

# Duke Power NFPA-805 Transition Pilot Observation Project Status Oconee (ONS)

November 10, 2005

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# Agenda

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- Reconstitution Project Status
- NFPA-805 Contract Status
- NFPA-805 Project Status
- Fire PRA Status
- Duke 3-Site Transition Schedule
- Oconee Transition Schedule
- NFPA-805 Project Organization
- Near Term Tasks



# Reconstitution Project Status

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- All three sites have funding approved with contracts in place
- ONS Unit 2 /Common Reconstitution Analysis is complete
- MNS currently has AREVA on site performing reconstitution for both units expected completion date of July 2006
- ONS currently has AREVA performing reconstitution for ONS Unit 3 with expected completion date of September 2006
- CNS currently has AREVA performing reconstitution for both units with expected completion date of July 2007



# NFPA-805 Contract Status

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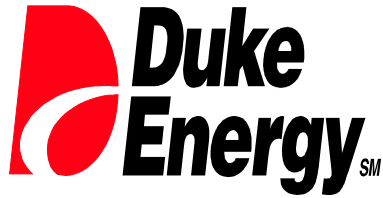
- ONS currently has Kleinsorg Group Risk Services, LLC assisting in performing the NFPA-805 Transition
- ONS recently issued a contract to ERIN Engineering & Research, Inc. to assist in performing the Fire PRA in support of the transition to NFPA-805



# Fire PRA Status

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- Sub-Task 5.1 - Plant Boundary Definition and Partitioning
  - Complete. Need to complete documentation. Will be included in the Fire Ignition Frequency Calculation
- Sub-Task 5.2 - Fire Ignition Frequencies
  - 95% complete.
  - Working on Transient Fire Calculation. EPRI/NRC Method is not clear on Categorizing Maintenance Tasks via work orders or hot work.
  - Comments to EPRI on Bus Bar Explosive Fires
- Sub-Task 5.3 – Fire PRA Component Selection
  - In Progress. Completed BEMAP (PRA to Basic Event Mapping) for Unit 3, working on other 2 units and mapping to Appendix (ARTRAK) database.
- Sub-Task 5.4 - Fire PRA Cable Selection
  - Will start in December. Database design is key.
- Sub-Task 5.5 - Qualitative Screening
  - Not going to perform Qualitative Screening (will quantify all Fire Compartments)



# Fire PRA Status

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- Sub-Task 5.6 - Fire-Induced Risk Model
- Sub-Task 5.7 - Quantitative Screening
- Sub-Task 5.8 - Scoping Fire Modeling
- Sub-Task 5.9 - Detailed Circuit Failure Analysis (combined w/ 5.10)
- Sub-Task 5.10 - Circuit Failure Mode Likelihood Analysis
- Sub-Task 5.11 - Detailed Fire Modeling
- Sub-Task 5.12 - Post-Fire Human Reliability Analysis
- Sub-Task 5.13 - Seismic-Fire Interactions Assessment
- Sub-Task 5.14 - Fire Risk Quantification
- Sub-Task 5.15 - Uncertainty and Sensitivity Analysis
- Sub-Task 5.16 - Fire PRA Documentation

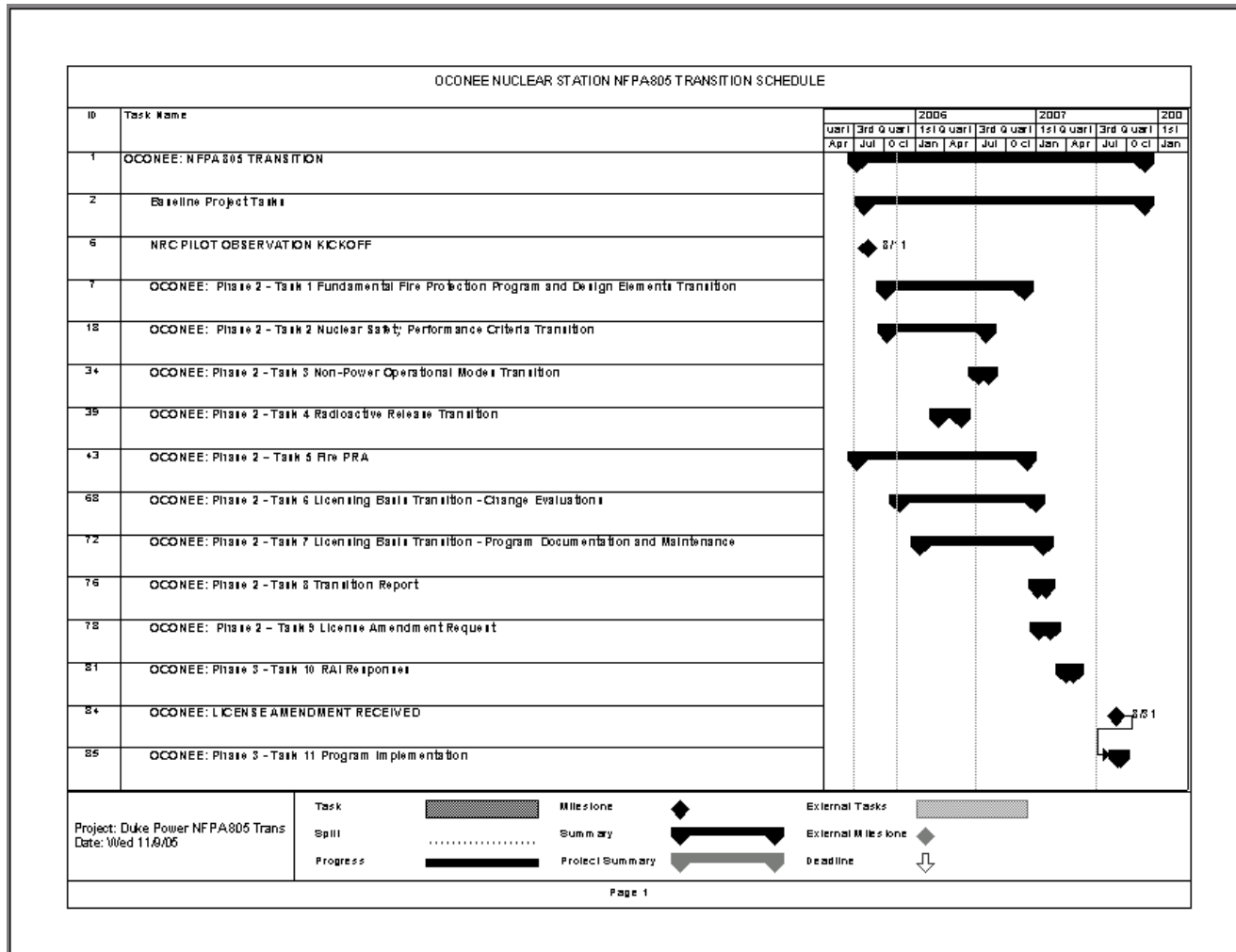


# Duke 3-Site Transition Schedule

| 2005   |                 |   |                 | 2006                       |                 |                 |                 | 2007            |                 |                            |                 | 2008            |                 |                 |                 | 2009            |                 |                 |  |
|--|-----------------|---|-----------------|----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--|
| 1 <sup>st</sup>                                  | 2 <sup>nd</sup> | 3 <sup>rd</sup>                               | 4 <sup>th</sup> | 1 <sup>st</sup>            | 2 <sup>nd</sup> | 3 <sup>rd</sup> | 4 <sup>th</sup> | 1 <sup>st</sup> | 2 <sup>nd</sup> | 3 <sup>rd</sup>            | 4 <sup>th</sup> | 1 <sup>st</sup> | 2 <sup>nd</sup> | 3 <sup>rd</sup> | 4 <sup>th</sup> | 1 <sup>st</sup> | 2 <sup>nd</sup> | 3 <sup>rd</sup> |  |
|  |                 | ONS NRC Audit (June)                          |                 |                            | MNS NRC Audit   |                 |                 |                 |                 | CNS NRC Audit              |                 |                 |                 |                 |                 |                 |                 |                 |  |
| ONS Unit 0/2 Reconst                             |                 | ONS Unit 3 Reconstitution (July 05 - Sept 06) |                 |                            |                 |                 |                 |                 |                 |                            |                 |                 |                 |                 |                 |                 |                 |                 |  |
| ONS Transition to NFPA-805 (March 05 – March 07) |                 |   |                 |                            |                 |                 |                 |                 |                 |                            |                 |                 |                 |                 |                 |                 |                 |                 |  |
| ONS Fire PRA                                     |                 |   |                 |                            |                 |                 |                 |                 |                 |                            |                 |                 |                 |                 |                 |                 |                 |                 |  |
|  |                 |   |                 | MNS - Reconstitution       |                 |                 |                 |                 |                 |                            |                 |                 |                 |                 |                 |                 |                 |                 |  |
|  |                 |   |                 | MNS Transition to NFPA-805 |                 |                 |                 |                 |                 |                            |                 |                 |                 |                 |                 |                 |                 |                 |  |
|  |                 |   |                 | MNS Fire PRA               |                 |                 |                 |                 |                 |                            |                 |                 |                 |                 |                 |                 |                 |                 |  |
|  |                 |   |                 | CNS - Reconstitution       |                 |                 |                 |                 |                 |                            |                 |                 |                 |                 |                 |                 |                 |                 |  |
|  |                 |   |                 |                            |                 |                 |                 |                 |                 | CNS Transition to NFPA-805 |                 |                 |                 |                 |                 |                 |                 |                 |  |
|  |                 |   |                 |                            |                 |                 |                 |                 |                 | CNS Fire PRA               |                 |                 |                 |                 |                 |                 |                 |                 |  |



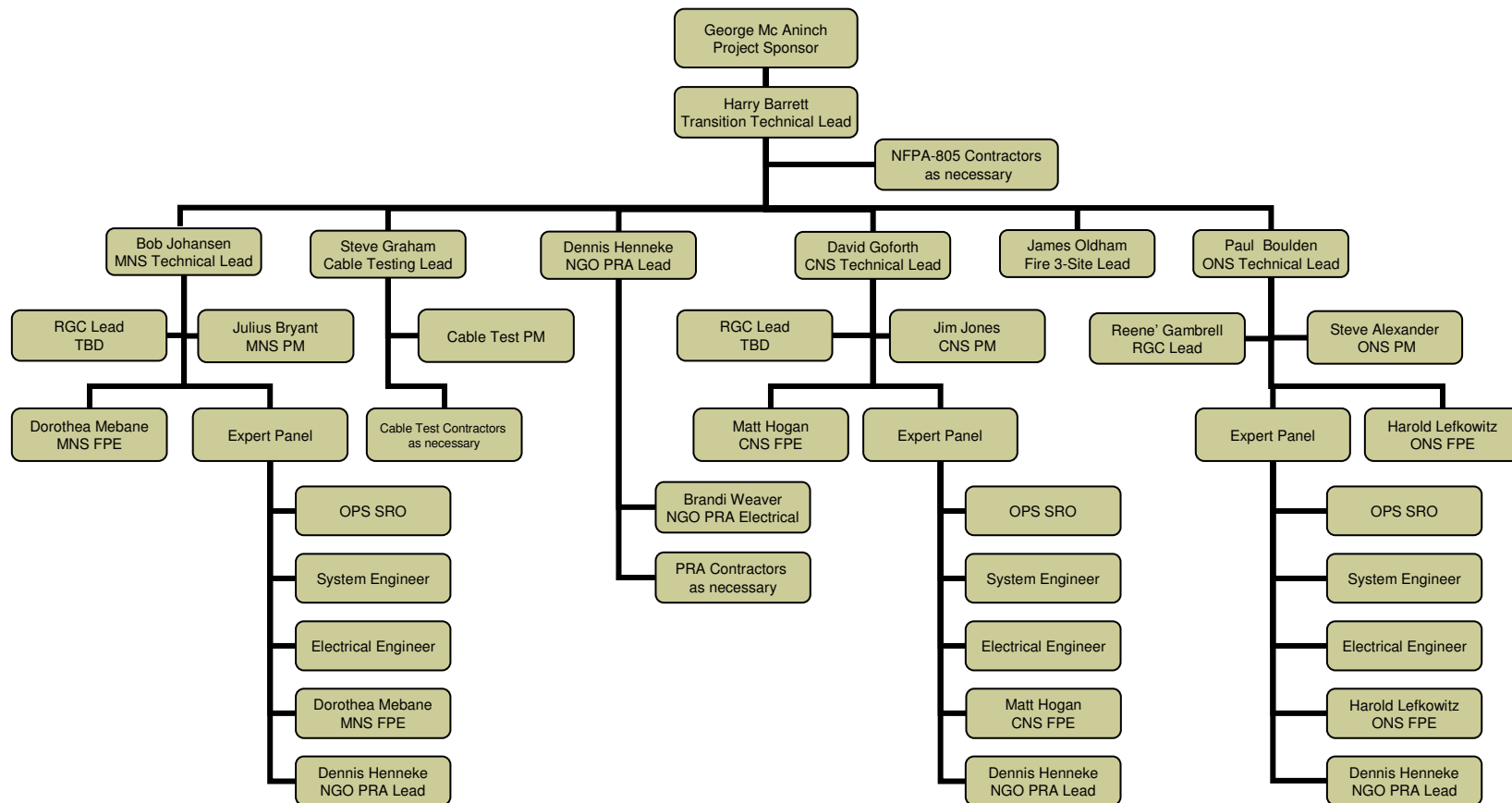
# Oconee NFPA-805 Transition Schedule







# NFPA-805 Transition Project Organization





## Near Term Tasks (Next Six Months)

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- Multiple Spurious Operations Expert Panel
- Armored Cable Fire Testing (1<sup>st</sup> Qtr 2006)
- Chapter 3 Non-Fire Area Specific Transition
- Transient Analysis
- Manual Action Feasibility
- CAFTA Logic Pilot