

# APS ENGINEERING SUPPORT (AES) DIVISION



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**PSC All-Hands and Priority Meeting** 

July 25, 2019

# **OUTLINE**

- AES Organizational Highlights
- Division priorities for FY19+







# **AES HIGHLIGHTS**

- Organizational highlights:
  - Controls Group becomes part of ASD as of July 1, 2019, as previously announced.
  - Experimental Facilities Operations Group (EFOG) becomes part of Operations umbrella by reporting to J. Connolly in PSC Deputy ALD for Operations role.
  - With the departure of John Maclean, DD has decided to convert this Associate Division Director position to line position(s).
    - This will support AES personnel demand in a relatively fixed or nominally increasing budget environment
    - Geoff Pile becomes the sole Associate Division Director in AES. All groups in AES will report through him.







#### Safety leadership

- Reinforcement of PSC safety practices, e.g. pre-job briefs, high risk work reviews
- Reinforcement of stop work authority and obligation to comply with called stop work
- Impactful observation/conversations, SMART Card targeted observations and trending

#### Ensuring cost effective operations

- Capture of high priority Interface Portfolio projects, resourcing and funding through SMT
  - Addresses obsolescence and reliability concerns; standardization where possible
- Executing required facility upgrades identified on the APS 400-Area Infrastructure Master Plan punch list
- Continuing robust preventative maintenance cycles completed on schedule

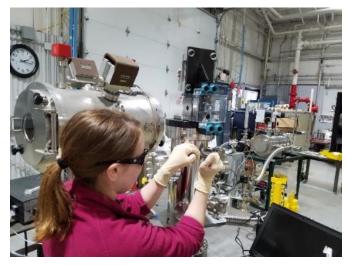


#### Divisional support of APS Upgrade Project

- AES is majority of matrixed support: FY19 ERA of ~57 FTEs
- Continued high involvement in milestone activities: Design completion, procurement and vendor oversight, receipt inspection and testing of first article and production components, future installation effort.



AES support of APS-U with the mechanical inspection, hi-pot, hydrostatic testing, and flowrate measurements on magnets



AES support of first article components received for the APS-U long lead procurement of the Low Power Photon Shutters (LPPS) which were cleaned, assembled and vacuum certified.



- Seamless performance on shutdowns as well as PSC project efforts
  - 8 shutdowns remaining before Apr/May 2022
  - Structured work planning and control through IPECC phases of a project
    - Rigor in planning and risk identification, mitigation
  - Support required to bring 28-ID beamline online
  - FE installation for 25-ID in May 2020; assistance with Sector 25 build out
  - Other APS-U efforts integrated into shutdown or maintenance period plans e.g. BTX kicker installation in 2017, recent Sector 37 scraper studies



- Progress towards becoming Centers of Excellence: Operations and Engineering
  - Machine reliability and uptime metrics as high as reasonable achievable before dark time
  - Execution of Interface Portfolio projects to address APS-U readiness and obsolescence
  - Promotion of core process adherence and continuous improvement
    - ServiceNow: Work request, group ticketing, shutdown planning, project proposal systems
    - Clear application of DOE Configuration Management (DOE-STD-1073) principles:
      - Management Assessment: Three year review planning already performed
      - Design Review: Adherence to the new Design Review process and Committee structure
      - Document Management: Continued use of the DMS and convention
      - Configuration Control:
        Full integration of CDB into Operations
      - Readiness Reviews: Codifying Readiness Review, Commissioning Review and Transition to
        - Operations processes more clearly for Operations
      - Work Planning & Control: Continued use of Aware for WCDs, approval and authorization

