management support (LOE) for Fermilab and US collaborator coordination. Materials (M&S) support includes all project-related conference travel, office supplies, and training support.	PIP-II Project Manager	Steve Holmes
6	121.2.2.1 PM Fermi & USA Coordination Project Management and Coordination	This WBS entry covers the project management support (LOE) for Fermilab and US collaborator coordination. Materials (M&S) support includes all project-related conference travel	PIP-II Project Manager	Steve Holmes
7	121.2.2.1.1 PM Fermi & USA Coordination : Coordination	This WBS entry covers the project management support (LOE) for Fermilab and US collaborator coordination.	PIP-II Project Manager	Steve Holmes
8	121.2.2.1.2 PM Fermi & USA Coordination : Travel	This WBS entry covers all project-related conference travel for Fermilab and US collaborator coordination.	PIP-II Project Manager	Steve Holmes
9	121.2.2.2 PM Fermi & USA Coordination Procurement (M&S)	This WBS entry covers the Materials (M&S) support for Fermilab and US collaborator coordination. It includes office supplies and training support.	PIP-II Project Manager	Steve Holmes
10	121.2.2.2.1 PM Fermi & USA Coordination Training Costs (M&S)	This WBS entry covers the Materials (M&S) support for Fermilab and US collaborator coordination training support.	PIP-II Project Manager	Steve Holmes
11	121.2.2.2.2 PM Fermi & USA Coordination Office Supply Costs (M&S)	This WBS entry covers the Materials (M&S) support for Fermilab and US collaborator coordination office supplies.	PIP-II Project Manager	Steve Holmes
12	121.2.3 PM International Coordination	This WBS entry covers the project management support (LOE) for international collaborator coordination. Materials (M&S) support includes all project-related international travel associated with collaboration efforts.	PIP-II Project Manager	Steve Holmes
13	121.2.3.1 PM International Coordination T4 Milestones	This WBS entry includes major milestones for Project Management International Coordination activities.	PIP-II Project Manager	Steve Holmes
14	121.2.3.2 PM International Coordination Project Management and Coordination	This WBS entry covers the project management support (LOE) for International coordination. Materials (M&S) support includes international coordination travel	PIP-II Project Manager	Steve Holmes
15	121.2.3.2.1 PM International Coordination : Coordination	This WBS entry covers the project management support (LOE) for International collaborator coordination.	PIP-II Project Manager	Steve Holmes
16	121.2.3.2.2 PM International Coordination : Travel	This WBS entry covers project-related travel for International collaborator coordination.	PIP-II Project Manager	Steve Holmes
17	121.2.3.3 PM International Coordination Procurement (M&S)	This WBS entry covers the Materials (M&S) support for International collaborator coordination. It includes special process spares, short term visitor support, and import duties for in-kind contributions.		

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4	121.2 PIP-II - Project Management	This WBS entry covers the labor, materials, travel, and fixed costs associated	PIP-II Project Manager	Steve Holmes
5	121.2.2 PM Fermi & USA Coordination			e Holmes
6	121.2.2.1 PM Fermi & USA Coordination Project Manage			e Holmes
7	121.2.2.1.1 PM Fermi & USA Coordination : Coordinatio			e Holmes
8	121.2.2.1.2 PM Fermi & USA Coordination : Travel			e Holmes
9	121.2.2.2 PM Fermi & USA Coordination Procurement (M			e Holmes
10	121.2.2.2.1 PM Fermi & USA Coordination Training Cost			e Holmes
11	121.2.2.2.2 PM Fermi & USA Coordination Office Supply			e Holmes
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Well defined where WBS is well defined
- otherwise just to L3

~270 lines
- color coded to match P6 colors

Pip2-docdb #599 has current draft version
- will update as develops

Details

- Management will define:
  - level of BOE, by scope of work
    - PM is at L2
    - CF is at L3
    - RF Power is mostly at L5 (2 of 12 at L4)
  - pip2-docdb entry
    - **word form**, with some information preloaded
    - **Excel form,** with some information preloaded
      - resources (labor and M&S) for the task
      - fill in contingency rule and estimate uncertainty
        - At L5, need to include in P6
    - these two documents need to be **consistent in format** across the entire project
      - information also has to be consistent with what is in P6
  - Work with L3 manager on WBS dictionary element
    - Need to have consistent wording and approach

- BOE needs WBS defined
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- Have documents in docdb
- Drafts in docdb

  - Extract information from P6 and include in docdb entry

BOE Reviewers: Tentative

WBS		L3	Reviewers
121.2	Project Management / Office	Steve Holmes	Paul Derwent, Dean Hoffer
121.3.1	Linac Project Management	Fernanda Garcia	Steve Holmes
121.3.2	Linac Accelerator Physics	Valeri Lebedev	Shekhar Mishra
121.3.3	Linac Warm Front End	Lionel Prost	Shekhar Mishra
121.3.4	Linac HWR	Allan Rowe	Shekhar Mishra, Fernanda Garcia
121.3.5	Linac SSR1	Leonardo Ristori	Shekhar Mishra, Fernanda Garcia
121.3.6	Linac SSR2	Leonardo Ristori	Shekhar Mishra, Fernanda Garcia
121.3.7	Linac LB650	Tom Nicol	Shekhar Mishra, Fernanda Garcia
121.3.8	Linac HB650	Tom Nicol	Shekhar Mishra, Fernanda Garcia
121.3.9	Linac RF Power	Dave Peterson	Lionel Prost
121.3.10	Linac RF Integration	Brian Chase	Lionel Prost, Jim Patrick
121.3.11	Linac Cryo	Arkadiy Klebaner	Allan Rowe, Shekhar Mishra
121.3.12	Linac Warm Units	Alex Chen	Curtis Baffes
121.3.13	Linac Magnet PS	Bruce Hanna	Lionel Prost
121.3.14	Linac Beam Transfer Line	TBD	Curtis Baffes, Allan Rowe
121.3.15	Linac Beam Abort Line	TBD	Curtis Baffes, Allan Rowe
121.3.16	Linac Instrumentation	Vic Scarpine	Jim Steimel
121.3.17	Linac Controls	Jim Patrick	Jim Steimel
121.3.18	Linac Vacuum	Alex Chen	Curtis Baffes
121.3.19	Linac Safety Systems	John Anderson	Shekhar Mishra
121.3.20	Linac Test Infrastructure	Jerry L, Joe O, Alex M, Leonardo R	Jim Steimel, Bruce Hanna, Dave Peterson
121.3.22	Linac Installation, Integration, Commissioning	Curtis Baffes	Shekhar Mishra, Fernanda Garcia, Allan Rowe, Jim Steimel
121.4	Booster	Ioanis Kourbanis	Lionel Prost
121.5	RR/MI	Ioanis Kourbanis	Lionel Prost
121.6	Conventional Facilities	Steve Dixon	Steve Holmes, Shekhar Mishra