#### Seabrook Station, Unit No. 1

Alkali-Silica Reaction (ASR) License Amendment Request (LAR) and License Renewal Application (LRA)

**Public Meeting** 

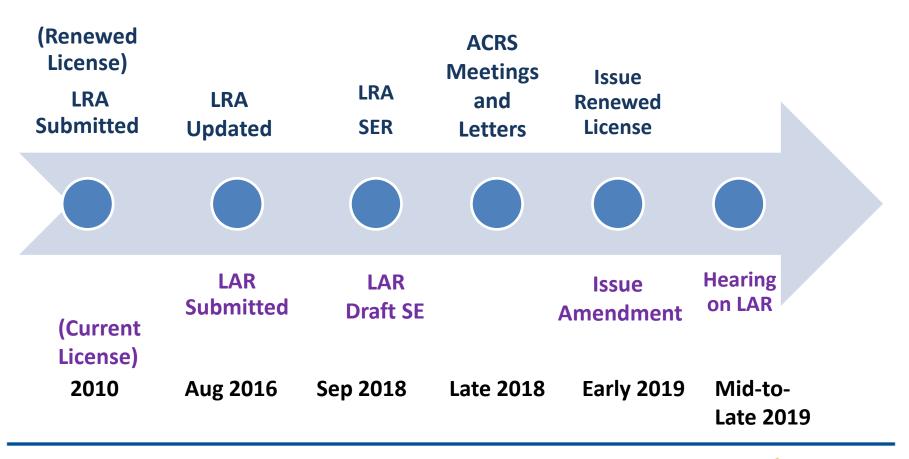
February 13, 2019



# Agenda

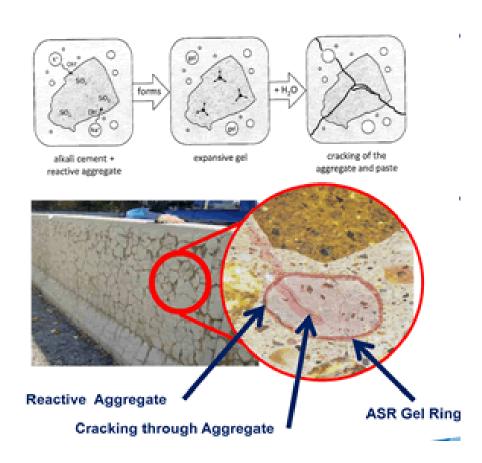
- Status of NRC Activities
- Alkali Silica Reaction
- Next Actions
- Discussion
- Closing Remarks
- Adjourn

# Licensing Timeline



#### **ASR**

- ASR is a slow expansive chemical reaction in hardened concrete, which occurs in the presence of water, between the alkaline cement and reactive silica found in some aggregates.
- The expansion can cause various material impacts
- ASR is a very slow moving phenomenon



#### ASR at Seabrook

- Indications of ASR identified in 2010
  - NRC has continued to verify safe operation at Seabrook
  - ASR progresses slowly
- Original license did not consider ASR
- LAR and LRA would address ASR for the current license and renewed license terms

### ASR License Amendment Request

- Detailed methodology for evaluating ASR-affected structures
- Based on large-scale testing program
- Monitoring ensures timely corrective action

## License Renewal Application

- Aging management programs (AMPs) identify and manage future effects of aging
- LRA supplemented to include ASR Monitoring Programs as AMPs
- ASR AMPs adequately manage the effects of aging due to ASR

### Issuance of the Licensing Actions

- Planned early 2019
- Meet the NRC's safety regulations
- NRC will adopt any required changes that result from the hearing process

#### Publicly Available Documents

- Available at <a href="https://adams.nrc.gov/wba/">https://adams.nrc.gov/wba/</a>
- ASR license amendment request
  - NRC staff draft safety evaluation: ML18226A205
  - ACRS letter: ML18348A951
- License renewal application
  - NRC staff safety evaluation report: <u>ML18362A370</u>
  - ACRS letter: <u>ML18353A954</u>
- Information on Concrete Degradation
  - https://www.nrc.gov/reactors/operating/ops-experience.html
- Seabrook License Renewal
  - https://www.nrc.gov/reactors/operating/licensing/renewal/applications.html



## Licensing Timeline

