EARNED VALUE MANAGEMENT

AACE – Fermi Labs Workshop May 17, 2019

Agenda

Introductions – Rich Marcum, Fermi Don Giegerich, AACE

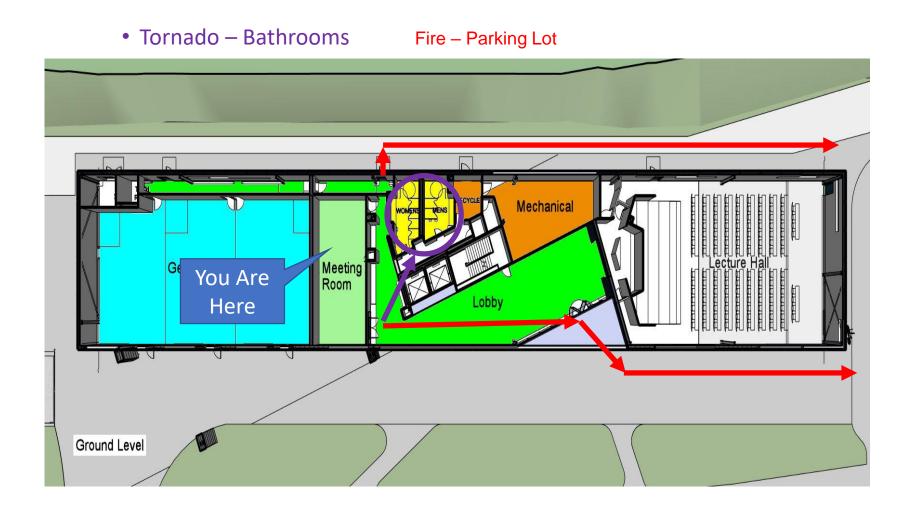
PRESENTATIONS

- Principles & Guidelines of EVM
- EVM application on DOE Projects
- Adaptability of EVM

Panel Discussion

Closing – Pat Cotter, AACE

Fire / Tornado Safety



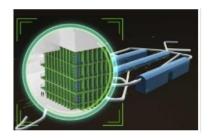
Welcome to Fermi National Accelerator Laboratory (FNAL)

- Fermilab is America's premier particle physics and accelerator laboratory.
- Fermilab is the accelerator-based neutrino research capital of the world.
- Fermilab has close to 1,800 employees, comprised of scientists, engineers and support staff. Additionally, over 4,000 scientists from across the U.S. and over 50 countries use Fermilab's accelerators, detectors and computing facilities each year.
- Fermilab is continually evaluating the human, technical and financial resources we have available to meet our commitments to the U.S. strategic plan for particle physics and the physics community.



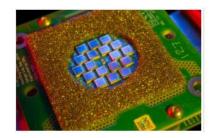
FNAL: Current Fermilab Major Project Portfolio

- Long Base Neutrino Facility and Deep Underground Neutrino Experiment (LBNF/DUNE)
- Proton Improvement Plan (PIP-II)
- Compact Muon Solenoid (CMS) at CERN
 - US-HL-LHC CMS Detector Upgrade Project (DUP)
 - HL-LHC Accelerator Upgrade Project (AUP)
- Integrated Engineering Research Center (IERC)
- Muon to Electron conversion (Mu2e)





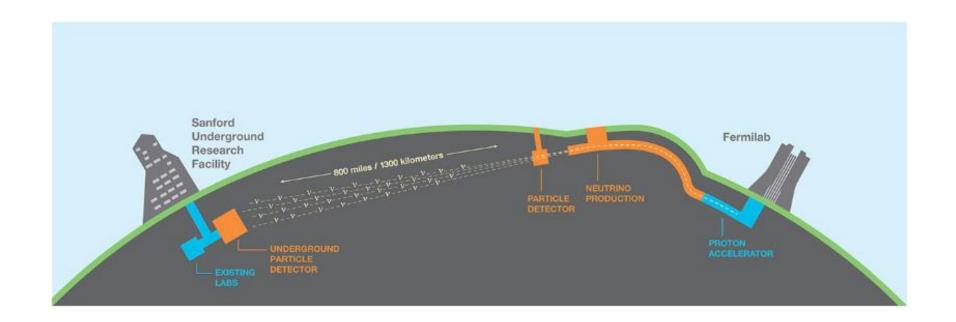






FNAL: LBNF/DUNE Project

 Fermilab's flagship project is LBNF/DUNE, which will bring together scientists from around the globe to build the world's most advanced neutrino experiment, one that could change our understanding of the universe.





FNAL: PIP-II Project

Fermilab broke ground on PIP-II in March 2019. It will become
the heart of the Fermilab accelerator complex, vastly
improving what is already the most powerful high-energy
particle beam for neutrino experiments. PIP-II will drive
LBNF/DUNE and other research at the lab, supporting the
long-term future of the U.S. high-energy physics program.



AACE

- Project Controls Professional Association
- Chicago-Midwest Section
- Earned Value Management Certification
- AACE local programs and activities
- Membership and participation
- Feedback encouraged

PROJECT CONTROL ELEMENTS



Project Control Process

- Scope
- Budget
- Schedule

Monitoring
The Plan

Objective.

Monitor Plans to Identify Problem Areas & Initiate Corrective Action:

Corrective Action

Work Plan

Scope Control Cost Control Schedule Control

Reporting **Deviations**

- Accept/Reject proposed design or construction changes
- Consider alternative solutions
- Revise forecast of cost at completion
- Recovery schedules

- Check design against scope as defined in contract
- Check commitments/ Cost against budgets
- Measure progress against schedule

- Report deviations from design or construction & assess cost & schedule impacts
- Trend reports if design, commitment or cost is under/over budget
- Report slippages/advancements
- Review critical activities for priorities & actions