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APS Renewal Planning Process

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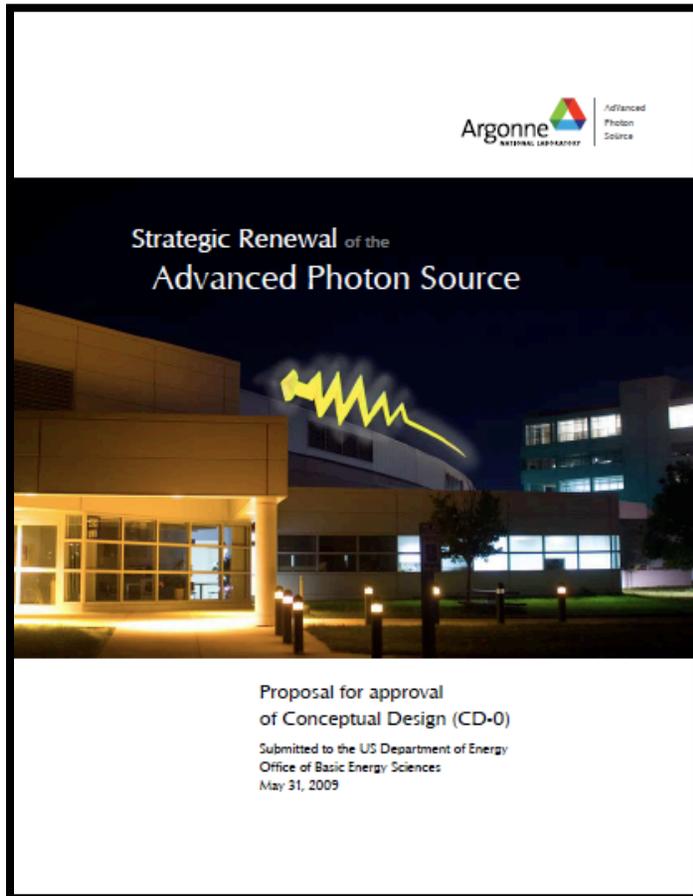
PUC and APSUO
July 20 and 23, 2009

Background

- APS Renewal Plans discussed at User Meeting on May 4-8, 2008
- Science Teams Develop Science Cases by September 15, 2008
 - Members of the 10 Science Teams were charged with developing the scientific case that will be the basis for a five-year APS renewal proposal to the DOE. The scientific cases clearly define how upgrades to beamlines and the facility will enable the science to progress and how that progression will impact the field.
- APS Renewal Workshop on October 20-21, 2008
 - Workshop held with users, APS staff, and APS Scientific Advisory Committee (SAC), the outcome of which was the APS Renewal White Paper along with a proceedings from the workshop.



Background (continued)



- Instrumentation Open Forum on January 9, 2009
 - This was the first (of many) open forums focusing on what instrumentation should be included in the APS Renewal. This first forum attempted to combine/coordinate the Letters of Intent and beamline upgrade proposals we have already received, with the goal of presenting this first cut to the APS SAC.
- Summary of Instrumentation Forum presented to SAC on January 20, 2009
- Renewal Discussions with User Community at User Meeting, May 4-6, 2009
- Submission of CD-0 Proposal to DOE on May 31, 2009

What's Next for the Beamlines?

- To keep up the Renewal momentum while we await the outcome of the DOE review of our CD-0 Proposal, we are organizing six working groups to flesh out the beamline aspects of the renewal. Their primary role will be to develop more detailed plans or options (including better cost/effort estimates) for each of the six categories listed below:

<u>Category</u>	<u>APS Leader</u>	<u>Outside Co-Leader(s)</u>
Imaging/Coherence	Barry Lai	C. Jacobson & Mark Sutton
Extreme Conditions	Malcolm Guthrie	Mark Rivers
Ultrafast Dynamics	Eric Dufresne	Paul Evans
Interfaces	Paul Zschack	John Budai & Dillon Fong
Spectroscopy	Steve Heald	Clem Burns
Proteins to Organisms	Stefan Vogt	J. Penner-Hahn & Malcolm Capel

- Until the CD-0 Proposal has been decided on by DOE, we will keep this process informal. We anticipate these six groups morphing *into technical oversight groups* for portions of the WBS for the renewal project, after we receive DOE approval.

On the Accelerator and Infrastructure Side

- We will soon create similar groups for the other sections of the WBS (accelerator, technical enablers) but these are less urgent since their plans are further fleshed out and costed already.
- One thing that we do need to do here is to develop a more detailed R&D plan for key elements, such as:
 - Superconducting undulators,
 - detectors, and
 - Superconducting rf deflecting cavities for short pulses

and develop firm go/no go dates for the decision of their implementation.

APS SAC Meeting in October and Beyond

- The goal for these working teams is to develop a draft list of the proposed beamlines to be included in the Renewal ready for discussion at the next APS Scientific Advisory Committee (SAC) meeting on October 8 and 9, 2009.
- What would we like from the SAC in October?
 - Feedback on the preliminary list of beamlines developed by the six teams
 - *a better requirements on IDs, what R&D would be required to successfully complete the project*
 - Advice on what cross-cut reviews to hold in 2010 to make a well informed decision of beamlines to be included in the renewal
- After receiving CD-0, launch a more open, inclusive process to develop a priority list of beamlines should be included in a CDR with more detail on their attributes.
- We would then develop an iterative process of discussions with the expanded working group and user community to make a second cut at the beamline prioritization for discussions at future SAC meetings.

Questions????