

# RHIC Machine/Detector Planning Meeting

26 Jan 05

## Agenda

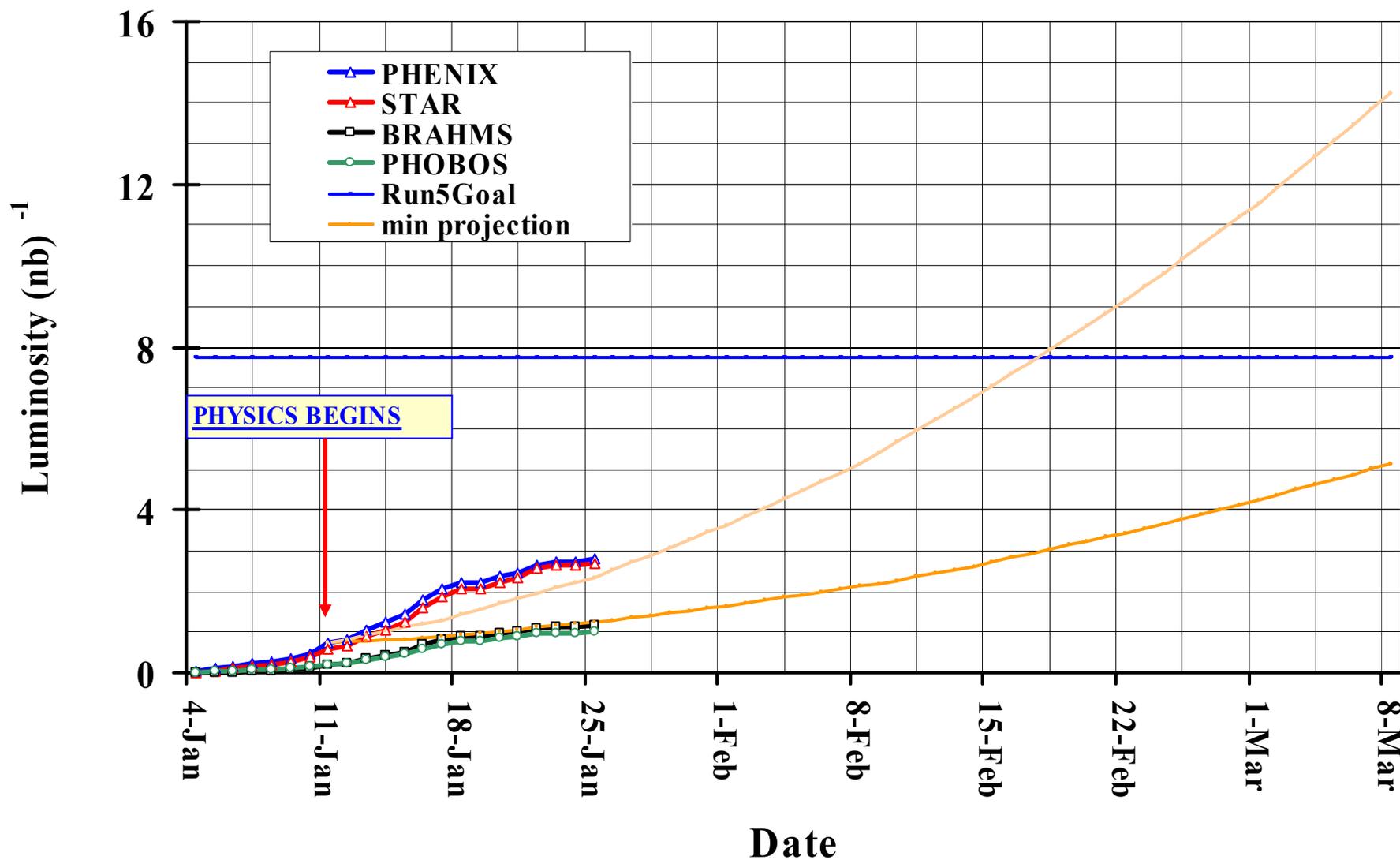
- **Schedule Issues – (Montag)**
- **Budget/Schedule Update – (Pile)**
- **Report from experiments  
(STAR,PHOBOS,PHENIX,BRAHMS)**
  - **When did experiment begin physics?**
  - **Progress toward goals - plot that shows goal(s) and progress toward goal(s)**
  - **Luminosity/background issues, other concerns**
- **Report from Accelerators (Pilat)**
- **Polarized Proton Update (Bai)**
- **RCF Issues (Throwe)**
- **Other business**

Planning Meeting Web Site: [http://server.c-ad.bnl.gov/esfd/RMEM/rhic\\_planning.htm](http://server.c-ad.bnl.gov/esfd/RMEM/rhic_planning.htm)

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- **Details – as run/planned** (*estimate based on actual budget*)
  - **18 Nov 04 – Cool down begins**
  - **23 Nov 04 – Blue Ring Cold**
  - **28 Nov 04 – Yellow Cold**
  - **29 Nov 04 – Short in D6-D8 dipoles Yellow Ring, schedule delay**
  - **3 Dec 04 – quad bus-bus short in sector 12, shutdown to repair**
  - **27 Dec 04 – short problem resolved, rings at 4 degrees again**
  - **27 Dec 04 - “2 week” RHIC setup with beam began**
  - **28-29 Dec 04 – found & fixed aperture problem in Yellow Ring (piece of Al foil)**
  - ***5 Jan 05 – “2 week” ramp-up with colliding beams began***
  - ***11 Jan 05 – 9+/- ? week physics with Cu-Cu began***
  - **15 Mar 05 – End of 9 week Cu-Cu run**
  - ***15 Mar 05 – begin 3 week pp setup***
  - ***5 Apr 05 – Begin 11.6+/- ? week pp Physics run***
  - ***15 Jun 05 – BNL Power Curtailment Program begins?***
  - **25 Jun 05 – end 11.6 week pp run, RHIC Run 5 ends**
  - **30 Jun 05 – Cryo switch to LN<sub>2</sub> complete, 32.0 weeks of RHIC cryo operation ends**

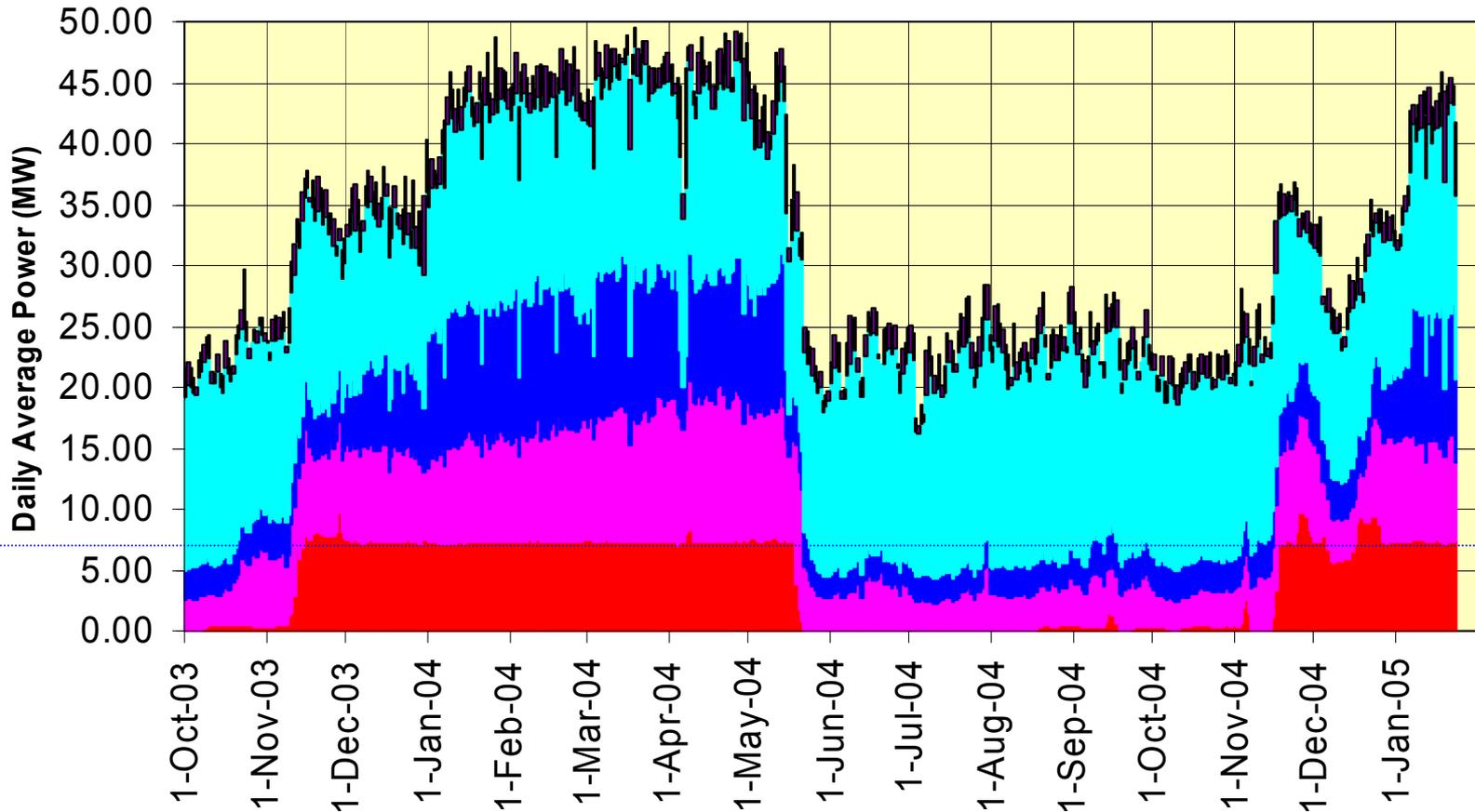
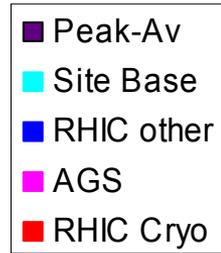
# RHIC Run 5 Delivered Cu-Cu Luminosity



as of 23 Jan

# BNL Energy Use FY 2004-5

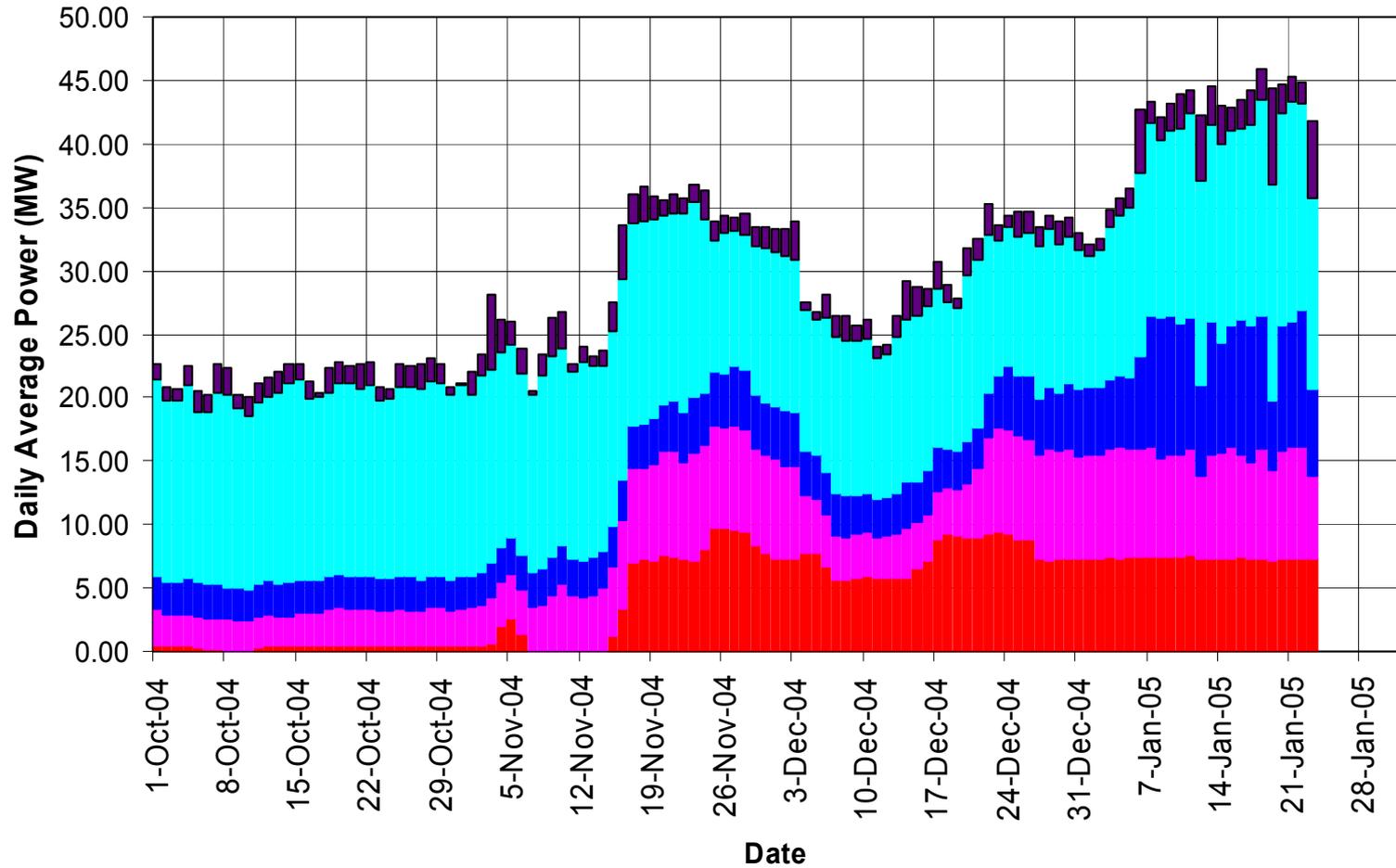
(C-AD Bldg power is in site base)



# BNL Energy Use FY 2005

(C-AD Bldg power is in site base)

- Peak-Av
- Site Base
- RHIC other
- AGS
- RHIC Cryo



# **RHIC Machine/Detector Planning Meeting**

**Archive**

# RHIC Machine/Detector Planning Meeting

17 November 2004

## Purpose of this meeting:

- To address issues and priorities relating to the optimization of physics output from RHIC experiments.
- To discuss and promulgate policy (when needed).

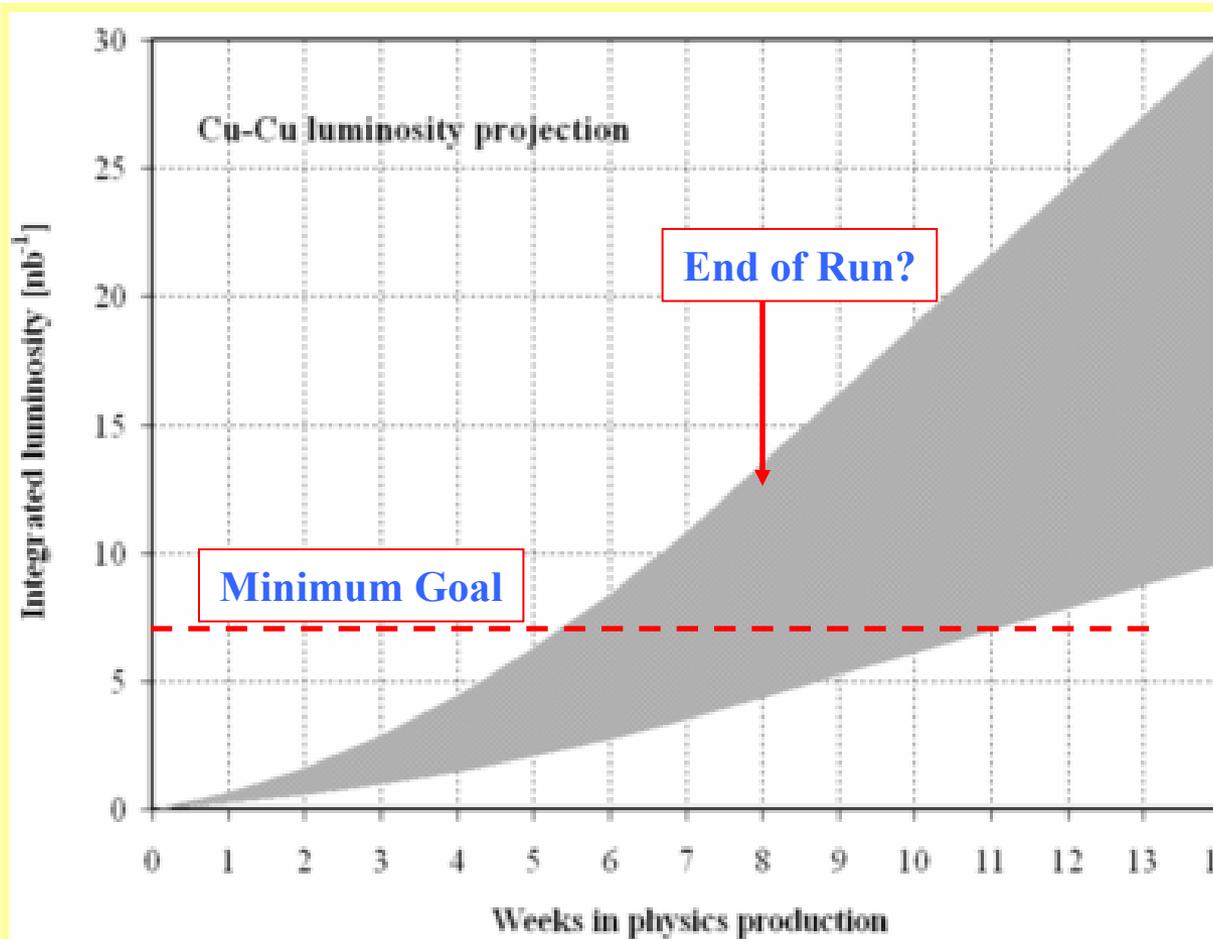
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## PAC Recommendations (very short summary):

- 8-10 week pp run should have highest priority
- Cu-Cu run should accumulate an integrated delivered luminosity of at least  $7 \text{ nb}^{-1}$  at  $\sqrt{s} = 200 \text{ GeV}$
- Cu-Cu at  $\sqrt{s} = 62.4 \text{ GeV}$  and 1 day at injection is advisable if above goals are met
- 1-2 day pp (unpolarized) run at  $\sqrt{s} = 400\text{-}500 \text{ GeV}$  desirable

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Projections based on the following beam intensity:

Minimum :  
 $45 * 2.9 * 10^9$

Maximum:  
 $28 * 6.6 * 10^9$

Luminosity evolution:  
**8 weeks ramp-up** during physics production

$\beta^* = 1$  meter