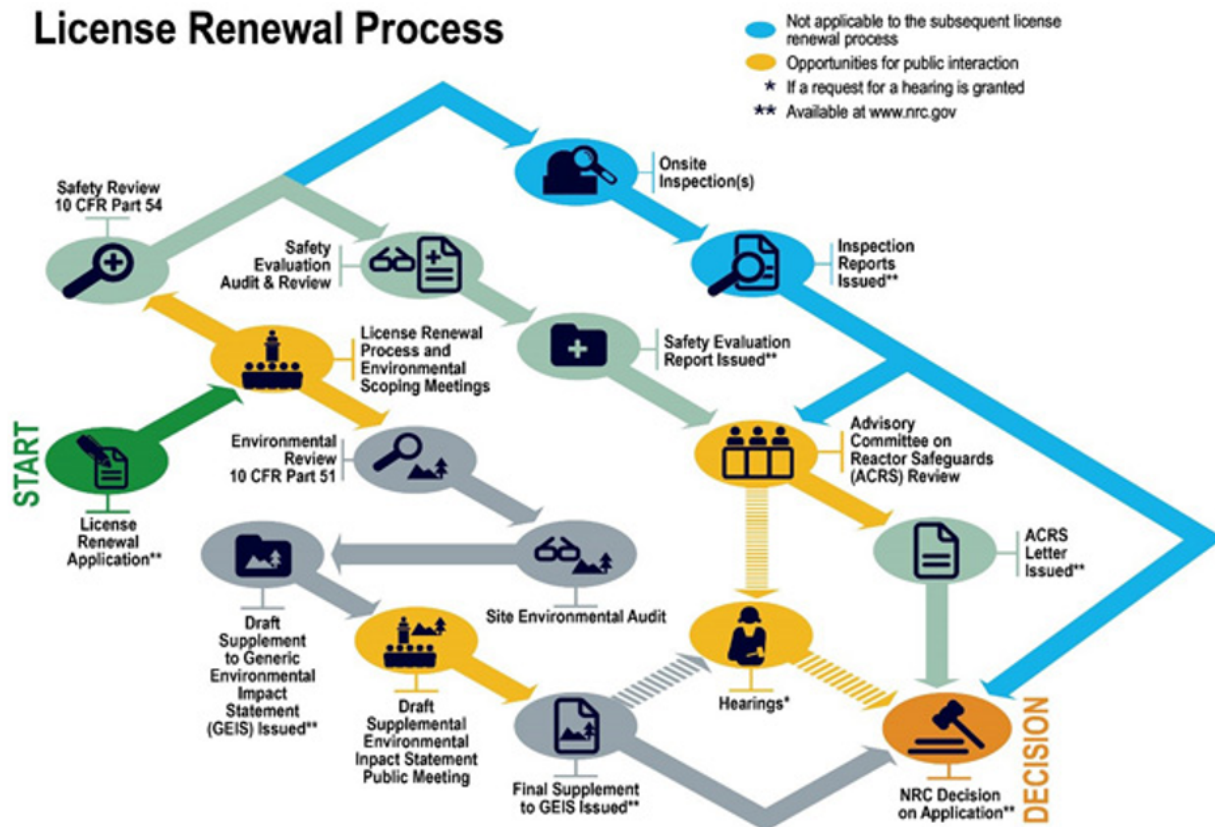


Appendix B: License Renewal Background

Under the Atomic Energy Act of 1954, as amended, and U.S. Nuclear Regulatory Commission (NRC) regulations, the NRC issues initial operating licenses for commercial power reactors for 40 years. The NRC regulations permit license renewals (LRs) that extend the initial 40-year license for up to 20 additional years per renewal. Initial LR is defined as the period of extended operation from 40 to 60 years, and first subsequent license renewal is the period of extended operation from 60 to 80 years.

The NRC LR process, as seen in figure B-1, consists of two concurrent and separate reviews: (1) a safety review and (2) an environmental review. The NRC regulations in Title 10 of the *Code of Federal Regulations* (10 CFR) Part 54, "Requirements for Renewal of Operating Licenses for Nuclear Power Plants," and 10 CFR Part 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions," set forth the requirements for the safety review and the environmental review, respectively.



Source: Agencywide Documents Access and Management System Accession No. ML050680253

Figure B-1 The LR process

Additional background on LR can be found at <https://www.nrc.gov/reactors/operating/licensing/renewal.html>.