



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

September 19, 1980

MEMORANDUM FOR: Edward S. Christenbury
Chief Hearing Counsel

FROM: Edwin J. Reis
Assistant Chief Hearing Counsel

SUBJECT: CHECK LIST FOR ISSUANCE OF FACILITY LICENSES

At the end of August, 1980, you orally requested that I prepare a list of statutory and regulatory requirements which must be met prior to the issuance of a facility license under section 103 of the Atomic Energy Act. These items vary with the type of license involved (e.g., construction permit, limited work authorization and operating license). Further compliance with some of these items should be physically recorded in the license while others need only be recorded in formal or informal documents accompanying the license (e.g., Safety Evaluation Report, Final Environmental Statement, uranium fuel-cycle health evaluation, or just checked to see that they were performed). In formulating this list I have reviewed the Atomic Energy Act of 1954, as amended, the Commission's regulations, the NRC Authorization Acts, consulted with other members of the Hearing Division of OELD, and had inquiries made of the safety and environmental staff of NRR. These requirements are classified as Required Findings, License Conditions, Conditions Imposed by Statute or Regulation, Documents Ordinarily Accompanying a license, and other requirements.

I wish to add three caveats to this listing:

1. This listing of an item does not purport to summarize the statutory or regulatory provision cited. It only indicates that the referenced section of law, regulation or policy should be further examined to assure its provisions are being met in licensing.
2. The classification, particularly the choice of items that should be listed in the license itself in contrast to their being complied with before licensing or incorporated in the license by operation of law, was influenced by the language in the statute or regulation involved and past NRC practice. Other choices could be made.
3. This list was prepared from an examination of the Atomic Energy Act, the Commission regulations (with emphasis on 10 C.F.R. Parts 50 and 51), and examination of statutes and Executive Orders dealing with conservation, within the time constraints involved and the press of other business. No attempt was made to examine the social, defense or other policies of the United States.

8009290 498

Required Findings:

- Issuance of the license will serve a useful purpose considering amount of nuclear material used (Atomic Energy Act of 1954, as amended (AEA), § 103(b)(1)), 10 C.F.R. 50.42(a)).
- The applicant is equipped and agrees to observe safety standards as the NRC may establish by rule (AEA, § 103(b)(2)).
- Applicant agrees to make such technical information and data available to NRC, which the NRC determines necessary (AEA, § 103(b)(3)).
- Issuance of license will not be inimical to common defense and security or to public health and safety (AEA § 103(d), 10 C.F.R. 50.40(c), 50.57(a)(6)).
- Activities licensed would not create or maintain condition inconsistent with anti-trust laws and that due consideration is given to advice of Attorney-General on these matters (AEA, § 105(c)(5); 10 C.F.R. 50.42(b)).
- For operating license, that construction has been substantially completed in accord with construction permit, the application, and the Act and regulations (AEA, § 185; 10 C.F.R. 50.35(c); 50.57(a)(1)).
- Assured that applicant will comply with 10 C.F.R., including Parts 20 & 50, and that public health and safety will not be endangered by issuance of license (10 C.F.R. 50.40(a)).
- Applicant is financially and technically qualified to comply with NRC regulations (10 C.F.R. 50.40(b), 50.57(a)(4), 140.11).
- Requirements of 10 C.F.R. Part 51 have been met and EIS prepared and circulated (10 C.F.R. 50.40(d); 51.5).
- That applicant and the facility meet all applicable regulatory requirements and that all required notices have been given (reasonable assurance of these matters is not enough) (10 C.F.R. 50.50).
- For construction permits, where not all technical information supplied, that each of the conditions in 10 C.F.R. 50.35 are met which include finding of reasonable assurance that safety questions will be resolved before construction completion date, and the facility can be constructed and operated at the proposed location without undue risk to public health and safety (10 C.F.R. 50.35).
- For operating license, that facility will operate in accord with law and regulations, and that activities authorized can be conducted without endangering public health and safety (10 C.F.R. 50.57(a)(2)).

- For operating licenses, that activities authorized can be conducted without endangering public health and safety, and that such activities can be conducted in compliance with regulations (10 C.F.R. 50.57(a)(3)).
- For operating licenses, that the provisions of 10 C.F.R. Part 140, on financial protection have been satisfied (10 C.F.R. 50.57(a)(5)).

Required License Conditions:

- The term of the license, which is not more than 40 years (AEA, § 103(c); 10 C.F.R. 50.51).
- The licensee immediately report any accident which could result in unplanned release of fission products in excess of allowable limits for normal operation established by the Commission (AEA, § 103(e); 10 C.F.R. 20.403, 50.72).
- Appropriate anti-trust conditions and exceptions (AEA, § 105(c)(6), (7) & (8); 10 C.F.R. 50.33a, 50.42(b); 50.54(g)).
- Licensee maintain financial protection to cover public liability claims (AEA, § 170(a) & (b)).
- Provision incorporating technical specifications including safety limits, limited safety settings, limiting control settings, limited conditions for operation, surveillance requirements, design features and administrative controls (AEA, § 182; 10 C.F.R. 50.36).
- Technical specifications including specification of the type, kind and source of special nuclear material, place of use and special characteristics of the facility and other conditions deemed necessary by the NRC be part of the license (AEA, § 182).
- No right is conferred to special nuclear material but that set out in the license (AEA, § 183(b); 10 C.F.R. 50.54(b)).
- Neither the license nor any right to deal with nuclear material may be assigned or transferred without Commission approval (AEA, § 183(c), § 184, 10 C.F.R. § 30.34(b); 50.54(c); 50.80).
- The license is subject suspension, recapture of material or control under AEA, § 108 (AEA, § 183(d), 10 C.F.R. 50.54(d); 50.101, 50.103).
- The license is subject to all provisions of Act and regulation now or hereafter in effect, and subject to revocation, modification, suspension, or amendment (AEA, § 183(d), § 187; 10 C.F.R. 50.54(e), 50.54(h); 50.100; 50.108).

- For construction permits, the earliest and latest dates of completion (AEA, § 185; 10 C.F.R. 50.33(h), 50.55(a)).
- All conditions in SER and its supplements as required by Boards.
- All conditions in FES as amended by Boards (10 C.F.R. 51.52(b)(3)).
- For construction permits, that permit is not approval of safety of design or specifications, unless applicant has requested and Commission has granted such approval (10 C.F.R. 50.35(b)).
- For construction permits, that operating authorization will not be granted until applicant issues a final safety evaluation and Commission has made requisite health and safety findings (10 C.F.R. 50.35(c)).
- For operating licenses, that appropriate provisions and limitation are included as to uncompleted work so as to protect public health and safety (10 C.F.R. 50.57(b)).
- That technical specifications conform to 10 C.F.R. 20.106 and 50.34(a) in regard to effluents (10 C.F.R. 50.36a).

Determinations To Accompany License:

- Safety Evaluation Report (10 C.F.R. 2.102).
- Reports of the Advisory Committee on Reactor Safeguards (AEA, § 183(b), 10 C.F.R. 50.58).
- Final Environmental Statement (10 C.F.R. 50.40(d)).
- Flood Plain Review (Executive Order, 1988, 3 C.F.R. pp. 117-320 (1978 ed.)).
- Discussion of Environmental Effects of the Uranium Fuel Cycle (see 44 Fed. Reg. 45362).

Other Requirements Prerequisite To Licensing:

- The licensed activities are under or within the jurisdiction of the United States (AEA, § 103(d); 10 C.F.R. 50.53).
- The licensee is not an alien, or foreign or alien owned, controlled or dominated (AEA, § 103(d); 10 C.F.R. 50.33(d), 50.38).
- Application for license and commitments predicate to licensing are on oath or affirmation and incorporated into the Staff's review (AEA, § 182(a), 10 C.F.R. 50.30(b)).

- ACRS report part of the record and publically available (AEA, § 182(b)).
- Notice has been given in writing of the application for the license to municipalities, utilities, cooperatives, and cognizant utility commissions (AEA, § 182(c); 10 C.F.R. 50.33(i), 50.43(a)).
- Publication was made in trade or news publications and Federal Register of notice of the application for license (AEA, § 182(c); 10 C.F.R. 50.33(i); 50.43(a)).
- That required hearings have been noticed, held, and requisite determinations made (AEA, § 189 and 10 C.F.R. §§ 2.104, 2.105, 50.58(b)).
- Final Safety Analysis Report has been issued showing conformity of facility to requirements of the AEA, and the NRC regulations including the General Design Criteria (10 C.F.R. Part 50, Appendix A), Quality Assurance Criteria (10 C.F.R. Part 50, Appendix B), Financial Qualification Guidelines, 10 C.F.R. Part 50, Appendix C, Emergency Plan requirements (10 C.F.R. Part 50, Appendix E), Fracture Toughness Requirements (10 C.F.R. Part 50, Appendix G), Reactor Vessel Material Surveillance Program Requirements (10 C.F.R. Part 50, Appendix H), Numerical Guides to Meet Criterion of "As Low As Reasonably Achievable" for Radio-Active Material (10 C.F.R. Part 50, Appendix I); Primary Reactor Containment Leakage Standards (10 C.F.R. Part 50, Appendix J); Emergency Core Cooling System Evaluation guides (10 C.F.R. Part 50, Appendix K); Anti-trust Review Information (10 C.F.R. Part 50, Appendix L) (10 C.F.R. 2.102, 50.10, 50.21-50.23, 50.30-50.36a, 50.40-50.46, 50.54-50.57).
- Applicant has certified updated application in accord with requirements of regulations (10 C.F.R. 50.30(c)(2)).
- Applicable fees have been paid (10 C.F.R. 50.30(e), and Part 170).
- Environmental report accompanies application (10 C.F.R. 50.30(f)).
- License condition have basis in SER.
- Licensing conditions of a continuing nature are in the Technical Specifications rather than the license itself.
- That applicant submitted a safety analysis report in accord with 10 C.F.R. 50.34 and 50.34a (including General Design Criteria) or that applicant has supplied other required information and satisfied the Commission that safety problems can be resolved before operation of the facility (10 C.F.R. 50.35(a)).
- Agreements to limit access to restricted data have been executed (10 C.F.R. 50.37).
- Combustible gas control requirements have been met (10 C.F.R. 50.44).

- Emergency core cooling system requirements have been met (10 C.F.R. 50.46).
- For limited work authorizations (LWA), that FES prepared and environmental findings made, and appropriate environmental condition incorporated in authorization (10 C.F.R. 50.10(e)).
- For construction permit, the applicant has financial qualifications, including funds or ability to obtain funds to construct (10 C.F.R. § 50.33(f)).
- For operating license, that applicant has financial qualifications, including funds or ability to get funds to operate for period of license and for decommissioning (10 C.F.R. § 50.33(f)).
- Environmental impact statement has been prepared, circulated and considered (NEPA, 42 U.S.C. 4321 et seq.; 10 C.F.R. 51.5).
- A proper required certification be obtained under § 401 of the Federal Water Pollution Control Act, 33 U.S.C. 1341, before license issuance (10 C.F.R. 51.20(c)).
- Discussed and determined in the EIS if all other required certificates have been obtained from Federal, State, regional, or local governments (10 C.F.R. § 1.20(c)).
- Discussion in EIS of compliance with all environmental quality standards and requirements of Federal, State, regional and local governmental agencies, including zoning and land use controls (10 C.F.R. 51.20(c)).
- A cost-benefit balance in the EIS (10 C.F.R. 51.20(e)).
- Consideration of effects of fuel cycle (Table S-3) in EIS (10 C.F.R. 51.20(e), 51.23(b)).
- Consideration of effects of transportation of fuel and waste (Table S-4) in EIS (10 C.F.R. 51.20(g)).
- Consideration of applicable zoning and land use limitations (10 C.F.R. 51.23(c)).
- Public notice of EIS availability given (10 C.F.R. 51.50).
- Hearing officers have made requisite health and safety and environmental findings (10 C.F.R. 50.35, 50.57, 50.58, 51.52(c)).
- Licensee has prepared and follows an approved security plan (10 C.F.R. 73.40).

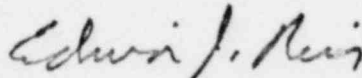
- License is accompanied by an NRC Staff analysis of "environmental dose commitments and health effects from [nuclear] fuel cycle releases, fuel-cycle socio-economic impacts and possible cumulative impacts." (Licensing and Regulatory Policy and Procedures for Environmental Protection: Uranium Fuel Cycle Impacts From Spent Fuel Reprocessing and Radioactive Waste Management, 44 Fed. Reg. 45362 (August 12, 1979)).
- Any exceptions relative to thermal discharges needed under section 316 of the Federal Water Pollution Control Act (FWPCA) have been obtained (33 U.S.C. 1336).
- Any National Pollutant Discharge Elimination System permit necessary under section 402 of FWPCA has been obtained (33 U.S.C. 1342).
- For activities licensed on land owned or controlled by the United States, that action has been taken to protect historic and scientific values (Antiquities Act of 1906, as amended, 16 U.S.C. 431-433).
- Notification was given to the Secretary of the Interior so that steps may be taken to preserve historic sites, buildings and objects of national significance and preserve historical or archeological data which might be destroyed or lost as a result of construction of a dam or of alteration of terrain caused by Federally licensed activities (Historic Sites, Buildings, and Antiquities Act of 1935, the Reservoir Salvage Act of 1960, and the Archeological and Historic Preservation Act of 1974, 16 U.S.C. 461-469c).
- Reasonable opportunity to comment was given to the Advisory Council on Historic Preservation on the effect of any licensing action on any district, site, building, structure or object listed in the National Register (National Historic Preservation Act of 1966, as amended, 16 U.S.C. 470; Executive Order 11593, 36 Fed. Reg. 800).
- Coordination was had with the appropriate Department for the conservation of fish and wildlife water impounded, diverted, deepened or modified (Fish & Wildlife Coordination Act, 16 U.S.C. 662(a)).
- Consultation with Department of the Interior to assure projects, with some exceptions, do not jeopardize any endangered species or adversely modify its habitat. (Endangered Species Act of 1973, as amended, 16 U.S.C. 1536).
- For license in Coastal Zone Management areas, certification by State agency that activity complies with State's coastal zone management program (Coastal Zone Management Act of 1972, 16 U.S.C. 1456).
- Coordination was had with Secretary of the Interior to preserve estuarine areas (16 U.S.C. 1224).

- Consultation with Department of the Interior and/or the Department of Agriculture for which a wild, scenic and prohibition on licensing which would adversely affect or recreational river was designated, or might be designated (Wild and Scenic Rivers Act, 16 U.S.C. 1278).
- Secretary of the Army approval for any structure or other work which may affect navigability or navigable capacity of any waters of the United States (Rivers & Harbors Act, 33 U.S.C. 403).
- EPA given opportunity to comment on EIS (Clean Air Act, 42 U.S.C. 7609).
- Coordination was had with EPA, where appropriate, in the adequate control of noise (Noise Control Act, 42 U.S.C. 4903(a)).
- Assure evaluation and proper consideration in EIS or elsewhere of effect of action on floodplains and wetlands (Executive Orders 11988 and 11990, 3 C.F.R., pages 117-120, 121-123 (1978 ed.)).
- Appropriate consideration was given to prime and unique farmland in the licensing process.
- Appropriate review of the safety of any proposed dams have been performed (Memorandum of the President, April 23, 1977).

Requirements Incorporated Into A License By The AEA Or NRC Regulation:

- The license does not operate to waive any condition of the anti-trust laws, and that the license may be suspended or revoked for such violation (AEA, § 105(a), 10 C.F.R. 50.54(g)).
- Only licensed operators may operate the facility (AEA, § 107, 10 C.F.R. 50.54(i)-(m)).
- Authority in time of war to suspend license, recapture material, and operate facilities (AEA, § 108, 10 C.F.R. 50.108).
- The licensee upon request shall submit statements under oath to determine violations, and if license should be suspended, modified, or revoked (AEA, § 182(a); 10 C.F.R. 50.54(f)).
- Nuclear material may not be transferred, assigned or disposed of without NRC approval (AEA § 184; 10 C.F.R. 30.41, 40.41, 70.42).
- Terms and conditions of license are subject to modification, revision and amendment (AEA, § 187; 10 C.F.R. 50.100).
- Licensee transmitting power in interstate commerce subject to FERC regulation (10 C.F.R. 50.43(c)).

- The licensee shall make no change in the facility which constitutes a change to technical specifications (10 C.F.R. 50.54(n)).
- Applicant has a safeguards contingency plan in accord with 10 C.F.R. Part 73 (10 C.F.R. 50.54(P)).
- Construction permit holders shall notify the Commission of each significant breakdown in the quality assurance program, significant deficiency in design or construction, or significant deficiency from performance specifications (10 C.F.R. 50.55(e)).
- Licensees shall comply with referenced codes and standards (10 C.F.R. 50.55a).
- Licensee shall permit NRC inspections and maintain NRC required records (10 C.F.R. 50.70(a) & (b)(3) & 50.71).
- Licensee shall provide NRC office space (10 C.F.R. 50.70(b)).
- Licensee may be required to "backfit" facility by the Commission, and to supply information regarding those matters (10 C.F.R. 50.109).



Edwin J. Reis
Assistant Chief Hearing Counsel