

CASE LAW AND ADMINISTRATIVE DECISIONS

CASE LAW

France

Judgement of the Council of State on an application for annulment of the Decree of 10 January 2003 authorising Cogema to modify a major nuclear installation (2004)

In its judgement of 28 July 2004, the Council of State (*Conseil d'État* – Supreme Administrative Court) rejected an application for annulment of the Decree of 10 January 2003 authorising Cogema to modify the major nuclear installation (*installation nucléaire de base* – INB) STE 3 located at the La Hague site. This decision provides clarifications on the content of the application presented in support of a licensing request and on the possibility of allowing for licensing of future modifications to the installation by order.

On the satisfactory nature of the environmental impact review and the risk review, the applicants (Greenpeace, *Réseau Sortir du nucléaire* and the *Comité de réflexion et d'information sur la lutte anti-nucléaire* – CRILAN) claimed in particular that the two reviews submitted by the operator in support of its application to modify the installation were insufficient.

Underlining that the “environmental impact review and its non-technical summary, presented by Cogema in support of its project to modify the major nuclear installation STE 3, includes an analysis of the initial state of the site, the characteristics of the installations and the interaction between the La Hague site and its environment”,* the Council of State considered that “even though the part of the review concerned with the proposed modifications to this major nuclear installation is quite succinct, it nevertheless contains an outline of these changes”.

The Court concluded that “under such circumstances, even if each part of the review does not contain quantitative details, the applicants are not entitled to claim that the impact review is thereby sullied with inadequacies of a substantial nature”. The same conclusions were reached in regard of the risk review, judged to be sufficient in that it “describes the measures taken in order to master the risks of nuclear and non-nuclear origin, whether external or internal, and to limit the consequences of an accident” and it “presents the risks and preventive measures on a case by case basis”.

As regards the powers conferred upon ministers to authorise future modifications, Article 4 of the litigious decree provides that each new, significantly different type of materials to be treated in the installation will, at the appropriate time, be specifically licensed by a joint order of the Ministers

* All quotations from the transcript of the Council of State are unofficial translations carried out by the translator.

responsible for the environment and industry, following the examination of a special safety application presented by the operator.

The applicant associations maintained that as modifications to a major nuclear installation should in principle be licensed by decree, these provisions illegally delegated the authority to joint orders to define the adaptation of the types of materials to be treated.

The Council of State rejected this ground, considering that the decree “determines with sufficient precision the conditions under which ministers exercising the powers conferred upon them, in order to license only (...) the modification of the types of materials to be treated in the installation”, as it “specifies the annual capacity of treatment of the major nuclear installation concerned and provides detail on the nature of the waste which could be stored and treated there” and it “defines the notion of significantly different material which should be the subject of a specific licence of the ministers”.

United States

*Ruling of the US Court of Appeals for the Federal Circuit in relation to the sale of uranium enrichment services in the United States (2005)**

An opinion of the US Court of Appeals for the Federal Circuit (case 04-1209,-1210), filed on 3 March 2005, concerned the appeal against the US Court of International Trade’s March 2003 ruling in favour of European uranium enrichment companies concerning the sale of enrichment services in the US (see *Nuclear Law Bulletin* Nos. 68 and 71).¹

In past years, the US government’s trade experts have determined repeatedly that the sale and purchase of low enriched uranium (LEU) under enrichment contracts is subject to US antidumping² and countervailing duty³ laws. In its opinion filed on 3 March 2005, the Court of Appeals disagreed

* This case note was kindly provided by Ms. Sophia Angelini, Attorney Adviser at the Office of Civilian Nuclear Programs of the US Department of Energy. The author alone is responsible for the facts mentioned and opinions expressed therein.

1. Eurodif S.A., *Compagnie Générale des Matières Nucléaires* and COGEMA, Inc., and Ad Hoc Utilities Group v. United States and USEC Inc.,
2. The sale of goods or “merchandise” is covered by the antidumping duty statute. The provision of services is *not* covered. Title 19 U.S.C. 1673 (2004) provides that antidumping duties may be imposed on imported merchandise where “a class or kind of foreign merchandise is being, or is likely to be, sold in the United States at less than fair value” and imports, sales, or likely sales of that merchandise result in injury or the threat of injury to the domestic industry, or in the material retardation of the establishment of the domestic industry. In order to determine whether merchandise is being sold or is likely to be sold in the United States at less than fair value, the DOC compares the merchandise’s normal value, or the price at which the merchandise is first sold for consumption in the exporting country, to the export price or constructed export price, which represents the price of the good when sold in or for export to the United States. “The purpose underlying the antidumping laws is to prevent foreign manufacturers from injuring domestic industries by selling their products in the United States at less than “fair value”, i.e. at prices below the prices the foreign manufacturers charge for the same products in their home markets.” *Torrington Co. v. United States*, 68 F.3d 1347, 1352 (Fed.Cir. 1995).” USEC I at 1317.
3. Title 19 U.S.C. 1677(5)(D) provides that in order to be subject to a countervailing duty or subsidy, an arm of a foreign government must make a “financial contribution” to a manufacturer that can take one of four forms: 1) the direct transfer of funds, such as grants, loans, and equity infusions, or the potential direct

while confirming the position of the Department of Commerce (DOC) that USEC Inc. constitutes the domestic enrichment industry with eligibility to request a trade investigation of imported LEU.⁴ The Court of International Trade (CIT) thoroughly detailed the relevant background in *USEC Inc. v. United States*, 281 F. Supp.2d 1334 (2003) (USEC II) and *USEC Inc. v. United States*, 259 F.Supp. 2d 1310 (2003) (USEC I).

Department of Commerce

In 2000, USEC petitioned the DOC to initiate antidumping and countervailing duty investigations focusing on imports of LEU from France and other countries.⁵ In 2001, the DOC issued final determinations concluding that: 1) SWU contracts⁶ are contracts for the sale of goods, not services, and therefore subject to US antidumping and countervailing duty statutes; and 2) that foreign enrichers, not domestic utilities, were “producers” of LEU for purposes of determining sufficient industry support to initiate investigations in the first place.

Court of International Trade

The CIT disagreed with the characterisation of enrichment contracts as being for the sale of goods and found the determination that enrichers were “producers” of LEU inconsistent with prior DOC decisions.⁷ It also determined that the DOC’s decision to not apply the tolling regulation to the SWU contracts between enrichers and utilities, as well as its industry support determination, were not in accordance with law and remanded.⁸ In its remand determination, the DOC reiterated its original positions. In USEC II, the Court concluded that: 1) the DOC’s interpretation of “producer” in the context of an industry support determination was reasonable; 2) enrichment contracts were contracts for services and not for goods; 3) payment by a foreign government entity of more than adequate remuneration to a foreign enricher for enrichment services qualified as a countervailable subsidy; and that 4) the DOC’s interpretation of the word “producer” for purposes of making an export price determination was inconsistent with its previous determinations and not in accordance with law.⁹ The Court certified four specific questions to the Court of Appeals.

transfer of funds or liabilities, such as loan guarantees; 2) foregoing or not collecting revenue that is otherwise due, such as granting tax credits or deductions from taxable income; 3) providing goods or services, other than general infrastructure, or; 4) purchasing goods. A public entity can provide a subsidy if it provides goods or services to a manufacturer for less than adequate remuneration or if it buys goods from the manufacturer for more than adequate remuneration. 19 U.S.C. 1677(5)(E). The statute does not contemplate the purchase of services for more than adequate remuneration to be a subsidy. See Eurodif, *supra*.

4. USEC, *USEC Responds to Trade Ruling by U.S. Court of Appeals for the Federal Circuit*, News Release, 4 March 2005.
5. Many utilities in the United States contract to have uranium enriched by an enricher. Only one entity in the United States, USEC, enriches uranium into LEU. A variety of foreign enrichers, including Eurodif, CGMN and COGEMA compete with USEC and also enrich the uranium of U.S. utilities. See Eurodif, *supra*.
6. SWU contracts = Separative Work Units Contracts. See note 13 *infra*.
7. USEC I, at 1324-26.
8. USEC I, at 1331.
9. USEC II, at 1334.

Issues on Appeal

I) Whether the DOC's decision to not apply its tolling regulation¹⁰ to determine whether US utilities should be considered "producers" of LEU for purposes of determining sufficient "domestic industry support" to proceed with an investigation was in accordance with law.¹¹ (The DOC determined that foreign enrichers and not domestic utilities were "producers" of LEU for purposes of determining domestic industry support.)

The Court of Appeals agreed with the Court of International Trade that sustained the DOC's interpretation of the term "producer" for purposes of an industry support determination and it affirmed the DOC's refusal to apply the tolling regulation to encompass US utilities within the definition of "producer". It also upheld the DOC's finding that USEC is the sole member of the domestic industry for purposes of satisfying the industry support requirement.¹² It reasoned that:

"Congress intended the industry support statute "to provide an opportunity for relief for an adversely affected industry and to prohibit petitions filed by persons with no stake in the result of the investigation. S. Rep. No. 249, 96th Cong., 1st Sess. 47 (1979). This view was echoed by the Court of International Trade when it noted that "[t]he language in the legislative history is broad and unqualified. It contrasts industries suffering adverse effect with those having no stake: the former have standing, the latter do not." ... Commerce interpreted having a "stake" as requiring that a company "perform some important or substantial manufacturing operation."... There is no basis to conclude that Commerce's interpretation in this context is unreasonable or not in accordance with law."

II) Whether the DOC's decision that enrichment of uranium feedstock pursuant to SWU contracts constitutes a sale of goods instead of services was supported by substantial evidence and in accordance

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10. In determining who is the producer or exporter of subject merchandise, one factor that the DOC considers is whether the merchandise is manufactured under a "tolling" or subcontracting arrangement. The tolling regulation at 19 C.F.R. 351.401(h) states that the DOC "will not consider a toller or subcontractor to be a manufacturer or producer where the toller or subcontractor does not acquire ownership, and does not control the relevant sale, of the subject merchandise or foreign like products. In this matter, the DOC determined that the enrichers were the producers for which it offered three reasons: 1) "the enrichment process is such a significant operation that it establishes the fundamental character of LEU."; 2) "the enrichers control the production process to such an extent that they cannot be considered tollers in the traditional sense under the regulation."; and 3) "utility companies do not maintain production facilities for the purpose of manufacturing subject merchandise." The DOC concluded that "the overall arrangement, even under the SWU contracts, is an arrangement for the purchase and sale of LEU." LEU from France, 66 *Fed. Reg.* at 65,884. See USEC I at 1322-23.
 11. Before an antidumping and countervailing duty investigation can be initiated, a petition must meet certain industry support requirements. The general rule is that a petition is considered to be filed on behalf of an industry if: (1) the domestic producers or workers who support the petition account for at least 25% of the total production of the domestic like product, and (2) the domestic producers or workers who support the petition account for more than 50% of the production of the domestic like product produced by that portion of the industry expressing support for or opposition to the petition. "Determination of industry support" 19 U.S.C. 1673a(c)(4)(A).
 12. USEC II, at 1346.

with law.¹³ (The DOC determined that SWU contracts as well as EUP contracts are contracts for the sale of goods.)

The Court of Appeals affirmed the Court of International Trade's decision that SWU contracts constituted contracts for services and not for goods.¹⁴ It reasoned that:

“In reviewing the contracts in this case, it is clear that ownership of either the unenriched uranium or the LEU is not meant to be vested in the enricher during the relevant time periods that the uranium is being enriched. While it is correct that a utility may not receive the LEU that was enriched from the exact unenriched uranium that it delivered to the enricher, it is nevertheless true that up until the sampling and weighing of the LEU before delivery, the utility retains title to the quantity of unenriched uranium that is supplied to the enricher. The utility's title to that uranium is only extinguished upon the receipt of title in the LEU for which it contracted. Therefore, the SWU contracts in this case do not evidence any intention by the parties to vest the enrichers with ownership rights in the delivered unenriched uranium or the finished LEU. As a result, the “transfer of ownership” required for a sale under NSK¹⁵ is *not* present here.” (emphasis added)”

III) Whether the DOC's decision that payment of more than adequate remuneration for enrichment services by partially public foreign entities to foreign enrichers constitutes a countervailable subsidy is in accordance with law.¹⁶ (The DOC determined that the transaction between EDF and Eurodif was a sale of goods to a government entity for more than adequate remuneration and, therefore, subject to the countervailing duty statute.)

The Court of Appeals reversed the finding that EdF's SWU contract with Eurodif rendered Eurodif's LEU subject to the countervailing subsidy statute. (The Court of International Trade found

13. As explained in USEC I at 1314, utilities employ two types of contracts are employed for procuring LEU from uranium enrichers. One is a contract for enriched uranium product (“EUP” contract”) in which the utility simply purchases LEU from the enricher. In an EUP contract, the price paid for the LEU covers all elements of the LEU's value, including the feed uranium and the effort expended to enrich it. The second type of contract provides for the purchase of “separative work units” or “SWU” which are measurements of the amount of energy or effort required to separate a given quantity of feed uranium into LEU. Under a SWU contract, a utility purchases separative work units and delivers a quantity of feed uranium to the enricher. See *LEU from France*, 66 Fed. Reg. at 65,878, 65,884-85. Because feed uranium is fungible, the specific feed uranium provided by a utility need not be used to produce LEU for that utility. Rather, enrichers maintain inventories of feed uranium not segregated according to source or ownership. Any uranium held by the enricher may be used to produce LEU for any customer. In USEC I, all parties agreed that sales of EUP constituted sales of merchandise subject to the antidumping and countervailing duty laws.

14. USEC II, at 1339. In support of its finding the Court of Appeals repeatedly cited its decision in *Fla. Power & Light Co. v. United States*, 307 F.3d 1364 (Fed. Cir. 2002).

15. *NSK Ltd. v. United States*, 115 F.3d 965 (Fed. Cir. 1997).

16. 19 U.S.C. 1671 provides that the DOC may impose countervailing duties where it determines that a government or public entity within a country is providing a countervailable subsidy “with respect to the manufacture, production, or export of a class or kind of merchandise imported, or sold (or likely to be sold) for importation, into the United States,” and imports of that merchandise injure or threaten to injure a domestic industry. The DOC concluded that countervailing duty provisions are applicable to both EUP purchase contracts and SWU enrichment contracts. USEC II, at 1346.

reasonable the interpretation by the DOC that countervailing duty provisions were applicable to imports of LEU under both EUP and SWU contracts.¹⁷⁾ It reasoned that:

“Section 1677(5) is clear as to what constitutes a subsidy – and the purchase of a service by a foreign public entity, however related to the manufacture of a good, is not contemplated in the statute as being a subsidy. While the provision of services by a government entity to another entity for less than adequate compensation may be considered a subsidy, the plain language of 1677(5) does not allow for the purchase of services by a government entity from another entity to be considered a subsidy. Thus, to the extent that the government argues that Commerce is owed deference under *Chevron USA., Inc. v. Natural Res. Def. Council, Inc.*, 467 US 837, 842-43 (1984), we reject that argument because we find that the plain meaning of the statute is unambiguous. Furthermore, 1677(5) clearly shows that Congress was aware of the distinction between contracts for services and contracts for goods... While the Court of International Trade, the government and USEC are correct that the purpose of the subsidy statute is to defeat unfair competitive advantage, that purpose cannot exceed the metes and bounds of the subsidy statute as established by its text.”

IV) The DOC’s decision to apply a definition of “producer” in the context of export price determination different from the definition it used in the industry support determination is reasonable and in accordance with law. (The DOC determined that foreign enrichers were “producers” of LEU for purposes of determining LEU export price.)

The Court of Appeals declined to reach the issue of whether the DOC properly employed its tolling regulation in its determination of export price.

Summary

The Court of Appeals: 1) sustained the DOC’s determination that USEC’s petition had sufficient industry support to trigger antidumping and countervailing subsidy investigations; 2) affirmed that SWU contracts in this case constituted contracts for services and not for goods and that LEU produced as a result of those contracts is not subject to the antidumping statute at 19 USC. 1673; 3) reversed the Court of International Trade’s decision regarding subsidies, reversed its holding that EDF’s SWU contract with Eurodif made the LEU produced by Eurodif subject to the countervailing subsidy statute and found that overpayment for enrichment services by foreign government entities cannot constitute a countervailable subsidy; and 4) declined to review the decision regarding Commerce’s application of the tolling regulation in the context of export price determination.

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17. USEC II at 1347-50.

Decision of the US Court of Appeals for the District of Columbia Circuit concerning the Yucca Mountain repository (2004)

This decision¹⁸ involved challenges by the Nuclear Energy Institute (NEI), State of Nevada, and environmental groups to aspects of the statutory and regulatory regimes of the Environmental Protection Agency (EPA), Nuclear Regulatory Commission (NRC) and Department of Energy (DOE) governing the Yucca Mountain repository programme under the Nuclear Waste Policy Act (NWPA).¹⁹ The Court vacated the 10 000-year compliance period of the EPA rule as inconsistent with section 801(a) of the Energy Policy Act,²⁰ along with corresponding parts of the NRC and DOE rules and remanded to the EPA.

Issues on Appeal

The challenges involved:

- EPA's Part 197's 10 000-year compliance period as conflicting with the Energy Policy Act and insufficiently protective of public health and safety;
- Boundaries and size of EPA's "controlled area" as in violation of the Safe Drinking Water Act;
- EPA's definition of the term "disposal";
- NRC licensing criteria as arbitrary, capricious and contrary to law;
- Constitutionality of Congress' approval of Nevada as the nation's repository;
- DOE's Part 963 site-suitability criteria alleging that DOE's reliance on engineered rather than geologic barriers to contain radiation is unlawful;
- Site recommendations of Yucca Mountain by the Secretary of Energy and the President to Congress;
- DOE's Final Environmental Impact Statement;
- EPA's "controlled area" boundaries;
- EPA's definition of "disposal" under Part 197.

The NEI challenged the EPA's decision to add a separate ground-water standard to part 197.

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18. Nuclear Energy Institute Inc. v. Environmental Protection Agency, 373 F.3d 1251, US Court of Appeals for the District of Columbia Circuit (2004).
 19. Regulations of the EPA "Public Health and Environmental Radiation Protection Standards for Yucca Mountain" at 40 C.F.R. Part 197; 2) NRC "Disposal of High-Level Radioactive Wastes in a Geologic Repository at Yucca Mountain, Nevada at 10 C.F.R. Part 63; and 3) DOE "Yucca Mountain Site Suitability Guidelines" at 10 C.F.R. Part 963.
 20. Energy Policy Act of 1992, Title XIII *High-Level Radioactive Waste*, Pub. L. No.102-486, 42 U.S.C. 10101 note.

Decision

The Court rendered its decision on 9 July 2004 dismissing all challenges to actions of the secretary and president as well as challenges to the constitutionality of Congress' Resolution under the Nuclear Waste Policy Act²¹ approving the Yucca Mountain for a repository. It also rejected all challenges to the EPA and NRC rules *except* for the EPA 10 000-year "individual-protection standard" for radiation exposure at 40 C.F.R. Part 197.

The Court found that: 1) EPA's 10 000-year compliance period violated Section 801 of the Energy Policy Act because it was not "based upon and consistent with" the findings and recommendations of the National Academy of Sciences (NAS), as required by the act. The NAS had recommended that compliance with the standard be measured at the time of "peak risk" which it estimated could occur tens to hundreds of thousands of years after disposal and had expressly rejected a 10 000-year standard.²²

The Court dismissed other challenges to EPA's regulations and NRC's licensing requirements *except* to the extent that they incorporated the EPA 10 000-year compliance period. Consequently, EPA and NRC regulations were vacated *insofar* as they included the 10 000-year compliance period and remanded for EPA to *either* promulgate a new rule (a potentially lengthy process) consistent with Energy Policy Act and NAS recommendations, or return to Congress for legislative authority to deviate from the NAS report.²³

Background

As originally enacted, the NWPA charged DOE with selecting, designing and operating a repository. It required that the EPA establish *generally* applicable standards for protecting the environment from releases of radioactive materials, and directed the NRC to assume responsibility for licensing the repository. Therefore, the DOE issued *general* site-selection guidelines under the act in 1984 that it used to determine three sites, Deaf County, Texas, Hanford, Washington and Yucca Mountain, Nevada to recommend to the president for intensive investigation. The president approved each site for characterisation. In 1985, the EPA promulgated 40 C.F.R. Part 191 general health and safety standards to govern an eventual repository.²⁴ The NRC issued generic licensing standards at 10 C.F.R. Part 60. In 1987, because characterising three separate sites was costly and time-consuming, Congress amended the act to focus exclusively on Yucca Mountain, Nevada.

In 1992 through the Energy Policy Act, Congress directed DOE's sister agencies, the EPA and the NRC, to focus their regulatory attention on Yucca Mountain as well. It required that the EPA promulgate, *based on the recommendations of the NAS*, site-specific standards for Yucca Mountain, and ordered the NRC to thereafter modify its generic technical requirements and criteria to conform

21. NWPA, 42 U.S.C. 10101 et seq.

22. In its 1995 report *Technical Bases for Yucca Mountain Standards*, the NAS explained that humans may not face peak radiation risks until tens to hundreds of thousands of years after disposal, "or even farther into the future". *Id.* at 2.

23. The Court concluded that "It was Congress that required EPA to rely on NAS's expert scientific judgment and given the serious risks nuclear waste disposal poses for the health and welfare of the American people, it is up to Congress – not EPA and not this court – to authorise departures from the prevailing statutory scheme."

24. EPA revised these standards in response to *NRDC v. United States EPA*, 824 F.2d 1258 (1st Cir. 1987).

with the EPA's Yucca-specific rule.²⁵ Accordingly in 2001, the EPA issued 10 C.F.R. Part 197 establishing health and safety standards that require the DOE to limit radiation releases from the repository for 10 000 years. Shortly thereafter, the NRC issued Yucca-specific licensing standards at 10 C.F.R. Part 63 and the DOE issued new site-suitability criteria specific to Yucca Mountain. Pursuant to these criteria and the NWPA, the Secretary found Yucca Mountain suitable and recommended it to the president who later recommended the site to Congress which approved development of a repository at Yucca Mountain over Nevada's formal objection.

Legal Framework

The Energy Policy Act provided:

“[T]he [EPA] Administrator shall, based upon and consistent with the findings and recommendations of the National Academy of Sciences, promulgate, by rule, public health and safety standards for protection of the public from releases from radioactive materials stored or disposed of in the repository at the Yucca Mountain site. Such standards shall prescribe the maximum annual effective dose equivalent to individual members of the public from releases to the accessible environment from radioactive materials stored or disposed of in the repository. The standards... shall be the only such standards applicable to the Yucca Mountain site.”

The EPA promulgated 40 C.F.R. Part 197 establishing a trio of health and safety standards to govern DOE's nuclear waste disposal activities at Yucca Mountain. Together, these standards were designed to protect both individuals living near the disposal site and ground-water supplies from excessive radiation contamination:

1. the “individual-protection standard” whereby, prior to receiving an NRC licence, the DOE must show that the undisturbed Yucca Mountain disposal system will sufficiently contain radiation to protect a hypothetical person living adjacent to the site from excessive (no more than an annual committed effective dose of 15 millirem) exposure to radiation releases for 10 000 years. DOE's analysis must include all potential pathways of radionuclide transport and exposure.²⁶ The hypothetical person or “reasonably maximally exposed individual”(RMEI) would live in the “accessible environment” (outside the “controlled area”, no more than 300 square kilometres around the repository), have a diet and living style representative of the Town of Amargosa, Nevada and drink 2 litres of water a day from certain area wells.²⁷
2. the “human-intrusion standard” whereby DOE must show, *inter alia*, a reasonable expectation that the RMEI will receive no more than a specified dose of radiation even if humans drill, intentionally or otherwise, into a waste package during the 10 000-year period immediately following disposal.²⁸

25. Congress exempted Yucca Mountain from EPA's generally applicable environmental regulations at 40 C.F.R. Part 191. Waste Isolation Pilot Plant Land Withdrawal Act, section 6(a)(2)(B), Pub. L. 102-578 (1992).

26. 40 C.F.R. Part 197.20 “Individual Protection Standard.”

27. 40 C.F.R. Part 197.21 “Who is the reasonably maximally exposed individual?”.

28. 40 C.F.R. Part 197.25 “Human-Intrusion Standard”.

3. the “ground-water protection standard” whereby DOE must show, *inter alia*, that the Yucca Mountain disposal system will contain radiation sufficiently for 10 000 years to protect ground water outside the controlled area from excessive contamination.²⁹

For a disposal licence at Yucca Mountain, DOE was required to demonstrate a “reasonable expectation” (defined at 40 C.F.R Part 197.14) of compliance with each of the three protection standards.³⁰

To account for changing conditions during the 10 000 years following disposal, EPA required that DOE “vary factors related to geology, hydrology, and climate based upon cautious, but reasonable assumptions. In contrast, DOE was directed to not project changes in society, the biosphere (other than climate), human biology, or increases or decreases of human knowledge or technology, and to assume those factors as remaining constant – as they were at the time of licence submittal.³¹ As to the period beyond the first 10 000 years, the rule directed DOE to calculate the maximum radiation exposures that the RMEI will incur and include the results in its environmental impact statement as an indicator of long-term disposal system performance. However, no regulatory standard applied to the result of this part of the analysis.³²

10 000 Year Compliance Period

National Academy of Sciences Report

Section 801(a) of the Energy Policy Act required EPA to promulgate public health and safety standards for Yucca Mountain “based upon and consistent with the findings and recommendations of the National Academy of Sciences.” The NAS produced in 1995 a report entitled “Technical Bases for Yucca Mountain Standards” in which it found “no scientific basis for limiting the time period of the individual-risk standard to 10 000 years or any other value.”³³ According to NAS, “compliance assessment is feasible for most physical and geologic aspects of repository performance on the time scale of the long-term stability of the fundamental geologic regime – a time scale that is on the order of *one million years* at Yucca Mountain.”³⁴ NAS also explained that humans may not face peak radiation risks until tens to hundreds of thousands of years after disposal, “or even farther into the future.”³⁵ NAS “recommended that compliance assessment be conducted for the time when the greatest risk occurs, within the limits imposed by the long-term stability of the geologic environment.”³⁶ That said, NAS explained that “although the selection of a time period of applicability

29. 40 C.F.R. Part 197.30 “Ground-Water Protection Standard”.

30. 40 C.F.R. Part 197.13 “How is subpart B implemented?”.

31. 40 C.F.R. Part 197.15 “How must DOE take into account the changes that will occur during the next 10 000 years after disposal”.

32. 40 C.F.R. Part 197.35 “What other projections must DOE make?”.

33. *Id.* at 55.

34. *Id.* at 6.

35. *Id.* at 2.

36. *Id.* at 6.

has scientific elements, it also has policy aspects that we have not addressed,” such as the goal of establishing consistent policies for managing various kinds of long-lived hazardous materials.³⁷

Decision

While EPA expressly acknowledged NAS recommendation that the compliance period cover the time when the greatest risk of radiation exposure occurs and that NAS had found it scientifically possible to predict repository performance for approximately one million years, the EPA nevertheless concluded that such an approach was not practical for regulatory decisionmaking. The Court rejected EPA’s considerations – based on policy and technical factors that NAS did not fully address as well the experience of other EPA and international programmes that indeed use the 10 000-year standard – which led the EPA to cut off the dose-limit evaluation at 10 000 years. The Court found that while the words “based upon and consistent with” in Section 801 of the Energy Policy Act did not require EPA to “walk in lock-step”, it was unreasonable for EPA to act *inconsistently* with NAS findings and recommendations. The Court found that EPA’s 10 000-year compliance period deviated dramatically from NAS’s findings that unequivocally recommended a standard pegged to the time when radiation doses reach their peak:

“[t]he period over which this level of protection should be assessed should extend over the period of duration of hazard potential of the repository, that is, until the time at which the highest critical group risk is calculated to occur, within the limits imposed by the long-term stability of the geologic environment at Yucca Mountain, which is on the order of [one million] years”.³⁸

Conclusion

The Court concluded that while EPA had flexibility in crafting standards, it could not stretch this cover standards inconsistent with the NAS report and vacated Part 197 to the extent that it requires DOE to show compliance for *only* 10 000 years following disposal. The decision raised a *possibility* that EPA could have maintained the standard if it provided adequate policy reasons for so doing: “It would have been one thing had EPA taken the Academy’s recommendations into account and then tailored a standard that accommodated the agency’s policy concerns.” The Court upheld selection of Yucca Mountain for a repository but rejected the EPA standard on which DOE relied. The decision is now final. EPA is working to revise its radiation standard to conform with the court’s decision. DOE remains optimistic that EPA’s work on the standard will be contemporaneous with DOE’s work on the Yucca Mountain licence application and that both will be ready at the end of 2005.³⁹

37. *Id* at 56.

38. NAS Report at 67.

39. Statement of Theodore J. Garrish, Deputy Director, Office of Civilian Radioactive Waste Management, U.S. Department of Energy. Subcommittee on Energy and Air Quality, Committee on Energy and Commerce, U.S. House of Representatives. 10 March 2005.

Spent Fuel Litigation

Indiana Michigan Power Company v. United States, US Court of Appeals for the Federal Circuit (2004)

Approximately 60 suits are pending in the Court of Federal Claims for breach of contract in which the utilities seek damages.⁴⁰ In the first such case to be decided, *Indiana Michigan v. US*, case no. 98-486C (Fed. Cl. 21 May 2004), the Court of Federal Claims found that although DOE had partially breached the Standard Contract, Indiana Michigan Power Company (“IMP”) failed to establish any immediate damages from that partial breach. IMP had sought damages for up to nine years preceding the partial breach as well as damages for 40 years in the future. On appeal to the US Court of Appeals for the Federal Circuit, IMP asserted, *inter alia*, that it was required to perform a *full* rerack of its pool fuel between 1989 and 1993 only because of DOE’s impending breach in 1998. The United States’ brief filed on 18 February 2005 addresses the issues of whether the trial court: 1) correctly held that IMP’s alleged “pre-breach mitigation” costs were not recoverable because they were not caused by the government’s later partial breach of contract; and 2) correctly held that IMP’s future damages should be recovered in the future as they are incurred. Briefing by the parties is ongoing.

Exelon

DOE has resolved four of the pending SNF cases in a settlement with Exelon and its subsidiaries which collectively produce about one-fifth of the nuclear energy in the United States. Exelon has 17 operating reactors in Pennsylvania, New Jersey, and Illinois, and is the largest nuclear power company in the United States.⁴¹ Under the settlement filed on 10 August 2004 in the US Court of Federal Claims, the government will reimburse Exelon for costs associated with storage of spent fuel at its nuclear power stations pending DOE’s acceptance of spent fuel under the Standard Contract.⁴² The press has reported that Exelon will receive 80 million US dollars (USD) immediately in gross reimbursements for storage costs already incurred, with additional amounts reimbursed annually for future costs. If the repository opens by 2010 and DOE commences acceptance, gross

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40. As background, DOE entered into contracts with over 45 utilities in which, in return for payments of fees into the Nuclear Waste Fund, DOE agreed to commence disposal of spent nuclear fuel (SNF) by 31 January 1998. Because there is still no repository under the NWPA and none is anticipated until at least 2010, DOE has been unable to commence SNF disposal as required by the contracts. To date, SNF litigation has conclusively established that DOE’s obligation to commence disposal is legally binding even in the absence of a repository, *Indiana Michigan Power Co. v. Department of Energy*, 88 F.3d 1272 (D.C. Cir. 1996); that the utilities’ remedies for DOE’s failure to commence disposal are to be determined as a matter of contract law, *Northern States Power Co. v. U.S.*, 128 F.3d 754 (D.C. Cir. 1997), cert.denied, 119 Sup. Ct. 540 (1998); and that DOE cannot deny liability on the ground that its delay was unavoidable. In addition, the Court of Appeals for the Federal Circuit held that DOE is in partial breach of its contracts and that utilities are entitled to recover damages for that breach. *Maine Yankee Atomic Power Company v. U.S.*, 225 F.3d 1336 (Fed. Cir. 2000); *Northern States Power Co. v. U.S.*, 224 F.3d 1361 (Fed.Cir. 2000).
 41. Michael Bologna, *Settlement Reached Over Reimbursement of Exelon for Storage of Spent Nuclear Fuel*, *Environment Reporter*, 12 August. Available at: <http://ehscenter.bna.com/pic2/ehs.nsf/id/BNAP-63TFRE?OpenDocument>.
 42. In *Alabama Power v. U.S. Department of Energy*, 307 F.3d 1300 (11th Cir. 2002), the Court found that DOE is not authorised to spend Nuclear Waste Fund monies on settlement agreements aimed at compensating utilities for on-site storage costs resulting from breach of the Standard Contract.

reimbursements to Exelon could, reportedly, total about USD 300 million. In all cases, reimbursements would be made only after costs are incurred and only for costs resulting from DOE delays in accepting the fuel.⁴³

Waste Incidental to Reprocessing

Natural Resources Defense Council, Snake River Alliance, Confederated Tribes & Bands of the Yakama Indian Nation, Shoshone Bannock Tribes v. Abraham, 388 F. 3d 701, US Court of Appeals for the Ninth Circuit (2004)

Summary

On 5 November 2004, the US Court of Appeals for the Ninth Circuit vacated the judgment of the US District Court for the District of Idaho that in 2003 had declared DOE Order 435.1 invalid as directly conflicting with the definition of high-level radioactive waste (HLW) under the Nuclear Waste Policy Act (NWPA).⁴⁴ The Court of Appeals found that the issue was not yet ripe and remanded the case to the District Court with a direction to dismiss the action.

Background

On 9 July 1999, DOE issued Order 435.1 entitled Radioactive Waste Management which prescribes procedures for DOE and its contractors in the management of radioactive waste stored at atomic energy defence facilities.⁴⁵ The order permits DOE to classify waste from reprocessing of spent nuclear fuel as either HLW or waste incidental to reprocessing (WIR), depending upon the degree of hazard that the waste presents. Wastes determined to be WIR are not considered HLW and are managed as transuranic, mixed low-level or low-level wastes. Presently, DOE plans to dispose of HLW in a geologic repository under the NWPA; low-level and transuranic wastes will not be sent there. On 4 January 2000, the Natural Resources Defense Council, Inc., et al. (NRDC) filed a petition for review in the Court of Appeals, under the NWPA. In response, DOE argued that the order was issued pursuant to the Atomic Energy Act (AEA) rather than the NWPA and that the case should have been filed in District Court. The Court of Appeals agreed and determined in 2001 that it did not have *direct* appellate jurisdiction, and transferred the petition, together with all issues of standing, ripeness and the merits to the Idaho District Court. NRDC v. Abraham, 244 F.3d. 742, 747-48 (9th Cir. 2001).

Arguments

The NRDC claimed that the NWPA applies to defence waste and that DOE exceeded its authority by attempting, through the order, to revise the NWPA definition of HLW. The NRDC asserted that *when* the order is applied, DOE will and use it in a way that redefines HLW as WIR and thereby reduces its handling to that of mere low-level radioactive waste, allegedly in violation of the NWPA. It also alleged that DOE had relied on the WIR concept when it closed two tanks in 1997.

43. Jack Bryar, Exelon, "Federal Government Reach Agreement Over Spent Nuclear Fuel Storage Costs", *Live PowerNews*, 10 August 2004. Available at www.livepowernews.com/stories04/0816/001.htm.

44. NWPA, 42 U.S.C. 10101 *et seq.* defines high-level radioactive waste at section 2(12).

45. DOE issued the Order under authorities including the Atomic Energy Act of 1954 (AEA), 42 U.S.C. 2011 *et seq.*, and the Energy Reorganization Act (ERA), 42 U.S.C. 5801 *et seq.*

DOE argued that the AEA rather than the NWPA controls management of HLW at defence facilities (such as at Savannah River, South Carolina, Hanford Nuclear Reservation, Washington, and Idaho National Engineering and Environmental Laboratory) and that, in any event, the order was consistent with the NWPA. It advanced that since President Reagan determined, under Section 8 of the NWPA, that a defence-only repository was not required, the NWPA *allows* DOE to dispose of defence HLW at Yucca Mountain. In other words, if DOE *chooses* to dispose of defence waste at Yucca Mountain, it may – although it must pay amounts equivalent to those paid by utilities under the Standard Contract. DOE asserted that the order was not ripe for review because it had not been applied to any *specific* tank closure and that the NRDC challenge to DOE’s *anticipated* application of the order to tank wastes would not be ripe until DOE actually made tank closures in a management decision under the order.

District Court

The Court granted summary judgment to the NRDC. It reasoned that the waste at issue fell within the NWPA definition of HLW that considers both the source of the waste and, in the case of solids derived from liquid waste, its hazard. The Court concluded that liquid and solid reprocessing wastes are treated differently under the NPWA which, in its view, allows DOE to treat solids to remove fission products, thereby permitting reclassification of the waste, but does *not* offer the option of reclassification for liquid waste produced directly in reprocessing. The Court recognised that DOE could treat solid waste derived from liquid reprocessing waste and “reclassify” it as non-HLW but nonetheless determined that DOE violated the NWPA by promulgating the Order as it relates to incidental waste. The Court rejected DOE’s argument that the presidential determination that no separate repository was necessary did not trigger a DOE duty to dispose of defence waste in a NWPA repository- but only required that it allocate to the government costs associated with any disposal of defence HLW in a commercial repository that in fact occurs. “In essence, DOE contends that it can choose whether to dispose of its defence waste in Yucca Mountain or elsewhere.” The Court found that DOE does not have discretion to dispose of defence HLW somewhere other than in a repository established under the NWPA.⁴⁶

Court of Appeals

The Court rendered its decision on the issue of ripeness on 5 November 2004. As it explained, the injunctive and declaratory judgment remedies requested by the NRDC are discretionary. Courts have traditionally been reluctant to apply them to administrative determinations unless they arise in the context of a controversy “ripe” for judicial resolution. Ripeness is a doctrine designed to prevent the courts, through avoidance of premature adjudication, from entangling themselves in abstract disagreements over administrative policies, and also to protect the agencies from judicial interference until an administrative decision has been formalised and its effects felt in a concrete way by the challenging parties. The Court found that “The abstruse and abstract arguments by the parties show that this case is not presently fit for review.” The Court concluded that:

“DOE has the duty of managing that portion of the waste that has been generated by atomic energy defence activities. In Order 435.1 it has devised a way to do that; a method that NRDC claims is subject to and will violate NWPA. NRDC wants us to leap into the fray immediately. But it is too early for that. We must adopt a wait-and-see attitude rather than making assumptions about the future and about the bona fides and talents of DOE. That approach

46. NRDC et al, v. Abraham, 271 F. Supp.2d 1260 (2003).

allocates initial authority and responsibility where it belongs- the place Congress put it... Despite NRDC's anxiety, the courts must await the coming of a proper time for decision, if, in the long run, that time ever comes."

European Union

Judgement of the European Court of Justice in European Commission v. UK (2005)

On 12 April 2005, the European Court of Justice (ECJ) handed down judgement in the case of European Commission v. United Kingdom (Case-61/03), ruling that the Euratom Treaty has no jurisdiction over military installations.

The European Commission brought this case following the failure of the UK government to provide general data relating to a plan for the disposal of radioactive waste associated with the decommissioning of the Jason military research reactor at the Royal Naval College, Greenwich, which ceased operating in 1996. Article 37 of the Euratom Treaty requires EU states to inform the Commission concerning plans for the disposal of radioactive waste, such that the potential for radioactive contamination of the water, ground and air space of another EU state from implementation of the disposal project can be assessed.

By order of the Court of 28 August 2003, France was granted leave to intervene in support of the form of order sought by the United Kingdom.

The Commission submitted that Article 37 of the Euratom Treaty applies to disposal of waste from both civil and military installations. It argued that that provision aims to prevent any risk of radioactive contamination of another Member State and that, since the protection of the population against the dangers of radiation is an indivisible objective, it must be extended to all sources of danger, including those resulting from the dismantling of military installations.

The UK, supported by France, replied that Article 37 could not apply to the disposal of radioactive waste from military installations since the treaty itself only covers the civil uses of nuclear energy and the provisions of the chapter of the treaty on health and safety cannot have a scope wider than that of the provisions in other chapters of the same treaty.

The opinion issued on 2 December 2004 by Advocate General Geelhoed stated that the European Commission was entitled to exercise scrutiny over plans for the disposal of radioactive waste from military installations, because Member States should co-operate to the greatest extent possible within the limits of defence secrecy needs.

The ECJ opposed the non-binding opinion of its Advocate General, ruling that EU states are not required to inform the Commission about the decommissioning of military installations nor about activities involving radioactive waste from such installations. The Court ruled that the Euratom Treaty is linked to promoting civilian and commercial nuclear energy, and therefore interpreted the treaty as excluding all military activities. It added that the absence in the Treaty of any derogation laying down the detailed rules according to which the Member States would be authorised to rely on and protect those essential interests leads to the conclusion that activities falling within the military sphere are outside the scope of that treaty.

The Court reiterated in its conclusions that the fact that the Euratom Treaty is not applicable to uses of nuclear energy for military purposes does not by any means reduce the vital importance of the

objective of protecting the health of the public and the environment against the dangers related to the use of nuclear energy, including for military purposes. It added that insofar as the Euratom Treaty does not provide the Community with a specific instrument in order to pursue that objective, it is possible that appropriate measures may be adopted on the basis of the relevant provisions of the EC Treaty.

ADMINISTRATIVE DECISIONS

Sweden

Decision on the early shutdown of Barsebäck-2 (2005)

The Swedish government decided on 16 December 2004 to shut down the second nuclear power plant at Barsebäck on 31 May 2005. The decision was made pursuant to the 1997 Act on the Phasing-out of Nuclear Power (see *Nuclear Law Bulletin* No. 61).

The first reactor at Barsebäck was closed in 1999 through a political decision by the government following a period of negotiations between the state, owner Sydkraft and national energy company Vattenfall. Barsebäck-2, which commenced operations in 1977, was designed to operate for 40 years but will close after 28 years service. It was due to be shut down on 1 July 2002; however the Swedish parliament rescinded this date at the end of 2001 at the request of the government which expressed a desire to carry out a new revision of the Swedish energy situation before fixing the shutdown date (see *Nuclear Law Bulletin* No. 69).

The government justified its decision by referring to the energy policy decisions of 1997 and 2002, where the Swedish parliament stated that nuclear power should be replaced by environmentally-friendly forms of energy and more efficient use of electricity, all in the interest of an ecologically sustainable society. Pursuant to the Act on the Phasing-out of Nuclear Power, the government has the right to close a power plant on a date of its choice, provided that scheduled closure is in line with the objective to restructure the energy system, and provided that the ensuing loss of electric power may be counterbalanced by increased energy production or reduced energy consumption.

The municipality of Kävlinge where the Barsebäck plant is situated appealed this decision to the Supreme Administrative Court of Sweden on 19 January 2005 against the decision of the government to close Barsebäck-2. The Municipality claimed that the government, when making its decision, had not complied with its obligations pursuant to the 2003 Law on the Prevention of Accidents, the Environment Code and European Law. In particular, the government had not provided a description of the environmental consequences of the project, thereby depriving the municipality of its right to be consulted and to influence the closure proceedings. The Supreme Administrative Court dismissed the appeal on 2 March 2005 on the ground that the municipality was not a Party to the decision.