

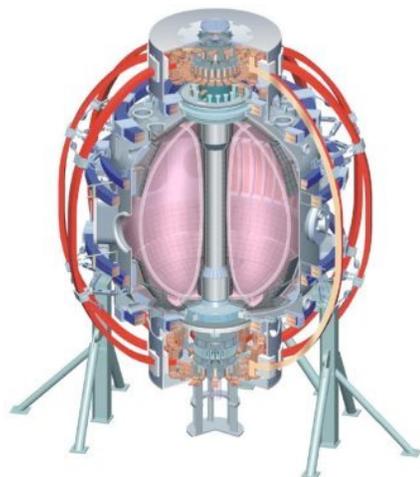
## Comments on LLD

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**NSTX Mid-Run Assessment**

**June 17, 2009**

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IPP, Garching  
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## LLD Status

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- **LLD installation still planned for upcoming FY09 outage**
  - **Plates as Plasma Processes Inc. in Huntsville for Mo substrate spraying**
  - **Heater control system undergoing final assembly at PPPL**

## FY10 Planning

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- **First experiments will involve LLD without lithium**
  - **Strikepoint control sufficiently developed for initial operation with strikepoint on outboard divertor carbon tiles**
  - **Bakeout and GDC but *no* boronization**
    - **Implies need to begin operations with LITER evaporation**
    - **No opportunity for experiments prior to introduction of lithium in FY10**

## FY10 Planning (continued)

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- **Need to develop LLD operating scenarios**
  - **“FY09-like” LITER evaporation only on “cold” LLD**
    - **No strikepoint on LLD**
  - **“Hot” LLD in “pumping” mode**
    - **Continue evaporating onto “hot” LLD until enough liquid lithium accumulates to demonstrate “persistence” of pumping**
  - **LLD in “power handling” mode**
    - **Plan is to have additional LITER’s “on reserve” to minimize down time for reloading**