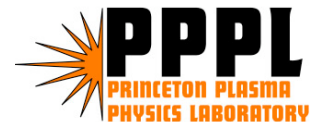


# PPPL Institutional Issues

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**R. J. Hawryluk**

**Office of Fusion Energy Sciences  
Budget and Planning Meeting  
March 14-15, 2006**

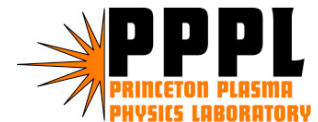


# Budget Requirements to Support OFES Programs

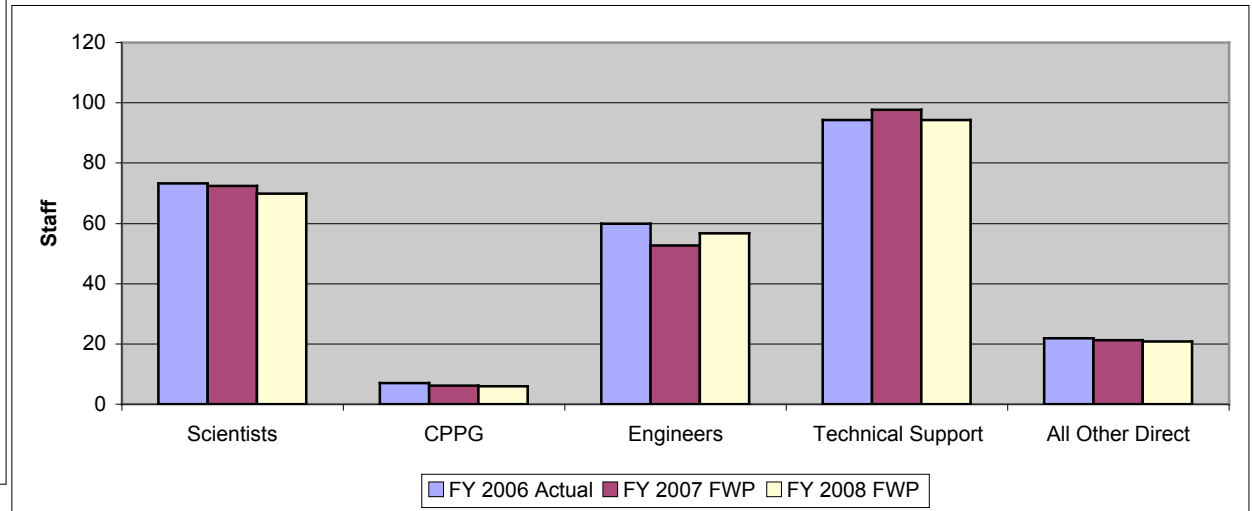
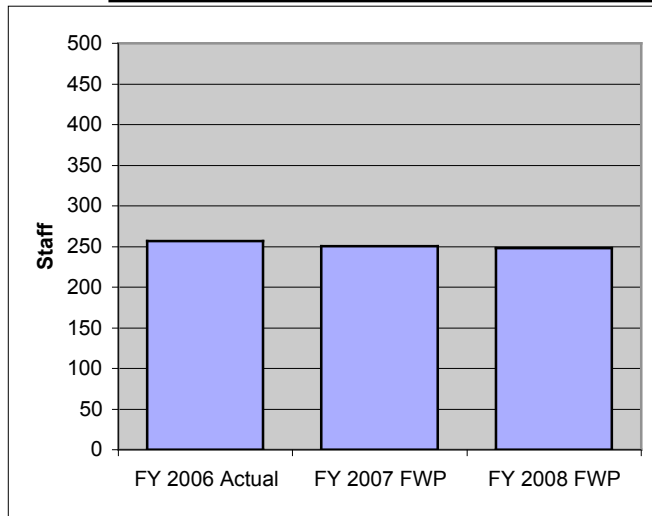
	<b>FY2006 Jan. AFP</b>	<b>FY2007 Base</b>	<b>FY2007 Incr.</b>	<b>FY2008 Base</b>	<b>FY2008 Incr.</b>
<b>NSTX</b>	<b>\$29.0</b>	<b>\$29.9</b>	<b>\$3.6</b>	<b>\$29.9</b>	<b>\$4.6</b>
<b>NCSX</b>	<b>15.8</b>	<b>15.0</b>	<b>1.6</b>	<b>15.7</b>	<b>2.6</b>
<b>QPS/ARIES</b>	<b>0.4</b>	<b>0.4</b>	<b>0.1</b>	<b>0.4</b>	<b>2.1</b>
<b>DIII-D/ C-Mod Collaborations</b>	<b>6.3</b>	<b>6.4</b>	<b>1.1</b>	<b>6.4</b>	<b>1.4</b>
<b>International Collaborations</b>	<b>2.2</b>	<b>2.3</b>	<b>2.0</b>	<b>2.3</b>	<b>2.1</b>
<b>PS&amp;T Department (LTX, MRX, etc.)</b>	<b>4.1</b>	<b>4.1</b>	<b>0.8</b>	<b>4.1</b>	<b>1.0</b>
<b>Heavy Ions</b>	<b>1.0</b>	<b>1.0</b>	<b>0.7</b>	<b>1.0</b>	<b>0.9</b>
<b>Theory/SciDAC</b>	<b>6.8</b>	<b>7.1</b>	<b>1.0</b>	<b>7.1</b>	<b>1</b>
<b>Diagnostic Development</b>	<b>0.6</b>	<b>0.6</b>	<b>0</b>	<b>0.6</b>	<b>0</b>
<b>Science Education</b>	<b>0.6</b>	<b>0.6</b>	<b>0.1</b>	<b>0.6</b>	<b>0.1</b>
<b>GPP</b>	<b>1.8</b>	<b>1.8</b>	<b>0</b>	<b>1.8</b>	<b>0.5</b>
<b>All Other</b>	<b>0.6</b>	<b>0.6</b>	<b>0</b>	<b>0.6</b>	<b>0</b>
<b>Total OFES (excl. ITER)</b>	<b><u>\$69.2</u></b>	<b><u>\$69.8</u></b>	<b><u>\$11.0</u></b>	<b><u>\$70.5</u></b>	<b><u>\$16.3</u></b>

(\$ in Millions)

**ITER funding is part of ORNL FWP.**



# Direct Staffing Covered by OFES Funding Plan



- Skill mix issues going from NCSX design to NCSX operations.
- Design engineers will be available to support ITER.

# Institutional Considerations

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- **FY'05 voluntary separation program reduced staffing costs by ~5%.**
  - Budgets do not enable bringing in the next generation of scientists and engineers into the program.
- **Office of Science contractual requirements for increased support of Laboratory infrastructure incorporated.**
  - Additional DOE Deferred Maintenance Reduction Program not yet fully defined nor addressed.
- **PPPL's role in ITER is not fully defined at this time.**
  - Problem for the whole community in assessing staffing requirements.

# Impact of a 10% Reduction in '08 Relative to the Base Case

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- **Staffing Impact**

- The “10% reduction in '08” would result in a loss of ~50 scientists, engineers, technicians and administrators relative to present staff.
- ~40 additional losses if severance is not funded separately.

- **Programmatic Impact ( if ~50 staff are reduced)**

- NSTX operation decreased from 10 to 5 weeks, upgrades drastically cut back.
- First plasma on NCSX slips by additional ~2 months relative to the current baseline construction schedule.
- Loss of staff with unique skills will have a profound impact of being able to execute and support the diversity of programs.
- Unable to meet Office of Science expectations on facility maintenance initiatives.
- Increased risk in meeting environmental, financial and other regulatory requirements.

# Summary

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- **PPPL participates in, and supports, the broad portfolio of research activities in OFES.**
  - **Strong elements of our program are:**
    - **collaboration on PPPL facilities and**
    - **collaboration on other facilities around the nation and the world.**
  - **Inter-institutional collaborations prepare us for ITER and beyond.**
- **ITER is a major scientific opportunity for the entire Fusion Energy Science community**
  - **PPPL looks forward to contributing to ITER in collaboration with the community.**