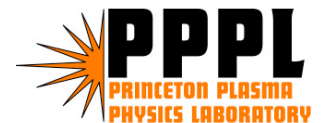


PPPL Institutional Issues

R. J. Hawryluk

**Office of Fusion Energy Sciences
Budget and Planning Meeting
March 15-16, 2005**

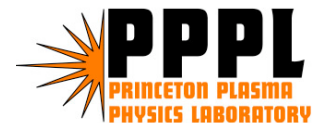


Budget Requirements to Support OFES Programs

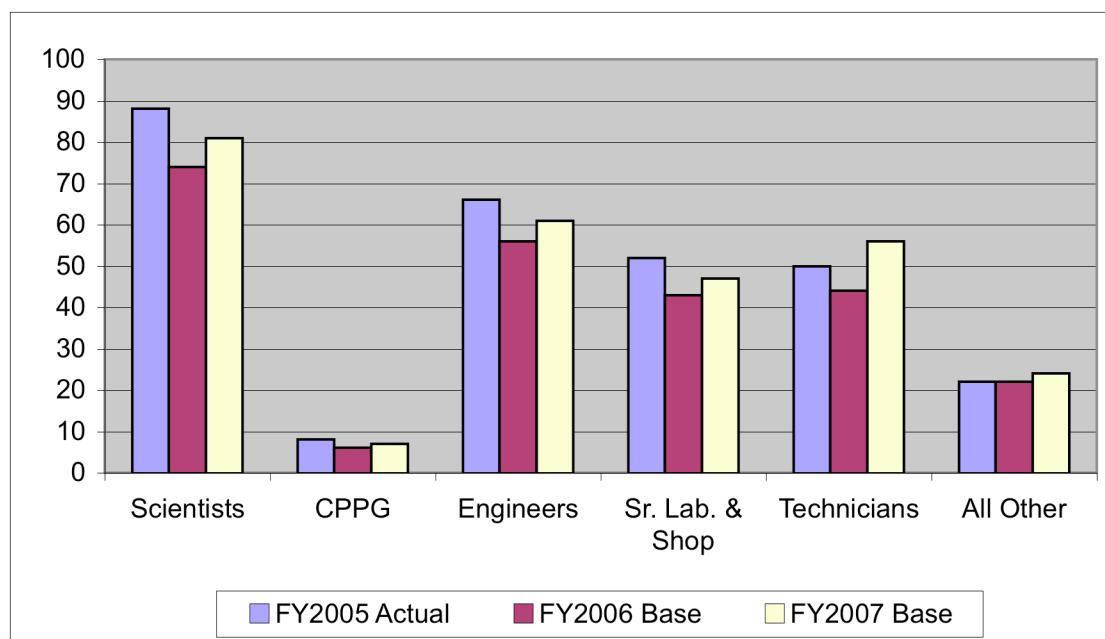
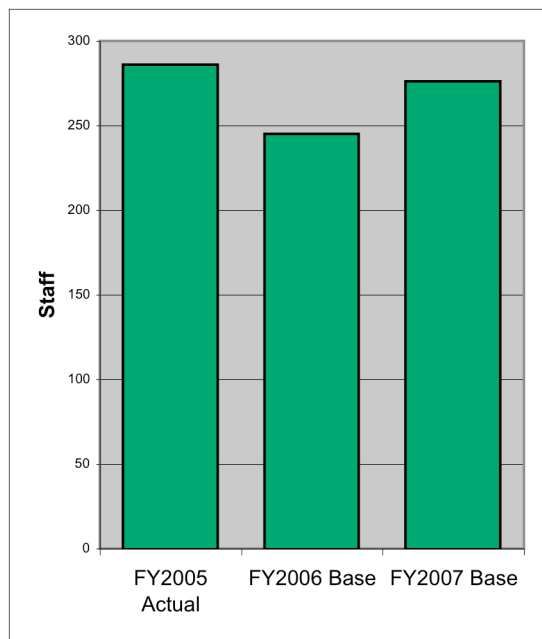
Project	FY2005	FY2006		FY2007	
	BA*	Base	Inc.	Base	Inc.
NSTX	\$ 29.5	\$ 25.7	\$ 6.2	\$ 30.0	\$ 2.6
NCSX	16.2	15.3	6.1	15.4	7.4
QPS/NSO/AIRES/APEX/Econ.	1.3	0.5	2.1	0.5	2.3
DIII-D/C-Mod Collaborations	6.4	6.3	0.8	6.3	0.8
International Collaborations	2.7	2.3	0.9	2.3	1.0
Theory/SciDAC	7.1	6.9	1.6	6.9	1.4
PS&T (LTX, MRX, MNX, etc.)	4.2	4.3	1.1	4.3	1.2
IFE	1.6	0.8	0.8	0.8	0.8
Diagnostic Development	0.5	0.5	-	0.5	-
Science Education	0.6	0.6	0.1	0.6	0.1
GPP	1.6	1.8	-	1.8	-
All Other	0.6	0.6	0.1	0.6	0.1
TOTAL OFES (Excluding ITER)	\$ 72.4	\$ 65.7	\$ 19.8	\$ 70.0	\$ 17.6

(\$Millions)

PPPL base budget is down by \$6.7 million in FY 2006



Direct Staffing Covered by Funding Plan



Budget shortfall in '06 being addressed by:

- Voluntary separation program (VSP) and attrition.
- Canceling procurements/travel/overtime to pay for VSP associated severance costs,
- Increased participation in ITER (?)
 - insufficient to address the staffing shortfall.

Exacerbating Factors

- **Ratio of sum of labor, fixed and long-lead procurements costs to total funding continues to trend up.**
 - 70% in '99 and 90% in '06 & 84% in '07
 - Loss of flexibility to accommodate budget cuts.
- **Office of Science contractual requirements for increased support of Laboratory infrastructure**
 - \$1.4M increase to maintenance budget required
- **The future of ITER and PPPL's role in it is not known.**
 - Problem for the whole community in assessing staffing requirements.
 - Participation in ITER will be decided competitively.
 - Assumed to continue at the present level.

Impact of a 10% Reduction in '07 Relative to the Base Case

- **Staffing Impact**
 - The “10% reduction in '07” would result in a loss of 50 scientists, engineers, technicians and administrators relative to present staff.
 - ~60 additional losses if severance is not funded separately.
- **Programmatic Impact (if ~50 staff are reduced)**
 - Impact is built up by individual projects.
 - Not operate NSTX
 - First plasma on NCSX slips by additional ~4 months relative to the new stretched out construction schedule.
 - Unable to meet Office of Science expectations on facility maintenance initiatives.
 - Increase risk to the Laboratory’s ability to meet environmental and other regulations.

Summary

- **PPPL participates in, and supports, the broad portfolio of research activities in OFES**
- **ITER will be a major scientific opportunity for the Fusion Energy Science community**
 - **At present , we do not know when it will move forward.**
- **U.S. domestic program is central to our contributing to and taking advantage of ITER results.**
 - **Critical that we work together and support the need for both a strong U.S. domestic program and participation in ITER.**
- **Currently planned funding does not support 40 staff in FY'06.**
 - **Announced a Voluntary Separation Program.**
- **PPPL research and engineering staff can support a greater level of effort on: NSTX, NCSX, ITER, HIF, SciDAC, and off-site collaborations.**