

<b>Title</b>	<b><i>UVC MFD Switch Replacement</i></b>		
Project Requestor	Dave Bromberek		
Date	4/17/08		
Group Leader(s)	Ali Nassiri		
Machine or Sector Manager	Nick Sereno/Louis Emery		
Category	Obsolescence/Spares		
Content ID*	APS_1271279	Rev.	2
			4/17/08 3:54 PM

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

**Description:**

<b>Start Year (FY)</b>	<b>2009</b>	<b>Duration (Yr)</b>	<b>3</b>
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**Objectives:**

Replace the UVC motorized fused disconnect switches with three-phase medium voltage (13.2kV) safety switches and controllers. Acceptance testing is to be done after installation.

**Benefit:**

To provide a safe and reliable means of providing and disconnecting 13.2kVAC power to the SR or Booster RF power systems.

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

N/A

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

The need is to eliminate the reliance of a critical component that is no longer supported with spare parts. If this project is not undertaken, a significant risk of extended downtime or loss of redundancy exists.

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

Pursuit of a modern and reliable three-phase medium voltage disconnect switch and control system would ensure that the Booster and Storage Ring RF systems continue to operate and exceed current control system limitations.

**Description:**

The present means to connect the SR and Booster RF power systems to Argonne site power is via a 13.2kVac motorized fused disconnect switches. This type of switch has been out of production for fifteen years and spare parts are no longer supplied by the manufacturer. The medium voltage switches and control systems would be replaced with a modern system that is acceptable to power transmission and distribution companies. The RF power station's three phase medium voltage switches and control systems would be replaced with three phase safety switches and control systems that include visual verification and Kirk Lock System..

**Funding Details**

**Cost: (\$K)**

Use FY08 dollars.

Year	AIP	Contingency
1	42	
2	42	
3	84	
4		
5		
6		
7		
8		
9		
Total	168	

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		0.1			0.2			0.3
2		0.1			0.2			0.3
3		0.1			0.2			0.3
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.)