

APS Strategic Planning Proposal

<b>Title</b>	Booster Vacuum Ion Pump and Controller Replacement		
Project Requestor	Gagliano, Joseph		
Date	3/12/2008		
Group Leader(s)	Goepner, George		
Machine or Sector Manager	SERENO, NICHOLAS S		
Category	Machine Obsolence		
Content ID*	APS_1253927	Rev.	1

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

**Description:**

<b>Start Year (FY)</b>	<b>2008</b>	<b>Duration (Yr)</b>	<b>3</b>
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**Objectives:**

To maintain the uptime and reliable performance of the booster synchrotron.

**Benefit:**

Reliable operations, especially during top-up.

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

The proposed work can be done at minimum risk to the APS facility. This work is considered routine maintenance.

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

Degraded performance of the booster synchrotron.

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

The requested funding is small when compared to the cost of downtime to the facility if the booster synchrotron vacuum performance degrades.

**Description:**

Replace aging ion pumps with new ion pumps; replace obsolete pump controllers with current model; purchase spare all-metal valves.

**Funding Details**

**Cost: (\$K)**

Use FY08 dollars.

Year	AIP	Contingency
1	150.42	
2	150.42	
3	150.42	
4		
5		
6		
7		
8		
9		
Total	451.26	

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.)