

# RHIC Machine/Detector Planning Meeting

22 December 2004

## Agenda

- **Schedule Issues – update on Shorts (Montag)**
- **Budget update (Lowenstein)**
- **General Remarks (Pile)**
- **Report from Accelerators (Pilat)**
- **Polarized Proton Update (Bai)**
- **Report from experiments (STAR,PHOBOS,PHENIX,BRAHMS)**
- **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** *(based on DOE expectation of 30 cryo weeks)*
  - 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 (est)** - “2 week” RHIC setup with beam begins
    - 3.4 calendar weeks lost → 1.7 program weeks (est) → 5.6 calendar weeks used to this point – 1.7=4.0 program weeks used → 26 weeks to go (18 physics weeks)
  - 10 Jan 05 – “2 week” ramp-up with colliding beams begins
  - 24 Jan 05 – 9 week physics with Cu-Cu begins
  - 28 Mar 05 – Nominal end of 9 week Cu-Cu run
  - 28 Mar 05 – begin 3 week pp setup
  - 18 Apr 05 – Begin 9 week pp Physics run
  - 15 Jun 05 – BNL Power Curtailment Program begins?
  - 20 Jun 05 – end 9 week pp run, RHIC Run 5 ends
  - 27 Jun 05 – Cryo switch to LN<sub>2</sub> complete, **30 effective (31.6 actual)** weeks of RHIC cryo operation ends

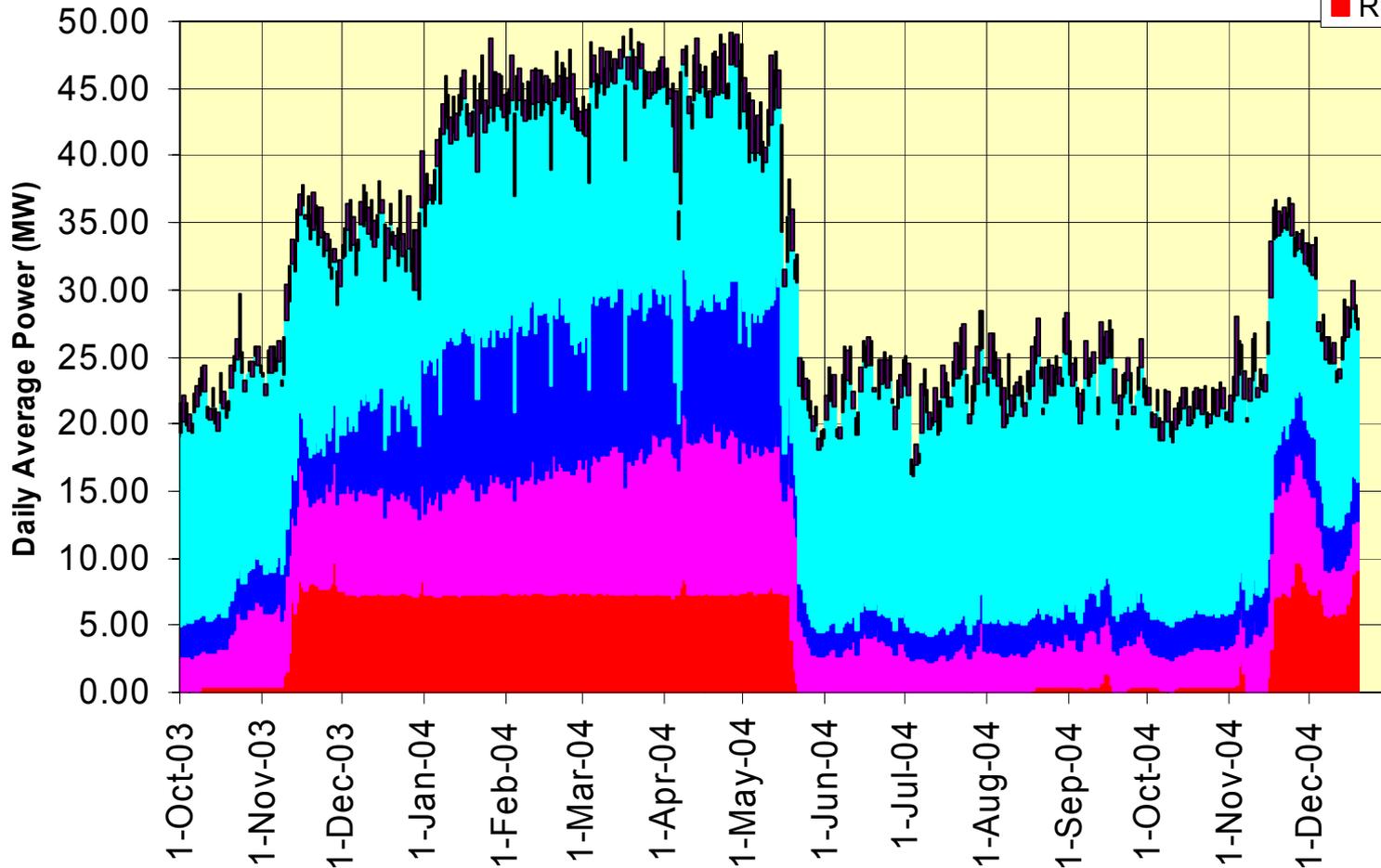
*We'll develop an actual plan once we get a budget from DOE!*

as of 19 Dec

# BNL Energy Use FY 2004-5

(C-AD Bldg power is in site base)

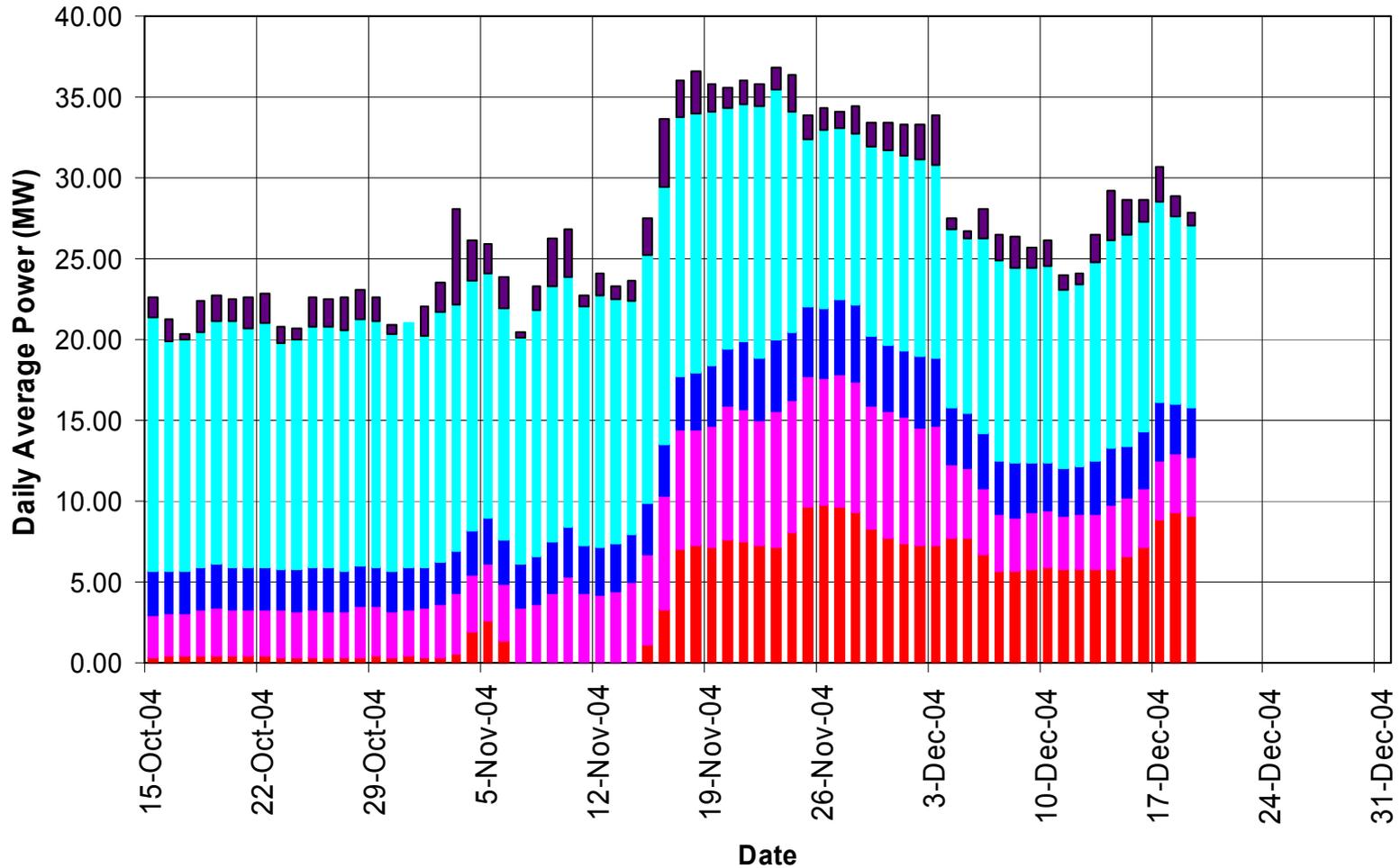
- Peak-Av
- Site Base
- RHIC other
- AGS
- RHIC Cryo



# BNL Energy Use FY 2004

(C-AD Bldg power is in site base)

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# **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).

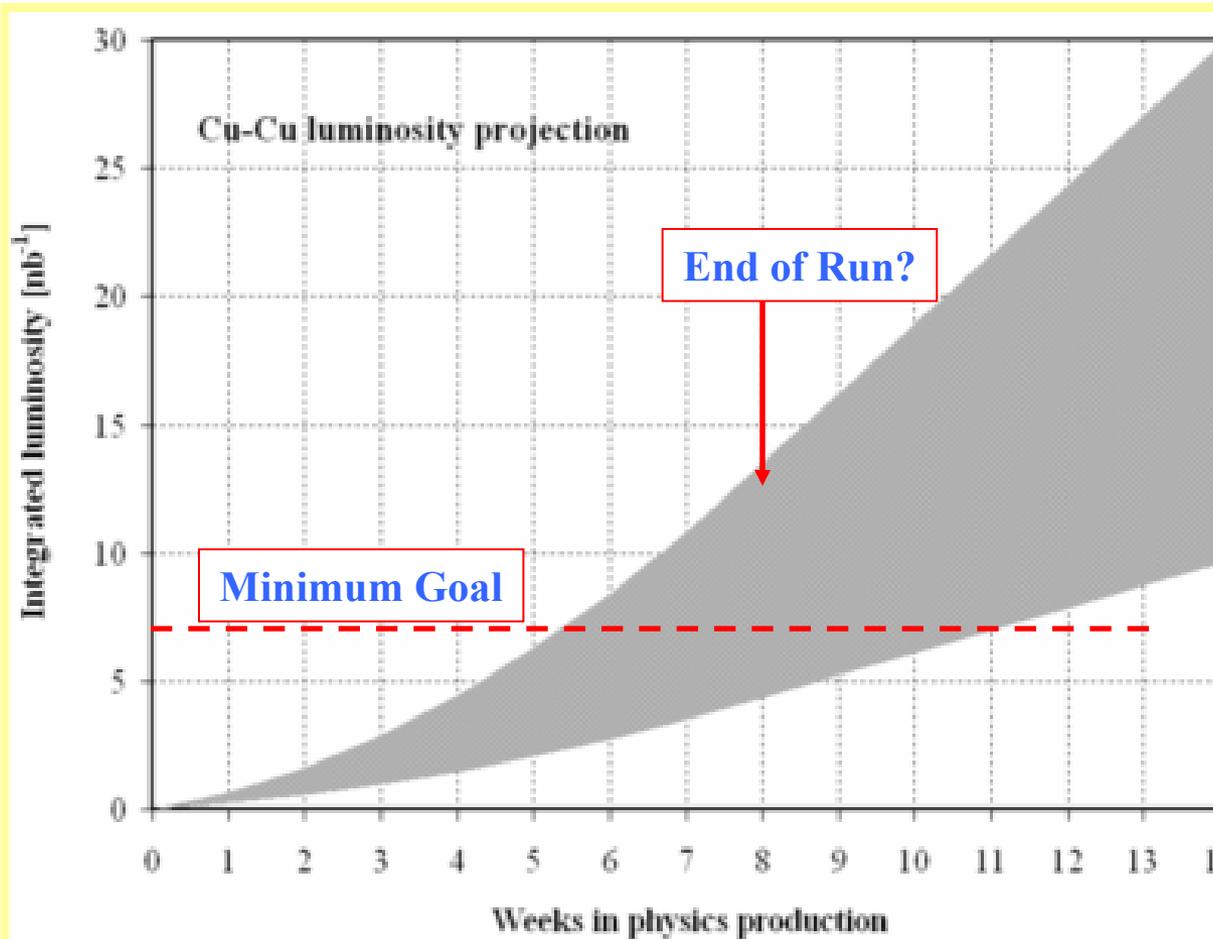
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## PAC Recommendations (very short summary):

- 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