License Renewal

NRC renews Seabrook operating license

Seabrook’s renewed license, issued after nearly nine years under review, permits operation until 2050.

Seabrook, a 1,248-MWe pressurized water reactor in Seabrook, N.H., received a renewed operating license on March 12, nearly nine years after NextEra Energy submitted its license renewal application to the Nuclear Regulatory Commission in May 2010. The renewal was delayed by the discovery of concrete degradation in some plant components caused by alkali-silica reaction (ASR). A license amendment describing the methodology to be used for analyzing ASR at Seabrook was issued on March 11.

The plant is now licensed to operate until March 15, 2050. A decision on the renewal was initially expected in late January but was delayed by the NRC “in response to significant public interest.” Some of that interest came from New Hampshire and Massachusetts legislators and from the C-10 Foundation, a community group that has intervened in the proceedings. An Atomic Safety and Licensing Board hearing on Seabrook’s ASR license amendment is scheduled for this summer, and opponents of the plant’s continued operation were concerned that the operating license was renewed and the ASR license amendment issued before the hearing took place.

A public meeting to discuss the schedule for issuing the license amendment and the license renewal was held on February 13 and was attended by 15 NRC staff and about 200 members of the public. “The NRC staff acknowledged that it had not adequately communicated to stakeholders when it decided to change the schedule to issue these licensing actions before the hearing instead of after the hearing,” according to a meeting summary issued by the NRC on February 26. “The NRC staff also stated that if the result of the hearing process required changes to Seabrook’s license, then the NRC has the ability to make those changes.”

Both supporters and opponents of Seabrook’s renewed license made their opinions known, according to the NRC summary. “For those that approved, they generally provided economic and environmental benefits as their reasons for supporting issuance of these licensing actions. For those that disapproved, they generally stated that the NRC should not rush to issue these licensing actions and that the public should have their voices heard by the Atomic Safety and Licensing Board at the hearing prior to issuance.”

Concrete degradation caused by ASR was first detected at Seabrook in 2009. NextEra applied in August 2016 to amend Seabrook’s license to include appropriate analysis and management of ASR-affected components (NN, July 2018, p. 25).

On March 7, the ASLB presiding over Florida Power & Light Company’s application for a subsequent license renewal for Turkey Point-3 and -4, located near Florida City, Fla., granted hearing requests from the Southern Alliance for Clean Energy (SACE) and from joint petitioners Friends of the Earth, the Natural Resources Defense Council, and Miami Waterkeeper. A third request was denied.

SACE filed a hearing request with two multifaceted environmental contentions that were admitted in part. SACE’s first contention challenges the adequacy of the discussion in FPL’s environmental report (ER) of the impacts of continued operation of the cooling canal system (CCS) on the American crocodile and its critical seagrass habitat. As admitted, the group’s second contention claims that the ER improperly fails to consider replacing the existing CCS with mechanical draft cooling towers.
The joint petitioners filed five environmental contentions, two of which were accepted in part. “We admit Contention 1-E to the extent it claims that the ER improperly failed to consider mechanical draft cooling towers as a reasonable alternative to the CCS,” the ASLB’s order stated. “We also admit Contention 5-E to the extent it challenges the ER’s failure to recognize Turkey Point Units 3 and 4 as a source of ammonia in surrounding freshwater wetlands, as well as its failure to consider the impacts of ammonia discharges on threatened and endangered species and their critical habitat.”

In January 2018, Turkey Point became the first U.S. nuclear power plant to apply for a second 20-year license renewal. The current licenses for Turkey Point-3 and -4 expire in 2032 and 2033, respectively.

Arguments were to be heard on March 27 from a petitioner in the subsequent license renewal proceeding for Exelon Generation’s Peach Bottom-2 and -3, boiling water reactors located in Delta, Pa., rated at 1,322 and 1,324 MWe, respectively. Beyond Nuclear requested a hearing on November 19, contending that the application fails to satisfy NRC regulations for aging management programs and fails to address the environmental impacts of an additional 20 years of operation. An ASLB was established on December 18 to consider the request (NN, Jan. 2019, p. 60).