- 3. Within 30 days of the date of this Order, the licensee shall cause all licensed material in its possession to be transferred to an authorized recipient in accordance with 10 CFR 30.41.
- 4. After the conditions of Paragraph 3 are met and within 30 days of the date of this Order, the licensee shall submit a completed NRC Form 314 to the Regional Administrator, NRC Region I, at 475 Allendale Road, King of Prussia, Pennsylvania 19406–1415.

B. It is further ordered that:

1. Upon a written finding by the Regional Administrator, NRC Region I, that no licensed material remains in the licensee's possession and that other applicable provisions of 10 CFR 30.36 have been fulfilled, Byproduct Material License No. 37–20553–01 is revoked.

The Director, Office of Enforcement, may relax or rescind, in writing, any of the above provisions upon demonstration of good cause by the licensee.

V

In accordance with 10 CFR 2.202, the licensee must, and any other person adversely affected by this Order may submit an answer to this Order, and may request a hearing on this Order, within 20 days of the date of this Order. Where good cause is shown, consideration will be given to extending the time to request a hearing. A request for extension of time must be made in writing to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, and shall include a statement of good cause for the extension. The answer may consent to the Order. Unless the answer consents to this Order, the answer shall, in writing and under oath or affirmation, specifically admit or deny each allegation or charge made in this Order and set forth the matters of fact and law on which the licensee or other person adversely affected relies and reasons as to why the Order should not have been issued. Any answer or request for a hearing shall be submitted to the Secretary, U.S. Nuclear Regulatory Commission, ATTN: Chief, Rulemakings and Adjudications Staff, Washington, D.C. 20555. Copies also shall be sent to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555; to the Assistant General Counsel for Materials Litigation and Enforcement at the same address; and to the Regional Administrator, NRC Region I, 475 Allendale Road, King of Prussia, Pennsylvania 19406–1415; and to the licensee if the answer or hearing request is by a person other than the licensee. If a person other than the licensee

requests a hearing, that person shall set forth with particularity the manner in which his interest is adversely affected by this Order and shall address the criteria set forth in 10 CFR 2.714(d).

If a hearing is requested by the licensee or a person whose interest is adversely affected, the Commission will issue an Order designating the time and place of any hearing. If a hearing is held, the issue to be considered at such hearing shall be whether this Order should be sustained.

Pursuant to 10 CFR 2.202(c)(2)(i), the licensee, may, in addition to demanding a hearing, at the time the answer is filed or sooner, move the presiding officer to set aside the immediate effectiveness of the Order on the ground that the Order, including the need for immediate effectiveness, is not based on adequate evidence but on mere suspicion, unfounded allegations, or error.

In the absence of any request for hearing, or written approval of an extension of time in which to request a hearing, the provisions specified in Section IV above shall be final 20 days from the date of this Order without further order or proceedings. If an extension of time for requesting a hearing has been approved, the provisions specified in Section IV shall be final when the extension expires if a hearing request has not been received. An answer or a request for hearing shall not stay the immediate effectiveness of this order.

Dated at Rockville, Maryland this 13th day of December 1999.

For the Nuclear Regulatory Commission. Carl J. Paperiello,

Deputy Executive Director for Materials, Research and State Programs. [FR Doc. 99–33021 Filed 12–20–99; 8:45 am] BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

[Docket No. 50-458]

Entergy Operations, Inc.; Notice of Consideration of Issuance of Amendment to Facility Operating License, Proposed No Significant Hazards Consideration Determination, and Opportunity for a Hearing

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Facility Operating License No. NPF– 47 issued to Entergy Operations, Inc. (the licensee), for operation of the River Bend Station, Unit 1 (RBS) located in West Feliciana Parish, Louisiana.

The proposed amendment would add an exception to the RBS Technical Requirements Manual (TRM), Section TR 3.9.14, current prohibition for travel of loads in excess of 1200 pounds over fuel assemblies in the spent fuel storage. The exception would allow the movement of spent fuel pool watertight gates, which separate the spent fuel pool from the cask and lower transfer pools. Approval of this exception would allow the licensee to perform maintenance and repairs to the gates and watertight seals, provided the licensee complies with the defense-in-depth recommendations, or take alternative measures to compensate for deficiencies in the defense-in-depth approach, addressed in NUREG-0612, "Control of Heavy Loads at Nuclear Power Plants." Corresponding sections of the RBS Updated Safety Analysis Report (USAR) would be revised to be consistent with the exception and to state that the provisions of NUREG-0612 will be met.

The load of the gate (approximately 1600 pounds) and rigging (approximately 400 pounds) exceeds the load analyzed over spent fuel. In accordance with the guidance in Nuclear Regulatory Commission (NRC) Bulletin 96–02, "Movement of Heavy Loads over Spent Fuel, over Fuel in the Reactor Core, or over Safety-Related Equipment," issued April 11, 1996, and Title 10 of the Code of Federal Regulations, Part 50.59 (10 CFR 50.59), these changes have been determined to involve an unreviewed safety question.

Before issuance of the proposed license amendment, the Commission will have made findings required by the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations.

The Commission has made a proposed determination that the amendment request involves no significant hazards consideration. Under the Commission's regulations in 10 CFR 50.92, this means that operation of the facility in accordance with the proposed amendment would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety. As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. Involved a significant increase in the probability or consequences of an accident previously evaluated.

The River Bend Station (RBS) fuel building fuel storage facilities consist of three separate but interconnected stainless steel-lined concrete pools. The spent fuel storage pool is the largest of these pools. Adjacent to the fuel storage pool are the cask pool and the lower inclined fuel transfer (IFTS) pool. Each of these two pools is separated from the fuel storage pool by a full-height wall broken by a watertight gate. The watertight gates are normally open, but are closed to seal their respective pools during cask handling and equipment maintenance operations. It is necessary to lift the gate between the spent fuel pool and the IFTS pool for seal replacement. The total weight of the gate including the rigging equipment is 2000 pounds. This lift is considered as a heavy load lift since it is higher than the current RBS analyzed light load limit of 1200 pounds for movement of loads over the spent fuel pool. RBS TRM 3.9.14 prohibits any load in excess of 1200 pounds from travel over fuel assemblies in the storage pool.

Each of the gates is designed with a pneumatic seal that, when pressurized, seals the respective pool from the spent fuel pool, forming a watertight barrier. No provisions for moving the gates over spent fuel were included in the licensing basis for RBS heavy loads. However, the qualified life for the gate seals necessitates that they be replaced several times over the life of the plant. Therefore, approval of an exception to the current prohibition for loads over the spent fuel pool is required to allow for replacement

of the gate seals.

To perform the movement of the gate from its installed position to a position where it can be accessed for seal replacement, an engineering plan that meets the intent of NUREG-0612, "Control of Heavy Loads [at Nuclear Power Plants]," has been developed. There are numerous design features, which comply with NUREG-0612 guidelines, that will preclude the gate from dropping onto the spent fuel assemblies during the movement activity. These features include the design of the lifting devices, design of the cask and fuel bridge cranes, crane operator training, and the use of written procedures. The guidance in NUREG-0612 will be met in all respects, except that in lieu of a single[-]failure-proof crane, the scheme will employ redundant and diverse means to meet the intent of single-failure[-]proof movements.

It is proposed for the subject spent fuel pool gate lift to use one of two rigging schemes that comply with the intent of NUREG-0612 guidance. The first one will be accomplished through the use of Fuel Building bridge crane and the cask crane at the same time to provide the redundancy required to make the lift a single-failure-proof lift and satisfy NUREG-0612 single-failure proof criteria. The other rigging scheme will involve the use of lifting lugs welded to the overhead structural steel members and special lifting devices that are designed in accordance with NUREG-0612 single-failureproof criteria.

In the first rigging scheme, the fuel building bridge crane and the cask crane will be used to perform the gate lifting and movement. The intent of NUREG-0612 is that in lieu of providing a single-failure-proof crane system, the control of heavy loads guidelines can be satisfied by establishing

that the potential for a heavy load drop is extremely small. The gate lifting using the fuel building bridge crane and cask crane will conform with NUREG-0612 guidelines in that the probability of the gate drop over the spent fuel assemblies is extremely small. Both cranes have a rated capacity of fifteen (15) tons. The maximum weight of the gate and associated lifting devices is one (1) ton. Therefore, there is ample safety factor margin for lifting and movements of the subject spent fuel pool gate. Special lifting devices, which have redundancy or ultimate strength of at least 10 times the lifted load, will also be utilized during the rigging process. Even though neither the fuel building bridge crane or the cask crane is a single-failure-proof crane, rigging the spent fuel pool gate using these cranes will provide the required redundancy that meets the intent of NUREG-0612 single-failure-proof criteria.

In the second rigging scheme, the initial gate lift will be performed through the use of structural steel lugs that are permanently welded to the Fuel Building overhead structural steel girder located over the centerlines of the wall openings for the two gates that separate the spent fuel pool from the IFTS and the cask pools. For example, the IFTS lower pool gate will be moved northward toward the cask pool opening using the aforementioned structural steel lugs and lifting devices such as chains, slings, and shackles. Once the gate is through the cask pool opening, the movement path will no longer be over irradiated spent fuel. Once through the cask pool opening, the gate will be moved eastward toward the center of the cask pool. The cask crane auxiliary hook will lift the gate inside the cask pool. Finally, the gate will be placed on the Fuel Building floor elevation 113 [feet] adjacent to the cask pool for seal replacement. For the movement of the gate between the spent fuel pool and the cask pool, the distance of the movement is reduced because the gate movement would essentially entail lifting of the gate to above the hinges, rotating it, and moving it through the opening directly into the cask pool Though seal replacement on the cask pool gate is not necessary at the present time, it may be necessary in the future. As such, the proposed changes would allow movement of either of the two spent fuel pool gates for

repair or seal replacement. The proposed load lift of the fuel pool gate for replacement of the seal conforms to all of the NUREG-0612 guidelines included in Section 5.1.5(1)(a) and 5.1.6. The design of the lifting lugs and associated lifting devices (chains, slings, shackles, hoists, etc.) will conform to the guidelines of NUREG-0612, Section 5.1.6, "Single-Failure Proof Handling System." The auxiliary hook of the cask crane has a rated capacity of 15 tons. The cask crane is not a single-failure[-]proof crane. However, it meets NUREG-0612 criteria of Section 5.1.1(6) and is designed for seismic loading. As discussed above, the cask crane, alone, will handle the gate only after the gate is located inside the cask pool where drop of the gate above the spent fuel rack is no longer a concern. The cask pool area has been evaluated for an accidental drop of the spent fuel cask. There is no safety-related equipment inside the cask pool. The

maximum weight of the gate and associated lifting devices is 2000 pounds. Therefore, there is ample safety factor margin for lifting the gate with the cask crane.

The probability and consequences of a seismic event are not affected by the proposed gate lifting. The consequences of a seismic event during the gate lifting are insignificant since both cranes, the fuel building bridge crane and the cask crane, are seismically qualified for the lifted load. In addition, the design of all rigging devices conforms to NUREG-0612 guidelines, with a factor of safety of 10 ultimate strength for the weight of the load.

Consistent with the defense-in-depth approach outlined in NUREG-0612, the movement will be conducted according to load handling instructions, operator training will be conducted on the activity prior to the movement, and the equipment will be inspected and checked before the movement will be performed. NUREG-0612 gives guidance that when a particular heavy load must be brought over spent fuel, alternative measures may be used. The combination of preventative measures, as proposed, minimizes the risks inherent in hauling large loads over spent fuel to permissible levels. With these provisions and the guidance in NUREG-0612, the increase in probability of a load drop is negligible.

It is therefore concluded that the proposed gate lifting and movement does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Create the possibility of a new or different kind of accident from any accident previously evaluated.

The lifting of the fuel pool gate in the spent fuel pool as described above, minimizes the possibility of a heavy load drop onto spent fuel assemblies as not credible in accordance with NUREG-0612 single-failure-proof criteria. In addition, movement of the gate in the cask pool using the cask crane does not create the possibility of a new or different kind of accident. The cask drop accident scenario in the current RBS licensing basis, since the cask crane is not a single-failureproof crane, envelops the accidental drop of the gate in the cask pool during handling by the cask crane. That is, the analyzed weight of a cask is 125 tons versus the weight of the gate and the associated rigging of 1 ton.

It is therefore concluded that the proposed gate lifting does not create the possibility of a new or different kind of accident from any previously analyzed.

3. Involve a significant reduction in a margin of safety.

By following the guidance in NUREG-0612, the movement of the spent fuel pool gates will have no impact on the analyses of postulated design basis events for RBS. The NRC guidance provides an acceptable means of ensuring the appropriate level of safety and protection against load drop accidents. Therefore, there is no reduction in the margin of safety associated with postulated design basis events at RBS in allowing the proposed change to the RBS licensing basis. RBS will continue to meet its commitment to comply with NUREG-0612.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

The Commission is seeking public comments on this proposed determination. Any comments received within 30 days after the date of publication of this notice will be considered in making any final determination.

Normally, the Commission will not issue the amendment until the expiration of the 30-day notice period. However, should circumstances change during the notice period such that failure to act in a timely way would result, for example, in derating or shutdown of the facility, the Commission may issue the license amendment before the expiration of the 30-day notice period, provided that its final determination is that the amendment involves no significant hazards consideration. The final determination will consider all public and State comments received. Should the Commission take this action, it will publish in the **Federal Register** a notice of issuance and provide for opportunity for a hearing after issuance. The Commission expects that the need to take this action will occur very infrequently.

Written comments may be submitted by mail to the Chief, Rules and Directives Branch, Division of Administrative Services, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and should cite the publication date and page number of this Federal Register notice. Written comments may also be delivered to Room 6D59, Two White Flint North, 11545 Rockville Pike, Rockville, Maryland, from 7:30 a.m. to 4:15 p.m. Federal workdays. Copies of written comments received may be examined at the NRC Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC.

The filing of requests for hearing and petitions for leave to intervene is discussed below.

By January 28, 2000, the licensee may file a request for a hearing with respect to issuance of the amendment to the subject facility operating license and any person whose interest may be affected by this proceeding and who wishes to participate as a party in the proceeding must file a written request for a hearing and a petition for leave to intervene. Requests for a hearing and a petition for leave to intervene shall be

filed in accordance with the Commission's "Rules of Practice for Domestic Licensing Proceedings" in 10 CFR Part 2. Interested persons should consult a current copy of 10 CFR 2.714 which is available at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, and accessible electronically through the ADAMS Public Electronic Reading Room link at the NRC Web site (http://www.nrc.gov). If a request for a hearing or petition for leave to intervene is filed by the above date, the Commission or an Atomic Safety and Licensing Board, designated by the Commission or by the Chairman of the Atomic Safety and Licensing Board Panel, will rule on the request and/or petition; and the Secretary or the designated Atomic Safety and Licensing Board will issue a notice of hearing or an appropriate order.

As required by 10 CFR 2.714, a petition for leave to intervene shall set forth with particularity the interest of the petitioner in the proceeding, and how that interest may be affected by the results of the proceeding. The petition should specifically explain the reasons why intervention should be permitted with particular reference to the following factors: (1) The nature of the petitioner's right under the Act to be made party to the proceeding; (2) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (3) the possible effect of any order which may be entered in the proceeding on the petitioner's interest. The petition should also identify the specific aspect(s) of the subject matter of the proceeding as to which petitioner wishes to intervene. Any person who has filed a petition for leave to intervene or who has been admitted as a party may amend the petition without requesting leave of the Board up to 15 days prior to the first prehearing conference scheduled in the proceeding, but such an amended petition must satisfy the specificity requirements described above.

Not later than 15 days prior to the first prehearing conference scheduled in the proceeding, a petitioner shall file a supplement to the petition to intervene which must include a list of the contentions which are sought to be litigated in the matter. Each contention must consist of a specific statement of the issue of law or fact to be raised or controverted. In addition, the petitioner shall provide a brief explanation of the bases of the contention and a concise statement of the alleged facts or expert opinion which support the contention and on which the petitioner intends to rely in proving the contention at the

hearing. The petitioner must also provide references to those specific sources and documents of which the petitioner is aware and on which the petitioner intends to rely to establish those facts or expert opinion. Petitioner must provide sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. Contentions shall be limited to matters within the scope of the amendment under consideration. The contention must be one which, if proven, would entitle the petitioner to relief. A petitioner who fails to file such a supplement which satisfies these requirements with respect to at least one contention will not be permitted to participate as a party.

Those permitted to intervene become parties to the proceeding, subject to any limitations in the order granting leave to intervene, and have the opportunity to participate fully in the conduct of the hearing, including the opportunity to present evidence and cross-examine witnesses.

If a hearing is requested, the Commission will make a final determination on the issue of no significant hazards consideration. The final determination will serve to decide when the hearing is held.

If the final determination is that the amendment request involves no significant hazards consideration, the Commission may issue the amendment and make it immediately effective, notwithstanding the request for a hearing. Any hearing held would take place after issuance of the amendment.

If the final determination is that the amendment request involves a significant hazards consideration, any hearing held would take place before the issuance of any amendment.

A request for a hearing or a petition for leave to intervene must be filed with the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, Attention: Rulemakings and Adjudications Staff, or may be delivered to the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, by the above date. A copy of the petition should also be sent to the Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and to Mark Wetterhahn, Esq., Winston & Strawn, 1400 L Street, NW., Washington, DC 20005, attorney for the licensee.

Non-timely filings of petitions for leave to intervene, amended petitions, supplemental petitions and/or requests for hearing will not be entertained absent a determination by the Commission, the presiding officer or the presiding Atomic Safety and Licensing Board that the petition and/or request should be granted based upon a balancing of the factors specified in 10 CFR 2.714(a)(1)(i)–(v) and 2.714(d).

For further details with respect to this action, see the application for amendment dated December 16, 1999, which is available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, and accessible electronically through the ADAMS Public Electronic Reading Room link at the NRC web site (http://www.nrc.gov).

Dated at Rockville, Maryland, this 17th day of December 1999.

For the Nuclear Regulatory Commission.

Robert J. Fretz,

Project Manager, Section 1, Project Directorate IV & Decommissioning, Division of Licensing Project Management, Office of Nuclear Reactor Regulation.

[FR Doc. 99–33134 Filed 12–20–99; 8:45 am] BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

[Docket No. 50-400]

Carolina Power & Light Company; Shearon Harris Nuclear Power Plant, Unit 1, Environmental Assessment and Finding of No Significant Impact

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Facility Operating License No. NPF– 63, issued to Carolina Power & Light Company (CP&L, the licensee), for operation of the Shearon Harris Nuclear Power Plant, Unit 1, (HNP) located in Wake and Chatham Counties, North Carolina.

Environmental Assessment

Identification of the Proposed Action

The proposed action would support a modification to HNP to increase the spent fuel storage capacity by adding rack modules to spent fuel pools (SFPs) 'C' and 'D' and placing the pools in service. The proposed action consists of: (1) A revision to Technical Specification (TS) 5.6 to identify pressurized water reactor (PWR) burnup restrictions, boiling water reactor (BWR) enrichment limits, pool capacities, heat load limitations and nominal center-to-center distances between fuel assemblies in the racks to be installed in SFPs 'C' and 'D'; (2) an alternative plan in accordance with the requirements of 10 CFR 50.55a to demonstrate an acceptable level of

quality and safety in completion of the component cooling water (CCW) and SFPs 'C' and 'D' cooling and cleanup system piping; and (3) an unreviewed safety question for additional heat load on the CCW system.

The proposed action is in accordance with the licensee's application for amendment dated December 23, 1998, as supplemented by letters dated April 30, June 14, July 23, September 3, October 15, and October 29, 1999.

The Need for the Proposed Action

The proposed action is needed for the licensee to provide spent fuel storage capacity for all four CP&L nuclear units (Harris, Brunswick 1 and 2, and Robinson) through the end of their current licenses.

HNP was originally planned as a four nuclear unit site and the fuel handling building (FHB) was designed and constructed with four separate pools capable of storing spent fuel. HNP Units 3 and 4 were canceled in late 1981 and HNP Unit 2 was canceled in late 1983. The FHB, all four pools (including liners), and the cooling and cleanup system to support SFPs 'A' and 'B' were completed. However, construction on SFPs 'C' and 'D' was discontinued after Unit 2 was canceled and the system was not completed. HNP, Unit 1 began operation in 1987 with SFPs 'A' and 'B' in service.

As permitted by the HNP operating license issued on January 12, 1987, CP&L has implemented a spent fuel shipping program. Spent fuel from Brunswick (2 BWR units) and Robinson (1 PWR unit) is shipped to HNP for storage in the HNP SFPs. CP&L ships fuel to HNP in order to maintain full core offload capability at Brunswick and Robinson. As a result of the operation of HNP, shipping program requirements, and the unavailability of a Department of Energy (DOE) storage facility, it will be necessary to activate SFPs 'C' and 'D' and the associated cooling and cleanup system by early in the year 2000. Activation of these pools will provide spent fuel storage capacity for all four CP&L units through the end of their current operating licenses.

Environmental Impacts of the Proposed Action

The Commission has completed its evaluation of the proposed action and concludes there are no significant environmental impacts. The factors considered in this determination are discussed below.

Radioactive Waste Treatment

HNP uses waste treatment systems designed to collect and process gaseous,

liquid, and solid waste that might contain radioactive material. These radioactive waste treatment systems are discussed in the Final Environmental Statement (FES, NUREG–0972) dated October 1983, and evaluated in the Safety Evaluation Report (SER, NUREG–1083) dated November 1983. The proposal to increase the spent fuel storage capacity at HNP will not involve any change in the waste treatment systems described in the FES or SER.

Gaseous Radioactive Wastes

Gaseous releases from the fuel storage area are combined with other plant exhausts. Normally, the contribution from the fuel storage area is negligible compared to the other releases and no significant increases are expected as a result of the expanded storage capacity. Storing spent fuel in four pools (instead of the previous two pools) will result in an increase in the SFP evaporation rate. The licensee has determined that the increased evaporation will increase the relative humidity of the fuel building atmosphere by less than 10%. This increase is within the capacity of both the normal and the Engineered Safety Feature (ESF) ventilation systems. The net result of the increased heat loss and water vapor emission to the environment will be negligible.

Solid Radioactive Wastes

Spent resins are generated by the processing of SFP water through the SFP purification system. These spent resins are disposed of as solid radioactive waste. The necessity for pool filtration resin replacement is determined primarily by the requirement for water clarity, and the resin is normally expected to be changed about once a year. The licensee does not expect the resin change-out frequency of the SFP purification system to be permanently increased as a result of the expanded storage capacity. During racking operations, a small amount of additional resins may be generated by the pool cleanup system on a one-time basis.

Radiological Impact Assessment

For this modification the licensee plans to install region 2 (non-flux trap style) rack modules in pools 'C' and 'D' in incremental phases, on an as-needed basis. The licensee estimates that the collective dose associated with the proposed fuel rack installation is in the range of 2–3 person-rem.

All of the operations involved in racking will use detailed procedures prepared with full consideration of ALARA (as low as reasonably achievable) principles. The HNP racking