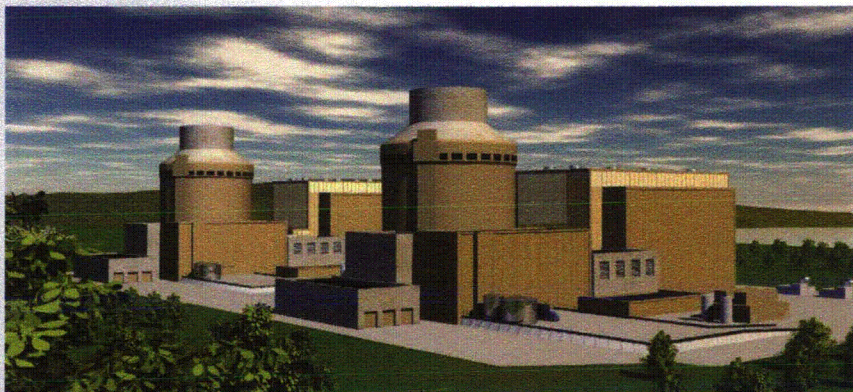
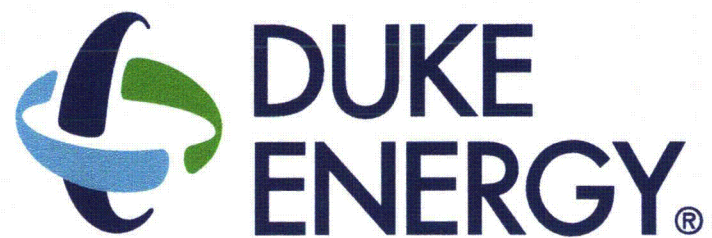


**Enclosure 4**  
**Levy Condensate Return Submittal 05-14-15 Presentation**  
**(Non-Proprietary)**  
**(10 pages including cover page)**





- *Condensate Return*

**LEVY**  
**Condensate Return Submittal**  
**05-14-15**



# Agenda

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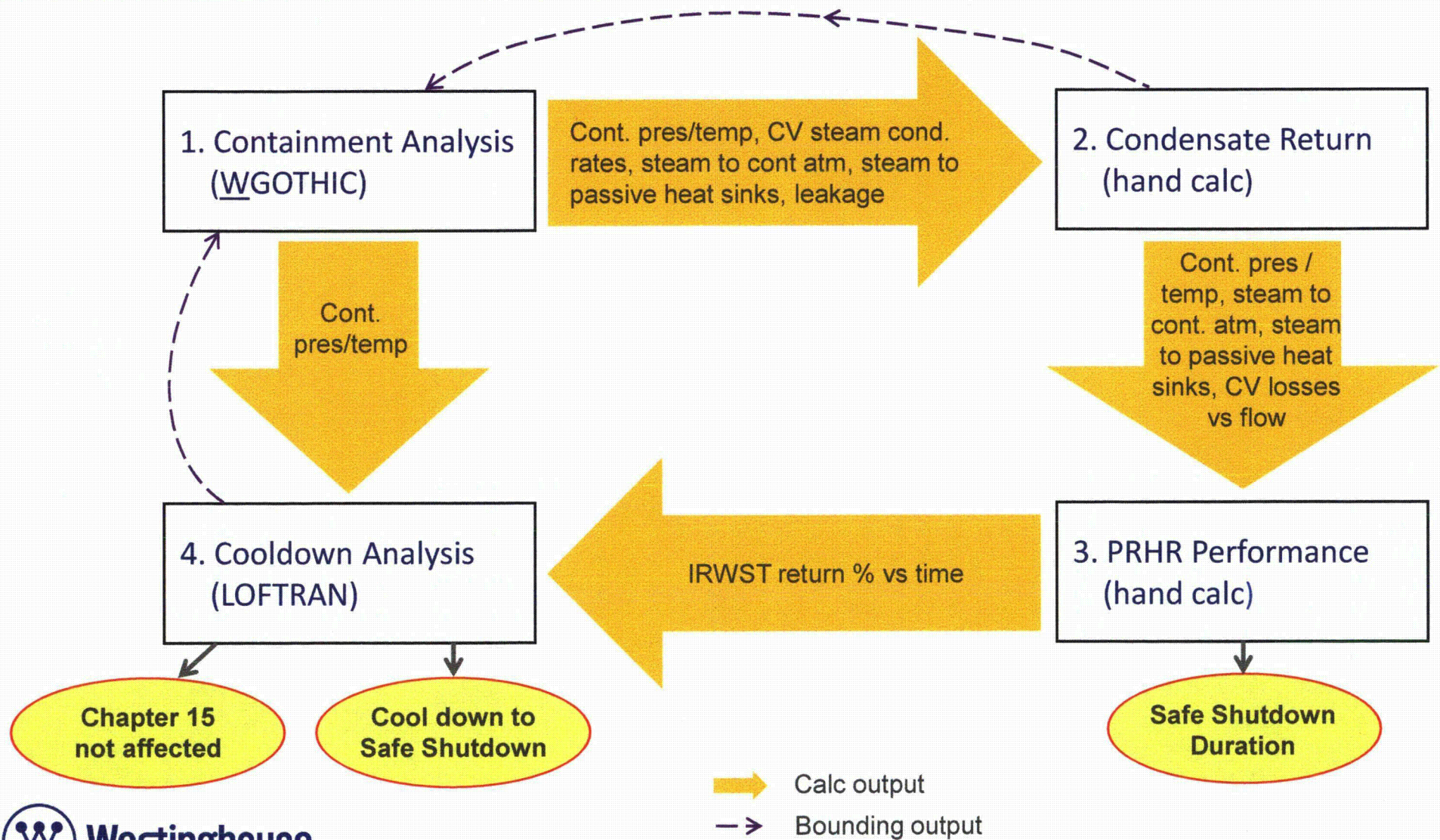
## Open Meeting

- Summary of Major Changes
- Licensing Basis Changes
- Long Term Analysis Finalization Plan

## Closed Meeting

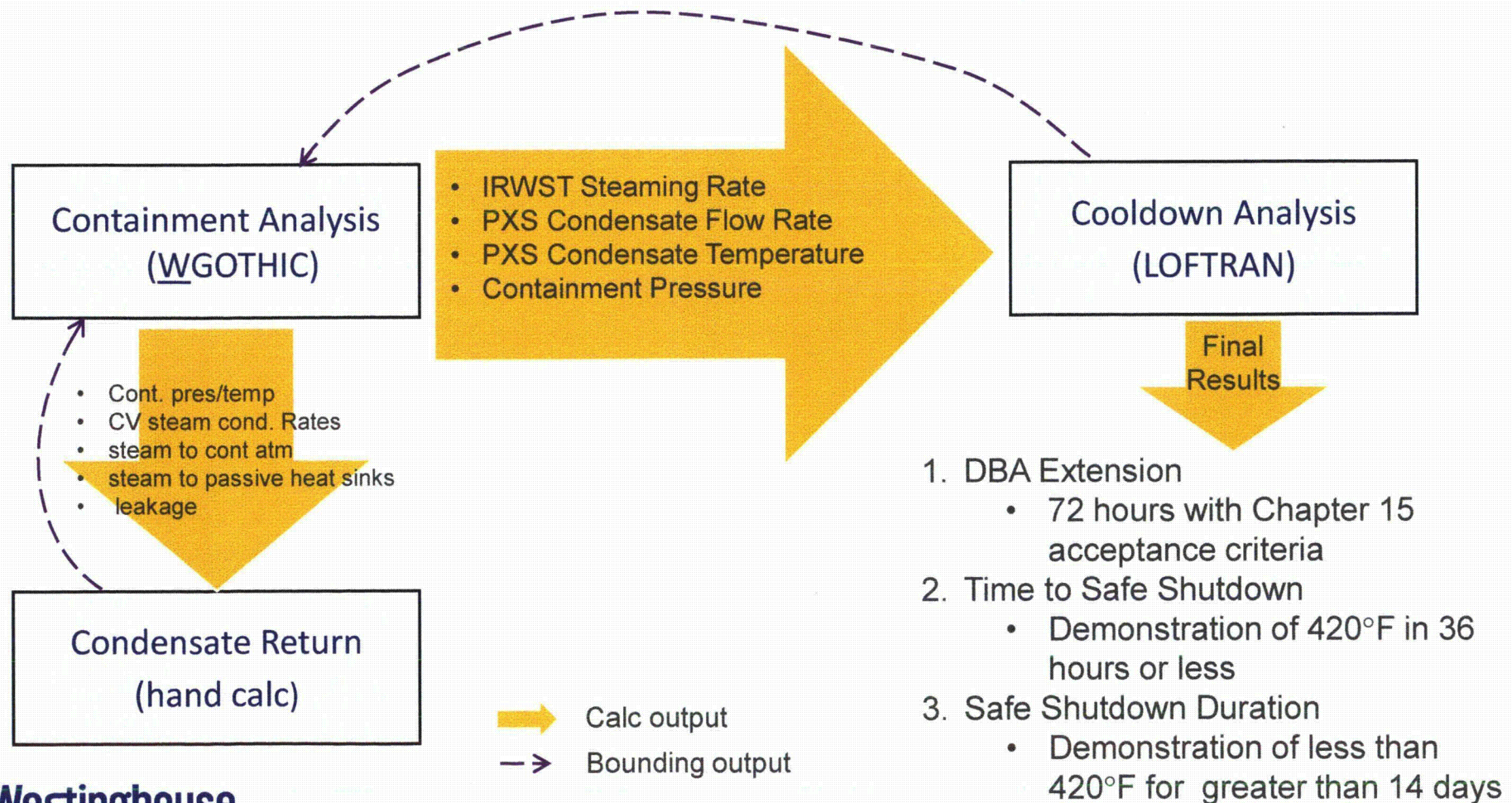
- Calculation Process
- Analysis Results
- Long Term Analysis
  - Preliminary Results

# Prior Analysis Approach





# Streamlined Analysis Approach





# Streamlined Analysis Approach – Benefits



- Reduction in exchanges between calculations
  - Limits error likely handoffs
  - Avoids the need for additional iterations
  - Limits the addition of unnecessary conservatism to bound each input
- Utilizes two analysis methodologies previously reviewed and approved by the staff
  - Benchmarked to integral system and separate effects testing
- Should improve ease of review for staff

**New approach has major benefits  
without sacrificing quality or margin**

# Status of Condensate Return Documentation

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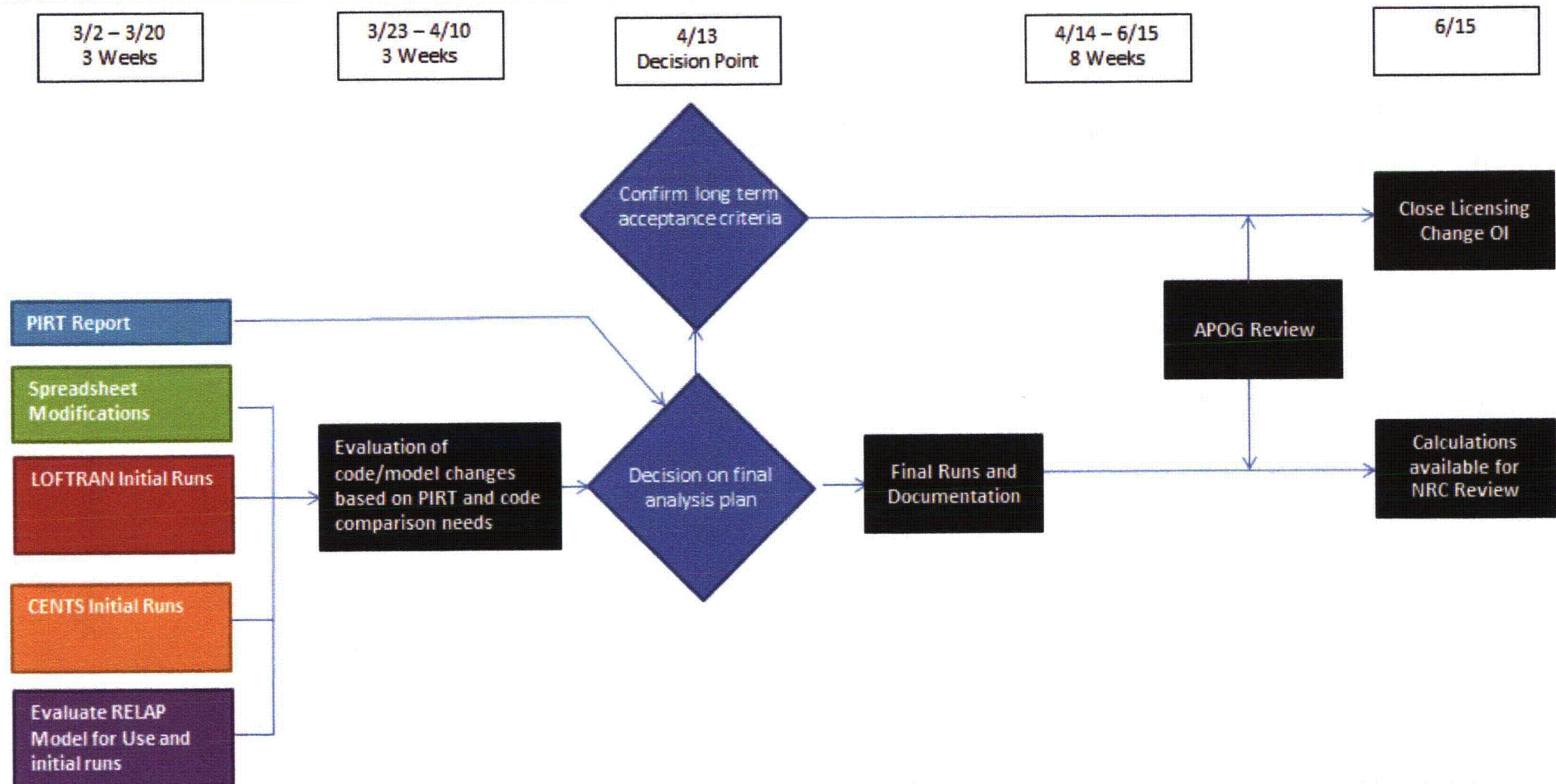
- Licensing documentation submitted
  - RAI 6.03-13 Response
    - Condensate Return Transient Return Rate Differences
  - Request for exemption
  - FSAR markups
- Calculations available for audit

# Levy COLA Changes

- FSAR Chapter 1
  - Revised departure summary
- FSAR 7.4 “Systems Required for Safe Shutdown”
  - Clarified the definition of long-term safe shutdown
    - Achieve 420F within 36 hours as shown in Chapter 19E
    - Maintain for at least 14 days based on realistic analysis that only credits safety-related equipment
    - Can maintain indefinitely using ADS and passive injection/recirculation
- FSAR 19.E4 “Shutdown Temperature Evaluation”
  - Updated text and figures to reflect results of revised calculations
- COLA Part 7 “Departures and Exemption Requests”
  - Revised Departure 3.2-1
  - Revised Exemption Request 4



# Long Term Analysis Plan



Finalization of analysis process and justification of LOFTRAN for long term use are still in progress

# Submittal timeline

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- Levy submittal to NRC – Complete
  - Open item for finalization of Safe Shutdown Duration
- Calculations for Demonstration of Safe Shutdown Duration complete – June 15<sup>th</sup>
- Levy submittal of open item closure – June 26<sup>th</sup>
  - Confirmation Activity: No changes expected to licensing change package
- NRC review of COLA change package in support of September 9 ACRS meeting