



*GE Nuclear Energy*

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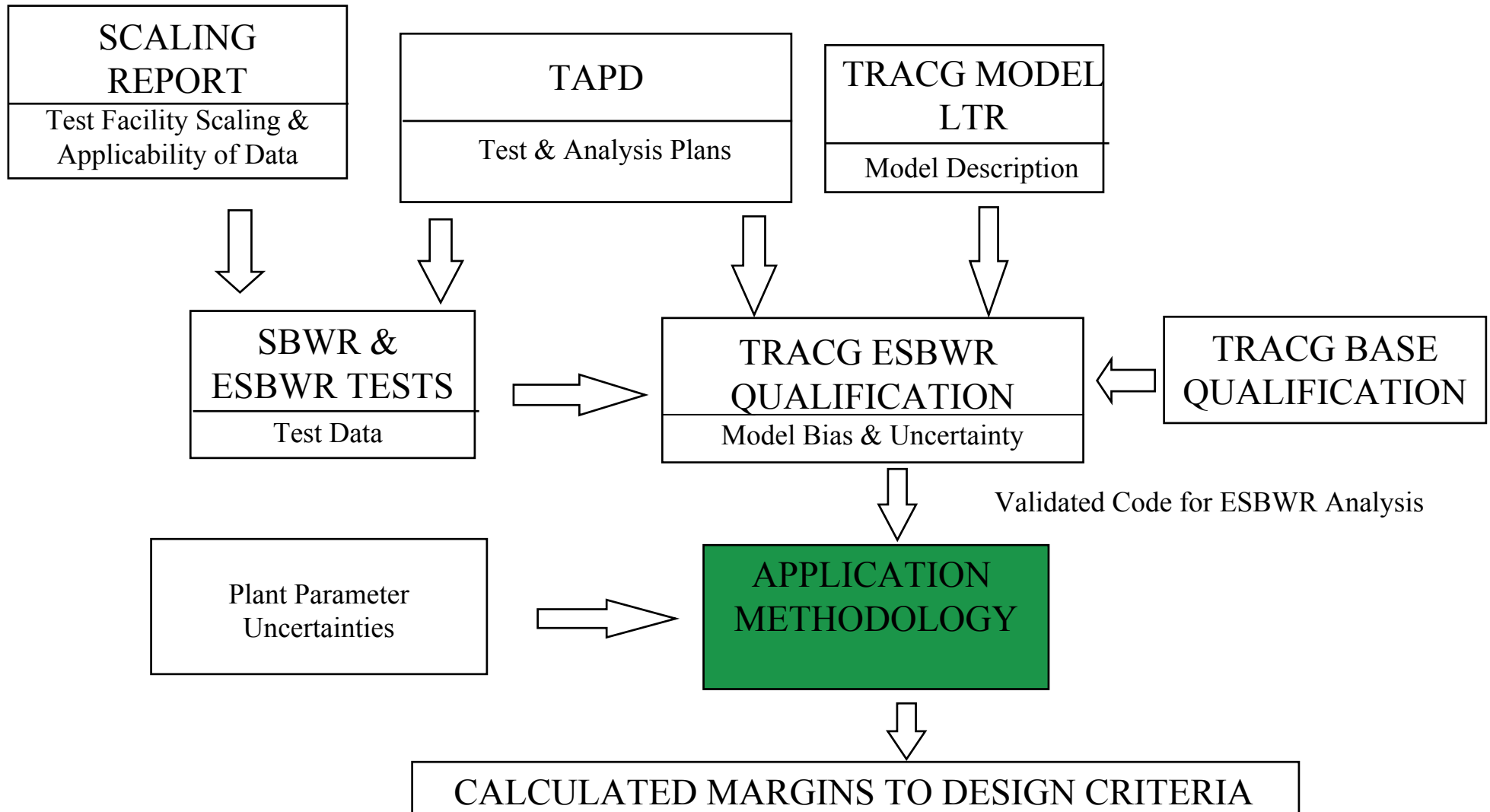
*TRACG Application for ESBWR –  
Overview*

*ESBWR NRC Meeting  
December 12, 2002*

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# ESBWR Technology Program Elements



# ***TRACG Application Scope***

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- ***Pre -Application Review Scope***
  - ***ECCS/LOCA***
  - ***Containment/LOCA***
  - ***Anticipated transients with scram (AOO)***
- ***Report describes the methodology to calculate key safety parameters and to quantify the uncertainties when applying the TRACG code to the ESBWR for these analysis categories.***
- ***Deferred to Certification Phase***
  - ***Anticipated Transients without Scram (ATWS)***

# ***Overview of ECCS/LOCA Application***

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# ***Overview of Containment/LOCA Application***

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# *Overview of AOO Application*

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# ***ECCS/LOCA Application Methodology Steps***

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# *High Ranked Parameters and Uncertainties for ECCS/LOCA*



# ***High Ranked Parameters and Uncertainties for ECCS/LOCA***

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# ***Specific Application Process for ECCS/LOCA***

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# ***Containment/LOCA Application Methodology Steps***

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# *Modeling of Stratification*

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# *High Ranked Parameters and Uncertainties for Containment*

# *High Ranked Parameters and Uncertainties for Containment (contd).*

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# *High Ranked Parameters and Uncertainties for Containment (contd).*

# ***Specific Application Process for Containment/LOCA***

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# ***AOO Application Methodology Steps***

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# *High Ranked Parameters and Uncertainties for AOOs*

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# *Specific AOO Application Process*

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# *Summary*

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- *Application Report describes the methodology to calculate key safety parameters and to quantify the uncertainties when applying the TRACG code to the ESBWR for :*
  - *ECCS/LOCA*
  - *Containment /LOCA*
  - *AOOs*
- *Results utilizing methodology presented for*
  - *ECCS/LOCA*
  - *Containment /LOCA*
- *Justification provided for extending operating plant AOO methodology to ESBWR*