

# **Status of New Reactor and Combined License Issues**

**Industry Briefing of NRC Commission**

**August 22, 2007**



NUCLEAR  
ENERGY  
INSTITUTE

# **Industry Participants**

- **Marvin Fertel, Senior Vice President and Chief Nuclear Officer, NEI**
- **Christopher Crane, President and Chief Nuclear Officer, Exelon Nuclear**
- **Dave Christian, Senior Vice President and Chief Nuclear Officer, Dominion Generation**

# Discussion Topics

- **Key policy issues**
- **COL issues**
  - **Completion of rulemakings and guidance**
- **Critical industry activities**
- **The next 12 months**
  - **Completion of near-term priorities**

# **Key Policy Issues**

- **Publish Part 26 Rulemaking**
- **Issue Notice of Hearing after docketing each portion of an application**
  - **Facilitates the potential for earlier operational date**
- **Recognition of EP adequacy for a new unit at an existing operating site**
- **Affirm Waste Confidence position**

# **COL Issues**

- **Outstanding progress over past 10 months**
- **Limited number of open issues requiring closure...**
  - **Access Authorization**
  - **Digital I&C**
  - **New QA process for effluents**
  - **Radiological Protection**
  - **ISI/IST**
  - **PRA**
- **Commission directed transparency & accountability in the hearing process**

# **Completion of COL Related Rulemakings**

- **Limited Work Authorization**
  - Will increase focus on safety-significant construction
  - Foundation for earlier operational date
- **Aircraft Impact**
  - Industry peer review of evaluations
  - Industry taking action in advance of the rule
- **Security -- §73.55**
  - New designs incorporating insights from security evaluations on operating plants

# **Critical Industry Tasks**

- **Industry orientation on lessons learned from recent construction**
- **Supply Chain**
  - **Focus on quality**
    - **Expanding NUPIC activities**
  - **Preventing Counterfeit/substandard parts**
  - **Broadening number of qualified vendors**
- **Workforce**
  - **Prime focus on skilled craft**
  - **Regional workforce groups**
  - **Establishing partnerships with community colleges**

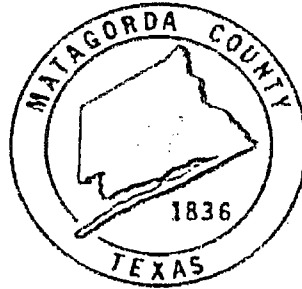
# **Critical Focus Areas**

- **Preparation and review of COL and design certification applications**
- **Construction Inspection Program development**
  - **Defining the ITAAC closeout process**
- **Improving the environmental review process**
- **Next phase of regulatory guide updates**
  - **Rationale for making changes**



# Summary

- **Predictability, open communications and quality applications are essential for success**
- **Industry priorities**
  - **COL and design certification applications**
  - **Construction inspection & closeout**
  - **Completion of rulemakings**
  - **Waste confidence**
- **Next 12 months are critical for credibility**



# **Impacts of New Nuclear Units in Matagorda County**

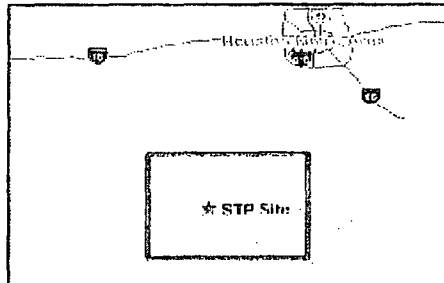
**August 22, 2007**

**Richard Knapik**

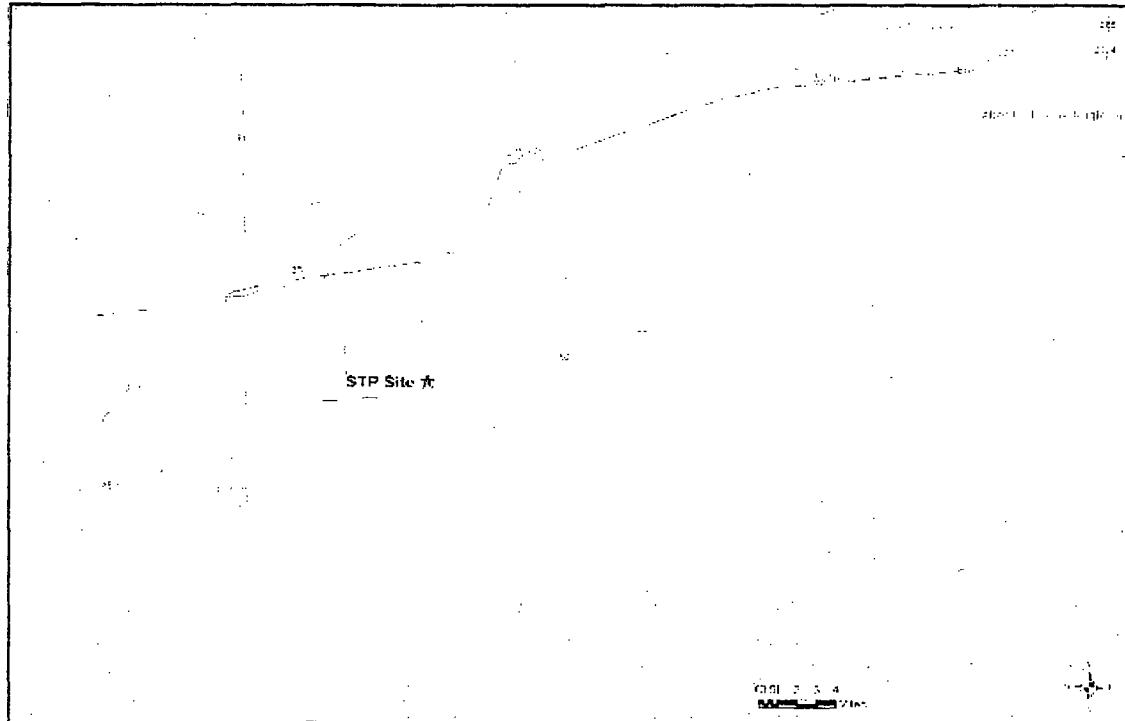
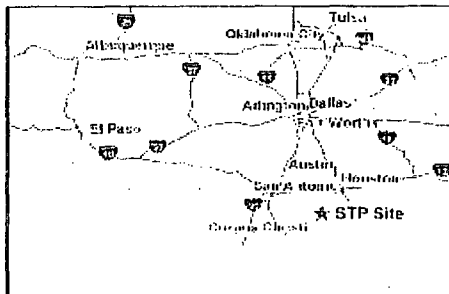
**Mayor of Bay City Texas**

# Matagorda County

South Texas Project (STP)



Locator Map



South Texas Nuclear Project 3 & 4

Project: South Central Texas State Plant  
 Datum: North American Datum 1927

# Matagorda County

- **Description**
- **Demographics**
- **Economy**

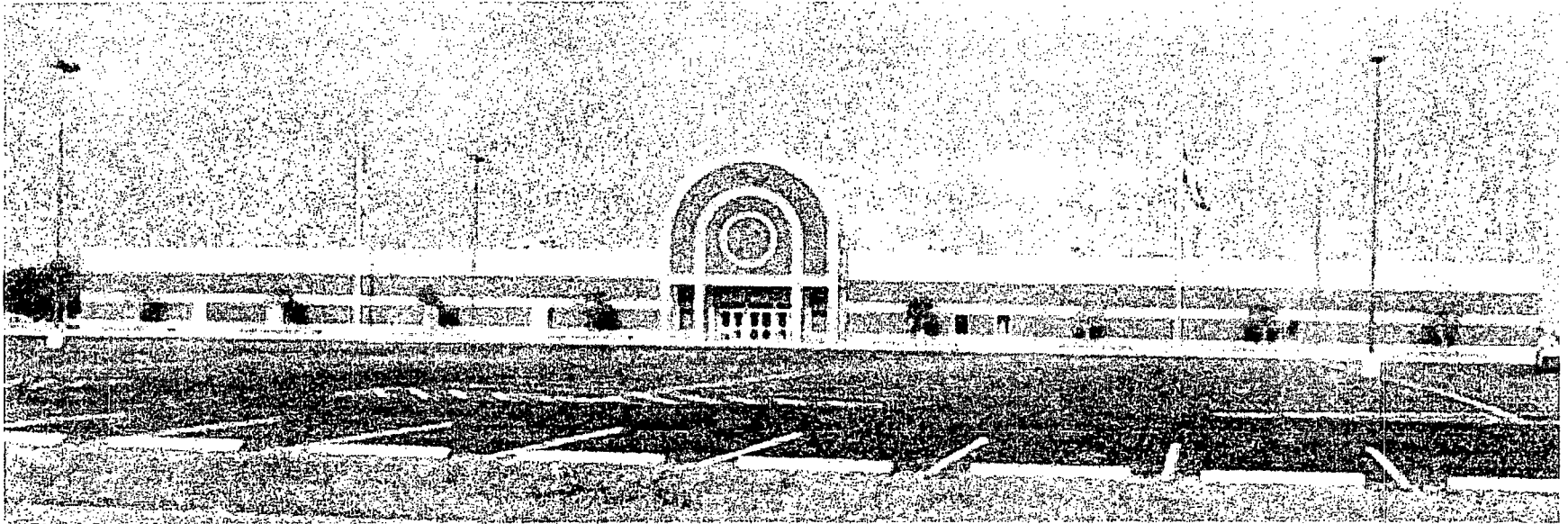
# Key Impacts

- **Housing**
- **Schools**
- **Traffic**
- **Infrastructure**

# **Benefits of New Plants**

- **Education**
- **High paying jobs**
- **Clean industry**
- **Economic growth**
- **Emergency Preparedness**
- **Corporate support for local needs**

# Wharton County Junior College Extension





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# **STATUS OF NEW REACTOR ISSUES**

**August 22, 2007**

**Luis Reyes**

**Executive Director for Operations**

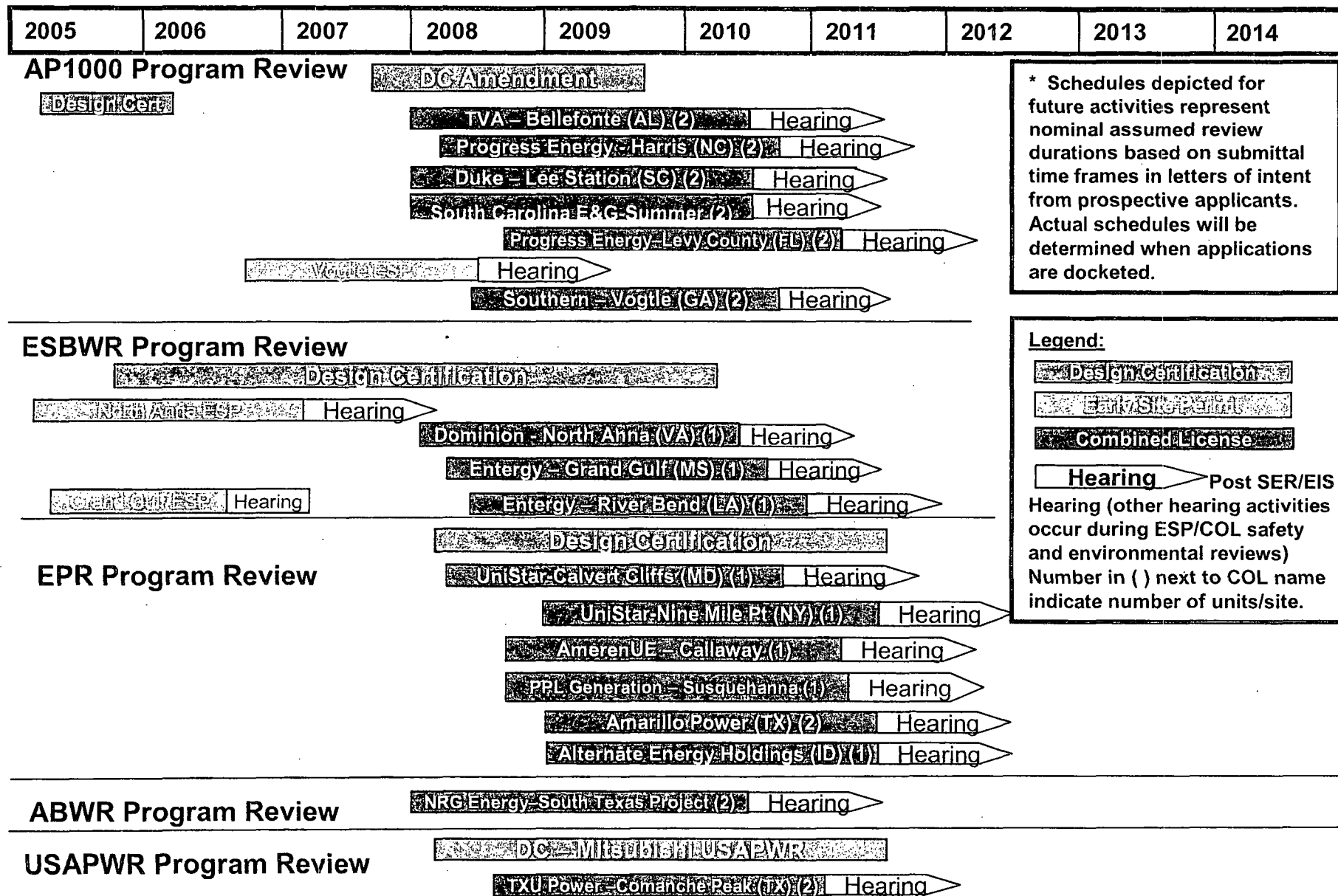


# **Agenda**

- **Overview of New Reactor Status**
- **Program Activities**
- **Reviewer Activities**
- **Stakeholder Interface**

# New Reactor Licensing Applications (Site and Technology Selected)

An estimated schedule by Fiscal Year



\* Schedules depicted for future activities represent nominal assumed review durations based on submittal time frames in letters of intent from prospective applicants. Actual schedules will be determined when applications are docketed.

## 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.

# New Reactor Licensing Applications (Site or Technology TBD)

An estimated schedule by Fiscal Year

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
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AP1000 Program Review

ESBWR Program Review

EPR Program Review

ABWR Program Review

USAPWR Program Review

Unspecified

\* Schedules depicted for future activities represent nominal assumed review durations based on submittal time frames in letters of intent from prospective applicants. Actual schedules will be determined when applications are docketed.

## Legend:

Design Certification

Combined License

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.

Combined License Hearing

Combined License Hearing

Submittal Dates TBD

Combined License Hearing

Florida P&L - Site and Vendor TBD Hearing

Exelon Texas - Site and Vendor TBD Hearing

DTE - Fermi - Vendor TBD Hearing

# **Infrastructure**

- **Contracting**
- **Licensing Program Plan**
- **Safety Evaluation Report Templates**
- **Rulemaking**
  - **Limited Work Authorization**
  - **Part 52**
  - **Security**

# **Pre-application Activities**

- **Outreach Meetings**
- **Quality Assurance Audits**
- **Pre-application Site Visits**
- **Pre-application Reviews and Interactions**
  - **Topical Reports**
  - **Design Centered Working Group Meetings**

# **Reviewer Tools**

- **Acceptance Review Process**
- **Regulatory Guides/Standard Review Plan**
- **Technical Consistency Office Instruction**
- **Knowledge Management tools (e.g., Wizard)**

# **Ongoing Technical Reviews**

- **Design Certifications**
- **Early Site Permits**
- **Pre-Application Activities**
  - **Technical Reports**
  - **Early Engagement on Long Lead Time Items**

# **Continued Focus Areas**

- **Resources**
  - **Critical skills-Hiring**
  - **Staff Development**
  - **Contracts**
- **Technical Issues**
  - **Digital Instrumentation and Controls**
  - **Seismic**
  - **Inspections, Tests, Analyses, and Acceptance Criteria**
  - **Emerging Issues**



# **Security**

- **Interactions**
  - **External: Department of Homeland Security, the public, industry, and vendors**
- **Readiness**
  - **Licensing**
  - **Schedule input**
  - **Staffing**

# **Emergency Planning**

- **Interactions**
  - **External: Federal Emergency Management Agency, the public, industry**
- **Readiness**
  - **Regulations & Guidance updated**
  - **Schedule**
  - **Staffing**

# **Government to Government Interactions**

- **Federal**
- **State**
- **Local**
- **Tribal**

# **Public Outreach Efforts**

- **Public Outreach Meetings**
- **Environmental Scoping Meetings**
- **Draft Environmental Impact Statement**
- **Technical Meetings**
- **Workshops**

# **International Communications**

- **Multinational Design Evaluation Program**
- **Bi-lateral Meetings**
- **Interactions with Chinese Regulatory Agency**

# **Conclusion**

- **Significant accomplishments**
- **Productive pre-application activities**
- **Enhancing program management**
- **Planning for contingencies**