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# Seabrook Station, Unit No. 1

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

### Public Meeting

February 13, 2019

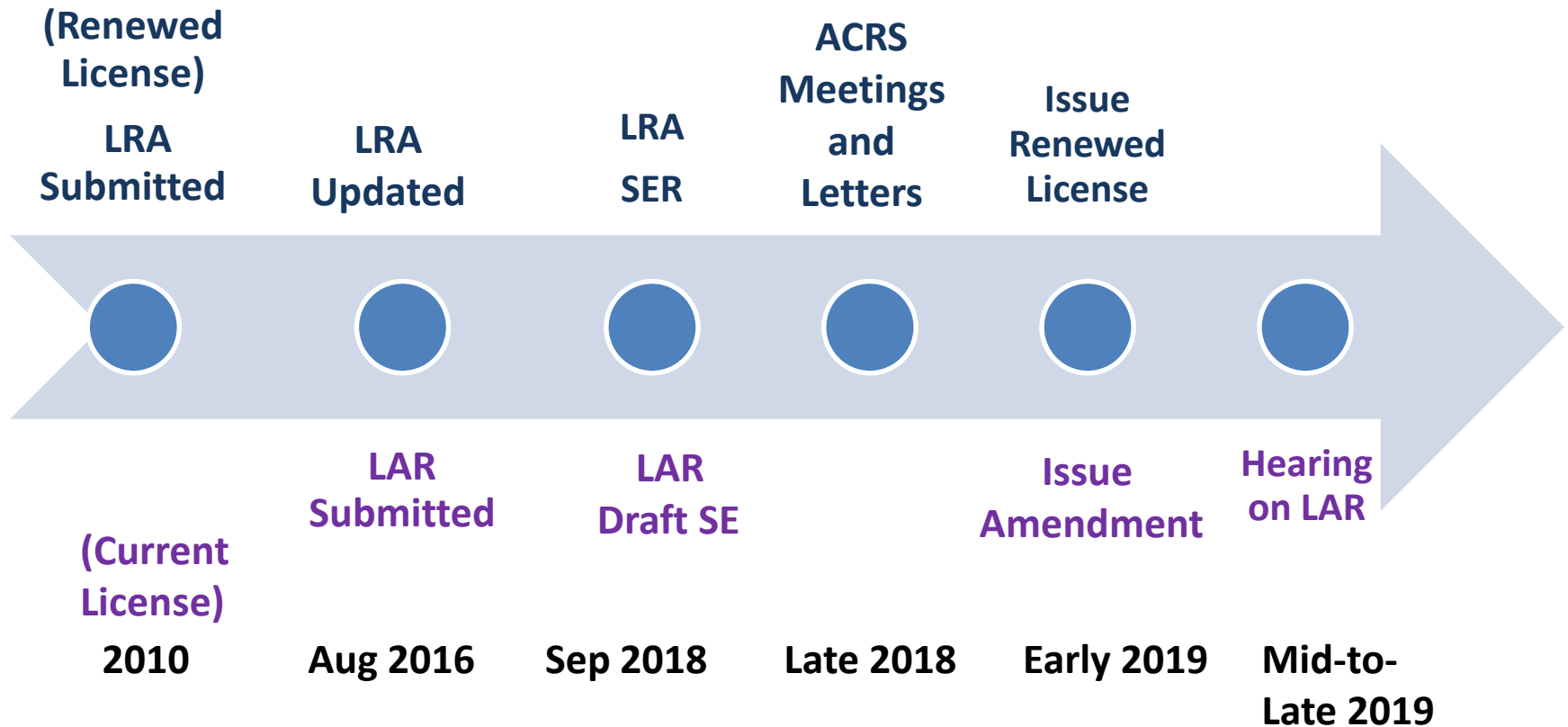
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# Agenda

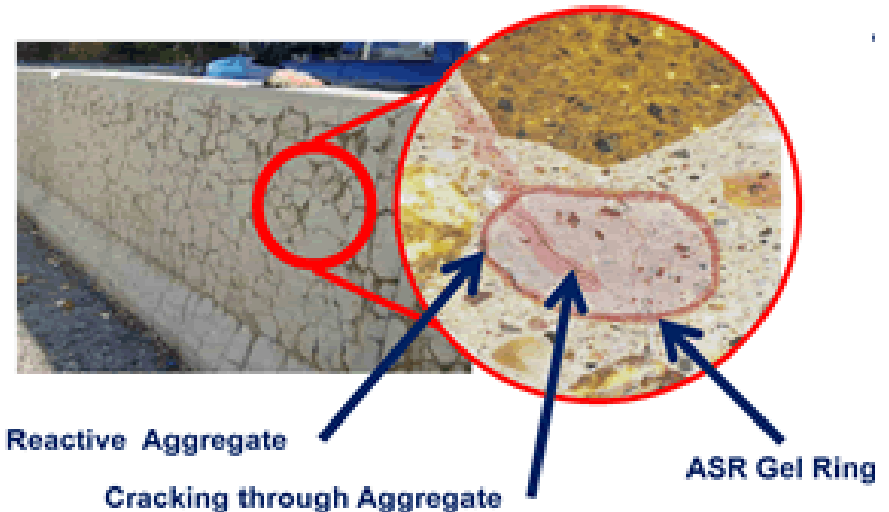
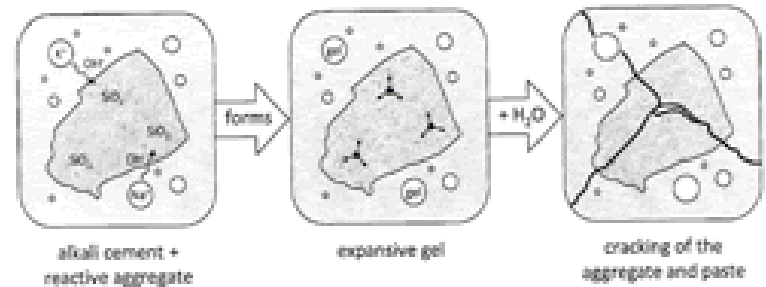
- Status of NRC Activities
- Alkali Silica Reaction
- Next Actions
- Discussion
- Closing Remarks
- Adjourn

# 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



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# 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

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# ASR License Amendment Request

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

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# 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

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# 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



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# Publicly Available Documents

- Available at <https://adams.nrc.gov/wba/>
- ASR license amendment request
  - NRC staff draft safety evaluation: [ML18226A205](#)
  - ACRS letter: [ML18348A951](#)
- License renewal application
  - NRC staff safety evaluation report: [ML18362A370](#)
  - ACRS letter: [ML18353A954](#)
- 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

