

<b>Title</b>	<b><i>Conventional Facilities Upgrades</i></b>		
Project Requestor	John Maclean		
Date	4/4/2008		
Group Leader(s)	Rick Janik		
Machine or Sector Manager	All		
Category	Facilities and Infrastructure		
Content ID*	APS_1255519	Rev.	4
			5/9/08 3:02 PM

\*This row is filled in automatically on check in to ICMS. See Note <sup>1</sup>

**Description:**

<b>Start Year (FY)</b>	<b>FY09</b>	<b>Duration (Yr)</b>	<b>5 years</b>
------------------------	-------------	----------------------	----------------

**Objectives:**

Provide Conventional Facilities to support the mission of the APS. This proposal groups known conventional facilities needs into one place. It will need revision when reviewed in the context of other proposals and when overall facilities priorities have been defined.

**Benefit:**

Provide Conventional Facilities to support the mission of the APS.

**Risks of Project:** See Note <sup>2</sup>

Risks involved with these projects vary by project as described below.

**Consequences of Not Doing Project:** See Note <sup>3</sup>

Risks involved with these projects vary by project as described below.

**Cost/Benefit Analysis:** See Note <sup>4</sup>

**Description:**

**Building 450 instrument air system overhaul:**

See proposal 238-07 (\$137K)

**Computer room extension:**

Current computer room space, cooling and power capacity is becoming marginal as more equipment is added for XOR. (\$2-5M)

**LOM437 build out:**

Office space required by XOR. See proposal 829-07 (\$4M)

**APS Storage Facility:**

More storage space is required at the facility. The situation will become worse when experiment hall space is lost to beamlines. See proposal 538-07 (\$5M)

**Gas cylinder storage racks:**

Existing rack space is barely sufficient. (\$10k)

**LOM expansions:**

Office space required by XOR (\$?)

**Improved ventilation for Booster tunnel:**

Provide proper ventilation while people work in booster tunnel. (\$40K)

**Additional LN2 tank for 433/434**

As additional beamlines are built out more LN2 storage will be required. (\$30k)

**Bldg. 450 Thermal Storage Controls**

To prevent system malfunction. (\$15K)

**Funding Details**

**Cost: (\$K)**

Use FY08 dollars.

**Funding Details**

**FY 08 \$**

**(Does not include LOM expansion)**

**Cost (\$k) Est. \* 1.13**

Year	AIP	Contingency
1	3232	970
2	3000	900
3	3000	900
4	3000	900
5	2000	600
Total	14232	4270

Contingency may be in dollars or percent. Enter figure for total project contingency.

**Effort: (FTE)**

The effort portion need not be filled out in detail by March 28

Year	Mechanical Engineer	Electrical Engineer	Physicist	Software Engineer	Tech	Designer	Post Doc	Total
1								0
2								0
3								0
4								0
5								0
6								0
7								0
8								0
9								0

**Notes:**

<sup>1</sup> **ICMS.** Check in first revision to ICMS as a *New Check In*. Subsequent revisions should be checked in as revisions to that document i.e. *Check Out* the previous version and *Check In* the new version. Be sure to complete the *Document Date* field on the check in screen.

<sup>2</sup> **Risk Assessment.** Advise of the potential impact to the facility or operations that may result as a consequence of performing the proposed activity. Example: If the proposed project is undertaken then other systems impacted by the work include ... (If no assessment is appropriate then enter NA.)

<sup>3</sup> **Consequence Assessment.** Advise of the potential consequences to the facility or to operations if the proposal is not executed. Example: If the proposed project is not undertaken then \_\_\_\_ may happen to the facility. (If no assessment is appropriate then enter NA.)

<sup>4</sup> **Cost Benefit Analysis.** Describe cost efficiencies or value of the risk mitigated by the expenditure. Example: Failure to complete this maintenance project will result in increased total costs to the APS for emergency repairs and this investment of \_\_\_\_ will also result in improved reliability of \_\_\_\_\_. (If no assessment is appropriate then enter NA.)