-----No. 2 of 2----------
On 07/10/95
[L-S document 530056, 60 FR 35577, 231 lines]

Adoption of Final Environmental Impact Statement

AGENCY: Tennessee Valley Authority.

ACTION: Adoption of Final Environmental Impact Statement.

SUMMARY: In accordance with TVA's procedures implementing the National Environmental Policy Act (NEPA) and consistent with 40 CFR 1506.3 (1993), TVA has decided to adopt a Final Supplemental Environmental Impact Statement (FSEIS) that was issued by the U.S. Nuclear Regulatory Commission (NRC) in late April 1995. This FSEIS is entitled, "Final Environmental Statement related to the operation of Watts Bar Nuclear Plant Units 1 and 2, Supplement No. 1." Notice of the availability of this FSEIS was published in the Federal Register on May 5, 1995 (60 FR 22,389). TVA has determined that the FSEIS meets the standards for an adequate FSEIS and can be adopted.

ADDRESSES: The FSEIS can be inspected by the public at the following places:

TVA Corporate Library, East Tower Building, 400 West Summit Hill Drive, Knoxville, Tennessee 37902;
TVA Corporate Library, Signal Place, 1101 Market Street, Chattanooga, Tennessee 37402;
and

TVA Technical Library, A100 National Environmental Research Center, CTR 1E, Muscle Shoals, Alabama 35660.

Copies of the FSEIS may also be obtained by writing or calling: Dale V. Wilhelm, Team Leader, Environmental Management Staff, 400 West Summit Hill Drive, WT 8C-K, Knoxville, Tennessee 37902, (615) 632-6693.

FOR FURTHER INFORMATION CONTACT:
Jon M. Loney, Manager, Environmental Management Staff, Tennessee Valley Authority, 400 West Summit Hill Drive, WT 8C-K, Knoxville, Tennessee 37902, (615) 632-2201.

SUPPLEMENTARY INFORMATION: On or about April 21, 1995, NRC released a FSEIS on the operation of TVA's Watts Bar Nuclear Plant (WBN). The supplement addresses changes in the plant design and the environment that occurred after NRC issued its "Final Environmental Statement" in 1978 on the operation of the plant. NRC concluded in the FSEIS that there have been no significant changes in potential environmental impacts associated with plant operation from those evaluated in its 1978 document. The FSEIS also concluded that TVA's preoperational and operational environmental and radiological monitoring programs were appropriate for establishing baseline conditions and for assessing resulting environmental impacts. Finally, the FSEIS concluded that the analysis of severe accident mitigation design alternatives for the plant demonstrated that none would be cost beneficial for further mitigating environmental impacts beyond the procedural changes which TVA had already committed to implement.

Background

TVA is the electric supplier to an 80,000 square mile area containing parts of seven States. It and the distributors of the electricity, which TVA generates, serve about 7.5 million people. TVA currently has 25,600 megawatts of generating capacity on its system. This includes coal-fired units, nuclear units, hydro-electric units, combustion turbines, and pumped storage hydro units.

TVA's WBN is located in Rhea County, Tennessee, approximately 13 kilometers (8 miles) southeast of Spring City, Tennessee, and 80 kilometers (50 miles) northeast of Chattanooga, Tennessee. The site is located adjacent to TVA's Watts Bar Dam Reservation at Tennessee River Mile 528. WBN is a two unit pressurized water reactor nuclear plant. Each of its units has a nameplate capacity of 1,170 megawatts. TVA expects to load fuel in Unit 1 in the Fall of 1995. Unit 2 is approximately 65 percent complete. Alternatives to TVA completing Unit 2 are being evaluated as part of an integrated resource planning (IRP) process and an associated EIS. The IRP is scheduled to be completed in December 1995. In December 1994, the TVA Board of Directors announced that based on interim data from the IRP, it would not be in TVA's or its customers' interests for TVA itself to complete Unit 2.

In August 1970, TVA proposed to construct and operate WBN in order to meet forecasted power needs in the TVA region. The Atomic Energy Commission (AEC), now NRC, issued construction permits for the two units on January 23, 1973. TVA commenced construction of WBN in 1973. In 1976, TVA applied to NRC for licenses to operate WBN.

At the time TVA sought operating licenses, construction of WBN Unit 1 was 85 percent complete and Unit 2 was 65 percent complete. TVA's proposed fuel loading dates for the units were December 1979 and September 1980, respectively. However, licensing of the plant was delayed and the construction permits for the units were extended by NRC. The delay was due in part to installation of modifications that NRC ordered for most nuclear plants following the 1979 incident at the Three Mile Island nuclear plant. In addition, the need for power in the TVA region and elsewhere in the country dramatically changed from the need forecasted in the early 1970s. After the Arab oil embargo in the mid-1970s, energy consumption in the country substantially declined. In the mid-1980's, plant licensing was delayed while TVA resolved a number of WBN-specific safety concerns that were raised by employees and the public. TVA implemented a series of corrective actions and plant modifications to prepare WBN Unit 1 for operation.

It takes many years to plan, permit, and construct new energy sources or to plan and deploy energy conservation programs (demand-side management programs). Years before the demand for electric energy arises, electric utilities have typically had to make decisions about the energy resource mix that they want on their systems to meet future demands. If no action is taken, a utility risks being unable to meet demand and the customers in its service territory would not be served. TVA, like most utilities, projects or forecasts the future demand for power in its region. Determining the need for power of future "load" on an utility system depends on two factors: (1) The capabilities of currently available energy resources, and (2) the forecast of future energy needs. If the forecasted need for power exceeds available capabilities to provide that power, additional energy resources must be obtained by the utility. These resources can be in the form of self-built generating facilities, purchases from other energy generators, or energy conservation measures that reduce the potential demand to levels capable of being met with existing energy resources.

TVA routinely produces three load forecasts to help in making energy resource decisions--a high-, medium-, and low-load forecast. The high forecast is designed to project a level of future energy demand for which there is a 90 percent chance or probability of not being exceeded. For the medium forecast, there is a 50 percent probability of not being exceeded; for the low forecast, a 10 percent probability of not being exceeded.

Under all of TVA's current forecasts, there is a need for additional energy resources in the immediate future to meet the demand for energy in the TVA region. In the medium-load forecast, there is a need in 1996 for the capacity of WBN Unit 1 (1170 megawatts) as well as an additional 850 megawatts. Under the high-load forecast, there is a need beyond WBN Unit 1's capacity for an additional 1500 megawatts in 1996. Only under the low-load forecast is there a slight surplus of capacity in 1996 of 300 megawatts with the capacity of WBN Unit 1 online.

Operating WBN Unit 1 will help meet projected future loads on the TVA power system at a very economically competitive cost. TVA has invested $6.4 billion in the construction of WBN Unit 1 and facilities which are shared in common with Unit 2. These costs have already been incurred and cannot be avoided even if TVA now chooses to meet future needs some other way. Operating the unit will allow TVA the opportunity of earning a return on the agency's investment. Compared to purchasing power or meeting demand with coal-fired generation or combustion turbine units, operation of WBN Unit 1 will be among TVA's lowest cost generating sources. WBN Unit 1's operating costs are projected to be approximately 1.7 cents/kwh. In contrast, the operating costs of alternative generating sources would range from 2.0 to 6.0 cents/kwh.

Environmental Reviews

In accordance with NEPA, TVA prepared and released in November 1972 a Final EIS on the potential environmental impacts associated with constructing and operating WBN. AEC relied on the TVA EIS when it issued construction permits to the plant in 1973. When TVA began the operating license application process for the WBN units in 1976, it updated the environmental analyses and information about the plant in a report entitled "Environmental Information Statement," and supplemented this report in 1977 to respond to NRC questions. This report and supplement were made part of the public record for the plant. Relying in part on TVA's analyses and information, NRC then issued its 1978 Final EIS. This EIS supplemented the earlier TVA EIS, and focused on the potential environmental impacts associated with operating WBN.

In 1993, TVA initiated an interdisciplinary environmental review of WBN. The purpose of this review was to determine if there were any new, significant environmental impacts related to WBN that had not been addressed in TVA's 1972 EIS. This review relied on the substantial amount of environmental-related data that TVA had collected through its preoperational monitoring programs at WBN and a number of special environmental studies that TVA had conducted over the years at WBN. Review findings were documented in an August 1993 report entitled "Review of Final Environmental Statement, Watts Bar Nuclear Plant Units 1 and 2." Based on this review, TVA determined:

The [1972] EIS concluded that the principal ways the plant will interact with the environment are: (1) Releases of small quantities of radioactivity to air and water, (2) release of minor quantities of heat and non-radioactive waste waters to TVA's Chickamauga Reservoir and major quantities of heat and water vapor from the plant's cooling towers into the atmosphere, (3) loss of aquatic life (such as fish larvae and plankton) that is drawn into the water intake, and (4) a change in land use from farming to industrial. These conclusions remain valid today.

* * * * *

Changes have occurred since the release of WBN's EIS in 1972. Most of these changes involve design modifications or changes in expected operational practices which improve safety or lessen potential environmental impacts. Additional information about environmental conditions in the vicinity of WBN has also been developed. None of the changes or new information materially affect impact projections in the EIS.

In September 1994, NRC decided to issue a formal supplement to its 1978 Final EIS. NRC released a Draft SEIS for public comment in November 1994. A public meeting to obtain comments on the Draft SEIS was held on January 10, 1995 in Sweetwater, Tennessee. NRC issued its FSEIS in late April 1995. Consistent with TVA's 1993 review, NRC did not identify any changes to WBN, significant new circumstances, or environmental concerns that substantially differed from those addressed earlier.

The FSEIS reached the following conclusions:

** There are no changes in the design of WBN that result in significant change in environmental impacts.

** Changes in proposed WBN operations have occurred but these changes do not result in significant environmental impacts.

** Changes in the population and demographics of the region have occurred; however these changes are not significant and changes in employment at the plant have not had significant socioeconomic impacts.

** Land use and water use impacts essentially remain unchanged.

** Regional climatology and WBN site meteorology have not changed significantly.

** There have been no significant changes in the terrestrial and aquatic environments in the vicinity of WBN.

** There have been no significant changes to the background of radiological characteristics in the vicinity of the plant.

** Based on available data, it does not appear that any minority or low income communities would be disproportionally affected by WBN operations.

The action before NRC is responding to TVA's request for an operating license for Watts Bar Unit 1. A favorable decision would allow the operation of the unit by TVA. Although the actions before the two agencies are essentially the same from the perspective of potential environmental consequences, it was deemed inappropriate for TVA to participate as a cooperating agency in the preparation and issuance of the SEIS because TVA is the applicant for the NRC operating license. However, TVA provided NRC and its contractor, Pacific Northwest Laboratory, substantial amounts of environmental data, information, and analyses that it had collected and prepared over the years for WBN. Much of this data and information were used in the FSEIS.

In its regulations implementing NEPA, the Council on Environmental Quality (CEQ) strongly encourages agencies to reduce the paperwork and duplication that have frequently been the hallmarks of NEPA reviews. One of the methods identified by CEQ to accomplish these goals is adopting the environmental documents prepared by other agencies. 40 CFR 1500.4(n) (1994). Under applicable regulations, TVA is allowed to adopt the NRC FSEIS as its own.

TVA has carefully reviewed the FSEIS and has concluded that it adequately updates the earlier environmental reviews, adequately assesses the remaining environmental impacts associated with operation of WBN Unit 1, and is an adequate supplement. This review has been documented in a TVA publicly-available report entitled, "Supplemental Environmental Review, Operation of Watts Bar Nuclear Plant." Accordingly, TVA hereby adopts NRC's "Final Environmental Statement related to the operation of Wattts Bar Nuclear Plant, Units 1 and 2, Supplement No. 1."

Dated: June 30, 1995.

Kathryn J. Jackson,

Senior Vice President, Resource Group.

[FR Doc. 95-16848 Filed 7-7-95; 8:45 am]

BILLING CODE 8120-01-M

(7/7/95 TOTAL 4)

1. Environmental Impact Statements; Notice of Availability

2. Electric Utility Hazardous Air Pollutant Study; Report to Congress

3. Notice of National Environmental Education Advisory Council Public Meeting

4. Hazardous Waste Treatment, Storage and Disposal Facilities and Hazardous Waste Generators; Organic Air Emission Standards for Tanks, Surface Impoundments, and Containers

No. 1 of 4
L-S ID No.: 529948 (91 lines)
PAGE: 60 FR 35393 NO. 130 07/07/95
CFR: -NONE-
CAPTION: Environmental Impact Statements; Notice of Availability
AGENCY: EPA
ACTION: Notice
DATES: SEE FEDERAL REGISTER FOR DETAILED DATE INFORMATION
CONTACT: Office of Federal Activities, 202-260-5076
202-260-5075

SUMMARY: -NONE-
EIS No. 950283, FINAL SUPPLEMENT, TVA, TN, ADOPTION--Watts Bar Nuclear Plant, Units 1 and 2, Updated Information Related to the Operations, Facility Operating License and NPDES Permit Issuance, Rhea County, TN, Due: August 7, 1995, Contact: Jon M. Loney (615) 632-2201. The Tennessee Valley Authority's (TVA) has adopted the US Nuclear Regulatory Commission's final supplemental EIS filed 4-28-95. TVA was not a cooperating Agency for the above final EIS. Recirculation of the document is necessary Under Section 1506.3(c) of the Council on Environmental Quality Regulations.
EIS No. 950284, FINAL EIS, NPS, TN, Obed Wild and Scenic River, General Management Plan and Development Concept Plan, Implementation, Morgan and Cumberland Counties, TN, Due: August 7, 1995, Contact: John Fischer (404) 331-5835.

No. 2 of 4
L-S ID No.: 529949 (108 lines)
PAGE: 60 FR 35393 NO. 130 07/07/95
CFR: -NONE-
CAPTION: Electric Utility Hazardous Air Pollutant Study; Report to Congress