Nuclear Regulatory Commission § 50.120

(6) The potential safety impact of changes in plant or operational complexity, including the relationship to proposed and existing regulatory requirements;

(7) The estimated resource burden on the NRC associated with the proposed backfit and the availability of such resources;

(8) The potential impact of differences in facility type, design or age on the relevancy and practicality of the proposed backfit;

(9) Whether the proposed backfit is interim or final and, if interim, the justification for imposing the proposed backfit on an interim basis.

(d) No licensing action will be withheld during the pendency of backfit analyses required by the Commission’s rules.

(e) The Executive Director for Operations shall be responsible for implementation of this section, and all analyses required by this section shall be approved by the Executive Director for Operations or his designee.

§ 50.110 Violations.

(a) The Commission may obtain an injunction or other court order to prevent a violation of the provisions of—

(1) The Atomic Energy Act of 1954, as amended;

(2) Title II of the Energy Reorganization Act of 1974, as amended; or

(3) A regulation or order issued pursuant to those Acts.

(b) The Commission may obtain a court order for the payment of a civil penalty imposed under Section 234 of the Atomic Energy Act:

(1) For violations of—

(i) Sections 53, 57, 62, 63, 81, 82, 101, 103, 104, 107, or 109 of the Atomic Energy Act of 1954, as amended;

(ii) Section 206 of the Energy Reorganization Act;

(iii) Any rule, regulation, or order issued pursuant to the sections specified in paragraph (b)(1)(i) of this section;

(iv) Any term, condition, or limitation of any license issued under the sections specified in paragraph (b)(1)(i) of this section.

(2) For any violation for which a license may be revoked under section 186 of the Atomic Energy Act of 1954, as amended.

§ 50.111 Criminal penalties.

(a) Section 223 of the Atomic Energy Act of 1954, as amended, provides for criminal sanctions for willful violation of, attempted violation of, or conspiracy to violate, any regulation issued under sections 161b, 161i, or 161o of the Act. For purposes of section 223, all the regulations in part 50 are issued under one or more of sections 161b, 161i, or 161o, except for the sections listed in paragraph (b) of this section.

(b) The regulations in 10 CFR part 50 that are not issued under sections 161b, 161i, or 161o for the purposes of section 223 are as follows: §§ 50.1, 50.2, 50.3, 50.4, 50.8, 50.11, 50.12, 50.13, 50.20, 50.21, 50.22, 50.23, 50.30, 50.31, 50.32, 50.33, 50.34a, 50.35, 50.36b, 50.37, 50.38, 50.39, 50.40, 50.41, 50.42, 50.49, 50.45, 50.50, 50.51, 50.52, 50.53, 50.56, 50.57, 50.58, 50.81, 50.90, 50.91, 50.92, 50.100, 50.101, 50.102, 50.103, 50.109, 50.110, 50.111.

§ 50.120 Training and qualification of nuclear power plant personnel.

(a) Applicability. The requirements of this section apply to each applicant for and each holder of an operating license issued under this part and each holder of a combined license issued under part 52 of this chapter for a nuclear power plant of the type specified in § 50.21(b) or § 50.22.

(b) Requirements. (1)(i) Each nuclear power plant operating license applicant, by 18 months prior to fuel load, and each holder of an operating license shall establish, implement, and maintain a training program that meets the requirements of paragraphs (b)(2) and (b)(3) of this section.

(ii) Each holder of a combined license shall establish, implement, and maintain the training program that meets
the requirements of paragraphs (b)(2) and (b)(3) of this section, as described
in the final safety analysis report no
later than 18 months before the sched-
uled date for initial loading of fuel.
(2) The training program must be de-
erived from a systems approach to
training as defined in 10 CFR 55.4, and
must provide for the training and qual-
ification of the following categories of
nuclear power plant personnel:
(i) Non-licensed operator.
(ii) Shift supervisor.
(iii) Shift technical advisor.
(iv) Instrument and control techni-
cian.
(v) Electrical maintenance personnel.
(vi) Mechanical maintenance per-
sonnel.
(vii) Radiological protection techni-
cian.
(viii) Chemistry technician.
(ix) Engineering support personnel.
(3) The training program must incor-
porate the instructional requirements
necessary to provide qualified per-
sonnel to operate and maintain the fa-
cility in a safe manner in all modes of
operation. The training program must
be developed to be in compliance with
the facility license, including all tech-
nical specifications and applicable reg-
ulations. The training program must
be periodically evaluated and revised
as appropriate to reflect industry expe-
rience as well as changes to the facil-
ity, procedures, regulations, and qual-
ity assurance requirements. The train-
ing program must be periodically re-
viewed by licensee management for ef-
fectedness. Sufficient records must be
maintained by the licensee to maintain
program integrity and kept available
for NRC inspection to verify the ade-
quacy of the program.
[72 FR 49505, Aug. 28, 2007]

§ 50.150 Aircraft impact assessment.

(a) Assessment requirements. (1) Assess-
ment. Each applicant listed in para-
graph (a)(3) shall perform a design-spe-
cific assessment of the effects on the
facility of the impact of a large, com-
mercial aircraft. Using realistic anal-
yses, the applicant shall identify and
incorporate into the design those de-
sign features and functional capabili-
ties to show that, with reduced use of
operator actions:
(i) The reactor core remains cooled,
or the containment remains intact; and
(ii) spent fuel cooling or spent fuel
pool integrity is maintained.
(2) Aircraft impact characteristics. The
assessment must be based on the be-
yond-design-basis impact of a large,
commercial aircraft used for long dis-
tance flights in the United States, with
aviation fuel loading typically used in
such flights, and an impact speed and
angle of impact considering the ability
of both experienced and inexperienced
pilots to control large, commercial air-
craft at the low altitude representative
of a nuclear power plant’s low profile.
(3) Applicability. The requirements of
paragraphs (a)(1) and (a)(2) of this sec-
tion apply to applicants for:
(i) Construction permits for nuclear
power reactors issued under this part
after July 13, 2009;
(ii) Operating licenses for nuclear
power reactors issued under this part
for which a construction permit was
issued after July 13, 2009;
(iii)(A) Standard design certifications
issued under part 52 of this chapter
after July 13, 2009;
(B) Renewal of standard design cer-
tifications in effect on July 13, 2009
which have not been amended to com-
ply with the requirements of this sec-
tion by the time of application for re-
newal;
(iv) Standard design approvals issued
under part 52 of this chapter after July
13, 2009;
(v) Combined licenses issued under
part 52 of this chapter that:
(A) Do not reference a standard de-
sign certification, standard design ap-
proval, or manufactured reactor; or
(B) Reference a standard design cer-
tificate issued before July 13, 2009
which has not been amended to address
the requirements of this section; and
(vi) Manufacturing licenses issued
under part 52 of this chapter that:
(A) Do not reference a standard de-
sign certification or standard design
approval; or
(B) Reference a standard design cer-
tification issued before July 13, 2009

1Changes to the detailed parameters on
aircraft impact characteristics set forth in
guidance shall be approved by the Commis-