

Title	ANCILLARY PUMPING SYSTEM UPGRADE		
Project Requestor	GAGLIANO, JOSEPH		
Date	01/08/2008		
Group Leader(s)	GOEPPNER, GEORGE A.		
Machine or Sector Manager	N/A		
Category	Machine Obsolescence and Spares		
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*This row is filled in automatically on check in to ICMS. See Note ¹

Description:

Start Year (FY)		Duration (Yr)	
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Objectives:

Maintain a reliable roughing / pumping system for the storage ring vacuum system.

Benefit:

Fast recovery in case of a catastrophic failure during operations period.

Risks of Project: See Note ²

The work can be performed at minimum risk. This is an upgrade to the existing system.

Consequences of Not Doing Project: See Note ³

In case of a catastrophic event in the storage ring this could decrease the downtime by at least 20+ hours.

Cost/Benefit Analysis: See Note ⁴

If the storage ring has events requiring repeated bakeouts the cost of downtime can be significant.

Description:

Replace obsolete turbo pumps, valves and roughing pumps with new higher volume turbo and roughing pumps. Replace existing controllers with PLC logic controllers and install an EPICS interface.

Funding Details

Cost: (\$K)

Use FY08 dollars.

Year	AIP	Contingency
1	75.1	
2	75.1	
3	75.1	
4		
5		
6		
7		
8		
9		
Total	225.3	

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:

¹ **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.

² **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.)

³ **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.)

⁴ **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.)