

# NRC New Plant Reviews

Processes and Expectations

Design Centered Work Group Meeting  
June 13, 2007

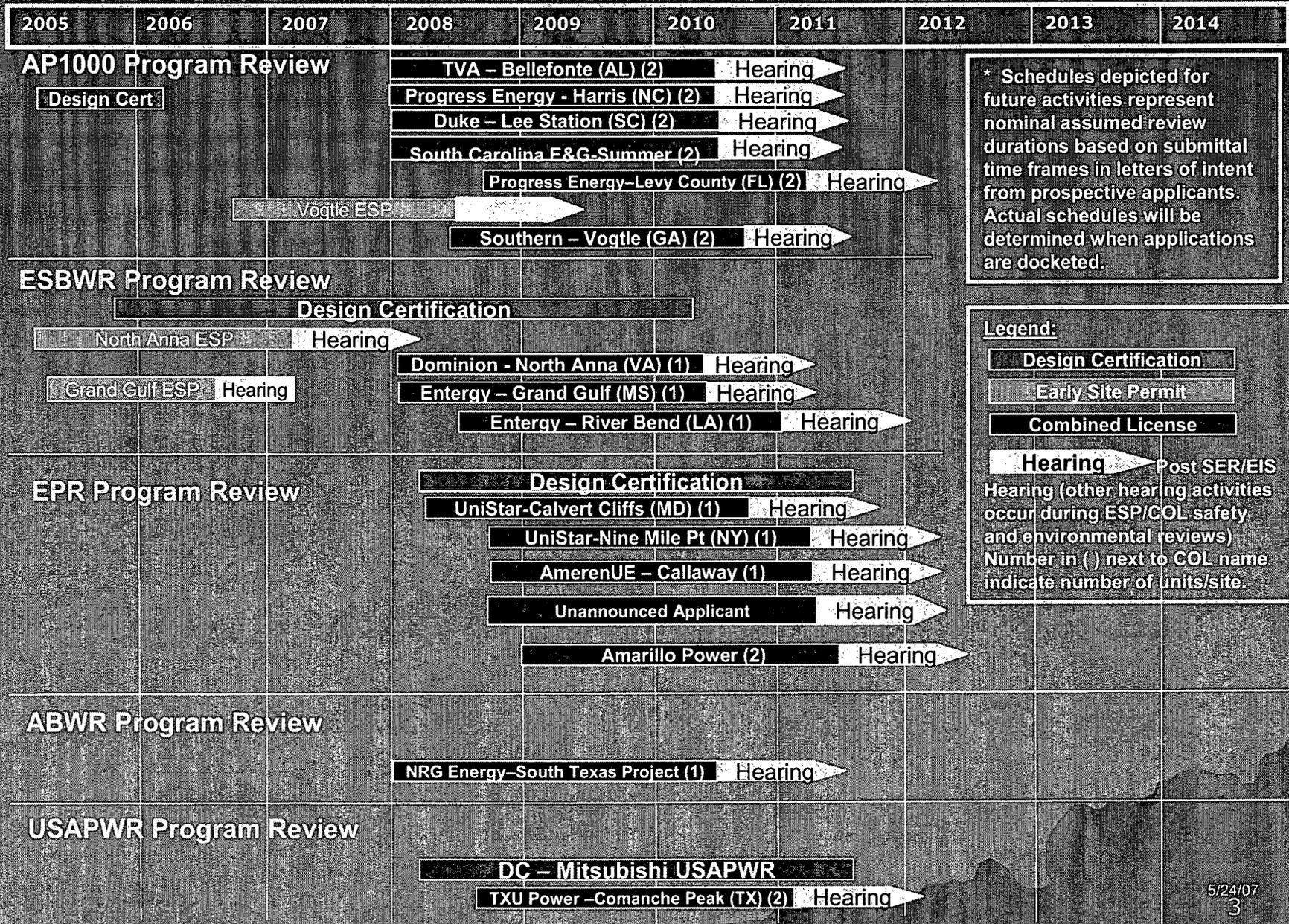
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# Presentation Objectives

- ◆ NRC new reactor applications review process
- ◆ NRC challenges
- ◆ Expectations
- ◆ Concerns

# New Reactor Licensing Applications (Site and Technology Selected)

An estimated schedule by Fiscal Year



# New Reactor Licensing Applications (Site or Technology TBD)

An estimated schedule by Fiscal Year

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>A1000 Program Review</b>									
<b>ESBWR Program Review</b>									
<b>EPR Program Review</b>									
<b>ABWR Program Review</b>									
<b>USAPWR Program Review</b>									
<b>Unspecified</b>									

**Legend:**

- Design Certification
- Early Site Permit
- Combined License
- Hearing Post SER/EIS Hearing (other hearing activities occur during ESP/COL safety and environmental reviews)
- Number in ( ) next to COL name indicate number of units/site.

Duke ESPs (2) Hearing

Submittal Dates TBD

Clinton ESP Hearing

Unannounced Applicant ESP Hearing

Florida P&L - Site and Vendor - TBD Hearing

Exelon Texas - Site and Vendor TBD Hearing

DTE - Fermi - Vender TBD Hearing

# Situation

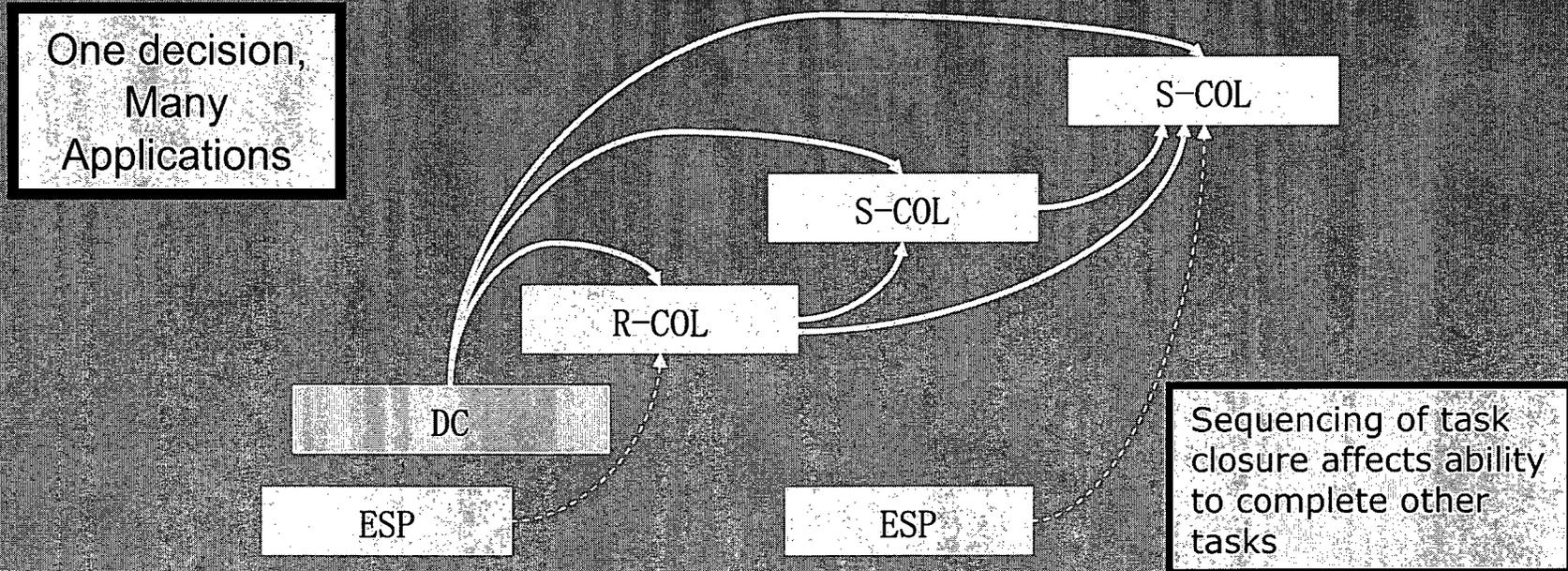
An unprecedented amount of review work to be performed in a limited time using a new process not fully used before

# Solution

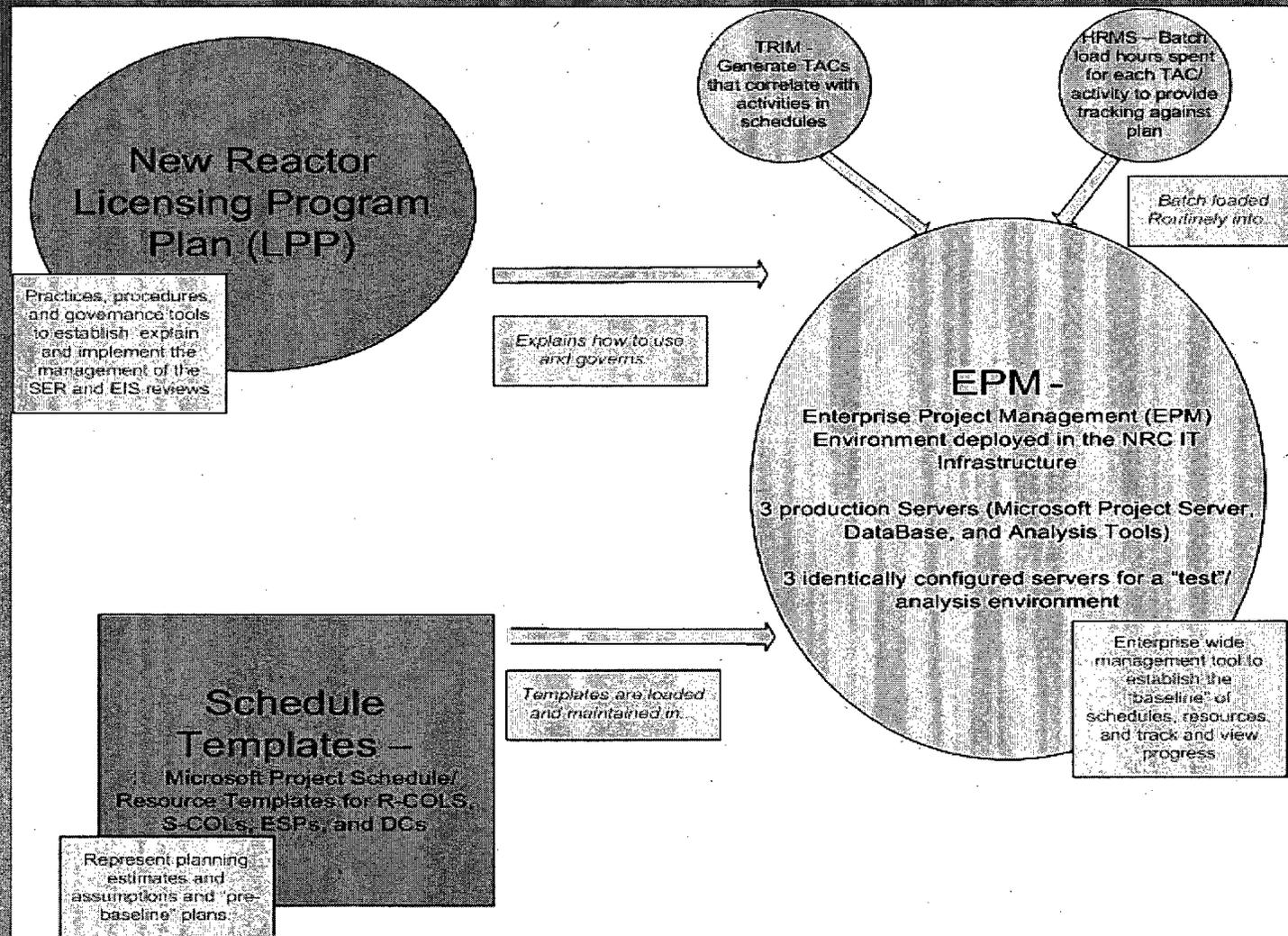
- ◆ Design Centered Reviews
- ◆ Licensing Program Plan and EPM Solution
  - Pre-plan
    - ◆ Specific tasks
    - ◆ Specific technical skill sets for specific tasks
    - ◆ Specific hours to perform review
    - ◆ Defined durations and dates
  - Server based software to manage reviews
  - Dedicated NRO Branch to manage scheduling process
    - ◆ Develops plan
    - ◆ Manages changes to plan

# Design Centered Reviews

License Reviews within a Design Center are Related

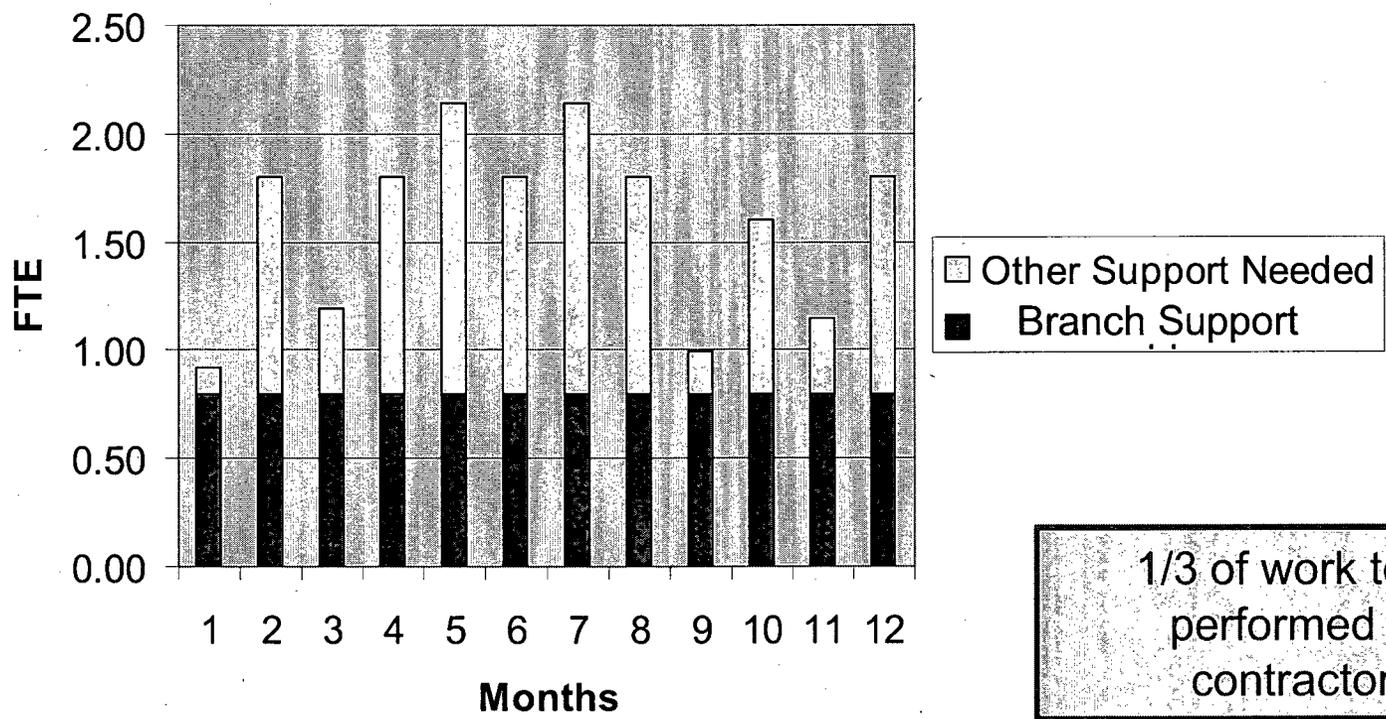


# Parts of the Licensing Program Plan



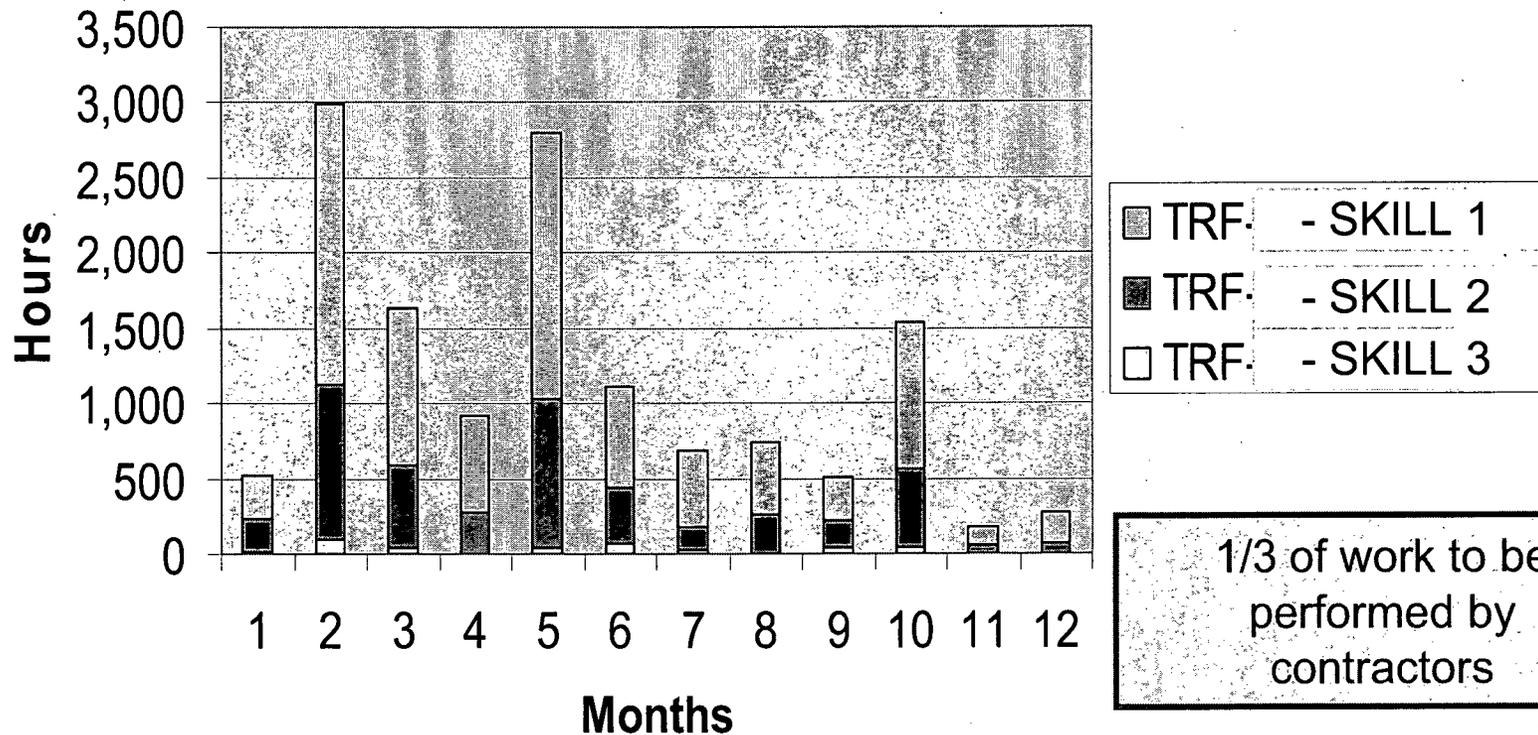
# EPM Provides Insights

## Branch FY08 Support Needs (Topical Reports Included)



# When and Which Technical Specialties Needed

## Branch Skills Need Breakdown (RCOLs Only)



# Necessity is the Mother of Invention

- ◆ 25 applications
  - Many simultaneous applications
  - Up to 350 technical reviewers working simultaneous
  
- ◆ Each application ~2800 tasks
  - ~250 SRP sections
  - 25 Applications ~70,000 tasks
  
- ◆ LPP and associated schedule
  - Tool to keep it all straight
  - Tool to evaluate change impact
  - Tool to electronically understand how the reviews are progressing
  - Tool to analyze and assist in prioritization of tasks

# Major COL, DC, and ESP Schedule Templates Standard Scope Areas

Scope Area	DC	ESP	COL
Acceptance Review	Yes	Yes	Yes
Safety Evaluation	Yes	Yes	Yes
Environmental Review	--	Yes	Yes
Hearings	--	Yes	Yes
Rulemaking	Yes	--	--

Types of reviews  
are standardized

The schedule templates/EPM include the following data, based on best available information:

- Identification of all tasks
- Task predecessor relationships for activities within a single licensing review.
- Resource usage and utilization assignments for each task, using generic resources
- Task duration

# LPP Effect on Performance of Reviews

- ◆ NRO approach (LPP/EPM Solution)
  - Safety 1<sup>st</sup> – Schedule 2<sup>nd</sup>
    - ◆ Adjust schedule
  - Details of process provided by each Branch (tasks, technical specialties, and hours)
  - LPP schedules when work is to be performed
  - EPM tracks progress at a greater level of detail
    - ◆ Each task has a responsible person who will need to status the work

Bases of Technical Decisions – NO CHANGE!!!

# Starting to Use LPP Now

- ◆ Vogtle ESP review
  - Currently using EPM Solution
- ◆ ESBWR DC review
  - July will use EMP Solution
- ◆ Other new plant applications as they are submitted
  - Plus, AP1000 DCD amendment