

# Modular Plant Licensing

Industry Meeting with NRC

May 22, 2002



## Modular Plants

- Plants consisting of multiple reactor modules hold great promise for the future
  - Enhanced safety and reliability
  - Improved economics
  - Ability to add capacity incrementally according to market conditions
  
- Need to ensure that statutory and regulatory infrastructure is not unfair to modular plants



## Objectives for Modular Plant Licensing

- Single NRC technical/safety review and single public hearing
- Approval to operate each module for 40-years
- Assessment of a single retrospective Price-Anderson premium
- Assessment of a single NRC annual fee



## Integrated Approach

- Applicants would
  - Prepare a single FSAR covering all modules
  - Prepare a single Environmental Report (if an ESP is not referenced)
  - Simultaneously submit nearly identical COL applications for each module
- NRC would
  - Use existing authority under the AEA to subject the set of modular COL applications to a integrated technical/safety review and a single public hearing
  - Issue an integrated set of nearly identical COLs, one for each module



## **Integrated Approach (cont.)**

- The set of modular COLs would authorize construction of all modules
- Modular COLs would identify the estimated completion date for each module as specified by the applicant per 10 CFR 50.33(h)
- Each COL would authorize operation after the module-specific 10 CFR 52.103(g) finding
- Pending legislation would allow module-specific 40-year license terms to commence with each 10 CFR 52.103(g) finding



## **Integrated Approach (cont.)**

- Pending legislation would subject modular plants to a single Price-Anderson premium
- NRC has authority to assess a single annual fee to multi-module plants, even if each module is licensed separately



## Design Approval Under a COL

- Regardless of licensing scenario, the SECY-01-0207 proposal for modular design re-reviews every five years is:
  - Unnecessary in light of the backfit rule (10 CFR 50.109)
  - Contrary to the intent that COLs resolve all safety issues and have a 40 year term
  - Adverse to Part 52 goal of standardization
- Duration of design approval embodied in a COL is coincident with the license term



## Summary

- Integrated, multi-license approach recommended to achieve practical objectives for modular plant licensing
- Enabling legislation pending in Congress
  - Price-Anderson
  - Start of 40-year license term
- Modular COL embodies design approval for the term of the license

