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R. C. Walling
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March 1988

Prepared for the U.S. Department of Energy
under Contract DE-AC06-76RLO 1830

Pacific Northwest Laboratory
Operated for the U.S. Department of Energy
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Printed in the United States of America
Available from
National Technical Information Service
United States Department of Commerce
5285 Port Royal Road
Springfield, Virginia 22161

NTIS Price Codes
Microfiche A01

Printed Copy

Pages	Price Codes
001-025	A02
026-050	A03
051-075	A04
076-100	A05
101-125	A06
126-150	A07
151-175	A08
176-200	A09
201-225	A010
226-250	A011
251-275	A012
276-300	A013

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Richland, Washington 99352

ABSTRACT

The creation of five reactor-specific spent fuel data bases that contain information on the projected amounts of spent fuel to be discharged from U.S. commercial nuclear reactors through the year 2020 is described. The data bases contain detailed spent fuel information from existing, planned, and projected pressurized water reactors (PWR) and boiling water reactors (BWR), and one existing high temperature gas reactor (HTGR). The projections are based on individual reactor information supplied by the U.S. reactor owners. The basic information is adjusted to conform to Energy Information Administration (EIA) forecasts for nuclear installed capacity, generation, and spent fuel discharged. The EIA cases considered are: 1) No New Orders (assumes increasing burnup), 2) No New Orders with No Increased Burnup, 3) Upper Reference (assumes increasing burnup), 4) Upper Reference with No Increased Burnup, and 5) Lower Reference (assumes increasing burnup). Detailed, by-reactor tables are provided for annual discharged amounts of spent fuel, for storage requirements assuming maximum at-reactor storage, and for storage requirements assuming maximum at-reactor storage plus intra-utility transshipment of spent fuel.

ACKNOWLEDGMENTS

The authors thank K. A. Ekblaw, M. E. Schutz, and R. G. Rau for their assistance in performing the work described in this report.

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1.0 INTRODUCTION

Under the provisions of the Nuclear Waste Policy Act of 1982 (NWPA), the Department of Energy (DOE) is responsible for the management and ultimate permanent disposal of the civilian spent fuel and high level radioactive waste generated as a result of commercial nuclear power plant operations in the U.S. The Office of Civilian Radioactive Waste Management (OCRWM) has been established within DOE to carry out this responsibility.

The greatest portion of the radioactive waste covered under this government responsibility will be spent nuclear fuel discharged from commercial nuclear power plants. Because most of the spent fuel that will ultimately require disposal has not yet been generated, planning for the management and disposal of this spent fuel must be largely based on projections of future spent fuel discharges from commercial nuclear power plants.

The DOE Energy Information Administration (EIA) annually publishes projections of nuclear energy generation on an overall, industry composite basis in its Commercial Nuclear Power report (DOE/EIA 1987a). In addition, the EIA also publishes projections of aggregate spent fuel discharges from commercial nuclear plants in its World Nuclear Fuel Cycle report (DOE/EIA 1987b). Discharge projections found in the World Nuclear Fuel Cycle report are keyed to the nuclear energy generation projections found in the Commercial Nuclear Power report. These EIA energy and discharge projections provide several scenarios representing different assumptions about the future growth of nuclear energy capacity in the U.S. Multiple scenarios allow analysis of the sensitivity of results and decisions to varying assumptions.

The OCRWM plans for management and disposal of spent fuel are based on the EIA nuclear energy projections. However, the EIA projections do not contain the specific reactor-by-reactor information that is needed to perform detailed analyses of relevant issues such as waste system transportation logistics, specific requirements for interim storage of spent fuel, or anticipated variations in the physical characteristics of the spent fuel to be received for disposal. Therefore, to provide a more detailed basis for such analysis, the DOE sponsored work to create adjusted data base (ADB) sets. These ADB sets are

based on utility-supplied data, and adjusted to meet EIA projections of annual spent fuel discharges, nuclear capacity, and energy generation. The Pacific Northwest Laboratory (PNL), operated for the DOE by Battelle Memorial Institute, has produced sets of ADBs annually since 1984 (four sets total) corresponding to annually-updated projections by EIA and annually-updated utility information. This work has been performed by the Reactor Data Analysis (RDA) Program at PNL.

The first ADB set was based on historical data complete through 1983 and projected data from 1984 to 2020 (Heeb, Libby, and Holter 1985). The second and third sets of ADBs used historical data through 1984 and 1985, respectively, and projected information from 1985 to 2020 and 1986 to 2020 (Heeb et al. 1986; Heeb, Walling, and Purcell 1987). This document describes the fourth ADB set that includes historical data through 1986 and projected data for the 1987 to 2020 time period. The succession of ADBs is explained below and illustrated in Table 1.1.

In the first study, the primary source of data used to develop the reactor-specific information was the utility-supplied Spent Fuel Data Base (SFDB) collected by PNL for the DOE Commercial Spent Fuel Management (CSFM) Program. The ADB sets from subsequent studies consist primarily of utility data (SFDB) collected by EIA via the Nuclear Fuel Data Form RW-859 and used by PNL. The new ADB sets were produced by adjusting the EIA data from the RW-859 form to meet EIA projections of nuclear capacity, energy generation, and spent fuel discharges.

The RDA Program uses the adjusted data bases for a number of planning purposes and furnishes data for use by other DOE programs. Roy F. Weston Inc. uses ADB information to calculate total system life cycle costs (TSLCC) for OCRWM. The RDA Program provides basic information on spent fuel for inclusion in the DOE Integrated Data Base (IDB) maintained by Oak Ridge National Laboratory. Information from the ADB is used in the DOE Systems Integration Program and the Monitored Retrievable Storage (MRS) Program.

Three 1987 EIA nuclear growth scenarios were chosen as bases for developing the 1987 reactor-specific spent fuel discharge projections: the Upper Reference Case, the Lower Reference Case, and the No New Orders Case. The

TABLE 1.1. Succession of Adjusted Data Bases

Year	Historical Data As Of	EIA Projection Period	Primary Data Collected By	ADBs Generated (see Table 1.2 for abbreviations)	ADBs Reported In:
1984	12-31-83	1984-2020	PNL	Middle (NIB), NNO (NIB)	Heeb, Libby Holter 1985 (PNL-5396)
1985	12-31-84	1985-2020	EIA (RW-859)	Middle, NNO, Middle-NIB NNO-NIB	Heeb, Libby Walling, Purcell 1986 (PNL-5833)
1986	12-31-85	1986-2020	EIA (RW-859)	UR, NNO, LR, UR-NIB, NNO-NIB	Heeb, Walling, Purcell 1987 (PNL-6104)
1987	12-31-86	1987-2020	EIA (RW-859)	UR, NNO, LR, UR-NIB, NNO-NIB	Walling, Heeb, Purcell 1988 (PNL-6430)

Notes: 1. In 1985, the EIA changed its primary fuel burnup assumption for discharge projections to one of increasing burnup (also called extended burnup). Prior to that time, the primary assumption had been that of constant burnup (or no increased burnup as it is now called).
2. In 1986, the EIA case names changed: the Low Case became the Lower Reference Case; the Middle Case became the Upper Reference Case; and the High Case became the Optimistic Case. The No New Orders Case remained the same.

background assumptions for these cases are described in documents published by DOE (DOE/EIA 1987a, 1987b). The Upper Reference Case has been previously selected by the OCRWM as the base case for waste management planning purposes. The Lower Reference and the No New Orders Cases were included to provide additional data sets for studying the sensitivity of analytical results and management decisions to less optimistic predictions of nuclear growth in the U.S. The projected installed nuclear generating capacity projections for the three growth scenarios are shown in Figure 3.2. The projected nuclear electric energy generation projections are shown in Figure 3.3.

In order to meet the installed capacity and energy-generation requirements beyond the year 2005 for the Upper and Lower Reference Cases, it was necessary to add generic power plants to the population of operating and pipeline (under

construction or on order) reactors. Reactor types consistent with currently existing power plants were chosen to represent these generic power plants. This approach permitted the detailed information for the generic power plants to be obtained from the resulting ADBs in the same manner as for the currently existing or planned reactors. Each of the generic reactors was assigned to a specific Federal Region. A mixture consisting of two thirds pressurized water reactors (PWRs) and one third boiling water reactors (BWRs) conforms to EIA assumptions.

The No New Orders Case includes only nuclear power plants that are currently operating and a subset of the plants currently under construction. EIA assumes that some of the plants currently under construction will not be completed, and that the startup of others will be delayed beyond official utility startup estimates. The Lower Reference Case contains the same set of plants operating or under construction as the No New Orders Case; however, a modest addition of generic plants is assumed starting in 2006 to meet EIA projections. The Upper Reference Case assumes fewer cancellations and some earlier startup dates relative to the No New Orders and Lower Reference Cases. A greater number of generic plants are added in the Upper Reference Case, also starting in 2006, to meet EIA projections.

In making projections of the amount of spent fuel discharged, EIA assumes the reactors will increase their current burnups by 30 percent above current levels by the year 2000. The discharge burnups then remain at those levels beyond 2000. A number of sensitivity scenarios are also projected by EIA. One of these scenarios assumes no increased burnup above current levels, with the burnup maintained at the historical average for 1984. This results in the discharge of more spent fuel for the same installed capacity and electrical generation.

Adjusted Data Bases were generated for the Upper Reference, Lower Reference, and No New Orders cases forecast by EIA (DOE/EIA 1987a, 1987b). Additionally, ADBs corresponding to the no increased burnup sensitivity scenario were generated for the Upper Reference and No New Orders cases.

The data-base names are abbreviated as shown in Table 1.2. The adjusted data base names are keyed to case names published in World Nuclear Fuel Cycle Requirements 1987 (DOE/EIA 1987b, Table E1).

TABLE 1.2. List of Acronyms for Data Base Names

Acronym	Data Base
SFDB	The unmodified Spent Fuel Data Base containing only utility-supplied data. This data is used for Spent Fuel Storage Requirements 1987 (DOE/RL 1987) and for many other purposes. Predecessor SFDBs were used for previous Spent Fuel Storage Requirements reports and the Annual Capacity Report (DOE/RW-0146).
ADB	Any Adjusted Data Base
NNO	No New Orders Case, assumes increasing burnup
NNO-NIB	No New Orders Case sensitivity scenario with No Increased Burnup
UR	Upper Reference Case, assumes increasing burnup
UR-NIB	Upper Reference Case sensitivity scenario with No Increased Burnup
LR	Lower Reference Case, assumes increasing burnup

2.0 SUMMARY

The utility-supplied spent fuel discharge forecasts contained in the 1987 SFDB were adjusted to produce agreement with EIA discharge forecasts (DOE/EIA 1987b). Adjustments were made also to utility-supplied projected discharge burnups in the 1987 SFDB to produce agreement with EIA burnup and energy generation assumptions (DOE/EIA 1987a). Five reactor-specific ADBs were produced to match five EIA cases. The ADBs are designated as follows:

1. No New Orders (increasing burnup) - NNO
2. No New Orders, No Increased Burnup - NNO-NIB
3. Upper Reference (increasing burnup) - UR
4. Upper Reference, No Increased Burnup - UR-NIB
5. Lower Reference (increasing burnup) - LR.

The adjustment procedure changes the amount of fuel discharged annually so that it agrees with the EIA forecast. The method allows the discharged fuel batch identity of the utility data base to remain intact, while exact agreement with EIA projected spent fuel discharges is obtained by adjusting batch size. Burnup is then adjusted to produce agreement with EIA burnup and energy generation forecasts.

The method used in developing the reactor-specific spent fuel discharge projections, as well as the resulting data bases themselves, are described in detail in this report. Discussions of the method cover the following topics:

- description of the data base
- data base adjustment procedures
- addition of generic power reactors
- calculated data base annual electric energy generation.

The accumulated spent fuel inventory for each of the five cases analyzed, and the original utility inventory projection are presented in Chapter 3.0.

Reactor-specific discharge and storage requirements for four scenarios are presented in Appendix A. Table A.1 gives startup and shutdown dates for reactors in the four scenarios: the Utility case, the No New Orders Case, the Upper Reference Case, and the Lower Reference Case. Table A.2 gives the names and startup dates for the Upper and Lower Reference Case generic reactors.

Tables A.3 and A.4 show the Upper Reference Case (UR) annual and cumulative discharges respectively. Tables A.5 through A.8 display the annual and cumulative storage requirements for the maximum at-reactor (AR) storage assumption, and for the maximum transshipment assumption for the UR data base. These compare directly to the storage requirements from the utility-supplied data, as reported in Spent Fuel Storage Requirements 1987 (DOE/RL 1987).

The reactor-specific spent fuel discharge projections contained in this report represent the period from 1987 through 2020. The total cumulative spent fuel inventory during this time period ranges from 111,000 MTIHM for the Upper Reference-No Increased Burnup case to 78,000 MTIHM for the No New Orders (increasing burnup) case. A description of the methods and the results is included in the next section of this report. Detailed information that supports discussions in the main body of the report, including descriptions of the capacity and fuel discharge projections, are included in Appendix A.

3.0 DISCUSSION

The 1987 SFDB is a compendium of information on U.S. commercial power reactor spent fuel and other reactor-specific information collected by EIA via the Nuclear Fuel Data Form RW-859. It is based on data provided by the operating utilities, and represents the utilities' estimate of the amounts and characteristics of their spent fuel discharges. The most recent, annual data collection by EIA contains historical data through December 1986 and projections for 1987 and beyond; this collection is often referred to as "CY-1986 data," named for the last calendar year for which historical information is known.

Electrical energy generation is not contained explicitly in the data base; however, it may be derived from the spent fuel quantities and spent fuel burnup contained in the data base.

3.1 DATA BASE DESCRIPTION

The SFDB contains information organized by individual reactor. The first portion of the information consists of details such as the owning/operating utility, location, various power ratings, dates of startup and final shutdown (end of commercial operation), and information on storage capacity. The second portion consists of the historical record of fuel discharges by batch or subbatch with the date of discharge, number of assemblies, the uranium mass for the batch, and the average discharge burnup. The third portion of the SFDB contains projected discharge information for 1987 and beyond.

The electrical energy generation implicit in the SFDB is entirely independent of the nuclear energy generation forecasts made by EIA. The SFDB was modified to produce ADBs that are consistent with these forecasts of nuclear energy generation and spent fuel discharges. The technical steps involved in modifying the SFDB to produce an ADB that conforms to the EIA projections are described in this section. The principal requirement of the modification was to retain as much of the detailed utility estimates of fuel burnup, plant capacity factor, and discharge schedules as possible, while matching the EIA forecast for spent fuel discharges and energy generation.

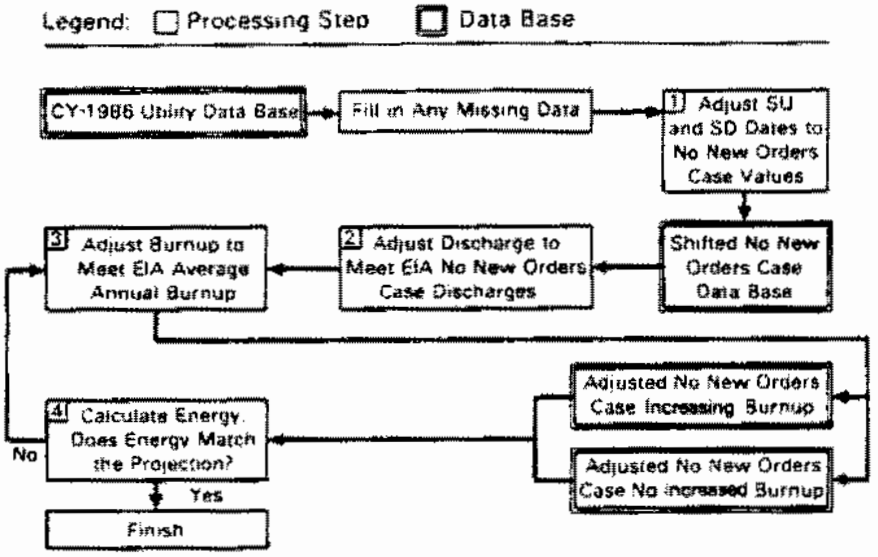
3.2 DATA BASE ADJUSTMENT PROCEDURE

The steps in the adjustment procedure are shown in Figure 3.1. The adjustment process required the construction of four major processors. These steps are described in the sections that follow. The adjustment process is entirely concerned with the time beyond 1986, since historical information is left unchanged by the adjustment process. The adjustment steps are numbered in the Figure 3.1 flow chart.

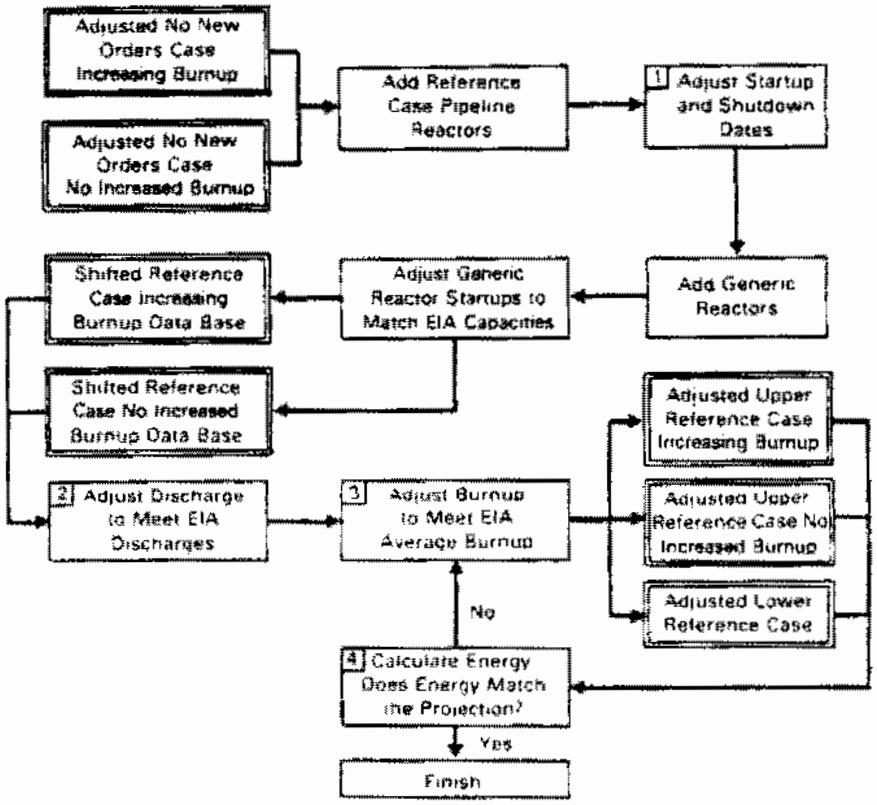
3.2.1 Step 1--Shift Utility Data Base Startup and Shutdown Dates

The commercial operation date is used as the starting point for energy generation by the ADB energy calculation algorithm. The utilities report the date of commercial operation for operating and pipeline reactors on the RW-859 form. The utility date is used for operating reactors. Commercial operation dates for pipeline reactors starting up after 1987 are derived from EIA operable dates (DOE/EIA 1987a). Based on comparison of the EIA operable dates for operating reactors with the commercial operation dates given by the utilities, the EIA operable dates precede the commercial operating dates by an average of six months. Thus, six months was added to the EIA operable dates for pipeline reactors to represent the startup date for commercial operation. The startup date for each reactor is shown in Appendix A, Table A.1. Pipeline reactors that are part of the SFDB, but are assumed by EIA to be canceled, are removed.

The utility-supplied pattern of discharges for pipeline reactors was shifted by the difference between the utility-supplied commercial operation date and the derived EIA commercial operation date. For example, the utility-supplied commercial operation date for Palo Verde-3 is November 1987. The EIA operable date for Palo Verde-3 is September 1987; adding six months yields a derived commercial operation date of March 1988. Therefore, the pattern of discharges for Palo Verde-3 was shifted by four months, the difference between the derived date of March 1988 and the utility-supplied date of November 1987. The shutdown dates were adjusted to an average of 40 years after the adjusted startup date. Generic reactors were added to the Upper and Lower Reference Cases so that installed nuclear generation capacity could be matched.



Data Base Adjustment Process for the No New Orders Case



Data Base Adjustment Process for the Upper and Lower Reference Cases

FIGURE 3.1. Flow Diagram of the Data Base Adjustment Process

3.2.2 Step 2--Adjustment of Utility Discharges to Match EIA Projections

The projected discharge amounts in the SFDB are modified to agree with EIA forecasts published by DOE/EIA (1987b). An adjustment ratio, which is equal to the ratio of the EIA target amount to the unadjusted amount from the SFDB, was calculated for each year. In producing the No New Orders ADBs, all discharges were adjusted by this ratio.

The difference between the No New Orders Case and the Lower Reference Case is the addition of generic reactors. To produce the Lower Reference ADB, the No New Orders reactors were held constant and the adjustment was limited to the discharges of the Lower Reference generic reactors. The No New Orders ADB is therefore a subset of the Lower Reference ADB.

There are more differences between the No New Orders and Upper Reference Cases compared to the No New Orders and Lower Reference Cases. The Upper Reference case has more optimistic startup dates for most pipeline reactors, includes several pipeline reactors assumed canceled in the No New Orders and Lower Reference Cases, and includes the addition of more generic capacity. Limiting the adjustment solely to reactors which are new or have a different startup relative to the No New Orders Case requires unrealistic adjustments to meet targets. To produce the Upper Reference ADBs, the adjustment is applied to all pipeline reactors--those with startups after 1986--and the generic reactors. In this manner credible results are achieved while a majority of the No New Orders reactors--those starting prior to 1987--remain unaffected.

3.2.3 Step 3--Adjustment of Burnups to Match EIA Burnup Projections

In Step 3, the average annual burnup was adjusted to meet EIA average burnup forecasts. A limit of 60,000 MWD/MTIHM was selected as a reasonable upper bound for individual PWR burnups based on patterns seen in the utility-supplied data; a limit of 50,000 MWD/MTIHM was used as the maximum BWR burnup. (Metric tons of initial heavy metal, MTIHM, is a measure of the quantity of fuel. Burnup is measured in megawatt-days per MTIHM, MWD/MTIHM.) Utility-supplied burnups were increased according to EIA's stated increased burnup assumptions (30 percent over the 1984 average by 2000) in the increasing

burnup cases. Some slight changes were made to the average annual burnups of all adjusted data bases in order to match EIA annual energy generation forecasts.

3.2.4 Step 4--Calculation of Electrical Energy Generation from the Adjusted Data Base

The information available within the data base permits an estimation of the electrical energy generated by the fuel during its residence in the core. Energy generation in a batch of discharged fuel is equal to the product of the burnup (MWD/MTIHM) and the amount discharged (MTIHM). This is the thermal energy generated in the fuel. The electrical energy is the product of the thermal energy and the thermal efficiency of the reactor. In order to calculate the annual electrical generation by the reactor it is necessary to relate the thermal energy generated by the fuel to the electrical energy generated by the reactor. The algorithm employed to do this is based on the relative energy generated by the fuel batches during equilibrium operation. The algorithm is then modified to include nonequilibrium initial core batches.

During equilibrium operation, each position in the core is designated as one that holds fresh fuel, once-burned fuel, twice burned fuel, etc. The batch of fresh fuel will generate E_1 kWh during its first cycle of residence. During the next cycle, the batch of fuel will be moved into the designated once-burned fuel positions in-core and generate E_2 kWh. This progression continues until the discharge cycle is reached. During this cycle let EN be the final energy generated by the batch during the last cycle of residence. The energy generated by the discharged batch, E_D, will be the sum of the energy generated in each cycle of residence, $E_D = E_1 + E_2 + \ldots E_N$.

During any given cycle of operation, there will be a batch of fresh fuel in-core that will generate E_1 kWh and a once-burned batch in-core that will generate E_2 kWh. This progression will continue until the highest-burned batch is reached, which will generate E_N kWh. The energy generated by the reactor during any cycle of equilibrium operation, E_R, will be the sum of the energy generated by all fuel batches resident in-core during the cycle, $E_R = E_1 + E_2 + \ldots E_N$. Hence, E_D equals E_R. This key relationship is used to calculate the

cycle energy from the amount of spent fuel discharged and its burnup, parameters that are readily available on the data base.

For reactors just starting up, the ratio of first-cycle energy generation to first-discharge batch energy generation will not be unity, but will approximate the reciprocal of the core fraction discharged if power sharing by in-core batches is proportional to batch size. Thus for one-third core replacement, the ratio of first cycle energy to the energy generated by the fuel in the first discharge would approximate 3.0. The second discharge ratio would approximate half of this, or 1.5. The third discharge ratio would approximate unity, and remain unity for all subsequent discharges.

In actual practice power sharing between in-core fuel batches is not exactly equitable, and fuel management plans do not specify that the same fraction of the core will be replaced for every refueling outage. However, when large numbers of reactors are involved and interest is primarily in over-all energy generation over several years during which only a small fraction of the total energy generation is from plants not at equilibrium, average nonequilibrium ratios of cycle energy to batch energy may be approximated with sufficient accuracy. Detailed fuel management plans for several reactors were analyzed to obtain a more realistic ratio of cycle to batch energy. The ratios of cycle energy to batch energy (E_R/E_D) were calculated and the results are summarized in Table 3.1.

The energy of a given cycle is approximated by adding the product of total burnup, weight of the batch, and the thermal efficiency of the reactor over all batches discharged at the end of the cycle. This energy is E_D, the energy generated by the discharged fuel. If the reactor is at equilibrium, then E_D equals E_R, as has been demonstrated; the energy generated in the discharged fuel is the energy generated by the reactor during the operating cycle. If the

TABLE 3.1. Cycle to Batch Energy Ratio by Cycle

	First	Second	Third	Fourth	Equilibrium
PWR	2.857	1.266	1.095	1.073	1.000
BWR	3.663	1.404	1.111	1.058	1.000

reactor is not at equilibrium, then the appropriate factor from Table 3.1 is multiplied by E_D to obtain E_R, the cycle energy. For example, if the reactor is a PWR and on its second cycle of operation, then E_R equals 1.266 x E_D.

The annual energy generation is calculated from E_R by allocation to each year according to the number of months in the year for that cycle. Thus if a 18 month cycle had one month in year X, 12 months in year (X + 1), and the remaining five months in year (X + 2), then the reactor would contribute to each of the three year's energy generation as follows: year X would contribute 1/18 x E_R; year (X + 1) would contribute 12/18 x E_R; and year (X + 2) would contribute 5/18 x E_R. The annual contributions from each reactor cycle calculated in this manner are added together to compute the annual energy generation schedule for comparison to EIA energy generation forecasts.

3.3 GENERIC REACTOR ADDITIONS

The SFDB contains information only on those reactors that were operating, under construction, or in the planning stage by some U.S. utility in 1986. In order to meet EIA annual Upper Reference Case and Lower Reference Case forecasts for installed nuclear capacity, spent fuel discharges, and energy generation after 2005, it is necessary to include generic reactors. These are included in the shifted data base after Step 1 of the adjustment process (see previous discussion and Figure 3.1).

Two actual reactors were selected to represent the generic PWR and BWR. Both were nominal 1100 MWe plants and both were on an average 24 month refueling schedule. The PWR equilibrium burnup was 46,000 MWD/MTIHM, and 35,000 MWD/MTIHM for the BWR. Relevant details for the two generic plant types are shown in Table 3.2.

Increases in capacity do not in general represent the addition of an integral number of plants, each with a fixed plant capacity. Fractional additions to capacity were represented by delayed startup of one of the plants of each plant type that are otherwise started up in July (commercial operation) of each year to maintain the correct cumulative capacity. Thus if the accumulated new capacity was equivalent to 15.65 generic plants by a given year, one of the plants would be delayed by four months: (1.0 - 0.65) x 12.0 = 4.2. The startup

TABLE 3.2. Generic Reactor Properties

	PWR	BWR
Rated Power Level	1,100 MWe	1,100 MWe
Thermal Power Level	3,400 MWth	3,300 MWth
Average Fuel Cycle Length	24 Months	24 Months
Equilibrium Enrichment	4.2 wt%	3.2 wt%
Equilibrium Burnup	46,000 MWD/MTIHM	35,000 MWD/MTIHM

of integral additions to capacity were done in accordance with the EIA convention of operable additions to capacity in January of each year, with a six-month interval between the operable date and commercial operation.

It is important for logistics modeling to maintain reasonable geographic accuracy in the projected spent fuel discharges. This requires that the generic reactors be added with site diversity. The first step in providing site diversity is to assign generic reactors to Federal Regions, state groupings defined by EIA. The location of each Federal Region is shown in Table 3.3, and a map of the regions is reproduced in Appendix B.

Site diversity is assured by making the assumption that the regional capacity distribution exhibited by the No New Orders Case in 2000 will continue

TABLE 3.3. Federal Region Locations

Federal Region	Location
I	New England
II	New York/New Jersey
III	Middle Atlantic
IV	South Atlantic
V	Midwest
VI	Southwest
VII	Central
VIII	North Central
IX	West
X	Northwest

until 2020. (A regional distribution for the No New Orders Case is not explicitly found in Commercial Nuclear Power 1987: Prospects for the United States and the World (DOE/EIA 1987a), however this distribution is identical to the Lower Reference Case in the year 2000.) This projects the regional installed capacity distribution for the succeeding 20 year period without change. This assumption was implemented by apportioning the addition of generic reactor capacity, plus new pipeline reactor capacity in the Upper Reference Case, to each region according to the No New Orders distribution in the year 2000. Table 3.4 shows the No New Orders Case installed capacities in the year 2000 and the number of Upper and Lower Reference Case generic reactors allocated to each region. Since each generic reactor is rated at 1100 MWe, the capacities

TABLE 3.4. Allocation of Generic Reactors to Federal Regions

Federal Region	No New Orders Capacity in 2000 (from DOE/EIA 1987a)			Generic Reactors			
	Table 3	Appendices C and D		Upper Reference		Lower Reference	
	(MWe)	(MWe)	(%)	No.	(%)	No.	(%)
I	5,400	5,400	5.2	6	4.7	4	5.6
II	8,600	8,600	8.3	10	7.8	6	8.3
III	13,700	12,700	12.3	15	11.6	9	12.5
IV	29,600	30,700	29.8	39	30.2	21	29.2
V	21,700	21,800	21.1	28	21.7	15	20.8
VI	8,500	8,500	8.2	11	8.5	6	8.3
VII	4,000	4,000	3.9	6	4.7	3	4.2
VIII	0	0	0.0	0	0.0	0	0.0
IX	9,400	9,400	9.1	12	9.3	6	8.3
X	2,200	2,200	2.1	2	1.6	2	2.8
Totals	103,000	103,100	100.0	129	100.0	72	100.0

Notes: 1) Numbers may not add due to independent rounding.
2) Aggregated capacity values in Table 8 for regions III and IV were found to disagree with the summation of individual capacities from Appendices C and D for the No New Orders Case in 2000 (DOE/EIA 1987a). This discrepancy was not seen in the four other year/case combinations in Table 8. The data from Appendices C and D were used in this analysis.

are directly proportional to the number of generic reactors. Hence, the comparison of No New Orders Case percentage capacity and the percentage of the number of generic reactors in Table 3.4 is reasonable. Table A.2 in Appendix A shows the actual Federal Region placement and date of commercial operation for each generic reactor.

The siting of generic plants within a given Federal Region was accomplished using a modified version of the method described in Holter et. al. (1986). The Holter method develops a numerical rating for each postulated generic site in each of the ten regions. The numerical rating defines the sequence in which each potential site is chosen within a specific region. The generic reactors are then assigned chronologically in order of their startup date using this priority. In the previous study (Heeb 1987), the Holter method was used independently for the Upper Reference and Lower Reference Cases. The resulting generic assignments were dissimilar because of restrictions on the minimum time allowed between reactors startups at multireactor sites and allocations to PWR and BWR reactor types. Although site preference was maintained for each case, working with the ADBs was cumbersome for some users. The method allowed the same generic reactor identifier in different cases to represent different locations and the same location could contain different reactor types or reactor identifiers. The Holter method was modified to restrict multireactor sites to a single reactor type, determined by the first reactor placed at the site, and to carry this site type determination over to a subsequent case. Through this modification, the Lower Reference generic reactors became a subset of the Upper Reference generic reactors, thus making the ADBs easier to use while retaining selection of the more preferable sites.

To match the EIA projections of installed nuclear capacity for the Upper Reference Case, 86 generic PWRs and 43 generic BWRs were required, a total of 129 generic reactors representing 142 GWe generic reactor capacity. For the Lower Reference Case, 48 generic PWRs and 24 generic BWRs were necessary. The 72 Lower Reference Case generic reactors represent 79 GWe generic reactor capacity.

3.4 ADJUSTED DATA BASE ANNUAL ELECTRIC ENERGY GENERATION

The data base annual energy generation calculational procedure is not an exact process. Approximations are required because the data base contains no information on electrical generation. The calculation of annual energies from operating cycle energies as described in Section 3.2.4 reflects the altered discharge amounts and the burnup assumptions imposed on the utility data. This method of calculation, the estimation of annual generation from the product of amount discharged and burnup, will necessarily cause year-to-year fluctuations in the apparent annual energy generation. The level of approximate agreement is a measure of the consistency of EIA projections of spent fuel discharges, burnup, annual electric energy generation, and detailed utility data.

3.5 DATA BASE ADJUSTMENT RESULTS

The projected annual spent fuel discharged amounts for all five ADBs are shown in Table 3.5. The EIA annual discharge targets were matched to the nearest MTIHM, with the exception of the Upper Reference ADBs for the year 1987 which could only be adjusted to within 5 MTIHM. Nonetheless, since the EIA projections are given to the nearest hundred MTIHM, all annual discharge amounts in the ADBs agree with the EIA projections as published in World Nuclear Fuel Cycle Projections 1987 (1987b, Table E1).

The cumulative discharged amounts are shown in Table 3.6 for all five adjusted data bases. These data should be compared with the data published by DOE/EIA (1987b, Table E2). In Table E2 of the DOE/EIA Report, the inventory of permanently discharged spent fuel in 1986 was based on a preliminary estimate of 14,000 MTIHM. It should be noted that Table E2 is not in complete agreement with Table E1 due to independent rounding performed by EIA. The final inventory for 1986 contained herein is 14,192 MTIHM, which is the amount found in Spent Fuel Storage Requirements 1987 (DOE/RL 1987). The difference from Table E2 is due primarily to some spent fuel at several reactors that have been temporarily shut down. This fuel was physically resident in the reactor core on December 31, 1986, but there are no plans to further irradiate the fuel which will be replaced upon refueling. When the starting difference of 192 MTIHM and the disagreement between EIA Tables E1 and E2 are taken into account, the

TABLE 3.5. Annual Discharges from the Five Adjusted Data Bases (MTIHM)

Year	No New Orders		Upper Reference		Lower Reference
	Increasing Burnup	No Increased Burnup	Increasing Burnup	No Increased Burnup	
1987	1600	1600	1595	1595	1600
1988	1500	1500	1500	1600	1500
1989	2000	2100	2100	2100	2000
1990	1700	1900	1700	1900	1700
1991	2000	1900	2000	2000	2000
1992	2200	2400	2300	2500	2200
1993	1800	1900	1800	2200	1800
1994	2100	2200	2100	2100	2100
1995	1800	2000	2000	2200	1800
1996	2000	2200	1900	2400	2000
1997	1900	2400	2100	2300	1900
1998	1700	2100	1800	2200	1700
1999	2100	2000	2200	2500	2100
2000	1600	2400	1800	2600	1600
2001	2100	2100	2000	2200	2100
2002	2000	2200	2200	2500	2000
2003	1700	2300	1800	2500	1700
2004	2100	2200	2100	2400	2100
2005	1900	2300	2100	2500	1900
2006	1700	2300	1700	2200	1700
2007	2200	2400	2400	2700	2200
2008	1900	2300	2200	2900	2000
2009	2300	2600	2600	2800	2500
2010	2000	2300	2700	3100	2200
2011	2200	2600	3000	3600	2600
2012	2400	2600	3200	3600	2800
2013	2400	2600	3600	4000	2900
2014	2500	2800	3800	4500	3200
2015	1700	1800	3300	3400	2500
2016	1800	2000	3900	4500	2900
2017	1300	1600	3300	4200	2500
2018	1300	1300	3600	4400	2500
2019	1000	1400	3700	4300	2500
2020	1300	1500	3800	4800	2600

Note: All EIA projections are made to the nearest hundred MTIHM. ADB annual discharges match the EIA projection within +/- 0.5 MTIHM, excepting the Upper Reference ADBs in 1987 which could only be adjusted within 5 MTIHM.

TABLE 3.6. Cumulative Discharges from the Five Adjusted Data Bases (MTIHM)

	No New Orders		Upper Reference		
Year	Increasing Burnup	No Increased Burnup	Increasing Burnup	No Increased Burnup	Lower Reference
1986	14192	14192	14192	14192	14192
1987	15793	15793	15788	15788	15793
1988	17293	17293	17287	17388	17293
1989	19293	19393	19388	19488	19293
1990	20993	21293	21088	21388	20993
1991	22993	23193	23088	23388	22993
1992	25192	25593	25387	25887	25192
1993	26992	27493	27187	28087	26992
1994	29093	29693	29287	30188	29093
1995	30893	31693	31287	32387	30893
1996	32893	33893	33187	34787	32893
1997	34793	36293	35287	37087	34793
1998	36493	38394	37088	39287	36493
1999	38593	40394	39287	41787	38593
2000	40193	42794	41087	44387	40193
2001	42293	44894	43087	46587	42293
2002	44293	47094	45288	49087	44293
2003	45993	49394	47088	51587	45993
2004	48093	51593	49187	53987	48093
2005	49993	53893	51287	56487	49993
2006	51693	56193	52987	58687	51693
2007	53893	58593	55387	61387	53893
2008	55793	60893	57587	64287	55893
2009	58093	63493	60187	67087	58393
2010	60092	65793	62887	70187	60593
2011	62293	68393	65887	73787	63193
2012	64693	70993	69087	77387	65993
2013	67093	73593	72687	81387	68893
2014	69593	76393	76487	85886	72093
2015	71293	78193	79786	89287	74593
2016	73093	80193	83687	93787	77492
2017	74393	81793	86987	97987	79993
2018	75693	83093	90587	102387	82493
2019	76693	84493	94287	106686	84992
2020	77993	85993	98087	111486	87592

inventory schedule in Table 3.6 agrees with EIA Table E2 within the number of significant figures shown in the EIA projection. The spent fuel inventory projections are shown in Figure 3.2.

The EIA installed nuclear capacity projections are shown in Figure 3.3 for the No New Orders Case, the Upper Reference Case, and Lower Reference Case. The nuclear electric energy generation forecasts from EIA that correspond to the capacity projections are shown in Figure 3.4. The forecasts of capacity and energy are given from 1986 to 2020. The capacity and energy forecasts, unlike the spent fuel discharge forecast, are independent of the assumptions of increased or no increased burnup. Therefore, only the three cases shown in Figures 3.3 and 3.4 are necessary.

Figure 3.5 shows the adjusted data base nuclear generation capacity compared to the EIA values shown in Figure 3.3. The EIA target capacities and data base capacities are nearly identical. The larger variations after 2005 are caused by slight differences in reactor retirement dates between EIA data and the ADBs.

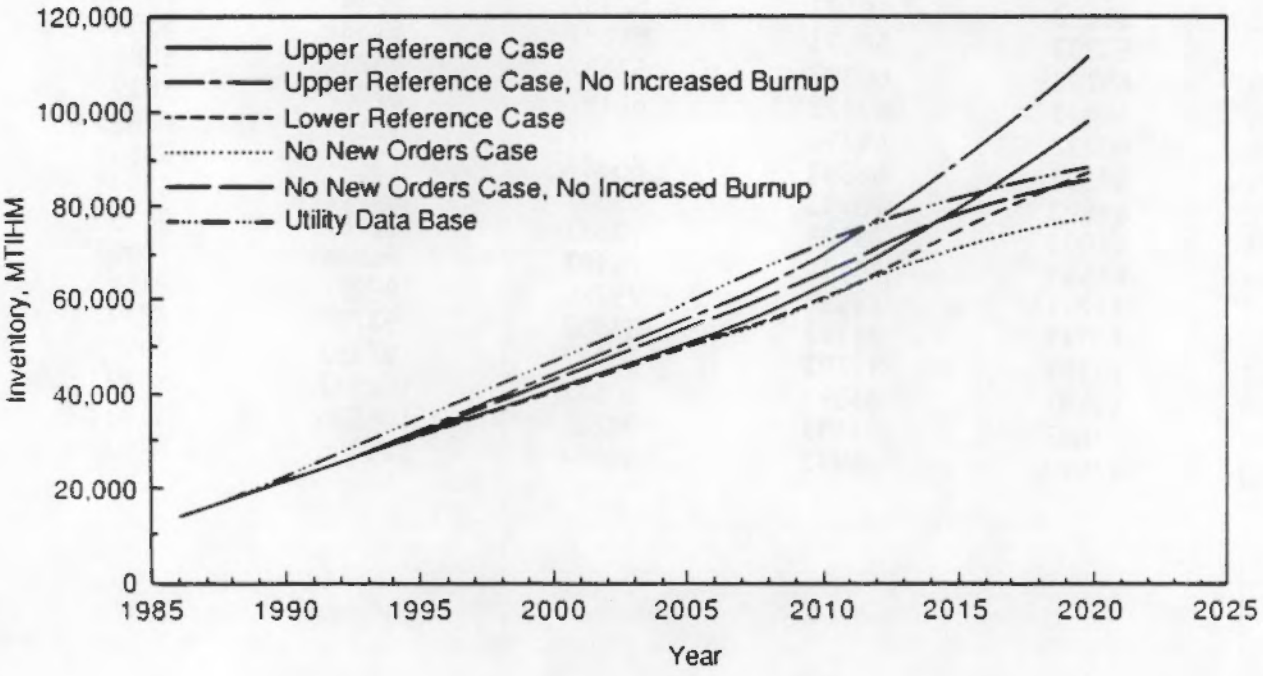


FIGURE 3.2. Projected Spent Fuel Inventory

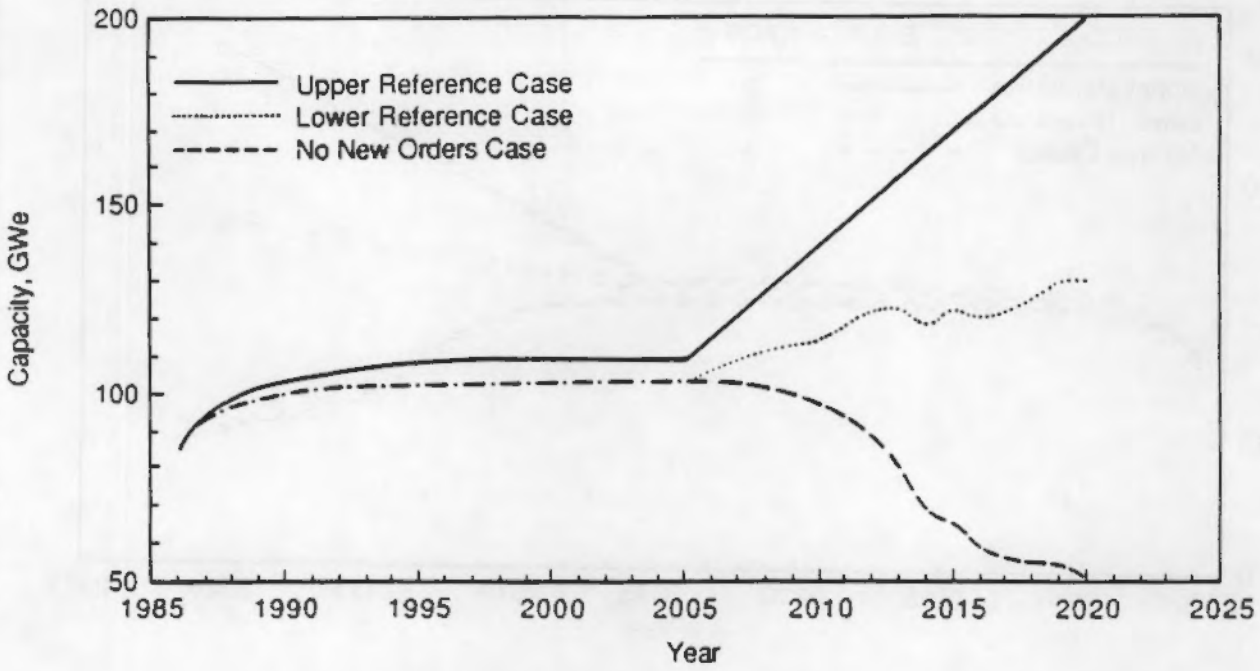


FIGURE 3.3. EIA Installed Nuclear Capacity Projections

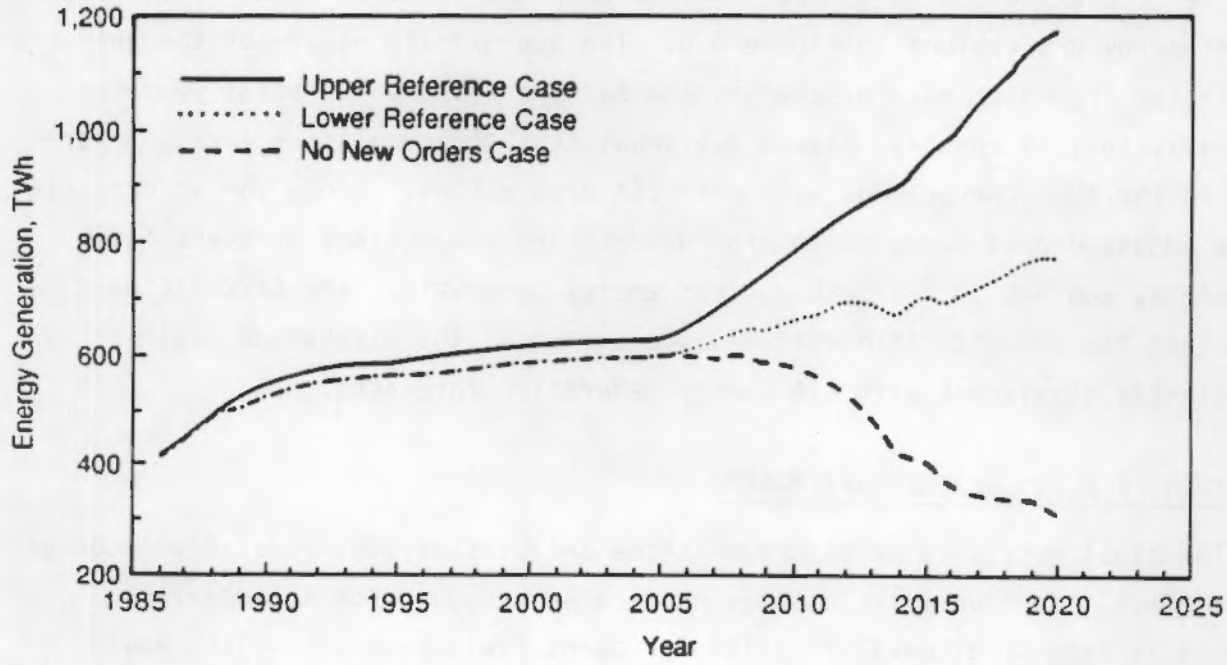


FIGURE 3.4. EIA Nuclear Energy Generation Projection

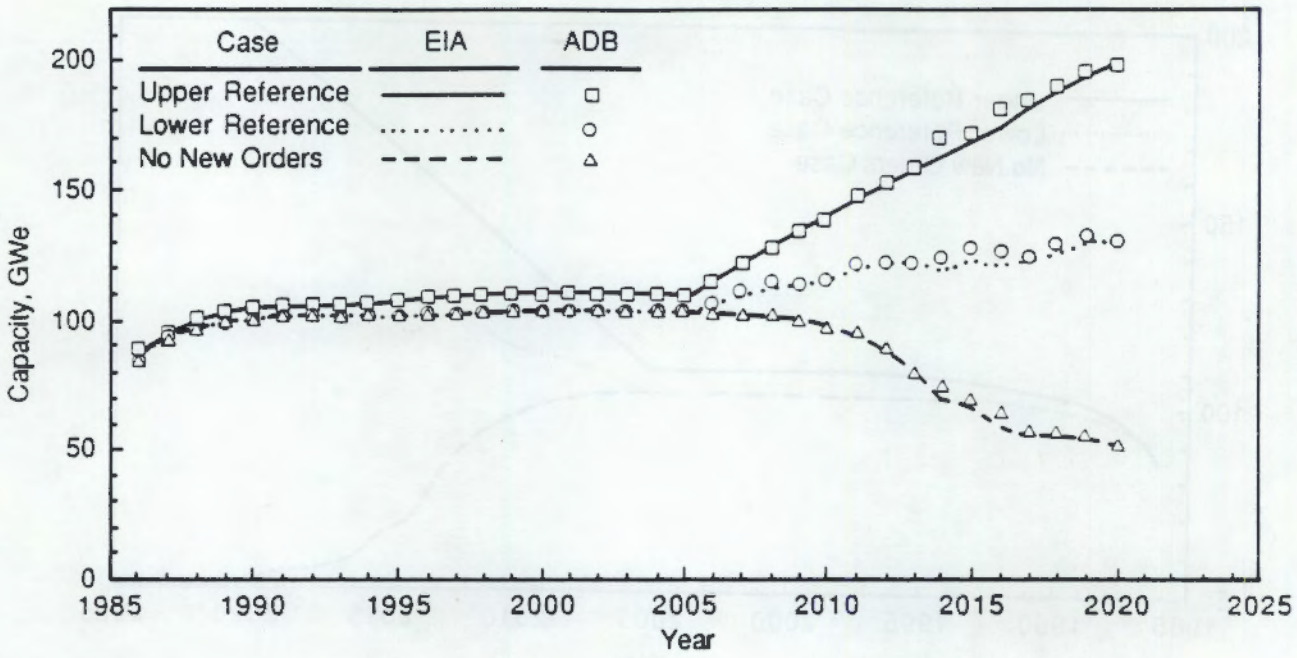


FIGURE 3.5. ADB Installed Nuclear Capacity and EIA Projections

The cumulative energy generation from each ADB (1986 to 2020) is compared to EIA energy projections in Figure 3.6. The approximate nature of the energy calculation from data base discharges and burnups shows up as small year-to-year variations in energy. Figure 3.6 shows that the cumulative energy generation in the ADBs corresponds well with EIA projections. Since the primary use of the adjusted data bases is to provide detailed projections of spent fuel discharges, and not to forecast nuclear energy generation, the calculation shows that the amounts discharged and the burnup of the discharged fuel is sufficiently consistent with EIA energy generation forecasts.

3.6 SPENT FUEL STORAGE REQUIREMENTS

The final result to be reported is the analysis of additional fuel storage requirements. This analysis assumes no receipt schedule for a federally-operated storage or disposal facility for spent fuel; such a facility would reduce storage requirements for most or all sites. The two storage scenario cases covered in this analysis are based on the maximum at-reactor storage capacities of the individual reactor sites, as reported by the utilities. Both cases include allowances for maintaining full core discharge capability, also

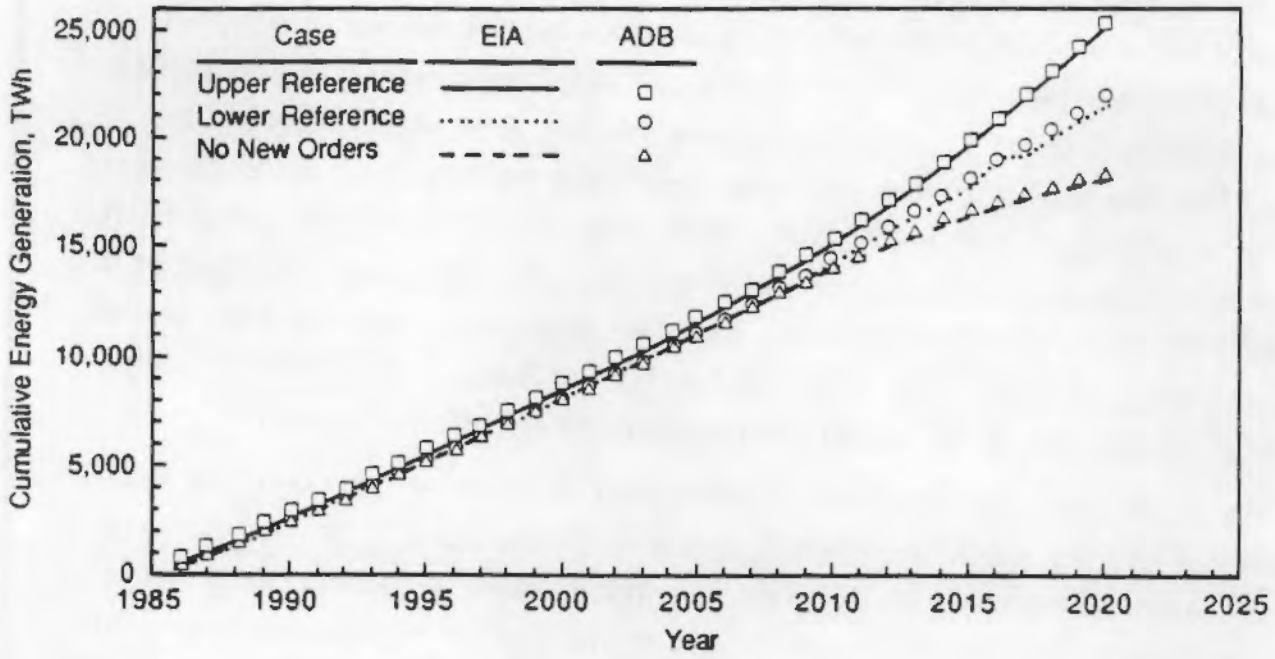


FIGURE 3.6. Cumulative ADB Energy Generation and EIA Energy Projections

referred to as full core reserve (FCR), for each separate reactor. A single FCR is assumed to be maintained for all units at multiple reactor stations employing either a single common spent fuel storage pool, or separate pools with interconnections allowing spent fuel transfer between them. Several sites have identified dry storage capacity which is included. The only difference between the two storage scenario cases is in the consideration of transshipment to other reactor sites. The first case assumes that transshipments occur only as currently planned by the utilities. The second case includes the additional assumption that there are no constraints on transshipments of spent fuel among reactors of like type (i.e. among BWRs or among PWRs) within a given utility system. This assumption allows unused spent fuel storage capacity at one reactor to offset needs for additional capacity at another reactor in the same utility system, thus delaying the utility's need for additional storage capacity. Such transshipments are included in the spent fuel management plans of several utilities. The two reference cases therefore define a range of potential storage requirements.

The maximum AR capacity case results are given in Table 3.7 and Figure 3.7 for the five projected data bases: No New Orders (NNO); No New Orders, No Increased Burnup (NNO-NIB); Upper Reference (UR); Upper Reference, No Increased Burnup (UR-NIB); Lower Reference (LR); and for the unadjusted Utility Data Base. The time period covers the range from 1987 through the year 2020. The storage requirements for the No New Orders (NNO) and Lower Reference (LR) data bases are identical. This is because the Lower Reference is a super-set of the No New Orders, differing only by the addition of generic reactors with assumed lifetime spent fuel storage. The availability of federally-operated storage or disposal facilities is not taken into account in these projections.

It is evident that the five adjusted data bases show substantially reduced additional storage requirement needs compared to the utility estimate. This reduction is due to the reduced plant operating capacity factor, to the delayed startup assumptions (in later years), and to varying burnup assumptions. The additional storage requirements taking transshipment into account are shown in Table 3.8 and in Figure 3.8 for the five projected data bases and for the Utility Data Base. A comparison of Tables 3.7 and 3.8 shows that transshipment can be an effective means of delaying additional storage requirements.

TABLE 3.7. Cumulative Storage Requirements--Maximum AR Storage (MTIHM)

Year	Utility Data Base	No New Orders		Upper Reference		Lower Reference
		Increasing Burnup	No Increased Burnup	Increasing Burnup	No Increased Burnup	
1987	38	29	29	29	29	29
1988	76	56	56	56	55	56
1989	140	104	109	104	109	104
1990	322	207	228	207	230	207
1991	509	345	367	345	371	345
1992	695	504	541	505	547	504
1993	1004	715	771	719	779	715
1994	1379	961	1036	968	1048	961
1995	1879	1216	1319	1225	1343	1216
1996	2469	1527	1751	1529	1780	1527
1997	3495	2071	2531	2076	2577	2071
1998	4211	2492	3122	2538	3171	2492
1999	5494	3185	3916	3252	4039	3185
2000	6753	3846	5060	3940	5256	3846
2001	8006	4726	6047	4764	6262	4726
2002	9545	5740	7351	5805	7575	5740
2003	10886	6700	8722	6800	8996	6700
2004	12382	7860	9991	7919	10330	7860
2005	14063	9026	11461	9120	11864	9026
2006	15807	10117	12967	10204	13358	10117
2007	17563	11399	14584	11480	15102	11399
2008	19280	12722	16383	12810	17171	12722
2009	20762	14219	18492	14365	19291	14219
2010	22369	15252	19882	15445	20795	15252
2011	23790	16777	21864	17019	23029	16777
2012	25251	18497	23950	18748	25189	18497
2013	26554	20131	25838	20392	27128	20131
2014	27954	21529	27499	21965	29119	21529
2015	29235	22502	28588	23010	30327	22502
2016	30491	23651	29965	24268	31962	23651
2017	31720	24354	30918	25213	33337	24354
2018	32910	25202	31888	26091	34429	25202
2019	33965	25950	33097	27051	35722	25950
2020	35364	26795	34192	28135	37089	26795

TABLE 3.8. Cumulative Storage Requirements--Maximum AR Storage Plus Transshipment (MTIHM)

Year	Utility Data Base	No New Orders		Upper Reference		Lower Reference
		Increasing Burnup	No Increased Burnup	Increasing Burnup	No Increased Burnup	
1987	23	18	18	18	18	18
1988	30	20	20	20	20	20
1989	65	52	53	52	53	52
1990	93	72	77	72	77	72
1991	162	110	117	110	118	110
1992	228	164	177	165	179	164
1993	372	240	264	244	268	240
1994	559	361	398	368	406	361
1995	880	507	561	516	571	507
1996	1332	655	769	664	841	655
1997	2104	1006	1336	1067	1380	1006
1998	2801	1296	1786	1338	1770	1296
1999	3991	1851	2518	1847	2566	1851
2000	5131	2442	3553	2438	3628	2442
2001	6222	3281	4473	3244	4551	3281
2002	7534	4198	5586	4219	5746	4198
2003	8828	5038	6852	5070	6910	5038
2004	10294	6051	8072	6062	8291	6051
2005	12024	7163	9444	7086	9786	7163
2006	13697	8148	10895	8024	11260	8148
2007	15529	9425	12544	9295	13103	9425
2008	17497	10708	14274	10629	15118	10708
2009	19120	12165	16485	12184	17329	12165
2010	20902	13194	18034	13291	18991	13194
2011	22456	14718	20216	14865	21376	14718
2012	24007	16633	22435	16816	23715	16633
2013	25409	18471	24473	18683	25797	18471
2014	26909	19952	26235	20404	27927	19952
2015	28190	20981	27356	21486	29135	20981
2016	29529	22252	28874	22875	30871	22252
2017	30818	23016	29908	23923	32328	23016
2018	32070	23950	30933	24868	33473	23950
2019	33155	24778	32175	25878	34800	24778
2020	34585	25675	33300	27016	36196	25675

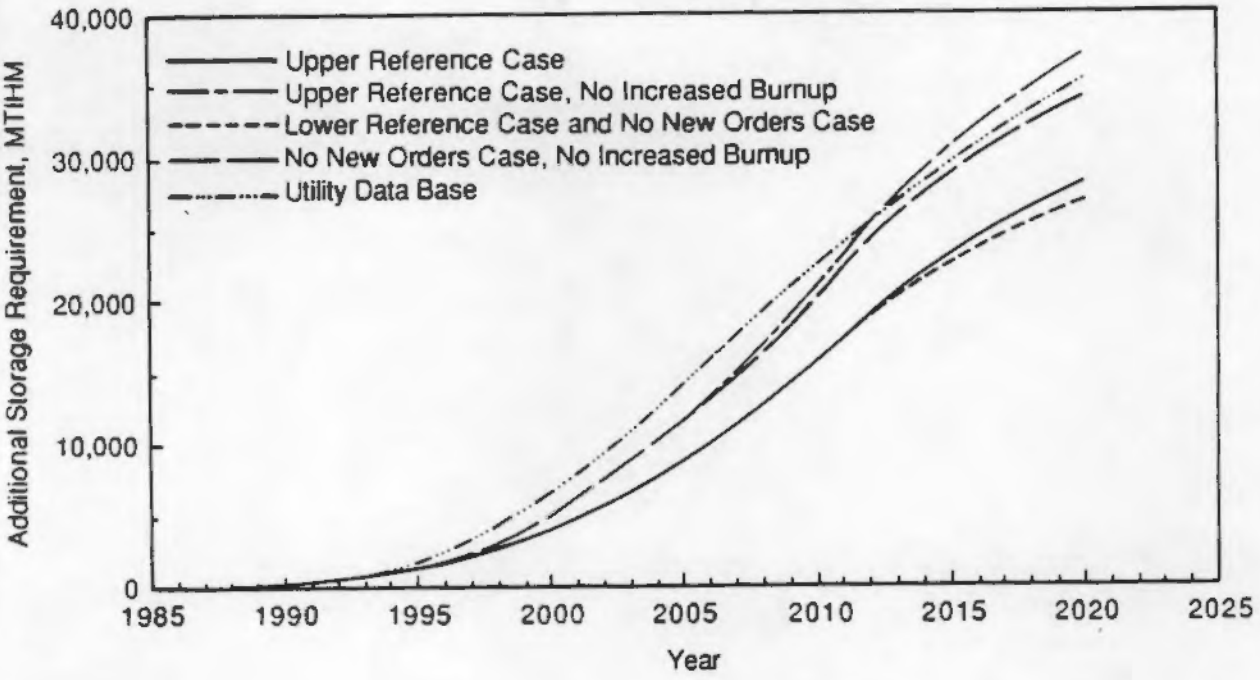


FIGURE 3.7. Cumulative Additional Storage Requirement--Maximum At-Reactor Storage

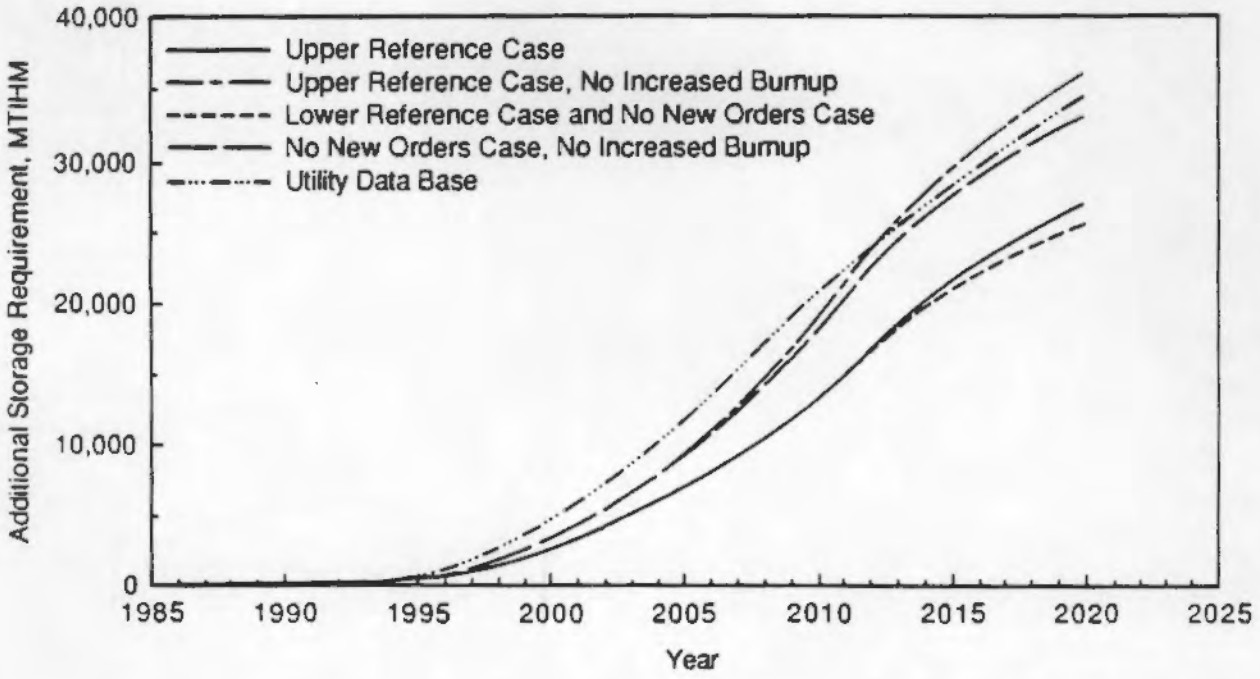
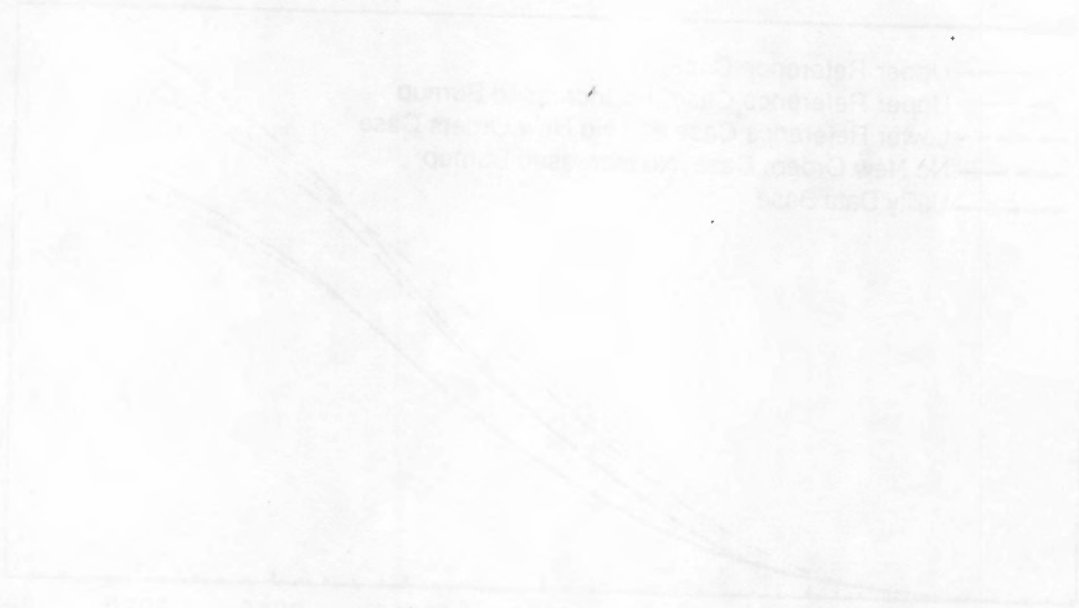


FIGURE 3.8. Cumulative Additional Storage Requirement--Maximum At-Reactor Storage Plus Transshipment



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APPENDIX A

DETAILED DATA BASE RESULTS

APPENDIX A

DETAILED DATA BASE RESULTS

The following tables provide detailed results for four scenarios: Utility, No New Orders, Upper Reference, and Lower Reference. Table A.1 gives startup and shutdown dates for the four scenarios. Table A.2 gives names and startup dates for the Upper Reference and Lower Reference generic reactors. The Upper Reference case has been selected by OCRWM as its planning base case. Tables A.3 to A.8 give Upper Reference by-reactor discharge projections and projections of additional storage requirements similar to the information published in Spent Fuel Storage Requirements 1987 (DOE/RL 1987) for the Utility Data Base.

Table Number	Title
A.1	Startup and Shutdown Dates and Federal Region for Operating and Pipeline Reactors in the Utility, No New Orders, Upper Reference, and Lower Reference Case ADBs
A.2	Startup and Shutdown Dates and Federal Region for Generic Reactors in the Upper Reference and Lower Reference Case ADBs
A.3	Upper Reference Case, 1986 Inventory and Projected Annual Reactor Discharges
A.4	Upper Reference Case, 1986 Inventory and Projected Inventory
A.5	Upper Reference Case, Maximum At-Reactor Capacity--Projected Annual Storage Requirements
A.6	Upper Reference Case, Maximum At-Reactor Capacity--Projected Cumulative Storage Requirements
A.7	Upper Reference Case, Maximum At-Reactor Capacity Plus Transshipment --Projected Annual Storage Requirements
A.8	Upper Reference Case, Maximum At-Reactor Capacity Plus Transshipment --Projected Cumulative Storage Requirements

TABLE A.1. Startup and Shutdown Dates and Federal Region for Operating and Pipeline Reactors in the Utility, No New Orders, Upper Reference, and Lower Reference Case ADBs

Reactor		Federal Region	Utility Case		No New Orders and Lower Reference Cases		Upper Reference Case	
			Startup	Shutdown	Startup	Shutdown	Startup	Shutdown
DRESDEN	1	5	1960/07	1978	1960/07	1978	1960/07	1978
YANKEE-ROWE	1	1	1961/07	2001	1961/07	2000	1961/07	2000
INDIAN PT	1	2	1962/10	1974	1962/10	1974	1962/10	1974
HUMBOLDT BAY		9	1963/09	1984	1963/09	1984	1963/09	1984
BIG ROCK	1	5	1965/11	2001	1965/11	2005	1965/11	2005
HADDAM NECK		1	1968/01	2007	1968/01	2007	1968/01	2007
SAN ONOFRE	1	9	1968/01	2000	1968/01	2008	1968/01	2008
LACROSSE		5	1969/11	2002	1969/11	1987	1969/11	2002
NINE MILE PT	1	2	1969/12	2005	1969/12	2010	1969/12	2010
OYSTER CRK	1	2	1969/12	2005	1969/12	2010	1969/12	2010
DRESDEN	2	5	1970/06	2007	1970/06	2010	1970/06	2010
GINNA		2	1970/07	2006	1970/07	2010	1970/07	2010
MILLSTONE	1	1	1970/12	2010	1970/12	2010	1970/12	2010
POINT BEACH	1	5	1970/12	2007	1970/12	2010	1970/12	2010
ROBINSON	2	4	1971/03	2007	1971/03	2011	1971/03	2011
MONTICELLO		5	1971/06	2006	1971/06	2011	1971/06	2011
DRESDEN	3	5	1971/11	2007	1971/11	2010	1971/11	2010
PALISADES		5	1971/12	2011	1971/12	2011	1971/12	2011
POINT BEACH	2	5	1972/10	2008	1972/10	2011	1972/10	2011
VT YANKEE	1	1	1972/11	2013	1972/11	2013	1972/11	2013
MAINE YANKEE		1	1972/12	2008	1972/12	2013	1972/12	2013
PILGRIM	1	1	1972/12	2008	1972/12	2012	1972/12	2012
SURRY	1	3	1972/12	2012	1972/12	2012	1972/12	2012
TURKEY PT	3	4	1972/12	2007	1972/12	2012	1972/12	2012
QUAD CITIES	1	5	1973/02	2007	1973/02	2013	1973/02	2013
QUAD CITIES	2	5	1973/03	2006	1973/03	2013	1973/03	2013
SURRY	2	3	1973/05	2013	1973/05	2013	1973/05	2013
OCONEE	1	4	1973/07	2013	1973/07	2013	1973/07	2013
FORT CALHOUN		7	1973/09	2008	1973/09	2014	1973/09	2014
TURKEY PT	4	4	1973/09	2007	1973/09	2012	1973/09	2012
PRAIRIE ISL	1	5	1973/12	2007	1973/12	2013	1973/12	2013
ZION	1	5	1973/12	2007	1973/12	2013	1973/12	2013
KEWAUNEE		5	1974/06	2014	1974/06	2014	1974/06	2014
COOPER STN		7	1974/07	2008	1974/07	2014	1974/07	2014
PEACHBOTTOM	2	3	1974/07	2010	1974/07	2014	1974/07	2014
BROWNS FERRY	1	4	1974/08	2021	1974/08	2021	1974/08	2021
INDIAN PT	2	2	1974/08	2006	1974/08	2014	1974/08	2014
3 MILE ISL	1	3	1974/09	2008	1974/09	2014	1974/09	2014
OCONEE	2	4	1974/09	2013	1974/09	2013	1974/09	2013
ZION	2	5	1974/09	2008	1974/09	2014	1974/09	2014
ARK NUCLEAR	1	6	1974/12	2008	1974/12	2015	1974/12	2015
HATCH	1	4	1974/12	2009	1974/12	2014	1974/12	2014

TABLE A.1. Startup and Shutdown Dates and Federal Region for Operating and Pipeline Reactors in the Utility, No New Orders, Upper Reference, and Lower Reference Case ADBs (contd)

Reactor		Federal Region	Utility Case		No New Orders and Lower Reference Cases		Upper Reference Case	
			Startup	Shutdown	Startup	Shutdown	Startup	Shutdown
OCONEE	3	4	1974/12	2014	1974/12	2014	1974/12	2014
PEACHBOTTOM	3	3	1974/12	2010	1974/12	2014	1974/12	2014
PRAIRIE ISL	2	5	1974/12	2008	1974/12	2014	1974/12	2014
DUANE ARNOLD		7	1975/02	2010	1975/02	2015	1975/02	2015
BROWNS FERRY	2	4	1975/03	2020	1975/03	2020	1975/03	2020
RANCHO SECO	1	9	1975/04	2008	1975/04	2015	1975/04	2015
CALVERT CLF	1	3	1975/05	2014	1975/05	2014	1975/05	2014
FITZPATRICK		2	1975/07	2015	1975/07	2015	1975/07	2015
COOK	1	5	1975/08	2009	1975/08	2016	1975/08	2016
BRUNSWICK	2	4	1975/11	2010	1975/11	2016	1975/11	2016
MILLSTONE	2	1	1975/12	2015	1975/12	2015	1975/12	2015
TROJAN		10	1976/05	2015	1976/05	2015	1976/05	2015
INDIAN PT	3	2	1976/08	2015	1976/08	2015	1976/08	2015
BEAVER VALLEY	1	3	1976/10	2016	1976/10	2016	1976/10	2016
ST LUCIE	1	4	1976/12	2010	1976/12	2017	1976/12	2017
BROWNS FERRY	3	4	1977/03	2020	1977/03	2020	1977/03	2020
BRUNSWICK	1	4	1977/03	2009	1977/03	2017	1977/03	2017
CRYSTAL RVR	3	4	1977/03	2007	1977/03	2017	1977/03	2017
CALVERT CLF	2	3	1977/04	2016	1977/04	2016	1977/04	2016
SALEM	1	2	1977/06	2016	1977/06	2016	1977/06	2016
FARLEY	1	4	1977/12	2012	1977/12	2018	1977/12	2018
NORTH ANNA	1	3	1978/06	2018	1978/06	2018	1978/06	2018
COOK	2	5	1978/07	2012	1978/07	2018	1978/07	2018
DAVIS-BESSE	1	5	1978/07	2017	1978/07	2017	1978/07	2017
FT ST VRAIN		8	1979/07	2007	1979/07	1990	1979/07	2007
HATCH	2	4	1979/09	2012	1979/09	2017	1979/09	2017
ARK NUCLEAR	2	6	1980/03	2011	1980/03	2018	1980/03	2018
NORTH ANNA	2	3	1980/12	2020	1980/12	2020	1980/12	2020
FARLEY	2	4	1981/07	2013	1981/07	2019	1981/07	2019
SEQUOYAH	1	4	1981/07	2022	1981/07	2022	1981/07	2022
MCGUIRE	1	4	1981/09	2021	1981/09	2021	1981/09	2021
SALEM	2	2	1981/10	2020	1981/10	2020	1981/10	2020
SEQUOYAH	2	4	1982/06	2023	1982/06	2023	1982/06	2023
LASALLE CTY	1	5	1982/10	2022	1982/10	2022	1982/10	2022
SUSQUEHANNA	1	3	1983/06	2022	1983/06	2022	1983/06	2022
SAN ONOFRE	2	9	1983/08	2011	1983/08	2021	1983/08	2021
ST LUCIE	2	4	1983/08	2023	1983/08	2023	1983/08	2023
SUMMER	1	4	1984/01	2024	1984/01	2024	1984/01	2024
MCGUIRE	2	4	1984/02	2023	1984/02	2023	1984/02	2023
SAN ONOFRE	3	9	1984/04	2012	1984/04	2023	1984/04	2023
LASALLE CTY	2	5	1984/09	2024	1984/09	2024	1984/09	2024
CALLAWAY	1	7	1984/12	2023	1984/12	2023	1984/12	2023

TABLE A.1. Startup and Shutdown Dates and Federal Region for Operating and Pipeline Reactors in the Utility, No New Orders, Upper Reference, and Lower Reference Case ADBs (contd)

Reactor		Federal Region	Utility Case		No New Orders and Lower Reference Cases		Upper Reference Case	
			Startup	Shutdown	Startup	Shutdown	Startup	Shutdown
WASH NUCLEAR	2	10	1984/12	2023	1984/12	2023	1984/12	2023
SUSQUEHANNA	2	3	1985/02	2024	1985/02	2024	1985/02	2024
DIABLO CANYON	1	9	1985/05	2026	1985/05	2026	1985/05	2026
CATAWBA	1	4	1985/06	2025	1985/06	2025	1985/06	2025
GRAND GULF	1	4	1985/07	2022	1985/07	2025	1985/07	2025
BYRON	1	5	1985/09	2024	1985/09	2024	1985/09	2024
WATERFORD	3	6	1985/09	2025	1985/09	2024	1985/09	2024
WOLF CREEK	1	7	1985/09	2025	1985/09	2025	1985/09	2025
PALO VERDE	1	9	1986/01	2024	1986/01	2024	1986/01	2024
LIMERICK	1	3	1986/02	2023	1986/02	2026	1986/02	2026
DIABLO CANYON	2	9	1986/03	2026	1986/03	2026	1986/03	2026
MILLSTONE	3	1	1986/05	2025	1986/05	2025	1986/05	2025
RVR BEND	1	6	1986/06	2026	1986/06	2026	1986/06	2026
CATAWBA	2	4	1986/08	2027	1986/08	2027	1986/08	2027
PALO VERDE	2	9	1986/08	2025	1986/08	2025	1986/08	2025
PERRY	1	5	1987/04	2026	1987/04	2026	1987/04	2026
ENRICO FERMI	2	5	1987/05	2025	1987/05	2025	1987/05	2025
HOPE CREEK		2	1987/06	2026	1987/06	2026	1987/06	2026
CLINTON	1	5	1987/11	2027	1987/07	2026	1987/07	2026
HARRIS	1	4	1987/03	2026	1987/07	2027	1987/07	2027
BYRON	2	5	1987/05	2026	1987/11	2026	1987/11	2026
NINE MILE PT	2	2	1987/09	2027	1988/06	2027	1987/12	2027
SEABROOK	1	1	1987/12	2031			1987/12	2031
BRAIDWOOD	1	5	1987/07	2026	1988/01	2027	1988/01	2027
VOGTLE	1	4	1987/06	2027	1988/01	2027	1988/01	2027
PALO VERDE	3	9	1987/11	2026	1988/03	2027	1988/03	2027
WATTS BAR	1	4	1989/06	2028	1988/04	2027	1988/04	2027
BEAVER VALLEY	2	3	1987/10	2026	1988/11	2027	1988/07	2027
SOUTH TEXAS	1	6	1987/12	2027	1989/10	2028	1989/04	2028
VOGTLE	2	4	1988/09	2028	1990/04	2030	1989/09	2029
COMANCHE PK	1	6	1989/02	2030	1990/04	2031	1989/10	2030
WATTS BAR	2	4	1990/06	2029	1990/04	2029	1989/10	2029
BRAIDWOOD	2	5	1988/09	2028	1990/10	2030	1990/01	2029
SHOREHAM		2	1988/06	2027			1990/04	2029
COMANCHE PK	2	6	1989/10	2030	1991/08	2032	1991/01	2031
SOUTH TEXAS	2	6	1989/06	2028	1992/01	2030	1991/04	2030
LIMERICK	2	3	1990/10	2030			1992/08	2034
WNP 1		10					1995/12	2035
BELLEFONTE	1	4	1992/06	2032	1998/12	2039	1996/12	2037
BELLEFONTE	2	4	1995/06	2034			1998/12	2038

TABLE A.2. Startup and Shutdown Dates and Federal Region for Generic Reactors in the Upper Reference and Lower Reference Case ADBs

Reactor Name	Federal Region	Upper Reference Case		Lower Reference Case	
		Startup	Shutdown	Startup	Shutdown
BWR Reactors					
B-8401	4	2006/07	2046	2006/08	2046
B-8501	5	2006/09	2046	2007/07	2047
B-8301	3	2007/07	2047	2008/05	2047
B-8901	9	2007/07	2047	2009/06	2048
B-8402	4	2008/07	2048	2010/07	2050
B-8601	6	2008/09	2048	2011/07	2051
B-8201	2	2009/07	2049	2011/05	2050
B-8502	5	2009/07	2049	2011/12	2051
B-8403	4	2010/04	2049	2012/07	2052
B-8101	1	2010/07	2050	2013/06	2052
B-8701	7	2010/08	2050	2013/07	2053
B-8503	5	2011/07	2051	2014/01	2053
B-8404	4	2011/07	2051	2013/07	2053
B-8302	3	2011/07	2051	2014/07	2054
B-8405	4	2012/04	2051	2014/08	2054
B-8902	9	2012/07	2052	2015/07	2055
B-8504	5	2012/07	2052	2015/07	2055
B-8602	6	2013/03	2052	2018/06	2057
B-8407	4	2013/07	2053	2019/10	2059
B-8202	2	2013/07	2053	2016/03	2055
B-8505	5	2013/07	2053	2019/04	2058
B-8303	3	2013/12	2053	2018/07	2058
B-8406	4	2014/07	2054	2017/01	2056
B-8001	10	2014/07	2054	2020/07	2060
B-8408	4	2014/07	2054		
B-8506	5	2014/07	2054		
B-8903	9	2014/10	2054		
B-8409	4	2015/07	2055		
B-8304	3	2015/07	2055		
B-8507	5	2016/02	2055		
B-8603	6	2016/07	2056		
B-8410	4	2016/07	2056		
B-8203	2	2016/07	2056		
B-8102	1	2017/06	2056		
B-8508	5	2017/07	2057		
B-8411	4	2017/07	2057		
B-804	9	2018/06	2057		
B-8305	3	2018/07	2058		
B-8412	4	2019/01	2058		
B-8509	5	2019/07	2059		
B-8702	7	2020/03	2059		
B-8413	4	2020/07	2060		
B-8604	6	2021/06	2060		
P-9401	4	2006/07	2047	2006/12	2047

TABLE A.2. Startup and Shutdown Dates and Federal Region for Generic Reactors in the Upper Reference and Lower Reference Case ADBs (contd)

Reactor Name	Federal Region	Upper Reference Case		Lower Reference Case	
		Startup	Shutdown	Startup	Shutdown
PWR Reactors					
P-9501	5	2006/07	2047	2006/12	2047
P-9301	3	2006/07	2047	2007/07	2048
P-9901	9	2006/11	2047	2007/07	2048
P-9402	4	2007/07	2048	2008/04	2048
P-9601	6	2007/07	2048	2009/06	2049
P-9201	2	2007/07	2048	2008/07	2049
P-9503	5	2007/08	2048	2011/07	2052
P-9403	4	2008/07	2049	2010/07	2051
P-9101	1	2008/07	2049	2010/07	2051
P-9701	7	2008/07	2049	2011/03	2051
P-9502	5	2008/12	2049	2009/08	2050
P-9404	4	2009/07	2050	2011/07	2052
P-9302	3	2009/07	2050	2011/07	2052
P-9405	4	2009/07	2050	2011/07	2052
P-9902	9	2009/07	2050	2012/05	2052
P-9505	5	2010/02	2050	2013/07	2054
P-9602	6	2010/07	2051	2013/06	2053
P-9406	4	2010/07	2051	2012/07	2053
P-9202	2	2010/07	2051	2012/07	2053
P-9504	5	2010/07	2051	2012/07	2053
P-9304	3	2010/09	2051	2014/10	2055
P-9407	4	2011/07	2052	2013/07	2054
P-9001	10	2011/07	2052	2013/07	2054
P-9408	4	2011/07	2052	2013/08	2054
P-9507	5	2011/07	2052	2015/07	2056
P-9903	9	2011/07	2052	2014/07	2055
P-9409	4	2011/07	2052	2014/07	2055
P-9303	3	2012/01	2052	2013/07	2054
P-9506	5	2012/07	2053	2014/07	2055
P-9603	6	2012/07	2053	2015/07	2056
P-9414	4	2012/07	2053	2020/07	2061
P-9203	2	2012/07	2053	2015/07	2056
P-9102	1	2012/07	2053	2014/07	2055
P-9508	5	2012/12	2053	2016/07	2057
P-9410	4	2013/07	2054	2015/07	2056
P-9904	9	2013/07	2054	2018/06	2058
P-9306	3	2013/07	2054	2019/07	2060
P-9411	4	2013/07	2054	2015/12	2056
P-9510	5	2013/07	2054	2020/01	2060
P-9702	7	2013/07	2054	2017/07	2058
P-9415	4	2013/07	2054		
P-9604	6	2013/07	2054	2019/07	2060
P-9511	5	2014/06	2054		
P-9204	2	2014/07	2055	2018/07	2059

TABLE A.2. Startup and Shutdown Dates and Federal Region for Generic Reactors in the Upper Reference and Lower Reference Case ADBs (contd)

Reactor Name	Federal Region	Upper Reference Case		Lower Reference Case	
		Startup	Shutdown	Startup	Shutdown
PWR Reactors (contd)					
P-9416	4	2014/07	2055		
P-9305	3	2014/07	2055	2016/07	2057
P-9905	9	2014/07	2055		
P-9417	4	2014/07	2055		
P-9512	5	2014/07	2055		
P-9418	4	2014/07	2055		
P-9605	6	2014/07	2055		
P-9513	5	2014/07	2055		
P-9307	3	2015/02	2055		
P-9412	4	2015/07	2056	2017/07	2058
P-9103	1	2015/07	2056	2020/08	2061
P-9205	2	2015/07	2056		
P-9509	5	2015/07	2056	2018/07	2059
P-9413	4	2015/09	2056	2019/01	2059
P-9906	9	2016/07	2057		
P-9514	5	2016/07	2057		
P-9419	4	2016/07	2057		
P-9308	3	2016/07	2057		
P-9703	7	2016/07	2057		
P-9420	4	2016/07	2057		
P-9606	6	2016/07	2057		
P-9515	5	2017/06	2057		
P-9206	2	2017/07	2058		
P-9421	4	2017/07	2058		
P-9907	9	2017/07	2058		
P-9516	5	2017/07	2058		
P-9422	4	2017/07	2058		
P-9309	3	2018/05	2058		
P-9104	1	2018/07	2059		
P-9423	4	2018/07	2059		
P-9517	5	2018/07	2059		
P-9607	6	2018/07	2059		
P-9424	4	2019/07	2060		
P-9310	3	2019/07	2060		
P-9908	9	2019/07	2060		
P-9518	5	2019/11	2060		
P-9425	4	2020/07	2061		
P-9207	2	2020/07	2061		
P-9519	5	2020/07	2061		
P-9426	4	2020/07	2061		
P-9704	7	2021/06	2061		

TABLE A.3. Upper Reference Case, 1986 Inventory and Projected Annual Reactor Discharges

REACTOR		Inv	ASSEMBLIES										:	Inv	MTIHM									
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	:	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
ARK NUCLEAR 1	PWR	448	0	48	0	46	54	0	51	0	46	53	:	208	0	22	0	21	25	0	24	0	21	25
ARK NUCLEAR 2	PWR	288	0	54	63	0	61	59	0	59	51	0	:	121	0	23	26	0	25	24	0	25	21	0
BEAVER VALLEY 1	PWR	283	63	0	62	0	62	61	0	60	0	61	:	130	29	0	29	0	29	28	0	28	0	28
BEAVER VALLEY 2	PWR	0	0	0	0	20	0	74	31	0	89	22	:	0	0	0	0	9	0	34	14	0	41	10
BELLEFONTE 1	PWR	0	0	0	0	0	0	0	0	0	0	0	:	0	0	0	0	0	0	0	0	0	0	0
BELLEFONTE 2	PWR	0	0	0	0	0	0	0	0	0	0	0	:	0	0	0	0	0	0	0	0	0	0	0
BIG ROCK 1	BWR	188	20	20	19	15	18	19	18	18	13	19	:	25	3	3	2	2	2	2	2	2	2	2
BRAIDWOOD 1	PWR	0	0	0	118	0	76	91	0	76	104	0	:	0	0	0	50	0	32	38	0	32	44	0
BRAIDWOOD 2	PWR	0	0	0	0	0	74	0	37	76	0	27	:	0	0	0	0	0	31	0	16	32	0	11
BROWNS FERRY1	BWR	1328	0	0	0	0	0	200	0	196	0	203	:	248	0	0	0	0	0	37	0	38	0	37
BROWNS FERRY2	BWR	1192	0	0	258	0	196	0	193	197	0	204	:	223	0	0	47	0	36	0	35	36	0	37
BROWNS FERRY3	BWR	1004	0	0	0	206	205	0	196	0	171	203	:	187	0	0	0	38	37	0	36	0	31	37
BRUNSWICK 1	BWR	840	164	0	169	142	0	164	0	161	138	0	:	156	30	0	31	26	0	31	0	30	26	0
BRUNSWICK 1	PWR	160	0	0	0	0	0	0	0	0	0	0	:	71	0	0	0	0	0	0	0	0	0	0
BRUNSWICK 2	BWR	756	0	149	169	0	166	0	162	162	0	164	:	141	0	27	31	0	31	0	30	30	0	31
BRUNSWICK 2	PWR	144	0	0	0	0	0	0	0	0	0	0	:	66	0	0	0	0	0	0	0	0	0	0
BYRON 1	PWR	0	77	70	0	69	80	0	73	72	0	75	:	0	33	30	0	29	34	0	31	30	0	32
BYRON 2	PWR	0	0	0	117	45	0	91	37	0	104	25	:	0	0	0	49	19	0	38	16	0	44	11
CALLAWAY 1	PWR	84	83	0	73	85	0	74	74	0	83	75	:	39	38	0	32	28	0	32	32	0	27	32
CALVERT CLF 1	PWR	618	0	77	0	75	0	85	0	82	0	87	:	237	0	30	0	29	0	32	0	31	0	32
CALVERT CLF 2	PWR	432	70	0	87	0	87	0	84	0	72	0	:	165	30	0	34	0	33	0	32	0	27	0
CATAWBA 1	PWR	84	60	0	62	53	64	64	0	62	55	65	:	27	25	0	26	22	27	27	0	26	23	27
CATAWBA 2	PWR	0	0	51	62	50	58	60	0	52	60	64	:	0	0	22	26	21	25	25	0	22	25	27
CLINTON 1	BWR	0	0	80	257	82	0	102	73	0	207	51	:	0	0	15	47	15	0	33	14	0	38	9
COMANCHE PK 1	PWR	0	0	0	0	0	53	65	27	59	78	19	:	0	0	0	0	0	24	30	12	27	31	8
COMANCHE PK 2	PWR	0	0	0	0	0	0	70	27	58	84	19	:	0	0	0	0	0	0	30	12	24	35	8
COOK 1	PWR	546	70	0	73	62	0	70	70	0	61	0	:	238	31	0	34	29	0	32	32	0	28	0
COOK 2	PWR	424	0	70	0	0	79	76	0	77	65	0	:	191	0	28	0	0	32	31	0	31	26	0
COOPER STN	BWR	648	0	100	104	90	104	101	104	97	87	103	:	120	0	20	19	17	19	18	19	18	16	19
CRYSTAL RVR 3	PWR	302	82	0	74	0	65	0	62	0	55	0	:	140	38	0	34	0	30	0	29	0	25	0
DAVIS-BESSE 1	PWR	197	0	61	55	0	56	54	0	53	46	0	:	93	0	24	26	0	26	25	0	25	22	0
DIABLO CANYON 1	PWR	51	0	54	0	65	0	74	0	74	0	76	:	24	0	25	0	30	0	33	0	31	0	32
DIABLO CANYON 2	PWR	0	44	54	0	65	0	74	0	73	0	76	:	0	20	25	0	30	0	33	0	31	0	32
DRESDEN 1	BWR	683	0	0	0	0	0	0	0	0	0	0	:	70	0	0	0	0	0	0	0	0	0	0
DRESDEN 2	BWR	1606	0	133	143	0	142	137	0	135	119	0	:	291	0	22	24	0	24	23	0	23	20	0
DRESDEN 3	BWR	1456	134	0	145	0	142	138	0	136	119	0	:	266	22	0	24	0	24	23	0	23	20	0
DUANE ARNOLD	BWR	896	112	95	0	93	114	0	103	103	0	114	:	129	20	17	0	17	20	0	18	18	0	20
ENRICO FERMI2	BWR	0	0	0	211	228	0	241	0	255	0	262	:	0	0	0	39	42	0	44	0	47	0	48
FARLEY 1	PWR	410	0	54	59	0	61	57	0	58	48	0	:	188	0	25	27	0	28	26	0	27	22	0
FARLEY 2	PWR	256	57	0	61	51	0	60	56	0	51	58	:	117	26	0	28	24	0	28	26	0	24	27
FITZPATRICK	BWR	1012	165	129	0	137	162	0	150	152	0	162	:	189	30	24	0	25	29	0	27	27	0	29
FORT CALHOUN	PWR	334	41	36	0	36	41	0	39	39	0	40	:	122	15	13	0	13	15	0	14	14	0	14
GINNA	PWR	470	31	25	29	25	28	28	29	29	24	30	:	183	11	9	10	9	10	10	10	10	0	11
GRAND GULF 1	BWR	264	252	0	242	209	0	235	231	0	201	239	:	49	46	0	44	37	0	41	41	0	35	42
HADDAM NECK	PWR	594	50	0	43	42	46	0	45	44	0	47	:	245	21	0	18	17	19	0	19	16	0	17
HARRIS 1	BWR	0	0	0	0	0	0	0	0	0	0	0	:	0	0	0	0	0	0	0	0	0	0	0
HARRIS 1	PWR	0	0	31	0	26	0	53	23	0	84	15	:	0	0	14	0	12	0	25	11	0	30	7
HATCH 1	BWR	1107	216	155	0	153	177	0	171	170	0	174	:	205	38	29	0	28	33	0	32	32	0	32
HATCH 2	BWR	745	0	148	167	152	0	172	169	0	148	175	:	137	0	27	31	28	0	32	31	0	27	32

TABLE A.3. Upper Reference Case, 1986 Inventory and Projected Annual Reactor Discharges (cont'd)

REACTOR		Inv	ASSEMBLIES										Inv	MTIHM									
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
HOPE CREEK	BWR	0	0	184	211	0	209	202	0	208	172	0	0	0	34	39	0	39	37	0	37	32	0
HUMBOLDT BAY	BWR	390	0	0	0	0	0	0	0	0	0	0	29	0	0	0	0	0	0	0	0	0	0
INDIAN PT 1	PWR	160	0	0	0	0	0	0	0	0	0	0	31	0	0	0	0	0	0	0	0	0	0
INDIAN PT 2	PWR	464	59	0	61	0	61	59	0	59	0	60	210	27	0	28	0	28	27	0	27	0	27
INDIAN PT 3	PWR	292	66	0	69	59	0	67	0	65	57	0	133	30	0	32	27	0	31	0	30	26	0
KEWAUNEE	PWR	369	40	36	30	31	33	40	32	32	28	33	144	15	11	11	12	13	15	12	12	11	13
LACROSSE	BWR	261	24	24	0	24	24	24	24	24	24	0	30	3	3	0	3	3	3	3	3	3	0
LASALLE CTY 1	BWR	132	283	0	170	172	0	193	189	0	165	198	24	52	0	31	31	0	35	34	0	36	36
LASALLE CTY 2	BWR	0	197	183	0	170	197	0	189	190	0	196	0	36	33	0	31	36	0	34	35	0	36
LIMERICK 1	BWR	0	234	215	0	174	0	200	186	0	165	0	0	43	40	0	32	0	35	33	0	29	0
LIMERICK 2	BWR	0	0	0	0	0	0	0	0	285	0	65	0	0	0	0	0	0	0	0	52	0	12
MAINE YANKEE	PWR	793	64	61	0	56	66	0	63	63	0	65	300	23	22	0	21	25	0	24	24	0	25
MCGUIRE 1	PWR	219	61	57	0	55	65	63	0	63	54	64	101	20	24	0	23	27	27	0	27	23	27
MCGUIRE 2	PWR	186	64	55	58	53	0	53	69	62	0	66	86	30	23	25	22	0	22	29	26	0	28
MILLSTONE 1	BWR	1536	171	0	177	0	177	0	169	0	147	0	289	30	0	32	0	32	0	30	0	26	0
MILLSTONE 2	PWR	474	0	61	77	41	0	60	0	56	46	0	185	0	25	31	17	0	24	0	22	18	0
MILLSTONE 3	PWR	0	73	0	76	65	0	74	73	0	63	75	0	34	0	35	30	0	34	34	0	29	35
MONTICELLO	BWR	428	103	0	116	89	0	100	100	0	90	0	79	19	0	21	15	0	19	17	0	15	0
NINE MILE PT1	BWR	1444	0	156	0	149	0	172	0	151	0	167	270	0	28	0	26	0	30	0	26	0	29
NINE MILE PT2	BWR	0	0	0	395	0	233	0	113	0	350	0	0	0	0	72	0	43	0	21	0	63	0
NORTH ANNA 1	PWR	294	54	52	0	51	57	0	56	56	0	58	135	25	24	0	24	26	0	26	26	0	27
NORTH ANNA 2	PWR	235	61	0	59	61	0	57	56	0	49	58	100	26	0	27	24	0	26	26	0	23	27
OCONEE 1	PWR	590	49	0	54	47	54	0	52	51	46	0	273	23	0	25	22	25	0	24	24	21	0
OCONEE 2	PWR	381	44	0	54	47	0	52	51	0	46	53	177	20	0	25	22	0	24	24	0	21	25
OCONEE 3	PWR	529	0	47	55	0	54	52	0	52	46	0	246	0	22	25	0	25	24	0	24	21	0
OYSTER CRK 1	BWR	1392	0	101	123	0	114	140	0	131	0	119	260	0	10	22	0	20	27	0	23	0	21
PALISADES	PWR	545	0	54	0	52	0	60	0	50	50	0	210	0	21	0	20	0	24	0	23	20	0
PALO VERDE 1	PWR	0	69	61	0	72	69	0	61	67	0	63	0	29	24	0	30	29	0	34	20	0	35
PALO VERDE 2	PWR	0	0	73	77	0	77	67	0	60	50	0	0	0	31	31	0	32	20	0	34	24	0
PALO VERDE 3	PWR	0	0	0	123	0	72	60	0	67	113	0	0	0	0	52	0	29	37	0	20	47	0
PEACHBOTTOM 2	BWR	1462	239	0	279	0	255	0	226	189	0	204	273	44	0	51	0	46	0	40	34	0	36
PEACHBOTTOM 3	BWR	1496	235	0	0	160	213	0	190	187	0	200	279	43	0	0	31	39	0	34	33	0	35
PERRY 1	BWR	0	0	175	0	160	160	0	190	192	0	200	0	0	32	0	34	33	0	30	35	0	36
PILGRIM 1	BWR	1320	0	155	0	0	171	0	165	0	147	0	247	0	27	0	0	30	0	29	0	20	0
POINT BEACH 1	PWR	440	29	20	29	25	29	20	20	20	24	29	177	12	10	10	9	10	10	10	10	9	10
POINT BEACH 2	PWR	400	27	25	29	25	29	20	27	27	24	20	103	11	9	10	9	10	10	10	10	9	10
PRAIRIE ISL 1	PWR	300	39	33	30	32	30	0	34	35	30	30	150	14	12	13	11	12	0	12	12	11	13
PRAIRIE ISL 2	PWR	415	0	31	37	31	30	35	34	34	30	0	101	0	10	14	11	13	12	12	12	11	0
QUAD CITIES 1	BWR	1393	150	0	145	125	0	140	149	0	120	143	201	20	0	20	22	0	25	20	0	21	25
QUAD CITIES 2	BWR	1420	0	134	145	0	143	140	0	137	120	0	200	0	24	20	0	25	25	0	24	21	0
RANCHO SECO 1	PWR	207	0	40	60	0	02	01	0	52	45	0	124	0	21	20	0	29	20	0	24	21	0
ROBINSON 2	PWR	270	42	47	0	37	43	53	0	42	30	0	110	10	19	0	10	19	22	0	10	10	0
RVR BEND 1	BWR	0	145	0	202	140	0	107	177	0	141	175	0	27	0	37	20	0	31	33	0	20	32
SALEM 1	PWR	344	74	0	77	00	91	0	70	73	0	71	150	34	0	30	30	42	0	32	34	0	33
SALEM 2	PWR	174	0	50	00	0	00	09	00	0	04	75	00	0	27	37	0	40	41	37	0	29	34
SAN ONOFRE 1	PWR	140	0	41	47	0	0	45	0	44	0	47	54	0	15	17	0	0	17	0	10	0	17
SAN ONOFRE 2	PWR	147	95	0	90	0	99	0	95	0	02	97	00	40	0	41	0	40	0	30	0	33	39
SAN ONOFRE 3	PWR	147	0	07	0	05	0	95	0	94	02	0	00	0	37	0	30	0	30	0	30	33	0
SEABROOK 1	PWR	0	0	37	0	33	54	00	20	55	0	20	0	0	17	0	15	25	30	13	25	0	9

TABLE A.3. Upper Reference Case, 1986 Inventory and Projected Annual Reactor Discharges (cont'd)

REACTOR		Inv	ASSEMBLIES										Inv	MTIHM								
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
SEQUOYAH 1	PWR	212	0	0	73	62	0	71	69	0	61	0	97	0	0	34	29	0	33	32	0	28	0
SEQUOYAH 2	PWR	136	71	0	72	0	72	69	0	69	68	0	62	33	0	33	0	33	32	0	32	28	0
SHOREHAM	BWR	0	0	0	0	0	173	183	0	141	0	58	0	0	0	0	0	32	33	0	26	0	9
SOUTH TEXAS 1	PWR	0	0	0	0	29	45	53	21	46	65	15	0	0	0	0	16	24	29	11	25	35	8
SOUTH TEXAS 2	PWR	0	0	0	0	0	0	58	23	45	64	16	0	0	0	0	0	0	31	12	24	35	9
ST LUCIE 1	PWR	444	96	65	0	56	68	0	67	65	0	69	169	36	25	0	21	26	0	26	25	0	26
ST LUCIE 2	PWR	164	82	0	65	56	0	63	62	0	55	65	61	31	0	25	22	0	25	24	0	21	25
SUMMER 1	PWR	112	68	54	0	53	61	0	58	59	0	60	51	28	25	0	25	28	0	27	27	0	28
SURRY 1	PWR	488	0	55	44	43	0	47	48	0	48	47	222	0	25	20	20	0	22	21	0	18	22
SURRY 2	PWR	385	0	52	45	0	52	48	0	48	48	0	175	0	24	21	0	24	21	0	21	18	0
SUSQUEHANNA 1	BWR	488	211	0	224	177	0	206	201	0	174	206	90	39	0	40	31	0	36	35	0	30	36
SUSQUEHANNA 2	BWR	324	0	187	205	0	209	203	0	199	174	0	60	0	34	37	0	36	35	0	34	30	0
THREE MILE ISL 1	PWR	284	0	58	0	56	66	61	0	63	0	65	132	0	27	0	26	31	28	0	29	0	30
TROJAN	PWR	379	58	38	43	38	43	42	42	41	37	42	174	23	17	20	18	20	19	19	19	17	19
TURKEY PT 3	PWR	424	67	48	0	37	0	46	41	41	0	42	192	31	22	0	17	0	21	19	19	0	19
TURKEY PT 4	PWR	446	0	41	47	0	43	42	41	0	36	43	203	0	19	22	0	20	19	19	0	17	20
VOGTLE 1	PWR	0	0	48	0	44	71	0	36	73	0	25	0	0	22	0	20	33	0	17	34	0	12
VOGTLE 2	PWR	0	0	0	0	43	0	87	37	0	104	25	0	0	0	0	20	0	48	17	0	48	12
VT YANKEE 1	BWR	1322	120	0	119	102	0	117	114	0	99	117	248	22	0	22	19	0	21	20	0	18	21
WASH NUCLEAR2	BWR	128	129	133	145	116	141	136	134	147	105	140	24	24	24	27	21	25	24	24	26	18	25
WATERFORD 3	PWR	92	0	70	80	0	79	77	0	75	66	0	39	0	28	34	0	33	32	0	31	28	0
WATTS BAR 1	PWR	0	0	0	85	38	0	82	34	0	98	24	0	0	0	39	18	0	38	16	0	45	11
WATTS BAR 2	PWR	0	0	0	0	33	0	74	34	0	97	0	0	0	0	0	15	0	34	16	0	45	0
WOLF CREEK 1	PWR	52	46	60	0	59	68	0	66	66	0	68	24	21	28	0	27	32	0	31	31	0	32
YANKEE-ROWE 1	PWR	341	31	31	0	28	0	35	31	0	30	33	83	7	7	0	6	6	0	7	0	7	8
ZION 1	PWR	574	0	61	65	0	65	63	0	62	55	0	262	0	28	30	0	30	29	0	28	25	0
ZION 2	PWR	503	71	56	0	59	65	0	62	62	0	64	229	32	26	0	27	30	0	28	28	0	29
FT ST VRAIN	HTG	0	0	240	0	282	0	240	0	240	0	240	0	0	3	0	3	0	3	0	2	0	2
MORRIS	BWR	2047	0	0	0	0	0	0	0	0	0	0	389	0	0	0	0	0	0	0	0	0	0
MORRIS	PWR	350	0	0	0	0	0	0	0	0	0	0	132	0	0	0	0	0	0	0	0	0	0
WEST VALLEY	BWR	85	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0
WEST VALLEY	PWR	40	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0
WNP-1	PWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESEARCH SITES	PWR	97	0	0	0	0	0	0	0	0	0	0	44	0	0	0	0	0	0	0	0	0	0
RESEARCH SITES	BWR	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
RESEARCH SITES	HTG	720	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0
GENERICS	PWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GENERICS	BWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE A.3. Upper Reference Case, 1986 Inventory and Projected Annual Reactor Discharges (cont'd)

REACTOR		ASSEMBLIES										MTIHM									
		1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
ARK NUCLEAR 1	PWR	0	49	0	41	56	0	45	0	48	45	0	23	0	19	26	0	21	0	22	21
ARK NUCLEAR 2	PWR	51	0	57	46	0	58	49	0	55	0	21	0	24	19	0	24	20	0	23	0
BEAVER VALLEY 1	PWR	53	0	67	0	66	0	50	60	0	51	25	0	26	0	30	0	23	28	0	24
BEAVER VALLEY 2	PWR	0	70	50	0	44	59	0	55	63	0	0	32	23	0	20	27	0	25	29	0
BELLEFONTE 1	PWR	0	61	0	74	49	0	75	0	72	41	0	28	0	34	22	0	34	0	33	19
BELLEFONTE 2	PWR	0	0	42	0	42	69	0	61	0	41	0	0	19	0	19	31	0	28	0	19
BIG ROCK 1	BWR	0	17	16	12	18	16	15	16	84	0	0	2	2	2	2	2	2	2	11	0
BRAIDWOOD 1	PWR	91	81	0	86	49	0	75	61	0	41	38	34	0	36	21	0	32	26	0	17
BRAIDWOOD 2	PWR	91	0	56	86	0	68	75	0	71	41	38	0	24	36	0	29	32	0	30	17
BROWNS FERRY1	BWR	173	0	191	156	0	194	0	199	183	0	31	0	35	28	0	35	0	36	33	0
BROWNS FERRY2	BWR	0	185	190	0	214	193	0	199	0	187	0	34	34	0	39	35	0	36	0	30
BROWNS FERRY3	BWR	0	184	190	0	214	0	188	198	0	187	0	33	34	0	39	0	31	36	0	30
BRUNSWICK 1	BWR	142	153	0	124	0	159	138	0	148	137	27	29	0	23	0	30	26	0	28	26
BRUNSWICK 1	PWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BRUNSWICK 2	BWR	143	0	156	0	173	159	0	164	149	0	27	0	29	0	32	30	0	31	28	0
BRUNSWICK 2	PWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BYRON 1	PWR	64	0	70	57	0	71	62	0	68	61	27	0	30	24	0	30	26	0	29	26
BYRON 2	PWR	0	81	58	0	50	68	0	62	72	0	0	34	24	0	21	29	0	26	30	0
CALLAWAY 1	PWR	0	68	70	0	80	71	0	74	68	0	0	29	30	0	34	30	0	32	29	0
CALVERT CLF 1	PWR	0	77	0	66	0	82	0	83	0	71	0	26	0	25	0	31	0	31	0	27
CALVERT CLF 2	PWR	73	0	80	0	90	0	70	0	78	0	27	0	30	0	34	0	26	0	29	0
CATAWBA 1	PWR	0	59	60	49	68	0	64	62	59	63	0	25	25	21	29	0	23	26	25	22
CATAWBA 2	PWR	0	58	61	49	0	63	62	62	58	0	0	25	26	21	0	27	22	26	25	0
CLINTON 1	BWR	0	164	116	0	166	139	0	127	147	0	0	36	21	0	19	26	0	24	27	0
COMANCHE PK 1	PWR	74	61	44	70	37	52	61	47	64	34	30	25	18	28	15	21	25	19	22	14
COMANCHE PK 2	PWR	69	0	46	67	37	107	58	50	64	31	28	0	19	27	15	43	23	20	22	13
COOK 1	PWR	61	65	0	64	76	0	58	0	65	59	28	30	0	25	35	0	27	0	30	27
COOK 2	PWR	67	0	73	61	0	75	0	76	71	0	27	0	29	25	0	30	0	31	29	0
COOPER STN	BWR	84	93	92	76	105	95	83	97	87	82	15	17	17	14	19	17	15	18	16	15
CRYSTAL RVR 3	PWR	54	0	60	0	66	0	53	0	58	0	25	0	26	0	32	0	25	0	27	0
DAVIS-BESSE 1	PWR	46	49	0	41	56	0	44	52	0	44	22	23	0	19	26	0	21	24	0	21
DIABLO CANYON 1	PWR	0	69	0	58	0	73	0	74	0	63	0	29	0	25	0	31	0	31	0	27
DIABLO CANYON 2	PWR	0	69	0	58	0	72	0	74	0	62	0	29	0	25	0	31	0	31	0	26
DRESDEN 1	BWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DRESDEN 2	BWR	128	129	0	107	148	0	115	138	0	116	20	22	0	18	25	0	19	23	0	19
DRESDEN 3	BWR	128	128	0	107	149	0	115	137	0	116	20	21	0	18	25	0	19	23	0	19
DUANE ARNOLD	BWR	90	0	100	87	0	101	88	0	103	87	16	0	18	15	0	18	18	0	18	15
ENRICO FERMI2	BWR	229	0	244	0	272	0	214	251	0	215	40	0	44	0	50	0	39	46	0	39
FARLEY 1	PWR	52	53	0	46	61	0	49	56	0	50	24	25	0	21	28	0	23	26	0	23
FARLEY 2	PWR	0	55	54	0	64	55	0	59	52	0	0	26	25	0	30	26	0	27	24	0
FITZPATRICK	BWR	133	0	144	119	0	151	128	0	144	130	24	0	26	21	0	27	23	0	26	23
FORT CALHOUN	PWR	34	0	37	30	0	38	33	0	37	34	12	0	13	11	0	13	12	0	13	12
GINNA	PWR	25	26	26	22	30	27	23	29	25	23	9	9	9	8	11	9	8	10	9	8
GRAND GULF 1	BWR	0	216	224	0	253	228	0	232	217	0	0	38	40	0	45	40	0	41	38	0
HADDAM NECK	PWR	39	0	45	35	49	0	39	47	0	38	14	0	16	13	18	0	14	17	0	14
HARRIS 1	BWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HARRIS 1	PWR	0	50	34	0	31	42	0	39	44	0	0	23	16	0	14	20	0	18	20	0
HATCH 1	BWR	150	0	164	132	0	166	143	0	158	144	28	0	30	24	0	31	27	0	29	27
HATCH 2	BWR	0	158	163	0	185	168	0	178	158	0	0	29	30	0	34	31	0	32	29	0

TABLE A.3. Upper Reference Case, 1986 Inventory and Projected Annual Reactor Discharges (cont'd)

REACTOR		ASSEMBLIES										MTIHM									
		1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
HOPE CREEK	BWR	176	188	0	157	216	0	169	202	0	170	33	35	0	29	40	0	31	38	0	32
HUMBOLDT BAY	BWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INDIAN PT 1	PWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INDIAN PT 2	PWR	52	0	57	0	65	58	0	60	0	51	23	0	26	0	29	26	0	27	0	23
INDIAN PT 3	PWR	58	0	63	52	0	64	0	67	61	0	26	0	29	24	0	29	0	31	28	0
KEWAUNEE	PWR	28	30	31	26	35	32	27	32	30	27	11	11	12	10	13	12	10	12	11	10
LACROSSE	BWR	24	24	24	24	24	72	0	0	0	0	3	3	3	3	3	8	0	0	0	0
LASALLE CTY 1	BWR	0	178	183	0	206	188	0	191	177	0	0	32	33	0	37	34	0	35	32	0
LASALLE CTY 2	BWR	167	0	184	150	0	186	161	0	178	161	30	0	33	27	0	34	29	0	32	29
LIMERICK 1	BWR	167	179	0	149	206	0	153	187	0	159	30	32	0	26	37	0	27	33	0	28
LIMERICK 2	BWR	226	0	150	0	125	173	0	156	0	106	41	0	27	0	22	31	0	28	0	19
MAINE YANKEE	PWR	56	0	60	50	0	62	53	0	58	0	21	0	23	19	0	24	20	0	22	0
MCGUIRE 1	PWR	55	0	60	49	67	0	53	63	59	53	23	0	25	21	26	0	22	27	25	22
MCGUIRE 2	PWR	55	58	60	0	68	62	53	0	58	53	23	25	25	0	29	26	22	0	25	22
MILLSTONE 1	BWR	149	0	163	0	184	0	143	0	158	144	26	0	29	0	33	0	25	0	28	26
MILLSTONE 2	PWR	49	53	0	42	61	0	48	53	0	48	19	20	0	16	23	0	18	20	0	18
MILLSTONE 3	PWR	0	68	70	0	79	71	0	74	68	0	0	31	32	0	36	33	0	34	31	0
MONTICELLO	BWR	91	98	0	81	113	0	88	103	0	88	16	17	0	14	19	0	15	18	0	15
NINE MILE PT1	BWR	0	146	0	124	0	157	0	160	0	135	0	25	0	21	0	27	0	27	0	23
NINE MILE PT2	BWR	290	0	187	0	163	0	246	0	234	0	50	0	32	0	28	0	42	0	40	0
NORTH ANNA 1	PWR	50	0	54	43	0	55	46	0	51	47	23	0	25	20	0	25	21	0	24	22
NORTH ANNA 2	PWR	0	53	54	0	60	54	0	55	52	0	0	24	25	0	28	25	0	25	24	0
OCONEE 1	PWR	45	49	51	0	56	50	44	0	48	44	21	23	24	0	26	23	20	0	22	20
OCONEE 2	PWR	46	0	50	41	0	51	44	0	49	44	21	0	23	19	0	24	20	0	23	20
OCONEE 3	PWR	45	49	50	0	56	51	0	52	48	0	21	23	23	0	26	24	0	24	22	0
OYSTER CRK 1	BWR	111	0	115	94	0	120	106	0	112	105	20	0	21	17	0	21	19	0	20	19
PALISADES	PWR	51	0	56	0	63	57	0	59	0	49	20	0	22	0	25	23	0	24	0	20
PALO VERDE 1	PWR	59	0	78	53	0	79	57	0	76	56	23	0	33	21	0	33	22	0	32	22
PALO VERDE 2	PWR	71	63	0	63	72	0	69	68	0	69	30	25	0	26	28	0	29	31	0	29
PALO VERDE 3	PWR	64	98	0	80	55	0	69	68	0	38	35	38	0	32	23	0	27	28	0	15
PEACHBOTTOM 2	BWR	174	0	190	155	0	193	166	0	184	0	31	0	34	27	0	34	29	0	33	0
PEACHBOTTOM 3	BWR	167	0	183	149	0	187	0	192	178	0	30	0	32	26	0	33	0	34	32	0
PERRY 1	BWR	170	0	187	152	0	191	165	194	0	165	30	0	33	27	0	34	29	34	0	29
PILGRIM 1	BWR	147	0	159	0	0	166	0	166	0	140	26	0	28	0	0	29	0	29	0	25
POINT BEACH 1	PWR	24	26	26	21	30	27	24	28	25	24	9	9	9	8	11	10	9	10	9	9
POINT BEACH 2	PWR	25	26	27	22	30	27	23	28	26	24	9	9	10	8	11	10	8	10	9	9
PRAIRIE ISL 1	PWR	30	32	34	28	0	34	30	34	32	29	11	11	12	10	0	12	11	12	11	10
PRAIRIE ISL 2	PWR	31	33	33	27	37	34	29	35	32	0	11	12	12	10	13	12	10	12	11	0
QUAD CITIES 1	BWR	0	130	133	0	150	136	0	139	128	0	0	23	23	0	26	24	0	25	23	0
QUAD CITIES 2	BWR	121	129	0	100	151	0	117	139	0	117	21	23	0	19	27	0	21	24	0	21
RANCHO SECO 1	PWR	46	0	48	41	0	52	0	49	50	0	21	0	22	19	0	24	0	23	23	0
ROBINSON 2	PWR	47	39	39	0	50	41	0	42	50	0	19	17	17	0	24	18	0	18	20	0
RVR BEND 1	BWR	0	157	160	0	184	162	0	167	154	0	0	29	30	0	34	30	0	31	28	0
SALEM 1	PWR	61	0	67	54	0	60	59	0	65	59	28	0	31	25	0	31	27	0	30	27
SALEM 2	PWR	0	68	70	0	79	71	0	72	68	0	0	31	32	0	36	33	0	34	31	0
SAN ONOFRE 1	PWR	0	42	0	36	0	45	0	46	0	38	0	16	0	13	0	17	0	17	0	14
SAN ONOFRE 2	PWR	0	89	0	75	0	92	0	94	0	81	0	36	0	30	0	37	0	38	0	33
SAN ONOFRE 3	PWR	83	0	90	0	103	0	80	0	89	80	33	0	36	0	42	0	32	0	36	32
SEABROOK 1	PWR	70	62	43	66	0	52	57	47	54	31	32	29	20	30	0	24	26	22	25	14

TABLE A.3. Upper Reference Case, 1986 Inventory and Projected Annual Reactor Discharges (cont'd)

REACTOR		ASSEMBLIES										MTIHM									
		1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
SEQUOYAH 1	PWR	61	66	0	64	76	0	69	69	0	69	28	30	0	25	34	0	27	32	0	27
SEQUOYAH 2	PWR	61	0	67	65	0	68	0	70	65	0	28	0	31	25	0	31	0	32	30	0
SHOREHAM	BWR	199	0	124	198	0	149	165	0	158	91	36	0	23	35	0	27	30	0	28	17
SOUTH TEXAS 1	PWR	56	49	35	53	30	42	47	39	44	25	30	27	19	29	16	23	25	21	24	14
SOUTH TEXAS 2	PWR	57	51	35	54	30	42	48	38	44	25	31	28	19	29	16	23	25	21	24	14
ST LUCIE 1	PWR	58	0	64	62	0	65	55	0	62	55	22	0	24	26	0	25	21	0	24	21
ST LUCIE 2	PWR	0	59	60	0	67	61	0	62	59	0	0	23	23	0	26	24	0	24	23	0
SUMMER 1	PWR	52	0	57	48	0	58	50	0	54	50	24	0	20	21	0	27	23	0	25	23
SURRY 1	PWR	0	43	45	0	49	44	0	45	42	0	0	20	21	0	22	20	0	21	19	0
SURRY 2	PWR	40	43	0	36	49	0	39	45	0	38	18	20	0	17	22	0	18	21	0	17
SUSQUEHANNA 1	BWR	0	187	194	0	219	196	0	201	187	0	0	32	34	0	38	34	0	35	32	0
SUSQUEHANNA 2	BWR	176	188	0	158	219	0	169	202	0	176	30	32	0	27	38	0	29	35	0	29
THREE MILE ISL 1	PWR	56	0	62	51	0	60	53	0	58	53	26	0	29	24	0	28	25	0	27	25
TROJAN	PWR	37	40	41	33	40	40	38	41	38	35	17	19	19	15	21	19	17	19	18	16
TURKEY PT 3	PWR	37	0	39	32	0	41	35	0	39	35	17	0	18	15	0	19	16	0	18	16
TURKEY PT 4	PWR	0	39	40	0	45	0	35	41	0	21	0	18	18	0	21	0	16	19	0	10
VOGTLE 1	PWR	92	0	56	86	0	68	74	0	72	41	43	0	26	40	0	32	34	0	33	19
VOGTLE 2	PWR	0	60	56	0	49	68	0	62	72	0	0	37	26	0	23	32	0	29	33	0
VT YANKEE 1	BWR	0	106	110	0	124	111	0	114	106	0	0	19	20	0	22	20	0	20	19	0
WASH NUCLEAR2	BWR	132	117	147	96	148	143	107	146	117	114	23	21	26	17	26	25	19	26	21	20
WATERFORD 3	PWR	67	72	0	60	62	0	65	77	0	65	28	30	0	25	34	0	27	32	0	27
WATTS BAR 1	PWR	0	77	0	83	47	0	72	0	68	39	0	36	0	38	22	0	33	0	31	18
WATTS BAR 2	PWR	87	77	0	83	47	0	72	0	68	39	40	36	0	38	22	0	33	0	31	18
WOLF CREEK 1	PWR	58	0	64	51	0	64	55	0	62	55	27	0	30	24	0	30	26	0	29	26
YANKEE-ROWE 1	PWR	0	33	30	70	0	0	0	0	0	0	0	0	7	18	0	0	0	0	0	0
ZION 1	PWR	55	58	0	49	67	0	52	62	0	53	25	27	0	22	31	0	24	28	0	24
ZION 2	PWR	55	0	60	49	0	61	53	0	58	52	25	0	27	22	0	28	24	0	27	24
FT ST VRAIN	HTG	0	240	0	240	0	1482	0	0	0	0	0	2	0	2	0	15	0	0	0	0
MORRIS	BWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORRIS	PWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WEST VALLEY	BWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WEST VALLEY	PWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WNP-1	PWR	77	0	30	109	0	52	64	0	82	39	35	0	14	50	0	24	29	0	37	18
RESEARCH SITES	PWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESEARCH SITES	BWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESEARCH SITES	HTG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GENERICS	PWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GENERICS	BWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE A.3. Upper Reference Case, 1986 Inventory and Projected Annual Reactor Discharges (cont'd)

REACTOR		ASSEMBLIES										MTIHM									
		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
ARK NUCLEAR 1	PWR	0	44	0	36	53	0	52	0	177	0	0	20	0	17	25	0	24	0	82	0
ARK NUCLEAR 2	PWR	64	49	0	43	59	0	60	57	0	59	27	20	0	18	25	0	25	24	0	25
BEAVER VALLEY 1	PWR	0	51	74	0	61	0	60	58	0	157	0	24	34	0	28	0	28	27	0	73
BEAVER VALLEY 2	PWR	88	54	0	79	0	76	76	0	71	82	41	25	0	36	0	32	35	0	33	38
BELLEFONTE 1	PWR	0	61	72	0	74	0	88	70	0	92	0	28	33	0	34	0	40	32	0	42
BELLEFONTE 2	PWR	103	0	72	91	0	80	0	70	82	0	47	0	33	41	0	36	0	32	37	0
BIG ROCK 1	BWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BRAIDWOOD 1	PWR	102	0	73	91	0	81	87	0	82	93	43	0	31	38	0	34	37	0	35	39
BRAIDWOOD 2	PWR	0	61	73	0	74	81	0	69	81	0	0	26	31	0	31	34	0	29	34	0
BROWNS FERRY1	BWR	219	168	0	139	0	239	199	0	177	199	40	31	0	25	0	43	36	0	32	36
BROWNS FERRY2	BWR	218	0	247	140	0	237	0	193	176	0	40	0	45	25	0	43	0	35	32	0
BROWNS FERRY3	BWR	219	0	246	0	201	237	0	192	176	0	40	0	45	0	36	43	0	35	32	0
BRUNSWICK 1	BWR	0	138	203	0	166	195	0	159	146	0	0	26	38	0	31	36	0	30	27	0
BRUNSWICK 1	PWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BRUNSWICK 2	BWR	101	137	0	116	165	0	165	159	0	560	34	26	0	22	31	0	31	30	0	105
BRUNSWICK 2	PWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BYRON 1	PWR	0	62	90	0	74	87	0	71	65	0	0	26	38	0	31	37	0	30	27	0
BYRON 2	PWR	102	61	0	91	74	0	87	71	0	93	43	26	0	38	31	0	37	30	0	39
CALLAWAY 1	PWR	81	62	0	52	74	0	74	70	0	74	35	26	0	22	32	0	32	30	0	32
CALVERT CLF 1	PWR	0	70	0	58	0	101	0	217	0	0	0	26	0	22	0	37	0	61	0	0
CALVERT CLF 2	PWR	92	0	103	0	85	0	84	0	73	217	34	0	39	0	32	0	31	0	27	81
CATAWBA 1	PWR	0	53	79	44	0	75	64	61	0	65	0	22	33	19	0	32	27	26	0	27
CATAWBA 2	PWR	69	53	78	0	64	76	63	60	0	63	29	22	33	0	27	32	27	25	0	27
CLINTON 1	BWR	209	124	0	185	151	0	179	144	0	190	39	23	0	34	28	0	33	27	0	35
COMANCHE PK 1	PWR	78	47	58	69	57	65	67	53	66	76	31	19	23	28	23	26	27	21	27	28
COMANCHE PK 2	PWR	82	47	55	74	57	62	71	53	61	75	33	19	22	30	23	25	29	21	25	30
COOK 1	PWR	0	59	86	0	71	0	70	67	0	193	0	27	40	0	33	0	32	31	0	89
COOK 2	PWR	84	64	0	54	0	92	77	0	68	77	34	26	0	22	0	37	31	0	27	31
COOPER STN	BWR	99	81	112	69	91	117	90	548	0	0	18	15	20	13	17	21	16	100	0	0
CRYSTAL RVR 3	PWR	78	0	78	0	64	0	63	0	56	0	32	0	36	0	30	0	29	0	26	0
DAVIS-BESSE 1	PWR	57	0	65	37	0	62	52	0	47	53	27	0	30	17	0	29	24	0	22	25
DIABLO CANYON 1	PWR	0	61	0	52	0	89	0	72	0	74	0	26	0	22	0	38	0	31	0	31
DIABLO CANYON 2	PWR	0	63	0	53	0	89	0	71	0	75	0	27	0	23	0	38	0	30	0	32
DRESDEN 1	BWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DRESDEN 2	BWR	151	0	171	724	0	0	0	0	0	0	25	0	29	121	0	0	0	0	0	0
DRESDEN 3	BWR	151	0	178	724	0	0	0	0	0	0	25	0	28	121	0	0	0	0	0	0
DUANE ARNOLD	BWR	0	88	130	0	105	126	0	101	368	0	0	16	23	0	19	22	0	18	64	0
ENRICO FERMI2	BWR	0	211	0	180	253	0	255	0	223	0	0	38	0	33	46	0	46	0	41	0
FARLEY 1	PWR	62	0	73	39	0	71	57	0	53	57	29	0	34	18	0	33	26	0	25	26
FARLEY 2	PWR	65	47	0	42	58	0	60	54	0	60	30	22	0	19	27	0	28	25	0	28
FITZPATRICK	BWR	0	129	189	0	153	184	0	148	560	0	0	23	34	0	27	33	0	26	99	0
FORT CALHOUN	PWR	0	34	48	0	39	46	0	133	0	0	0	12	17	0	14	16	0	47	0	0
GINNA	PWR	30	23	34	121	0	0	0	0	0	0	11	8	12	42	0	0	0	0	0	0
GRAND GULF 1	BWR	256	196	0	164	235	0	234	226	0	234	45	35	0	29	41	0	41	40	0	41
HADDAM NECK	PWR	157	0	0	0	0	0	0	0	0	0	57	0	0	0	0	0	0	0	0	0
HARRIS 1	BWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HARRIS 1	PWR	64	38	0	58	48	0	55	44	0	59	30	18	0	26	22	0	26	20	0	27
HATCH 1	BWR	0	143	211	0	172	206	0	560	0	0	0	27	39	0	32	38	0	104	0	0
HATCH 2	BWR	186	144	0	121	172	0	172	164	0	171	35	27	0	22	32	0	32	30	0	32

TABLE A.3. Upper Reference Case, 1986 Inventory and Projected Annual Reactor Discharges (cont'd)

REACTOR		ASSEMBLIES										MTIHM									
		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
HOPE CREEK	BWR	223	0	251	143	0	240	202	0	179	203	41	0	47	27	0	45	38	0	33	38
HUMBOLDT BAY	BWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INDIAN PT 1	PWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INDIAN PT 2	PWR	64	0	73	0	59	72	0	193	0	0	29	0	33	0	27	33	0	87	0	0
INDIAN PT 3	PWR	72	0	82	47	0	80	0	64	193	0	33	0	37	21	0	36	0	29	88	0
KEWAUNEE	PWR	35	27	40	22	33	39	33	121	0	0	13	10	15	8	13	15	13	46	0	0
LACROSSE	BWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LASALLE CTY 1	BWR	210	159	0	135	192	0	192	186	0	192	38	29	0	25	35	0	35	34	0	35
LASALLE CTY 2	BWR	0	161	238	0	194	231	0	185	170	0	0	29	43	0	35	42	0	34	31	0
LIMERICK 1	BWR	207	0	233	133	0	225	0	181	167	0	37	0	41	24	0	40	0	32	30	0
LIMERICK 2	BWR	260	0	189	0	192	267	0	179	0	239	46	0	34	0	34	37	0	32	0	42
MAINE YANKEE	PWR	78	53	0	45	65	0	217	0	0	0	27	20	0	17	25	0	83	0	0	0
MCGUIRE 1	PWR	0	53	77	44	0	76	63	61	0	63	0	22	33	19	0	32	27	26	0	27
MCGUIRE 2	PWR	69	53	0	44	63	75	0	61	58	63	29	22	0	19	27	32	0	26	24	27
MILLSTONE 1	BWR	0	0	0	580	0	0	0	0	0	0	0	0	0	103	0	0	0	0	0	0
MILLSTONE 2	PWR	0	48	66	0	67	68	0	51	217	0	0	18	25	0	22	26	0	19	83	0
MILLSTONE 3	PWR	80	62	0	52	74	0	74	71	0	74	37	29	0	24	34	0	34	33	0	34
MONTICELLO	BWR	0	86	129	0	484	0	0	0	0	0	0	15	22	0	83	0	0	0	0	0
NINE MILE PT1	BWR	0	135	0	532	0	0	0	0	0	0	0	23	0	91	0	0	0	0	0	0
NINE MILE PT2	BWR	334	0	239	0	245	0	287	0	267	0	57	0	41	0	42	0	49	0	45	0
NORTH ANNA 1	PWR	0	46	68	0	56	67	0	55	49	0	0	21	31	0	26	31	0	25	23	0
NORTH ANNA 2	PWR	62	48	0	39	56	0	56	54	0	56	29	21	0	18	26	0	26	25	0	26
OCONEE 1	PWR	57	0	68	37	52	0	177	0	0	0	26	0	31	17	24	0	82	0	0	0
OCONEE 2	PWR	58	0	64	36	0	63	177	0	0	0	27	0	30	17	0	29	82	0	0	0
OCONEE 3	PWR	57	44	65	0	53	62	0	177	0	0	26	20	30	0	25	29	0	82	0	0
OYSTER CRK 1	BWR	0	101	0	556	0	0	0	0	0	0	0	18	0	99	0	0	0	0	0	0
PALISADES	PWR	0	58	0	41	204	0	0	0	0	0	0	20	0	16	82	0	0	0	0	0
PALO VERDE 1	PWR	0	69	84	0	81	80	0	79	59	0	0	29	33	0	34	32	0	33	23	0
PALO VERDE 2	PWR	74	0	100	48	0	97	67	0	72	67	29	0	42	19	0	40	26	0	30	26
PALO VERDE 3	PWR	113	0	67	100	0	74	98	0	74	103	47	0	26	42	0	29	40	0	29	43
PEACHBOTTOM 2	BWR	218	167	0	139	200	0	200	764	0	0	39	30	0	25	35	0	35	135	0	0
PEACHBOTTOM 3	BWR	211	161	0	135	193	0	192	764	0	0	37	29	0	24	34	0	34	135	0	0
PERRY 1	BWR	216	0	242	139	0	233	198	0	174	196	38	0	43	25	0	41	35	0	31	35
PILGRIM 1	BWR	0	141	0	118	0	580	0	0	0	0	0	25	0	21	0	103	0	0	0	0
POINT BEACH 1	PWR	36	24	35	121	0	0	0	0	0	0	11	9	13	44	0	0	0	0	0	0
POINT BEACH 2	PWR	31	23	34	28	121	0	0	0	0	0	11	8	12	7	44	0	0	0	0	0
PRAIRIE ISL 1	PWR	39	29	44	24	36	41	120	0	0	0	14	10	16	9	13	15	43	0	0	0
PRAIRIE ISL 2	PWR	38	29	43	24	35	42	35	120	0	0	13	10	15	9	12	15	12	43	0	0
QUAD CITIES 1	BWR	153	116	0	98	140	0	712	0	0	0	27	20	0	17	25	0	126	0	0	0
QUAD CITIES 2	BWR	153	0	173	99	0	167	724	0	0	0	27	0	30	17	0	29	128	0	0	0
RANCHO SECO 1	PWR	59	0	65	38	0	64	0	61	177	0	27	0	30	18	0	30	0	24	82	0
ROBINSON 2	PWR	45	44	52	0	157	0	0	0	0	0	20	18	23	0	67	0	0	0	0	0
RVR BEND 1	BWR	188	148	0	119	169	0	169	161	0	173	35	26	0	22	31	0	31	30	0	32
SALEM 1	PWR	0	58	87	0	71	83	0	67	61	193	0	27	40	0	33	38	0	31	28	89
SALEM 2	PWR	81	62	0	51	74	0	74	71	0	74	37	28	0	23	34	0	34	33	0	34
SAN ONOFRE 1	PWR	0	157	0	0	0	0	0	0	0	0	0	58	0	0	0	0	0	0	0	0
SAN ONOFRE 2	PWR	0	79	117	0	96	0	95	0	85	0	0	32	47	0	39	0	38	0	34	0
SAN ONOFRE 3	PWR	0	80	0	68	0	114	0	92	0	95	0	32	0	27	0	46	0	37	0	38
SEABROOK 1	PWR	0	46	56	70	57	82	0	53	81	70	0	21	26	32	26	29	0	24	28	32

TABLE A.3. Upper Reference Case, 1986 Inventory and Projected Annual Reactor Discharges (cont'd)

REACTOR		ASSEMBLIES										MTIHM									
		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
SEQUOYAH 1	PWR	0	59	86	0	78	83	0	67	0	71	0	27	39	0	32	38	0	31	0	33
SEQUOYAH 2	PWR	76	58	0	49	0	84	70	0	82	70	35	27	0	23	0	39	32	0	29	32
SHOREHAM	BWR	0	134	158	0	184	177	0	154	178	0	0	24	29	0	30	32	0	28	32	0
SOUTH TEXAS 1	PWR	64	38	45	56	46	50	54	44	51	57	35	21	24	30	25	27	29	24	28	31
SOUTH TEXAS 2	PWR	63	37	44	56	47	50	55	43	50	57	34	20	24	30	25	27	30	23	27	31
ST LUCIE 1	PWR	0	55	82	0	67	80	0	84	15	0	0	21	31	0	26	31	0	24	6	0
ST LUCIE 2	PWR	69	53	0	44	63	0	63	61	0	64	27	21	0	17	25	0	25	24	0	25
SUMMER 1	PWR	0	50	74	0	59	70	0	57	53	0	0	23	34	0	27	32	0	26	25	0
SURRY 1	PWR	49	39	0	32	46	156	0	0	0	0	22	18	0	15	21	72	0	0	0	0
SURRY 2	PWR	50	0	57	32	0	54	156	0	0	0	23	0	26	15	0	25	72	0	0	0
SUSQUEHANNA 1	BWR	223	169	0	142	205	0	202	197	0	202	39	29	0	25	35	0	35	34	0	35
SUSQUEHANNA 2	BWR	222	0	250	142	0	241	203	0	179	204	38	0	43	25	0	42	35	0	31	35
THREE MILE ISL 1	PWR	0	53	78	0	64	74	0	176	0	0	0	25	36	0	30	34	0	82	0	0
TROJAN	PWR	46	35	52	29	43	50	43	41	193	0	21	16	24	13	20	23	20	19	90	0
TURKEY PT 3	PWR	0	35	51	0	41	157	0	0	0	0	0	16	23	0	19	72	0	0	0	0
TURKEY PT 4	PWR	46	0	31	29	0	157	0	0	0	0	21	0	14	13	0	72	0	0	0	0
VOGTLE 1	PWR	0	61	73	0	75	80	0	70	81	0	0	28	34	0	35	37	0	32	38	0
VOGTLE 2	PWR	101	61	0	91	75	0	80	71	0	91	47	28	0	42	35	0	41	33	0	42
VT YANKEE 1	BWR	127	96	0	82	0	137	388	0	0	0	23	17	0	15	0	24	66	0	0	0
WASH NUCLEAR2	BWR	162	107	180	87	137	175	130	140	111	137	29	19	32	15	24	31	23	25	20	24
WATERFORD 3	PWR	0	65	95	0	78	92	0	74	67	0	0	27	40	0	33	39	0	31	28	0
WATTS BAR 1	PWR	0	58	69	0	71	0	83	66	0	88	0	27	32	0	33	0	38	30	0	41
WATTS BAR 2	PWR	0	58	70	0	72	0	83	66	0	88	0	27	32	0	33	0	38	30	0	41
WOLF CREEK 1	PWR	0	55	82	0	66	79	0	64	59	0	0	26	38	0	31	37	0	30	27	0
YANKEE-ROWE 1	PWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ZION 1	PWR	70	0	77	44	0	74	193	0	0	0	32	0	35	20	0	34	88	0	0	0
ZION 2	PWR	0	52	78	0	64	75	0	193	0	0	0	24	36	0	29	34	0	88	0	0
FT ST VRAIN	HTG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORRIS	BWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORRIS	PWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WEST VALLEY	BWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WEST VALLEY	PWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WNP-1	PWR	0	66	0	96	74	0	82	73	0	89	0	30	0	43	34	0	37	33	0	41
RESEARCH SITES	PWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESEARCH SITES	BWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESEARCH SITES	HTG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GENERICS	PWR	247	149	368	571	812	944	1378	1413	1954	2581	114	69	169	263	373	434	627	645	881	1128
GENERICS	BWR	0	431	512	1238	1282	1807	2644	2114	3529	4340	0	79	94	226	234	293	483	385	643	784

TABLE A.3. Upper Reference Case, 1986 Inventory and Projected Annual Reactor Discharges (cont'd)

REACTOR		ASSEMBLIES					MTIHM			
		2017	2018	2019	2020		2017	2018	2019	2020
ARK NUCLEAR 1	PWR	0	0	0	0	:	0	0	0	0
ARK NUCLEAR 2	PWR	0	177	0	0	:	0	74	0	0
BEAVER VALLEY 1	PWR	0	0	0	0	:	0	0	0	0
BEAVER VALLEY 2	PWR	0	77	76	0	:	0	35	35	0
BELLEFONTE 1	PWR	70	0	87	0	:	32	0	40	0
BELLEFONTE 2	PWR	70	89	0	81	:	32	41	0	37
BIG ROCK 1	BWR	0	0	0	0	:	0	0	0	0
BRAIDWOOD 1	PWR	0	89	87	0	:	0	38	37	0
BRAIDWOOD 2	PWR	70	89	0	81	:	30	38	0	34
BROWNS FERRY1	BWR	0	197	0	175	:	0	36	0	32
BROWNS FERRY2	BWR	136	196	0	764	:	25	36	0	139
BROWNS FERRY3	BWR	138	0	166	764	:	25	0	30	139
BRUNSWICK 1	BWR	560	0	0	0	:	105	0	0	0
BRUNSWICK 1	PWR	0	0	0	0	:	0	0	0	0
BRUNSWICK 2	BWR	0	0	0	0	:	0	0	0	0
BRUNSWICK 2	PWR	0	0	0	0	:	0	0	0	0
BYRON 1	PWR	51	73	0	64	:	22	31	0	27
BYRON 2	PWR	70	0	87	81	:	30	0	37	34
CALLAWAY 1	PWR	52	0	61	64	:	22	0	26	27
CALVERT CLF 1	PWR	0	0	0	0	:	0	0	0	0
CALVERT CLF 2	PWR	0	0	0	0	:	0	0	0	0
CATAWBA 1	PWR	44	62	53	0	:	19	26	22	0
CATAWBA 2	PWR	43	63	0	55	:	18	27	0	23
CLINTON 1	BWR	143	0	179	164	:	26	0	33	30
COMANCHE PK 1	PWR	53	72	66	61	:	21	29	27	25
COMANCHE PK 2	PWR	53	69	70	62	:	21	28	28	25
COOK 1	PWR	0	0	0	0	:	0	0	0	0
COOK 2	PWR	0	193	0	0	:	0	70	0	0
COOPER STN	BWR	0	0	0	0	:	0	0	0	0
CRYSTAL RVR 3	PWR	177	0	0	0	:	82	0	0	0
DAVIS-BESSE 1	PWR	177	0	0	0	:	83	0	0	0
DIABLO CANYON 1	PWR	0	74	0	65	:	0	31	0	28
DIABLO CANYON 2	PWR	0	74	0	65	:	0	31	0	28
DRESDEN 1	BWR	0	0	0	0	:	0	0	0	0
DRESDEN 2	BWR	0	0	0	0	:	0	0	0	0
DRESDEN 3	BWR	0	0	0	0	:	0	0	0	0
DUANE ARNOLD	BWR	0	0	0	0	:	0	0	0	0
ENRICO FERMI2	BWR	176	251	0	223	:	32	46	0	41
FARLEY 1	PWR	0	157	0	0	:	0	73	0	0
FARLEY 2	PWR	39	0	157	0	:	18	0	73	0
FITZPATRICK	BWR	0	0	0	0	:	0	0	0	0
FORT CALHOUN	PWR	0	0	0	0	:	0	0	0	0
GINNA	PWR	0	0	0	0	:	0	0	0	0
GRAND GULF 1	BWR	161	0	197	284	:	28	0	35	36
HADDAM NECK	PWR	0	0	0	0	:	0	0	0	0
HARRIS 1	BWR	0	0	0	0	:	0	0	0	0
HARRIS 1	PWR	44	0	53	51	:	20	0	25	24
HATCH 1	BWR	0	0	0	0	:	0	0	0	0
HATCH 2	BWR	560	0	0	0	:	104	0	0	0

TABLE A.3. Upper Reference Case, 1986 Inventory and Projected Annual Reactor Discharges (cont'd)

REACTOR		ASSEMBLIES 2017	2018	2019	2020	MTIHM 2017	2018	2019	2020
HOPE CREEK	BWR	0	200	171	0	0	37	32	0
HUMBOLDT BAY	BWR	0	0	0	0	0	0	0	0
INDIAN PT 1	PWR	0	0	0	0	0	0	0	0
INDIAN PT 2	PWR	0	0	0	0	0	0	0	0
INDIAN PT 3	PWR	0	0	0	0	0	0	0	0
KEWAUNEE	PWR	0	0	0	0	0	0	0	0
LACROSSE	BWR	0	0	0	0	0	0	0	0
LASALLE CTY 1	BWR	131	0	162	168	24	0	29	31
LASALLE CTY 2	BWR	133	196	0	168	24	35	0	31
LIMERICK 1	BWR	129	187	0	165	23	33	0	29
LIMERICK 2	BWR	178	0	221	0	32	0	39	0
MAINE YANKEE	PWR	0	0	0	0	0	0	0	0
MCGUIRE 1	PWR	44	64	53	0	19	27	22	0
MCGUIRE 2	PWR	43	0	53	55	18	0	22	23
MILLSTONE 1	BWR	0	0	0	0	0	0	0	0
MILLSTONE 2	PWR	0	0	0	0	0	0	0	0
MILLSTONE 3	PWR	51	0	62	64	24	0	29	30
MONTICELLO	BWR	0	0	0	0	0	0	0	0
NINE MILE PT1	BWR	0	0	0	0	0	0	0	0
NINE MILE PT2	BWR	229	0	285	0	39	0	49	0
NORTH ANNA 1	PWR	0	156	0	0	0	72	0	0
NORTH ANNA 2	PWR	38	0	0	156	18	0	0	72
OCONEE 1	PWR	0	0	0	0	0	0	0	0
OCONEE 2	PWR	0	0	0	0	0	0	0	0
OCONEE 3	PWR	0	0	0	0	0	0	0	0
OYSTER CRK 1	BWR	0	0	0	0	0	0	0	0
PALISADES	PWR	0	0	0	0	0	0	0	0
PALO VERDE 1	PWR	57	67	0	71	24	28	0	30
PALO VERDE 2	PWR	0	81	56	0	0	34	22	0
PALO VERDE 3	PWR	0	83	96	0	0	33	40	0
PEACHBOTTOM 2	BWR	0	0	0	0	0	0	0	0
PEACHBOTTOM 3	BWR	0	0	0	0	0	0	0	0
PERRY 1	BWR	136	0	165	179	24	0	29	30
PILGRIM 1	BWR	0	0	0	0	0	0	0	0
POINT BEACH 1	PWR	0	0	0	0	0	0	0	0
POINT BEACH 2	PWR	0	0	0	0	0	0	0	0
PRAIRIE ISL 1	PWR	0	0	0	0	0	0	0	0
PRAIRIE ISL 2	PWR	0	0	0	0	0	0	0	0
QUAD CITIES 1	BWR	0	0	0	0	0	0	0	0
QUAD CITIES 2	BWR	0	0	0	0	0	0	0	0
RANCHO SECO 1	PWR	0	0	0	0	0	0	0	0
ROBINSON 2	PWR	0	0	0	0	0	0	0	0
RVR BEND 1	BWR	115	0	140	146	21	0	26	27
SALEM 1	PWR	0	0	0	0	0	0	0	0
SALEM 2	PWR	51	0	62	193	23	0	28	89
SAN ONOFRE 1	PWR	0	0	0	0	0	0	0	0
SAN ONOFRE 2	PWR	68	0	80	0	27	0	32	0
SAN ONOFRE 3	PWR	67	0	81	0	27	0	33	0
SEABROOK 1	PWR	54	0	67	62	25	0	31	29

TABLE A.3. Upper Reference Case, 1986 Inventory and Projected Annual Reactor Discharges (cont'd)

REACTOR		ASSEMBLIES					MTIHM			
		2017	2018	2019	2020		2017	2018	2019	2020
SEQUOYAH 1	PWR	49	0	59	61	:	22	0	27	28
SEQUOYAH 2	PWR	0	69	0	62	:	0	32	0	29
SHOREHAM	BWR	153	196	0	177	:	28	36	0	32
SOUTH TEXAS 1	PWR	44	65	64	60	:	24	36	29	27
SOUTH TEXAS 2	PWR	43	65	64	61	:	23	36	29	28
ST LUCIE 1	PWR	217	0	0	0	:	83	0	0	0
ST LUCIE 2	PWR	44	62	0	56	:	17	24	0	21
SUMMER 1	PWR	41	59	0	51	:	19	27	0	24
SURRY 1	PWR	0	0	0	0	:	0	0	0	0
SURRY 2	PWR	0	0	0	0	:	0	0	0	0
SUSQUEHANNA 1	BWR	140	0	170	177	:	24	0	29	31
SUSQUEHANNA 2	BWR	0	201	171	0	:	0	35	30	0
THREE MILE ISL 1	PWR	0	0	0	0	:	0	0	0	0
TROJAN	PWR	0	0	0	0	:	0	0	0	0
TURKEY PT 3	PWR	0	0	0	0	:	0	0	0	0
TURKEY PT 4	PWR	0	0	0	0	:	0	0	0	0
VOGTLE 1	PWR	76	88	0	80	:	32	41	0	37
VOGTLE 2	PWR	76	0	87	80	:	32	0	40	37
VT YANKEE 1	BWR	0	0	0	0	:	0	0	0	0
WASH NUCLEAR2	BWR	102	129	124	109	:	18	23	22	19
WATERFORD 3	PWR	54	76	0	68	:	23	32	0	29
WATTS BAR 1	PWR	67	0	82	0	:	31	0	38	0
WATTS BAR 2	PWR	67	0	82	0	:	31	0	38	0
WOLF CREEK 1	PWR	46	65	0	58	:	21	30	0	27
YANKEE-ROWE 1	PWR	0	0	0	0	:	0	0	0	0
ZION 1	PWR	0	0	0	0	:	0	0	0	0
ZION 2	PWR	0	0	0	0	:	0	0	0	0
FT ST VRAIN	HTG	0	0	0	0	:	0	0	0	0
MORRIS	BWR	0	0	0	0	:	0	0	0	0
MORRIS	PWR	0	0	0	0	:	0	0	0	0
WEST VALLEY	BWR	0	0	0	0	:	0	0	0	0
WEST VALLEY	PWR	0	0	0	0	:	0	0	0	0
WNP-1	PWR	67	0	84	0	:	31	0	38	0
RESEARCH SITES	PWR	0	0	0	0	:	0	0	0	0
RESEARCH SITES	BWR	0	0	0	0	:	0	0	0	0
RESEARCH SITES	HTG	0	0	0	0	:	0	0	0	0
GENERIC	PWR	2284	2934	3359	3037	:	987	1309	1495	1338
GENERIC	BWR	3698	5333	5445	5386	:	667	958	974	947

TABLE A.3. Upper Reference Case, 1986 Inventory and Projected Annual Reactor Discharges (cont'd)

SUBTOTALS BY REACTOR TYPE AND TOTALS

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
PWR ASSEMBLIES	20309	2320	2394	2943	2543	3016	3647	2464	3229	3199	2655
PWR MTIHM	8821	998	1017	1279	1099	1307	1595	1065	1389	1396	1133
BWR ASSEMBLIES	30605	3298	2664	4548	3381	3865	3931	4096	3953	3394	4253
BWR MTIHM	5563	597	488	821	598	693	702	735	709	604	764
HTG ASSEMBLIES	720	0	240	0	282	0	240	0	240	0	240
HTG MTIHM	9	0	3	0	3	0	3	0	2	0	2
TOTAL ASSEMBLIES	51634	5618	5298	7483	6126	6881	7818	6556	7422	6593	7148
TOTAL MTIHM	14192	1595	1500	2100	1700	2000	2300	1800	2100	2000	1900

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PWR ASSEMBLIES	3171	2818	3190	3077	2859	3273	2852	2960	3308	2607
PWR MTIHM	1377	1220	1379	1318	1243	1418	1238	1282	1448	1124
BWR ASSEMBLIES	4062	3252	4583	2706	4261	4297	3162	4587	3647	3226
BWR MTIHM	724	578	829	488	758	767	562	818	652	578
HTG ASSEMBLIES	0	240	0	240	0	1482	0	0	0	0
HTG MTIHM	0	2	0	2	0	15	0	0	0	0
TOTAL ASSEMBLIES	7233	6310	7773	6023	7120	9052	6014	7547	6955	5833
TOTAL MTIHM	2100	1800	2200	1800	2000	2200	1800	2100	2100	1700

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
PWR ASSEMBLIES	3465	3483	4108	3281	4519	4895	4999	5505	4671	5822
PWR MTIHM	1510	1503	1801	1430	1981	2100	2212	2422	2077	2591
BWR ASSEMBLIES	4996	3863	4473	7179	5861	5761	7717	7619	6780	7248
BWR MTIHM	890	696	799	1270	1019	1040	1388	1378	1223	1309
HTG ASSEMBLIES	0	0	0	0	0	0	0	0	0	0
HTG MTIHM	0	0	0	0	0	0	0	0	0	0
TOTAL ASSEMBLIES	8461	7346	8581	10460	10180	10656	12716	13124	11451	13062
TOTAL MTIHM	2400	2200	2600	2700	3000	3200	3600	3800	3300	3900

	2017	2018	2019	2020
PWR ASSEMBLIES	4567	5272	5267	4984
PWR MTIHM	2031	2327	2344	2208
BWR ASSEMBLIES	7016	7080	7598	8880
BWR MTIHM	1270	1273	1357	1593
HTG ASSEMBLIES	0	0	0	0
HTG MTIHM	0	0	0	0
TOTAL ASSEMBLIES	11583	12352	12863	13864
TOTAL MTIHM	3300	3600	3700	3800

TABLE A.4. Upper Reference Case, 1986 Inventory and Projected Inventory

REACTOR		Inv	Assemblies										Inv	MTIHM								
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
ARK NUCLEAR 1	PWR	448	448	496	496	542	596	596	647	647	693	748	208	208	230	230	251	276	276	300	300	321	346
ARK NUCLEAR 2	PWR	288	288	342	405	405	466	525	525	584	635	635	121	121	144	170	170	194	219	219	243	265	265
BEAVER VALLEY 1	PWR	283	346	346	408	408	470	531	531	591	591	652	130	159	159	186	188	216	245	245	273	273	301
BEAVER VALLEY 2	PWR	0	0	0	0	20	20	94	125	125	214	238	0	0	0	0	9	9	43	58	58	99	109
BELLEFONTE 1	PWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BELLEFONTE 2	PWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BIG ROCK 1	BWR	188	208	228	247	262	280	299	317	333	348	365	25	27	30	32	34	37	39	42	44	45	48
BRAIDWOOD 1	PWR	0	0	0	118	118	193	284	284	368	464	464	0	0	0	50	50	82	120	120	152	196	196
BRAIDWOOD 2	PWR	0	0	0	0	0	74	74	111	187	187	214	0	0	0	0	0	31	31	47	79	79	91
BROWNS FERRY1	BWR	1328	1328	1328	1328	1328	1328	1528	1528	1724	1724	1927	248	248	248	248	248	248	285	285	320	320	357
BROWNS FERRY2	BWR	1192	1192	1192	1456	1456	1646	1646	1839	2036	2036	2240	223	223	223	270	270	306	306	341	377	377	414
BROWNS FERRY3	BWR	1004	1004	1004	1004	1210	1415	1415	1611	1611	1782	1985	187	187	187	187	224	262	262	298	298	329	366
BRUNSWICK 1	BWR	840	1004	1004	1173	1315	1315	1479	1479	1640	1778	1778	156	186	186	217	244	244	274	274	304	330	330
BRUNSWICK 1	PWR	168	168	168	168	168	168	168	168	168	168	168	71	71	71	71	71	71	71	71	71	71	71
BRUNSWICK 2	BWR	756	756	906	1074	1074	1240	1240	1402	1564	1564	1728	141	141	168	199	199	230	230	260	290	290	321
BRUNSWICK 2	PWR	144	144	144	144	144	144	144	144	144	144	144	66	66	66	66	66	66	66	66	66	66	66
BYRON 1	PWR	0	77	147	147	216	296	296	369	441	441	516	0	33	62	62	91	125	125	156	187	187	218
BYRON 2	PWR	0	0	0	117	162	162	253	298	298	394	419	0	0	0	49	69	69	107	123	123	167	177
CALLAWAY 1	PWR	84	167	167	246	305	305	379	453	453	516	591	39	77	77	109	136	136	168	199	199	226	258
CALVERT CLF 1	PWR	618	618	695	695	770	770	855	855	937	937	1024	237	237	267	267	296	296	328	328	359	359	391
CALVERT CLF 2	PWR	432	518	518	597	597	684	684	768	768	848	848	165	195	195	229	229	263	263	294	294	321	321
CATAWBA 1	PWR	84	124	124	186	239	303	367	367	429	484	549	27	53	53	79	101	126	155	155	182	205	232
CATAWBA 2	PWR	0	0	61	113	163	221	281	281	333	393	457	0	0	22	48	69	94	119	119	141	166	193
CLINTON 1	BWR	0	0	88	337	419	419	591	674	674	881	932	0	0	15	62	77	77	110	124	124	162	172
COMANCHE PK 1	PWR	0	0	0	0	0	53	118	145	204	282	381	0	0	0	0	0	24	54	67	94	125	133
COMANCHE PK 2	PWR	0	0	0	0	0	0	70	97	153	237	256	0	0	0	0	0	0	30	42	66	101	109
COOK 1	PWR	546	616	616	689	751	751	821	891	891	952	952	238	270	270	303	332	332	364	396	396	424	424
COOK 2	PWR	424	424	494	494	494	573	649	649	726	791	791	191	191	219	219	219	251	282	282	313	339	339
COOPER STN	BWR	648	648	756	868	958	1054	1155	1259	1356	1443	1546	120	120	140	159	175	194	213	232	249	265	284
CRYSTAL RVR 3	PWR	382	384	384	458	458	523	523	585	585	640	640	140	170	170	213	213	243	243	272	272	297	297
DAVIS-BESSE 1	PWR	197	197	248	303	303	359	413	413	466	512	512	93	93	117	143	143	169	194	194	219	240	240
DIABLO CANYON 1	PWR	51	51	105	105	170	170	244	244	318	318	394	24	24	48	48	78	78	111	111	143	143	175
DIABLO CANYON 2	PWR	0	44	98	98	163	163	237	237	310	310	386	0	20	45	45	75	75	108	108	139	139	171
DRESDEN 1	BWR	683	683	683	683	683	683	683	683	683	683	683	70	70	70	70	70	70	70	70	70	70	70
DRESDEN 2	BWR	1606	1606	1739	1882	1882	2024	2161	2161	2296	2415	2415	291	291	314	338	336	361	384	384	407	427	427
DRESDEN 3	BWR	1456	1590	1590	1735	1735	1877	2015	2015	2151	2270	2270	266	288	288	312	312	336	359	359	382	402	402
DUANE ARNOLD	BWR	696	808	903	903	996	1110	1110	1213	1316	1316	1430	129	150	167	167	184	205	205	223	241	241	262
ENRICO FERMI2	BWR	0	0	0	211	439	439	680	680	935	935	1197	0	0	0	39	81	81	125	125	171	171	219
FARLEY 1	PWR	410	410	464	523	523	584	641	641	699	747	747	186	188	213	241	241	269	295	295	322	344	344
FARLEY 2	PWR	256	313	313	374	425	425	485	541	541	592	650	117	144	144	172	196	196	224	250	250	273	300
FITZPATRICK	BWR	1012	1177	1306	1306	1443	1605	1605	1755	1907	1907	2069	189	219	243	243	268	297	297	323	350	350	379
FORT CALHOUN	PWR	334	375	411	411	447	488	488	527	566	566	606	122	136	149	149	162	176	176	190	204	204	218
GINNA	PWR	470	501	526	555	580	606	636	665	694	718	748	183	194	203	214	222	232	242	252	262	271	281
GRAND GULF 1	BWR	264	516	516	756	987	987	1202	1433	1433	1634	1873	49	95	95	139	176	176	217	258	258	294	336
HADDAM NECK	PWR	594	644	644	687	729	775	775	820	864	864	911	245	265	265	283	300	319	319	338	354	354	371
HARRIS 1	BWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HARRIS 1	PWR	0	0	31	31	57	57	110	133	133	197	212	0	0	14	14	27	27	51	62	62	92	99
HATCH 1	BWR	1107	1317	1472	1472	1625	1802	1802	1973	2143	2143	2317	205	244	272	272	300	333	333	365	398	398	429
HATCH 2	BWR	745	745	891	1058	1210	1210	1382	1551	1551	1697	1872	137	137	163	194	222	222	254	285	285	313	345

TABLE A.4. Upper Reference Case, 1986 Inventory and Projected Inventory (cont'd)

REACTOR		Inv	Assemblies											Inv	MTIHM									
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
HOPE CREEK	BWR	0	0	184	396	396	604	808	808	1008	1178	1178	:	0	0	34	73	73	112	149	149	186	218	218
HUMBOLDT BAY	BWR	390	390	390	390	390	390	390	390	390	390	390	:	29	29	29	29	29	29	29	29	29	29	29
INDIAN PT 1	PWR	160	160	160	160	160	160	160	160	160	160	160	:	31	31	31	31	31	31	31	31	31	31	31
INDIAN PT 2	PWR	464	523	523	584	584	645	704	704	763	763	823	:	216	237	237	265	265	293	319	319	346	346	373
INDIAN PT 3	PWR	292	358	358	427	486	486	553	553	616	675	675	:	133	164	164	195	222	222	253	253	283	308	308
KEWAUNEE	PWR	369	409	439	469	500	533	573	605	637	665	698	:	144	159	170	182	194	206	221	233	246	256	269
LACROSSE	BWR	261	285	309	309	333	357	381	405	429	453	453	:	30	33	35	35	38	41	43	46	48	51	51
LASALLE CTY 1	BWR	132	415	415	585	757	757	950	1139	1139	1304	1502	:	24	76	76	107	138	138	173	208	208	238	274
LASALLE CTY 2	BWR	0	197	388	388	558	747	747	936	1126	1126	1322	:	0	36	69	69	100	136	136	171	205	205	241
LIMERICK 1	BWR	0	234	449	449	623	623	823	1009	1009	1174	1174	:	0	43	83	83	115	115	151	184	184	213	213
LIMERICK 2	BWR	0	0	0	0	0	0	0	0	285	285	350	:	0	0	0	0	0	0	0	0	52	52	64
MAINE YANKEE	PWR	793	857	918	918	974	1040	1040	1103	1166	1166	1231	:	306	323	346	346	367	392	392	416	440	440	465
MCGUIRE 1	PWR	219	280	337	337	392	457	520	520	583	637	701	:	101	127	151	151	174	202	229	229	255	278	305
MCGUIRE 2	PWR	186	250	305	363	416	416	469	538	600	600	666	:	86	115	139	163	186	186	208	237	263	263	291
MILLSTONE 1	BWR	1536	1707	1707	1884	1884	2061	2061	2238	2238	2377	2377	:	289	319	319	350	350	382	382	412	412	438	438
MILLSTONE 2	PWR	474	474	535	612	653	653	713	713	769	815	815	:	186	186	209	241	257	257	282	282	304	321	321
MILLSTONE 3	PWR	0	73	73	149	214	214	288	361	361	424	499	:	0	34	34	69	99	99	133	167	167	196	230
MONTICELLO	BWR	428	531	531	647	736	736	844	944	944	1034	1034	:	79	98	98	119	134	134	153	170	170	186	186
NINE MILE PT1	BWR	1444	1444	1602	1602	1761	1761	1923	1923	2074	2074	2241	:	270	270	298	298	325	325	355	355	381	381	416
NINE MILE PT2	BWR	0	0	0	396	396	628	628	741	741	1091	1091	:	0	0	0	72	72	115	115	135	135	198	198
NORTH ANNA 1	PWR	294	348	408	408	461	588	586	584	628	628	678	:	135	160	184	184	208	234	234	260	286	286	312
NORTH ANNA 2	PWR	235	296	296	355	406	406	463	519	519	568	626	:	108	136	136	163	187	187	213	239	239	262	289
OCONEE 1	PWR	598	639	639	693	748	794	794	846	897	943	943	:	273	296	296	321	343	368	366	392	415	437	437
OCONEE 2	PWR	381	425	425	479	526	526	578	629	629	674	727	:	177	197	197	222	244	244	268	292	292	312	337
OCONEE 3	PWR	529	529	576	631	631	685	737	737	789	834	834	:	246	246	268	293	293	318	342	342	366	387	387
OYSTER CRK 1	BWR	1392	1392	1493	1616	1616	1738	1879	1879	2016	2016	2129	:	266	266	277	299	299	319	346	346	369	389	391
PALISADES	PWR	646	646	699	699	661	661	711	711	769	819	819	:	219	219	246	246	266	266	284	284	307	327	327
PALO VERDE 1	PWR	0	69	138	138	202	271	271	352	419	419	502	:	0	29	53	53	83	112	112	146	172	172	207
PALO VERDE 2	PWR	0	0	73	150	150	227	294	294	374	432	432	:	0	0	31	61	61	93	121	121	155	179	179
PALO VERDE 3	PWR	0	0	0	123	123	196	283	283	350	463	463	:	0	0	0	52	52	80	117	117	145	192	192
PEACHBOTTOM 2	BWR	1462	1701	1701	1980	1980	2235	2235	2463	2652	2652	2856	:	273	316	316	367	367	413	413	454	487	487	523
PEACHBOTTOM 3	BWR	1496	1731	1731	1731	1899	2112	2112	2302	2489	2489	2689	:	279	322	322	322	353	392	392	426	459	459	495
PERRY 1	BWR	0	0	175	175	363	543	543	741	933	933	1133	:	0	0	32	32	66	99	99	136	170	170	208
PILGRIM 1	BWR	1328	1328	1475	1475	1475	1646	1646	1811	1811	1958	1958	:	247	247	274	274	274	305	305	334	334	360	360
POINT BEACH 1	PWR	448	475	501	530	555	584	612	640	666	692	721	:	177	189	200	210	219	229	240	250	260	268	279
POINT BEACH 2	PWR	408	435	460	489	514	543	571	598	625	649	677	:	163	174	183	193	202	212	223	232	242	251	261
PRAIRIE ISL 1	PWR	386	425	458	494	526	561	561	595	630	660	696	:	150	164	176	189	200	213	213	225	237	248	261
PRAIRIE ISL 2	PWR	415	415	446	483	514	550	585	619	653	683	683	:	161	161	172	185	196	209	221	233	245	256	256
QUAD CITIES 1	BWR	1393	1543	1543	1688	1813	1813	1953	2102	2102	2222	2365	:	261	287	287	313	335	335	360	386	386	407	432
QUAD CITIES 2	BWR	1428	1428	1582	1707	1707	1858	1998	1998	2127	2247	2247	:	268	268	292	317	317	343	367	367	391	413	413
RANCHO SECO 1	PWR	267	267	313	373	373	436	496	496	548	593	593	:	124	124	146	173	173	202	230	230	254	275	275
ROBINSON 2	PWR	270	312	359	359	396	439	492	492	534	570	570	:	116	134	153	153	170	188	210	210	228	244	244
RVR BEND 1	BWR	0	145	145	347	487	487	654	831	831	972	1147	:	0	27	27	64	90	90	121	154	154	180	212
SALEM 1	PWR	344	416	416	496	561	652	652	722	795	795	866	:	158	192	192	228	258	300	300	332	365	365	398
SALEM 2	PWR	174	174	232	312	312	400	489	569	569	633	708	:	80	80	107	144	144	184	225	262	262	291	326
SAN ONOFRE 1	PWR	146	146	187	234	234	234	279	279	323	323	378	:	54	54	69	86	86	86	103	103	119	119	137
SAN ONOFRE 2	PWR	147	242	242	348	348	439	439	534	534	616	713	:	68	100	100	141	141	181	181	220	220	253	292
SAN ONOFRE 3	PWR	147	147	234	234	319	319	414	414	508	590	590	:	68	68	97	97	133	133	171	171	209	242	242
SEABROOK 1	PWR	0	0	37	37	78	124	189	217	272	272	292	:	0	0	17	17	32	57	87	100	126	126	135

TABLE A.4. Upper Reference Case, 1986 Inventory and Projected Inventory (cont'd)

REACTOR		Inv	Assemblies										Inv	MTIHM									
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
SEQUOYAH 1	PWR	212	212	212	285	347	347	418	487	487	548	548	97	97	97	131	160	160	192	224	224	252	252
SEQUOYAH 2	PWR	136	207	207	279	279	351	420	420	489	549	549	62	95	95	128	128	161	193	193	225	253	253
SHOREHAM	BWR	0	0	0	0	0	173	356	356	497	497	547	0	0	0	0	0	32	65	65	91	91	100
SOUTH TEXAS 1	PWR	0	0	0	0	29	74	127	148	194	259	274	0	0	0	0	16	40	69	80	105	140	148
SOUTH TEXAS 2	PWR	0	0	0	0	0	0	58	81	126	190	206	0	0	0	0	0	0	31	44	68	103	111
ST LUCIE 1	PWR	444	548	605	605	661	729	729	796	861	861	930	169	204	229	229	251	276	276	302	327	327	353
ST LUCIE 2	PWR	164	246	246	311	367	367	430	492	492	547	612	61	93	93	118	140	140	164	188	188	210	235
SUMMER 1	PWR	112	172	226	226	279	340	340	398	457	457	517	51	79	104	104	128	156	156	183	211	211	239
SURRY 1	PWR	488	488	543	587	630	630	677	723	723	763	810	222	222	247	267	287	287	308	330	330	348	369
SURRY 2	PWR	385	385	437	482	482	534	580	580	626	666	666	175	175	199	219	219	243	264	264	286	304	304
SUSQUEHANNA 1	BWR	488	699	699	923	1100	1100	1308	1509	1509	1683	1889	98	128	128	168	199	199	235	270	270	300	336
SUSQUEHANNA 2	BWR	324	324	511	716	716	926	1128	1128	1327	1501	1501	66	66	94	131	131	167	202	202	237	267	267
THREE MILE ISL 1	PWR	284	284	342	342	398	464	525	525	588	588	653	132	132	159	159	185	215	244	244	273	273	303
TROJAN	PWR	379	429	467	518	548	591	633	675	716	753	795	174	197	215	234	252	272	291	311	330	347	366
TURKEY PT 3	PWR	424	491	539	539	576	576	622	663	704	704	746	192	223	245	245	262	262	283	302	321	321	340
TURKEY PT 4	PWR	446	446	487	534	534	577	619	660	660	696	739	203	203	221	243	243	263	282	301	301	317	337
VOGTLE 1	PWR	0	0	46	46	92	163	163	199	272	272	297	0	0	22	22	43	76	76	92	126	126	138
VOGTLE 2	PWR	0	0	0	0	43	43	136	167	167	271	296	0	0	0	0	20	20	60	77	77	126	137
VT YANKEE 1	BWR	1322	1442	1442	1561	1663	1663	1780	1894	1894	1993	2110	246	268	268	290	309	309	330	350	350	368	389
WASH NUCLEAR2	BWR	128	257	390	535	651	792	928	1062	1209	1314	1454	24	47	72	98	119	144	168	192	216	236	261
WATERFORD 3	PWR	92	92	162	242	242	321	398	398	473	539	539	39	39	66	100	100	133	165	165	197	225	225
WATTS BAR 1	PWR	0	0	0	85	123	123	205	239	239	337	381	0	0	0	39	57	57	95	118	118	155	167
WATTS BAR 2	PWR	0	0	0	0	33	33	107	141	141	238	238	0	0	0	0	15	15	49	65	65	110	110
WOLF CREEK 1	PWR	52	98	158	158	217	285	285	351	417	417	485	24	45	73	73	100	132	132	162	193	193	225
YANKEE-ROWE 1	PWR	341	372	403	403	431	431	466	497	497	527	566	83	98	97	97	104	104	112	119	119	126	134
ZION 1	PWR	574	574	635	700	700	765	828	828	890	945	945	262	262	290	320	320	349	378	378	407	432	432
ZION 2	PWR	503	574	638	638	689	754	754	816	878	878	942	229	261	287	287	314	343	343	372	400	400	429
FT ST VRAIN	HTG	0	0	240	240	522	522	782	782	1082	1082	1242	0	0	3	3	6	6	8	8	11	11	13
MORRIS	BWR	2047	2047	2047	2047	2047	2047	2047	2047	2047	2047	2047	389	389	389	389	389	389	389	389	389	389	389
MORRIS	PWR	350	350	350	350	350	350	350	350	350	350	350	132	132	132	132	132	132	132	132	132	132	132
WEST VALLEY	BWR	85	85	85	85	85	85	85	85	85	85	85	11	11	11	11	11	11	11	11	11	11	11
WEST VALLEY	PWR	40	40	40	40	40	40	40	40	40	40	40	15	15	15	15	15	15	15	15	15	15	15
WNP-1	PWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESEARCH SITES	PWR	97	97	97	97	97	97	97	97	97	97	97	44	44	44	44	44	44	44	44	44	44	44
RESEARCH SITES	BWR	4	4	4	4	4	4	4	4	4	4	4	1	1	1	1	1	1	1	1	1	1	1
RESEARCH SITES	HTG	720	720	720	720	720	720	720	720	720	720	720	9	9	9	9	9	9	9	9	9	9	9
GENERICS	PWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GENERICS	BWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE A.4. Upper Reference Case, 1986 Inventory and Projected Inventory (cont'd)

REACTOR		Assemblies										:	MTIHM									
		1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	:	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
ARK NUCLEAR 1	PWR	748	795	795	836	892	892	937	937	985	1036	:	348	368	368	387	413	413	434	434	456	477
ARK NUCLEAR 2	PWR	686	686	743	789	789	847	896	896	951	951	:	286	286	310	329	329	353	374	374	397	397
BEAVER VALLEY 1	PWR	705	705	762	762	827	827	877	937	937	988	:	326	326	352	352	382	382	405	433	433	457
BEAVER VALLEY 2	PWR	236	306	356	356	400	459	459	514	577	577	:	109	141	164	164	184	212	212	237	266	266
BELLEFONTE 1	PWR	0	61	61	135	184	184	259	259	331	372	:	0	28	28	62	84	84	118	118	151	170
BELLEFONTE 2	PWR	0	0	42	42	84	153	153	214	214	255	:	0	0	19	19	38	70	70	98	98	116
BIG ROCK 1	BWR	365	382	398	416	428	444	459	475	559	559	:	48	50	52	54	56	58	60	62	73	73
BRAIDWOOD 1	PWR	555	636	636	722	771	771	846	907	907	948	:	235	269	269	305	326	326	358	384	384	401
BRAIDWOOD 2	PWR	305	305	361	447	447	515	590	590	661	702	:	129	129	153	189	189	218	250	250	280	297
BROWNS FERRY1	BWR	2100	2100	2291	2446	2446	2640	2640	2839	3022	3022	:	389	389	423	452	452	487	487	523	556	556
BROWNS FERRY2	BWR	2240	2425	2615	2615	2829	3022	3022	3221	3221	3388	:	414	447	482	482	521	556	556	592	592	622
BROWNS FERRY3	BWR	1985	2169	2359	2359	2573	2573	2741	2939	2939	3106	:	366	399	434	434	473	473	503	539	539	569
BRUNSWICK 1	BWR	1920	2073	2073	2197	2197	2356	2494	2494	2642	2779	:	357	385	385	408	408	438	464	464	492	517
BRUNSWICK 1	PWR	160	160	160	160	160	160	160	160	160	160	:	71	71	71	71	71	71	71	71	71	71
BRUNSWICK 2	BWR	1871	1871	2027	2027	2200	2359	2359	2523	2672	2672	:	348	348	377	377	409	439	439	470	498	498
BRUNSWICK 2	PWR	144	144	144	144	144	144	144	144	144	144	:	66	66	66	66	66	66	66	66	66	66
BYRON 1	PWR	580	580	650	707	707	776	840	840	908	969	:	245	245	275	299	299	329	355	355	384	410
BYRON 2	PWR	419	500	556	556	606	674	674	736	808	808	:	177	211	235	235	258	285	285	311	342	342
CALLAWAY 1	PWR	591	659	729	729	809	880	880	954	1022	1022	:	258	287	317	317	351	381	381	413	442	442
CALVERT CLF 1	PWR	1024	1101	1101	1167	1167	1249	1249	1332	1332	1403	:	391	416	416	441	441	472	472	503	503	530
CALVERT CLF 2	PWR	913	913	993	993	1083	1083	1153	1153	1231	1231	:	349	349	379	379	412	412	439	439	468	468
CATAWBA 1	PWR	549	608	668	717	785	785	839	901	960	1013	:	232	257	283	303	332	332	355	381	406	429
CATAWBA 2	PWR	457	515	576	625	625	688	748	802	860	860	:	193	218	244	264	264	291	313	339	364	364
CLINTON 1	BWR	932	1096	1212	1212	1312	1451	1451	1578	1725	1725	:	172	202	223	223	242	268	268	291	318	318
COMANCHE PK 1	PWR	375	436	480	550	587	639	700	747	801	835	:	163	188	205	234	248	269	294	313	335	348
COMANCHE PK 2	PWR	325	325	371	438	475	582	640	690	744	775	:	136	136	155	182	197	240	263	284	305	318
COOK 1	PWR	1013	1078	1078	1132	1208	1208	1266	1266	1331	1398	:	452	482	482	507	542	542	569	569	599	626
COOK 2	PWR	858	858	931	992	992	1067	1067	1143	1214	1214	:	366	366	396	426	426	451	451	481	516	516
COOPER STN	BWR	1630	1723	1815	1891	1998	2091	2174	2271	2358	2448	:	299	316	333	347	366	383	399	416	432	447
CRYSTAL RVR 3	PWR	694	694	764	764	822	822	875	875	933	933	:	322	322	350	350	381	381	406	406	433	433
DAVIS-BESSE 1	PWR	558	607	607	648	704	704	748	800	800	844	:	262	285	285	304	330	330	351	375	375	396
DIABLO CANYON 1	PWR	394	483	483	521	521	594	594	668	668	731	:	175	204	204	229	229	260	260	292	292	319
DIABLO CANYON 2	PWR	386	455	455	513	513	585	585	659	659	721	:	171	200	200	225	225	256	256	287	287	314
DRESDEN 1	BWR	683	683	683	683	683	683	683	683	683	683	:	70	70	70	70	70	70	70	70	70	70
DRESDEN 2	BWR	2535	2664	2664	2771	2919	2919	3034	3172	3172	3288	:	447	469	469	487	511	511	531	554	554	573
DRESDEN 3	BWR	2390	2518	2518	2625	2774	2774	2889	3026	3026	3142	:	422	444	444	462	487	487	506	529	529	548
DUANE ARNOLD	BWR	1520	1520	1620	1707	1707	1808	1896	1896	1999	2086	:	278	278	295	311	311	329	345	345	363	378
ENRICO FERMI2	BWR	1417	1417	1661	1661	1933	1933	2147	2398	2398	2613	:	259	259	303	303	353	353	392	438	438	477
FARLEY 1	PWR	799	852	852	898	959	959	1008	1064	1064	1114	:	369	393	393	414	443	443	465	491	491	515
FARLEY 2	PWR	650	705	759	759	823	878	878	937	989	989	:	300	326	351	351	380	406	406	433	457	457
FITZPATRICK	BWR	2202	2202	2346	2465	2465	2616	2744	2744	2888	3018	:	403	403	428	450	450	476	499	499	525	548
FORT CALHOUN	PWR	640	640	677	707	707	745	778	778	815	849	:	230	230	243	254	254	267	279	279	292	304
GINNA	PWR	773	799	825	847	877	904	927	956	981	1004	:	298	299	308	318	328	336	344	354	363	371
GRAND GULF 1	BWR	1873	2089	2313	2313	2566	2794	2794	3026	3243	3243	:	336	374	413	413	458	498	498	539	577	577
HADDAM NECK	PWR	950	950	995	1030	1079	1079	1118	1165	1165	1203	:	385	385	402	415	432	432	447	464	464	478
HARRIS 1	BWR	0	0	0	0	0	0	0	0	0	0	:	0	0	0	0	0	0	0	0	0	0
HARRIS 1	PWR	212	262	296	296	327	369	369	408	452	452	:	99	122	138	138	152	172	172	190	210	210
HATCH 1	BWR	2467	2467	2631	2763	2763	2929	3072	3072	3230	3374	:	457	457	487	511	511	542	569	569	598	625
HATCH 2	BWR	1872	2030	2193	2193	2378	2544	2544	2714	2872	2872	:	345	374	405	405	439	470	470	501	531	531

TABLE A.4. Upper Reference Case, 1986 Inventory and Projected Inventory (cont'd)

REACTOR		Assemblies										MTIHM									
		1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
HOPE CREEK	BWR	1354	1540	1540	1697	1913	1913	2082	2284	2284	2454	251	285	285	315	355	355	386	424	424	456
HUMBOLDT BAY	BWR	390	390	390	390	390	390	390	390	390	390	29	29	29	29	29	29	29	29	29	29
INDIAN PT 1	PWR	160	160	160	160	160	160	160	160	160	160	31	31	31	31	31	31	31	31	31	31
INDIAN PT 2	PWR	875	875	932	932	997	1055	1055	1115	1115	1168	397	397	422	422	452	478	478	505	505	528
INDIAN PT 3	PWR	733	733	796	848	848	912	912	979	1040	1040	336	336	364	387	387	417	417	447	475	475
KEWAUNEE	PWR	726	756	787	813	848	886	907	939	969	996	279	291	303	312	326	338	348	360	372	382
LACROSSE	BWR	477	501	525	549	573	645	645	645	645	645	54	56	59	61	64	72	72	72	72	72
LASALLE CTY 1	BWR	1502	1680	1863	1863	2069	2257	2257	2448	2625	2625	274	306	339	339	377	411	411	446	478	478
LASALLE CTY 2	BWR	1489	1489	1673	1823	1823	2009	2178	2178	2348	2509	271	271	305	332	332	366	395	395	428	457
LIMERICK 1	BWR	1341	1520	1520	1669	1875	1875	2028	2215	2215	2374	243	274	274	301	337	337	364	398	398	428
LIMERICK 2	BWR	576	576	726	726	851	1024	1024	1180	1180	1286	106	106	132	132	154	185	185	213	213	232
MAINE YANKEE	PWR	1287	1287	1347	1397	1397	1459	1512	1512	1570	1570	486	486	509	529	529	552	573	573	595	595
MCGUIRE 1	PWR	756	756	816	865	932	932	985	1048	1107	1160	328	328	354	374	403	403	425	452	477	499
MCGUIRE 2	PWR	721	779	839	839	907	969	1022	1022	1080	1133	315	339	364	364	393	419	442	442	468	489
MILLSTONE 1	BWR	2526	2526	2689	2689	2873	2873	3016	3016	3174	3318	484	484	493	493	526	526	551	551	579	605
MILLSTONE 2	PWR	864	917	917	959	1026	1026	1068	1121	1121	1169	348	368	368	376	400	400	418	438	438	457
MILLSTONE 3	PWR	499	567	637	637	716	787	787	861	929	929	230	262	294	294	330	363	363	397	429	429
MONTICELLO	BWR	1125	1223	1223	1304	1417	1417	1505	1608	1608	1696	202	218	218	232	252	252	267	285	285	300
NINE MILE PT1	BWR	2241	2387	2387	2511	2511	2668	2668	2828	2828	2963	418	435	435	456	456	483	483	511	511	534
NINE MILE PT2	BWR	1381	1381	1568	1568	1731	1731	1977	1977	2211	2211	248	248	280	280	307	307	349	349	389	389
NORTH ANNA 1	PWR	728	728	782	826	825	880	926	926	977	1024	335	335	360	380	380	406	427	427	451	472
NORTH ANNA 2	PWR	626	679	733	733	793	847	847	902	954	954	289	313	338	338	366	391	391	416	440	440
OCONEE 1	PWR	988	1037	1088	1088	1144	1194	1238	1238	1288	1330	457	480	504	504	535	553	573	573	595	616
OCONEE 2	PWR	773	773	823	884	864	915	959	959	1008	1052	358	358	381	408	408	424	444	444	467	487
OCONEE 3	PWR	879	928	978	978	1034	1085	1085	1137	1185	1185	408	431	454	454	480	503	503	527	550	550
OYSTER CRK 1	BWR	2240	2240	2355	2449	2449	2589	2675	2675	2787	2892	416	416	431	448	448	469	488	488	508	527
PALISADES	PWR	870	870	926	926	989	1046	1046	1105	1105	1154	348	348	370	370	395	418	418	442	442	461
PALO VERDE 1	PWR	561	561	639	692	692	771	828	828	904	968	230	230	263	284	284	317	339	339	371	393
PALO VERDE 2	PWR	503	568	568	629	701	701	778	838	838	907	209	234	234	260	289	289	317	348	348	377
PALO VERDE 3	PWR	547	637	637	717	772	772	841	909	909	947	228	265	265	297	328	328	347	375	375	390
PEACHBOTTOM 2	BWR	3030	3030	3220	3375	3375	3588	3734	3734	3918	3918	554	554	588	615	615	650	679	679	712	712
PEACHBOTTOM 3	BWR	2856	2856	3039	3188	3188	3375	3375	3567	3745	3745	524	524	557	583	583	616	616	650	682	682
PERRY 1	BWR	1303	1303	1498	1642	1642	1833	1996	2192	2192	2357	238	238	269	296	296	330	359	394	394	423
PILGRIM 1	BWR	2105	2105	2264	2264	2264	2438	2438	2598	2598	2736	386	386	414	414	414	443	443	472	472	497
POINT BEACH 1	PWR	745	771	797	818	848	875	899	927	952	976	288	297	306	314	325	334	343	353	362	371
POINT BEACH 2	PWR	702	728	755	777	807	834	857	885	911	935	270	279	289	297	308	317	326	336	345	354
PRAIRIE ISL 1	PWR	726	758	792	828	828	864	884	918	950	979	271	283	295	305	305	317	327	339	351	361
PRAIRIE ISL 2	PWR	714	747	780	807	844	878	907	942	974	974	267	279	290	300	313	325	335	348	359	359
QUAD CITIES 1	BWR	2365	2495	2628	2628	2778	2914	2914	3053	3181	3181	432	455	479	479	505	529	529	553	576	576
QUAD CITIES 2	BWR	2368	2497	2497	2605	2756	2756	2873	3012	3012	3129	434	457	457	476	502	502	523	547	547	568
RANCHO SECO 1	PWR	639	639	687	728	728	780	780	829	879	879	296	296	318	337	337	361	361	384	407	407
ROBINSON 2	PWR	617	658	695	695	753	794	794	838	886	886	263	280	297	297	321	338	338	357	377	377
RVR BEND 1	BWR	1147	1304	1464	1464	1648	1818	1818	1977	2131	2131	212	241	271	271	305	335	335	366	394	394
SALEM 1	PWR	927	927	994	1048	1048	1116	1176	1175	1240	1299	428	428	457	482	482	513	540	540	570	597
SALEM 2	PWR	708	776	846	846	925	996	996	1068	1136	1136	326	357	389	389	425	458	458	492	523	523
SAN ONOFRE 1	PWR	370	412	412	448	448	493	493	539	539	577	137	152	152	166	166	182	182	199	199	213
SAN ONOFRE 2	PWR	713	802	802	877	877	969	969	1063	1063	1144	292	328	328	358	358	395	395	433	433	466
SAN ONOFRE 3	PWR	673	673	763	763	866	866	948	948	1035	1116	275	275	312	312	353	353	385	385	421	454
SEABROOK 1	PWR	362	424	467	533	533	585	642	689	743	774	167	196	215	246	246	270	298	318	343	357

TABLE A.4. Upper Reference Case, 1986 Inventory and Projected Inventory (cont'd)

REACTOR		Assemblies										MTIHM									
		1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
SEQUOYAH 1	PWR	609	675	675	729	804	804	863	932	932	991	280	310	310	335	369	369	396	428	428	455
SEQUOYAH 2	PWR	610	610	677	732	732	800	800	870	935	935	281	281	312	337	337	369	369	401	431	431
SHOREHAM	BWR	746	746	870	1060	1060	1209	1374	1374	1530	1621	136	136	159	193	193	221	251	251	279	296
SOUTH TEXAS 1	PWR	330	379	414	467	497	539	586	625	669	694	179	205	224	253	269	292	317	338	362	376
SOUTH TEXAS 2	PWR	263	314	349	403	433	475	521	559	603	628	142	170	189	218	234	257	282	303	326	340
ST LUCIE 1	PWR	988	988	1052	1104	1104	1169	1224	1224	1286	1341	375	375	400	420	420	444	485	465	489	510
ST LUCIE 2	PWR	612	671	731	731	798	859	859	921	980	980	235	258	281	281	307	331	331	355	378	378
SUMMER 1	PWR	589	589	626	672	672	730	780	780	834	884	263	263	289	310	310	337	360	360	386	409
SURRY 1	PWR	810	853	898	898	947	991	991	1036	1078	1078	389	389	410	410	432	453	453	473	492	492
SURRY 2	PWR	706	749	749	785	834	834	873	918	918	958	322	342	342	359	381	381	399	420	420	437
SUSQUEHANNA 1	BWR	1889	2076	2270	2270	2489	2685	2685	2886	3073	3073	336	368	402	402	439	473	473	508	540	540
SUSQUEHANNA 2	BWR	1677	1865	1865	2023	2242	2242	2411	2613	2613	2783	297	330	330	357	395	395	424	459	459	488
THREE MILE ISL 1	PWR	709	709	771	822	822	882	935	935	993	1046	329	329	358	381	381	409	434	434	461	485
TROJAN	PWR	832	872	913	946	992	1032	1068	1109	1147	1182	384	402	421	437	458	476	493	512	530	546
TURKEY PT 3	PWR	783	783	822	854	854	895	930	930	969	1004	357	357	375	390	390	409	425	425	442	459
TURKEY PT 4	PWR	739	778	818	818	863	863	898	939	939	960	337	355	373	373	394	394	410	429	429	438
VOGTLE 1	PWR	389	389	445	531	531	599	673	673	745	786	180	180	206	246	246	278	312	312	345	364
VOGTLE 2	PWR	296	376	432	432	481	549	549	611	683	683	137	174	200	200	223	255	255	283	317	317
VT YANKEE 1	BWR	2110	2216	2326	2328	2450	2561	2561	2675	2781	2781	389	408	427	427	449	469	469	489	508	508
WASH NUCLEAR2	BWR	1586	1703	1850	1946	2092	2235	2342	2488	2605	2719	284	305	331	348	373	398	417	443	464	484
WATERFORD 3	PWR	606	678	678	738	820	820	885	962	962	1027	253	283	283	308	342	342	370	402	402	429
WATTS BAR 1	PWR	361	438	438	521	568	568	648	648	708	747	167	202	202	240	262	262	295	295	327	345
WATTS BAR 2	PWR	325	402	402	485	532	532	604	604	672	711	150	185	185	224	245	245	279	279	310	328
WOLF CREEK 1	PWR	543	543	607	658	658	722	777	777	839	894	252	252	281	305	305	335	360	360	389	414
YANKEE-ROWE 1	PWR	560	593	623	699	699	699	699	699	699	699	134	141	148	166	166	166	166	166	166	166
ZION 1	PWR	1006	1058	1058	1107	1174	1174	1226	1286	1288	1341	457	483	483	506	536	536	560	588	588	613
ZION 2	PWR	997	997	1057	1106	1106	1167	1220	1220	1278	1330	455	455	482	504	504	532	556	556	583	607
FT ST VRAIN	HTG	1242	1482	1482	1722	1722	3204	3204	3204	3204	3204	13	16	16	16	18	33	33	33	33	33
MORRIS	BWR	2047	2047	2047	2047	2047	2047	2047	2047	2047	2047	389	389	389	389	389	389	389	389	389	389
MORRIS	PWR	350	350	350	350	350	350	350	350	350	350	132	132	132	132	132	132	132	132	132	132
WEST VALLEY	BWR	85	85	85	85	85	85	85	85	85	85	11	11	11	11	11	11	11	11	11	11
WEST VALLEY	PWR	40	40	40	40	40	40	40	40	40	40	15	15	15	15	15	15	15	15	15	15
WNP-1	PWR	77	77	107	210	210	268	332	332	414	453	35	35	49	99	99	122	151	151	189	207
RESEARCH SITES	PWR	97	97	97	97	97	97	97	97	97	97	44	44	44	44	44	44	44	44	44	44
RESEARCH SITES	BWR	4	4	4	4	4	4	4	4	4	4	1	1	1	1	1	1	1	1	1	1
RESEARCH SITES	HTG	720	720	720	720	720	720	720	720	720	720	9	9	9	9	9	9	9	9	9	9
GENERICS	PWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GENERICS	BWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE A.4. Upper Reference Case, 1986 Inventory and Projected Inventory (cont'd)

REACTOR		Assemblies										MTIHM									
		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
ARK NUCLEAR 1	PWR	1030	1074	1074	1118	1163	1163	1215	1215	1302	1392	477	498	498	514	539	539	563	563	645	645
ARK NUCLEAR 2	PWR	1015	1064	1064	1107	1166	1166	1226	1283	1283	1342	423	444	444	462	486	486	511	535	535	560
BEAVER VALLEY 1	PWR	988	1039	1113	1113	1174	1174	1234	1292	1292	1449	457	481	515	515	543	543	571	598	598	671
BEAVER VALLEY 2	PWR	665	719	719	798	798	868	944	944	1015	1097	307	331	331	368	368	408	435	435	468	506
BELLEFONTE 1	PWR	372	433	505	505	579	579	667	737	737	829	170	197	230	230	264	264	304	336	336	378
BELLEFONTE 2	PWR	368	358	430	521	521	601	601	671	753	753	163	163	196	238	238	274	274	306	343	343
BIG ROCK 1	BWR	559	559	559	559	559	559	559	559	559	559	73	73	73	73	73	73	73	73	73	73
BRAIDWOOD 1	PWR	1050	1050	1123	1214	1214	1295	1382	1382	1464	1557	444	444	475	514	514	548	585	585	619	659
BRAIDWOOD 2	PWR	702	763	836	836	910	991	991	1060	1141	1141	297	323	354	354	385	419	419	448	483	483
BROWNS FERRY1	BWR	3241	3409	3409	3548	3548	3787	3986	3986	4163	4362	596	626	626	652	652	695	731	731	783	799
BROWNS FERRY2	BWR	3606	3606	3853	3993	3993	4230	4230	4423	4599	4599	662	662	706	732	732	775	775	810	842	842
BROWNS FERRY3	BWR	3325	3325	3571	3571	3772	4009	4009	4201	4377	4377	609	609	654	654	690	733	733	768	800	800
BRUNSWICK 1	BWR	2779	2917	3120	3120	3286	3481	3481	3640	3786	3786	517	543	581	581	612	649	649	678	705	705
BRUNSWICK 1	PWR	160	160	160	160	160	160	160	160	160	160	71	71	71	71	71	71	71	71	71	71
BRUNSWICK 2	BWR	2853	2998	2998	3186	3271	3271	3436	3595	3595	4155	531	557	557	579	610	610	640	670	670	775
BRUNSWICK 2	PWR	144	144	144	144	144	144	144	144	144	144	66	66	66	66	66	66	66	66	66	66
BYRON 1	PWR	969	1031	1121	1121	1195	1262	1282	1353	1418	1418	418	436	474	474	505	542	542	572	600	600
BYRON 2	PWR	910	971	971	1062	1136	1136	1223	1294	1294	1387	385	411	411	449	481	481	517	547	547	587
CALLAWAY 1	PWR	1103	1165	1165	1217	1291	1291	1365	1435	1435	1509	476	503	503	525	556	556	588	618	618	649
CALVERT CLF 1	PWR	1403	1473	1473	1531	1531	1632	1632	1849	1849	1849	530	556	556	577	577	615	615	696	696	696
CALVERT CLF 2	PWR	1323	1323	1426	1426	1511	1511	1595	1595	1868	1885	502	502	541	541	573	573	604	604	631	713
CATAWBA 1	PWR	1013	1066	1145	1189	1189	1264	1328	1389	1389	1454	429	451	484	503	503	535	562	588	588	615
CATAWBA 2	PWR	929	982	1060	1060	1124	1200	1263	1323	1323	1386	393	415	448	448	476	508	534	560	560	586
CLINTON 1	BWR	1934	2058	2058	2243	2394	2394	2573	2717	2717	2907	357	380	380	414	442	442	475	502	502	537
COMANCHE PK 1	PWR	913	960	1018	1087	1144	1209	1276	1329	1395	1465	380	399	422	450	473	499	526	548	574	603
COMANCHE PK 2	PWR	857	904	959	1033	1090	1152	1223	1276	1337	1412	351	370	392	422	445	470	499	520	545	575
COOK 1	PWR	1390	1449	1535	1535	1606	1606	1676	1743	1743	1936	626	653	692	692	725	725	757	788	788	877
COOK 2	PWR	1298	1362	1362	1416	1416	1508	1585	1585	1653	1736	544	570	570	592	592	629	660	660	688	719
COOPER STN	BWR	2539	2628	2732	2801	2892	3009	3099	3647	3647	3647	465	480	500	513	529	551	567	667	667	667
CRYSTAL RVR 3	PWR	1003	1003	1081	1081	1145	1145	1208	1208	1264	1264	465	465	502	502	531	531	560	560	586	588
DAVIS-BESSE 1	PWR	901	901	966	1003	1003	1065	1117	1117	1164	1217	423	423	453	470	470	499	524	524	546	571
DIABLO CANYON 1	PWR	731	792	792	844	844	933	933	1005	1005	1079	319	344	344	367	367	404	404	435	435	467
DIABLO CANYON 2	PWR	721	784	784	837	837	926	926	997	997	1072	314	340	340	363	363	401	401	431	431	463
DRESDEN 1	BWR	683	683	683	683	683	683	683	683	683	683	70	70	70	70	70	70	70	70	70	70
DRESDEN 2	BWR	3439	3439	3610	4334	4334	4334	4334	4334	4334	4334	598	598	627	748	748	748	748	748	748	748
DRESDEN 3	BWR	3293	3293	3463	4187	4187	4187	4187	4187	4187	4187	574	574	602	723	723	723	723	723	723	723
DUANE ARNOLD	BWR	2086	2174	2304	2304	2409	2535	2535	2636	3004	3004	378	394	417	417	436	458	458	476	540	540
ENRICO FERMI2	BWR	2613	2824	2824	3004	3257	3257	3512	3512	3735	3735	477	515	515	548	594	594	640	640	681	681
FARLEY 1	PWR	1176	1176	1249	1288	1288	1359	1416	1416	1469	1526	543	543	577	595	595	628	655	655	679	706
FARLEY 2	PWR	1054	1101	1101	1143	1201	1201	1261	1315	1315	1375	487	509	509	529	556	556	583	608	608	636
FITZPATRICK	BWR	3018	3147	3336	3336	3489	3673	3673	3821	4381	4381	548	571	604	604	631	664	664	690	790	790
FORT CALHOUN	PWR	849	883	931	931	970	1016	1016	1149	1149	1149	304	316	333	333	347	364	364	411	411	411
GINNA	PWR	1034	1057	1091	1212	1212	1212	1212	1212	1212	1212	381	390	401	444	444	444	444	444	444	444
GRAND GULF 1	BWR	3499	3695	3695	3859	4094	4094	4328	4554	4554	4788	623	657	657	686	728	728	769	809	809	850
HADDAM NECK	PWR	1360	1360	1360	1360	1360	1360	1360	1360	1360	1360	535	535	535	535	535	535	535	535	535	535
HARRIS 1	BWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HARRIS 1	PWR	516	564	564	610	658	658	713	757	757	816	240	258	258	284	306	306	332	352	352	379
HATCH 1	BWR	3374	3517	3728	3728	3900	4106	4106	4686	4686	4686	625	651	690	690	722	761	761	865	865	865
HATCH 2	BWR	3058	3202	3202	3323	3495	3495	3667	3631	3631	4002	565	592	592	614	646	646	678	708	708	740

TABLE A.4. Upper Reference Case, 1986 Inventory and Projected Inventory (cont'd)

REACTOR		Assemblies										MTIHM									
		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
HOPE CREEK	BWR	2677	2677	2928	3071	3071	3311	3513	3513	3692	3895	497	497	543	570	570	614	652	652	685	723
HUMBOLDT BAY	BWR	390	390	390	390	390	390	390	390	390	390	29	29	29	29	29	29	29	29	29	29
INDIAN PT 1	PWR	160	160	160	160	160	160	160	160	160	160	31	31	31	31	31	31	31	31	31	31
INDIAN PT 2	PWR	1230	1230	1303	1303	1362	1434	1434	1627	1627	1627	557	557	590	590	616	649	649	736	736	736
INDIAN PT 3	PWR	1112	1112	1194	1241	1241	1321	1321	1385	1578	1578	508	508	545	567	567	603	603	632	720	720
KEWAUNEE	PWR	1031	1058	1098	1120	1153	1192	1225	1346	1346	1346	395	406	421	429	442	457	469	515	515	515
LACROSSE	BWR	645	645	645	645	645	645	645	645	645	645	72	72	72	72	72	72	72	72	72	72
LASALLE CTY 1	BWR	2835	2994	2994	3129	3321	3321	3513	3699	3699	3891	516	545	545	570	605	605	640	674	674	709
LASALLE CTY 2	BWR	2509	2670	2908	2908	3102	3333	3333	3516	3688	3868	457	486	529	529	565	607	607	640	671	671
LIMERICK 1	BWR	2581	2581	2614	2947	2947	3172	3172	3353	3528	3528	462	462	504	527	527	567	567	599	629	629
LIMERICK 2	BWR	1546	1546	1735	1735	1927	2134	2134	2313	2313	2552	278	278	311	311	345	382	382	414	414	456
MAINE YANKEE	PWR	1648	1693	1693	1738	1803	1803	2020	2020	2020	2020	622	642	642	659	684	684	767	767	767	767
MCGUIRE 1	PWR	1160	1213	1290	1334	1334	1410	1473	1534	1534	1597	499	522	554	573	573	605	632	657	657	684
MCGUIRE 2	PWR	1202	1256	1256	1299	1362	1437	1437	1498	1564	1617	518	540	540	559	586	617	617	643	667	694
MILLSTONE 1	BWR	3318	3318	3318	3898	3898	3898	3898	3898	3898	3898	605	605	605	708	708	708	708	708	708	708
MILLSTONE 2	PWR	1169	1217	1283	1283	1340	1408	1408	1459	1676	1676	457	475	500	500	522	548	548	567	650	650
MILLSTONE 3	PWR	1009	1071	1071	1123	1197	1197	1271	1342	1342	1416	466	494	494	518	552	552	586	619	619	653
MONTICELLO	BWR	1696	1782	1911	1911	2395	2395	2395	2395	2395	2395	300	315	337	337	420	420	420	420	420	420
NINE MILE PT1	BWR	2963	3098	3098	3630	3630	3630	3630	3630	3630	3630	534	557	557	648	648	648	648	648	648	648
NINE MILE PT2	BWR	2545	2545	2784	2784	3029	3029	3316	3316	3583	3583	446	446	487	487	529	529	577	577	623	623
NORTH ANNA 1	PWR	1024	1070	1138	1138	1194	1261	1261	1316	1365	1365	472	493	525	525	551	582	582	607	630	630
NORTH ANNA 2	PWR	1016	1062	1062	1101	1157	1157	1213	1267	1267	1323	469	490	490	508	534	534	560	585	585	611
OCONEE 1	PWR	1387	1387	1453	1490	1542	1542	1719	1719	1719	1719	642	642	673	690	714	714	796	796	796	796
OCONEE 2	PWR	1110	1110	1174	1210	1210	1273	1450	1450	1450	1450	514	514	544	561	561	590	672	672	672	672
OCONEE 3	PWR	1242	1286	1351	1351	1404	1466	1466	1643	1643	1643	576	596	626	626	651	680	680	762	762	762
OYSTER CRK 1	BWR	2892	2993	2993	3549	3549	3549	3549	3549	3549	3549	527	545	545	644	644	644	644	644	644	644
PALISADES	PWR	1154	1204	1204	1245	1449	1449	1449	1449	1449	1449	481	481	481	498	579	579	579	579	579	579
PALO VERDE 1	PWR	960	1029	1113	1113	1194	1274	1274	1353	1412	1412	393	422	455	455	489	521	521	554	577	577
PALO VERDE 2	PWR	981	981	1081	1129	1129	1226	1293	1293	1365	1432	406	406	446	467	467	507	534	534	564	590
PALO VERDE 3	PWR	1060	1060	1127	1227	1227	1301	1397	1397	1471	1574	437	437	464	506	506	535	575	575	604	647
PEACHBOTTOM 2	BWR	4136	4303	4303	4442	4642	4642	4842	5606	5606	5606	750	780	780	805	840	840	876	1011	1011	1011
PEACHBOTTOM 3	BWR	3956	4117	4117	4252	4445	4445	4637	5401	5401	5401	719	748	748	772	806	806	840	976	976	976
PERRY 1	BWR	2573	2573	2815	2954	2954	3187	3385	3385	3559	3755	461	461	504	529	529	570	606	606	637	671
PILGRIM 1	BWR	2736	2877	2877	2995	2995	3575	3575	3575	3575	3575	497	522	522	543	543	648	648	648	648	648
POINT BEACH 1	PWR	1006	1030	1065	1186	1186	1186	1186	1186	1186	1186	382	390	403	447	447	447	447	447	447	447
POINT BEACH 2	PWR	966	989	1023	1043	1164	1164	1164	1164	1164	1164	365	373	386	393	437	437	437	437	437	437
PRAIRIE ISL 1	PWR	1018	1047	1091	1115	1151	1192	1312	1312	1312	1312	375	385	401	409	422	436	479	479	479	479
PRAIRIE ISL 2	PWR	1012	1041	1084	1108	1143	1185	1220	1340	1340	1340	373	383	398	407	419	434	446	489	489	489
QUAD CITIES 1	BWR	3334	3450	3450	3548	3688	3688	4400	4400	4400	4400	603	623	623	641	665	665	791	791	791	791
QUAD CITIES 2	BWR	3282	3282	3455	3554	3554	3721	4445	4445	4445	4445	595	595	625	643	643	672	800	800	800	800
RANCHO SECO 1	PWR	938	938	1003	1041	1041	1105	1105	1158	1333	1333	435	435	465	482	482	512	512	536	618	618
ROBINSON 2	PWR	931	975	1027	1027	1184	1184	1184	1184	1184	1184	397	415	437	437	504	504	504	504	504	504
RVR BEND 1	BWR	2319	2459	2459	2578	2747	2747	2916	3077	3077	3258	429	455	455	477	508	508	539	569	569	601
SALEM 1	PWR	1299	1357	1444	1444	1515	1598	1598	1685	1726	1919	597	623	663	663	696	734	734	765	793	881
SALEM 2	PWR	1217	1279	1279	1330	1404	1404	1478	1549	1549	1623	560	589	589	612	646	646	680	713	713	747
SAN ONOFRE 1	PWR	577	734	734	734	734	734	734	734	734	734	213	271	271	271	271	271	271	271	271	271
SAN ONOFRE 2	PWR	1144	1223	1340	1340	1436	1436	1531	1531	1616	1616	466	498	545	545	583	583	622	622	656	656
SAN ONOFRE 3	PWR	1115	1195	1195	1263	1263	1377	1377	1469	1469	1564	454	486	486	513	513	559	559	598	598	635
SEABROOK 1	PWR	774	820	876	946	1003	1065	1065	1118	1179	1249	357	378	404	436	463	491	491	516	544	576

TABLE A.4. Upper Reference Case, 1986 Inventory and Projected Inventory (cont'd)

REACTOR		Assemblies										MTIHM									
		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
SEQUOYAH 1	PWR	991	1050	1136	1136	1206	1269	1289	1356	1356	1427	455	482	522	522	554	592	592	623	623	655
SEQUOYAH 2	PWR	1011	1069	1069	1118	1118	1202	1272	1272	1334	1404	466	493	493	515	515	554	586	586	615	647
SHOREHAM	BWR	1621	1755	1913	1913	2077	2254	2254	2408	2586	2586	296	320	349	349	379	411	411	439	472	472
SOUTH TEXAS 1	PWR	758	798	841	897	943	993	1047	1091	1142	1199	418	431	455	488	511	538	567	591	618	649
SOUTH TEXAS 2	PWR	691	728	772	828	875	925	980	1023	1073	1130	374	394	418	448	474	501	530	554	581	612
ST LUCIE 1	PWR	1341	1396	1478	1478	1545	1625	1625	1689	1784	1784	518	531	563	563	588	619	619	643	649	649
ST LUCIE 2	PWR	1049	1102	1102	1146	1209	1209	1272	1333	1333	1397	405	426	426	443	467	467	492	515	515	540
SUMMER 1	PWR	884	934	1008	1008	1067	1137	1137	1194	1247	1247	489	432	466	466	494	526	526	552	577	577
SURRY 1	PWR	1127	1166	1168	1198	1244	1400	1400	1400	1400	1400	515	533	533	548	569	640	640	640	640	640
SURRY 2	PWR	1006	1006	1063	1095	1095	1149	1305	1305	1305	1305	460	460	486	501	501	526	597	597	597	597
SUSQUEHANNA 1	BWR	3296	3465	3465	3607	3812	3812	4014	4211	4211	4413	579	608	608	633	668	668	703	737	737	772
SUSQUEHANNA 2	BWR	3005	3005	3255	3397	3397	3638	3841	3841	4028	4224	527	527	570	595	595	636	671	671	702	737
THREE MILE ISL 1	PWR	1046	1099	1177	1177	1241	1315	1315	1491	1491	1491	485	510	546	546	576	610	610	692	692	692
TROJAN	PWR	1228	1283	1315	1344	1387	1437	1480	1521	1714	1714	567	584	608	621	641	664	684	703	792	792
TURKEY PT 3	PWR	1004	1039	1098	1098	1131	1288	1288	1288	1288	1288	459	475	498	498	517	589	589	589	589	589
TURKEY PT 4	PWR	1006	1006	1037	1066	1066	1223	1223	1223	1223	1223	460	460	474	487	487	559	559	559	559	559
VOGTLE 1	PWR	786	847	920	920	995	1075	1075	1145	1226	1226	364	393	427	427	461	498	498	531	568	568
VOGTLE 2	PWR	784	845	845	936	1011	1011	1099	1178	1178	1261	364	392	392	434	469	469	516	543	543	585
VT YANKEE 1	BWR	2908	3004	3004	3086	3086	3223	3591	3591	3591	3591	531	548	548	562	562	587	652	652	652	652
WASH NUCLEAR2	BWR	2881	2988	3168	3255	3392	3567	3697	3837	3948	4085	512	531	563	578	602	633	656	681	700	724
WATERFORD 3	PWR	1027	1092	1187	1187	1265	1357	1357	1431	1498	1498	429	457	496	496	529	568	568	599	627	627
WATTS BAR 1	PWR	747	805	874	874	945	945	1028	1094	1094	1182	345	371	403	403	436	436	474	505	505	545
WATTS BAR 2	PWR	711	769	839	839	911	911	994	1060	1060	1148	328	355	387	387	420	420	459	489	489	530
WOLF CREEK 1	PWR	894	949	1031	1031	1097	1176	1176	1245	1299	1299	414	440	478	478	508	545	545	575	602	602
YANKEE-ROWE 1	PWR	699	699	699	699	699	699	699	699	699	699	166	166	166	166	166	166	166	166	166	166
ZION 1	PWR	1411	1411	1488	1532	1532	1606	1799	1799	1799	1799	645	645	680	700	700	734	822	822	822	822
ZION 2	PWR	1330	1382	1460	1460	1524	1599	1599	1792	1792	1792	607	630	666	666	695	730	730	818	818	818
FT ST VRAIN	HTG	3284	3284	3284	3284	3284	3284	3284	3284	3284	3284	33	33	33	33	33	33	33	33	33	33
MORRIS	BWR	2847	2847	2847	2847	2847	2847	2847	2847	2847	2847	389	389	389	389	389	389	389	389	389	389
MORRIS	PWR	350	350	350	350	350	350	350	350	350	350	132	132	132	132	132	132	132	132	132	132
WEST VALLEY	BWR	85	85	85	85	85	85	85	85	85	85	11	11	11	11	11	11	11	11	11	11
WEST VALLEY	PWR	40	40	40	40	40	40	40	40	40	40	15	15	15	15	15	15	15	15	15	15
WNP-1	PWR	453	519	519	614	688	688	778	843	843	932	207	237	237	280	314	314	361	385	385	425
RESEARCH SITES	PWR	97	97	97	97	97	97	97	97	97	97	44	44	44	44	44	44	44	44	44	44
RESEARCH SITES	BWR	4	4	4	4	4	4	4	4	4	4	1	1	1	1	1	1	1	1	1	1
RESEARCH SITES	HTG	720	720	720	720	720	720	720	720	720	720	9	9	9	9	9	9	9	9	9	9
GENERIC	PWR	247	149	368	671	812	944	1378	1413	1954	2581	114	69	169	263	373	434	627	645	881	1128
GENERIC	BWR	0	431	512	1238	1282	1607	2644	2114	3529	4348	0	79	94	226	234	293	483	385	643	784

TABLE A.4. Upper Reference Case, 1986 Inventory and Projected Inventory (cont'd)

REACTOR		Assemblies					MTIHM			
		2017	2018	2019	2020		2016	2017	2018	2019
ARK NUCLEAR 1	PWR	1392	1392	1392	1392	:	645	645	645	645
ARK NUCLEAR 2	PWR	1342	1519	1519	1519	:	580	634	634	634
BEAVER VALLEY 1	PWR	1449	1449	1449	1449	:	671	671	671	671
BEAVER VALLEY 2	PWR	1097	1174	1249	1249	:	506	541	576	576
BELLEFONTE 1	PWR	899	899	986	986	:	416	416	456	456
BELLEFONTE 2	PWR	823	912	912	993	:	375	416	416	453
BIG ROCK 1	BWR	559	559	559	559	:	73	73	73	73
BRAIDWOOD 1	PWR	1557	1646	1733	1733	:	659	696	733	733
BRAIDWOOD 2	PWR	1211	1300	1300	1381	:	512	550	550	584
BROWNS FERRY1	BWR	4382	4559	4559	4734	:	799	835	835	867
BROWNS FERRY2	BWR	4735	4931	4931	5695	:	867	902	902	1041
BROWNS FERRY3	BWR	4515	4515	4681	5445	:	825	825	855	994
BRUNSWICK 1	BWR	4346	4346	4346	4346	:	810	810	810	810
BRUNSWICK 1	PWR	168	168	168	168	:	71	71	71	71
BRUNSWICK 2	BWR	4155	4155	4155	4155	:	775	775	775	775
BRUNSWICK 2	PWR	144	144	144	144	:	66	66	66	66
BYRON 1	PWR	1489	1542	1542	1606	:	621	652	652	679
BYRON 2	PWR	1457	1457	1544	1625	:	616	616	653	687
CALLAWAY 1	PWR	1561	1561	1622	1686	:	671	671	697	725
CALVERT CLF 1	PWR	1849	1849	1849	1849	:	696	696	696	696
CALVERT CLF 2	PWR	1885	1885	1885	1885	:	713	713	713	713
CATAWBA 1	PWR	1498	1560	1613	1613	:	634	660	682	682
CATAWBA 2	PWR	1429	1492	1492	1547	:	605	631	631	654
CLINTON 1	BWR	3050	3050	3229	3393	:	564	564	597	627
COMANCHE PK 1	PWR	1518	1590	1658	1717	:	624	653	680	704
COMANCHE PK 2	PWR	1465	1534	1604	1666	:	596	624	652	677
COOK 1	PWR	1936	1936	1936	1936	:	877	877	877	877
COOK 2	PWR	1730	1923	1923	1923	:	719	797	797	797
COOPER STN	BWR	3647	3647	3647	3647	:	667	667	667	667
CRYSTAL RVR 3	PWR	1441	1441	1441	1441	:	668	668	668	668
DAVIS-BESSE 1	PWR	1394	1394	1394	1394	:	653	653	653	653
DIABLO CANYON 1	PWR	1079	1153	1153	1218	:	487	498	498	526
DIABLO CANYON 2	PWR	1072	1146	1146	1211	:	463	494	494	522
DRESDEN 1	BWR	683	683	683	683	:	76	76	76	76
DRESDEN 2	BWR	4334	4334	4334	4334	:	748	748	748	748
DRESDEN 3	BWR	4187	4187	4187	4187	:	723	723	723	723
DUANE ARNOLD	BWR	3004	3004	3004	3004	:	540	540	540	540
ENRICO FERMI2	BWR	3911	4162	4162	4385	:	713	759	759	799
FARLEY 1	PWR	1526	1683	1683	1683	:	708	778	778	778
FARLEY 2	PWR	1414	1414	1571	1571	:	654	654	727	727
FITZPATRICK	BWR	4381	4381	4381	4381	:	790	790	790	790
FORT CALHOUN	PWR	1149	1149	1149	1149	:	411	411	411	411
GINNA	PWR	1212	1212	1212	1212	:	444	444	444	444
GRAND GULF 1	BWR	4949	4949	5146	5350	:	878	878	913	949
HADDAM NECK	PWR	1360	1360	1360	1360	:	535	535	535	535
HARRIS 1	BWR	0	0	0	0	:	0	0	0	0
HARRIS 1	PWR	860	860	913	964	:	400	400	425	448
HATCH 1	BWR	4666	4666	4666	4666	:	865	865	865	865
HATCH 2	BWR	4562	4562	4562	4562	:	844	844	844	844

TABLE A.4. Upper Reference Case, 1986 Inventory and Projected Inventory (cont'd)

REACTOR		Assemblies 2017	2018	2019	2020	MTIHM 2016	2017	2018	2019
HOPE CREEK	BWR	3895	4095	4266	4266	723	760	792	792
HUMBOLDT BAY	BWR	390	390	390	390	29	29	29	29
INDIAN PT 1	PWR	160	160	160	160	31	31	31	31
INDIAN PT 2	PWR	1627	1627	1627	1627	736	736	736	736
INDIAN PT 3	PWR	1578	1578	1578	1578	720	720	720	720
KEWAUNEE	PWR	1346	1346	1346	1346	515	515	515	515
LACROSSE	BWR	645	645	645	645	72	72	72	72
LASALLE CTY 1	BWR	4022	4022	4184	4352	732	732	762	792
LASALLE CTY 2	BWR	3821	4011	4011	4179	696	730	730	761
LIMERICK 1	BWR	3649	3836	3836	4001	652	685	685	714
LIMERICK 2	BWR	2730	2730	2951	2951	488	488	527	527
MAINE YANKEE	PWR	2020	2020	2020	2020	767	767	767	767
MCGUIRE 1	PWR	1641	1705	1758	1758	703	730	752	752
MCGUIRE 2	PWR	1660	1660	1713	1768	712	712	734	757
MILLSTONE 1	BWR	3898	3898	3898	3898	708	708	708	708
MILLSTONE 2	PWR	1676	1676	1676	1676	650	650	650	650
MILLSTONE 3	PWR	1467	1467	1529	1593	677	677	706	735
MONTICELLO	BWR	2395	2395	2395	2395	420	420	420	420
NINE MILE PT1	BWR	3630	3630	3630	3630	648	648	648	648
NINE MILE PT2	BWR	3812	3812	4097	4097	662	662	710	710
NORTH ANNA 1	PWR	1365	1521	1521	1521	630	702	702	702
NORTH ANNA 2	PWR	1361	1361	1361	1517	628	628	628	700
OCONEE 1	PWR	1719	1719	1719	1719	796	796	796	796
OCONEE 2	PWR	1450	1450	1450	1450	672	672	672	672
OCONEE 3	PWR	1643	1643	1643	1643	762	762	762	762
OYSTER CRK 1	BWR	3549	3549	3549	3549	644	644	644	644
PALISADES	PWR	1449	1449	1449	1449	579	579	579	579
PALO VERDE 1	PWR	1469	1536	1536	1667	601	627	627	657
PALO VERDE 2	PWR	1432	1513	1569	1569	590	624	646	646
PALO VERDE 3	PWR	1574	1657	1753	1753	647	680	720	720
PEACHBOTTOM 2	BWR	5606	5606	5606	5606	1011	1011	1011	1011
PEACHBOTTOM 3	BWR	5401	5401	5401	5401	976	976	976	976
PERRY 1	BWR	3891	3891	4056	4226	696	696	725	755
PILGRIM 1	BWR	3575	3575	3575	3575	646	646	646	646
POINT BEACH 1	PWR	1186	1186	1186	1186	447	447	447	447
POINT BEACH 2	PWR	1164	1164	1164	1164	437	437	437	437
PRAIRIE ISL 1	PWR	1312	1312	1312	1312	479	479	479	479
PRAIRIE ISL 2	PWR	1340	1340	1340	1340	489	489	489	489
QUAD CITIES 1	BWR	4400	4400	4400	4400	791	791	791	791
QUAD CITIES 2	BWR	4445	4445	4445	4445	800	800	800	800
RANCHO SECO 1	PWR	1333	1333	1333	1333	618	618	618	618
ROBINSON 2	PWR	1184	1184	1184	1184	504	504	504	504
RVR BEND 1	BWR	3365	3365	3505	3651	623	623	648	675
SALEM 1	PWR	1919	1919	1919	1919	881	881	881	881
SALEM 2	PWR	1674	1674	1738	1929	770	770	799	887
SAN ONOFRE 1	PWR	734	734	734	734	271	271	271	271
SAN ONOFRE 2	PWR	1682	1682	1762	1762	683	683	715	715
SAN ONOFRE 3	PWR	1631	1631	1712	1712	662	662	694	694
SEABROOK 1	PWR	1303	1303	1370	1432	601	601	632	661

TABLE A.4. Upper Reference Case, 1986 Inventory and Projected Inventory (cont'd)

REACTOR		Assemblies				MTIHM			
		2017	2018	2019	2020	2016	2017	2018	2019
SEQUOYAH 1	PWR	1476	1476	1535	1596	678	678	705	733
SEQUOYAH 2	PWR	1404	1473	1473	1535	647	679	679	708
SHOREHAM	BWR	2739	2935	2935	3112	499	535	535	567
SOUTH TEXAS 1	PWR	1243	1298	1352	1402	573	703	732	759
SOUTH TEXAS 2	PWR	1173	1226	1282	1333	635	665	694	721
ST LUCIE 1	PWR	1921	1921	1921	1921	732	732	732	732
ST LUCIE 2	PWR	1441	1503	1503	1558	557	582	582	603
SUMMER 1	PWR	1288	1347	1347	1398	596	623	623	647
SURRY 1	PWR	1400	1400	1400	1400	648	648	648	648
SURRY 2	PWR	1305	1305	1305	1305	597	597	597	597
SUSQUEHANNA 1	BWR	4553	4553	4723	4900	796	796	825	856
SUSQUEHANNA 2	BWR	4224	4425	4596	4596	737	772	802	802
THREE MILE ISL 1	PWR	1491	1491	1491	1491	692	692	692	692
TROJAN	PWR	1714	1714	1714	1714	792	792	792	792
TURKEY PT 3	PWR	1288	1288	1288	1288	589	589	589	589
TURKEY PT 4	PWR	1223	1223	1223	1223	559	559	559	559
VOGTLE 1	PWR	1296	1384	1384	1464	601	642	642	679
VOGTLE 2	PWR	1331	1331	1418	1498	617	617	658	695
VT YANKEE 1	BWR	3591	3591	3591	3591	652	652	652	652
WASH NUCLEAR2	BWR	4187	4316	4448	4549	742	765	787	806
WATERFORD 3	PWR	1552	1628	1628	1695	650	681	681	710
WATTS BAR 1	PWR	1249	1249	1331	1331	576	576	614	614
WATTS BAR 2	PWR	1215	1215	1297	1297	561	561	598	598
WOLF CREEK 1	PWR	1345	1418	1418	1488	623	654	654	681
YANKEE-ROWE 1	PWR	699	699	699	699	166	166	166	166
ZION 1	PWR	1799	1799	1799	1799	822	822	822	822
ZION 2	PWR	1792	1792	1792	1792	818	818	818	818
FT ST VRAIN	HTG	3204	3204	3204	3204	33	33	33	33
MORRIS	BWR	2047	2047	2047	2047	389	389	389	389
MORRIS	PWR	350	350	350	350	132	132	132	132
WEST VALLEY	BWR	85	85	85	85	11	11	11	11
WEST VALLEY	PWR	40	40	40	40	15	15	15	15
WNP-1	PWR	999	999	1083	1083	456	456	494	494
RESEARCH SITES	PWR	97	97	97	97	44	44	44	44
RESEARCH SITES	BWR	4	4	4	4	1	1	1	1
RESEARCH SITES	HTG	720	720	720	720	9	9	9	9
GENERIC	PWR	12541	15475	18834	21671	5698	7008	8495	9833
GENERIC	BWR	21393	26726	32171	37477	3887	4845	5819	6766

TABLE A.4. Upper Reference Case, 1986 Projected Inventories (cont'd)

SUBTOTALS BY REACTOR TYPE AND TOTALS

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
PWR ASSEMBLIES	20309	22629	25023	27966	30589	33525	37172	39636	42865	46064	48719
PWR MTIHM	8621	9619	10636	11916	13015	14322	15917	16982	18371	19767	20900
BWR ASSEMBLIES	30605	33903	36567	41107	44408	48273	52204	56300	60253	63647	67900
BWR MTIHM	5563	6160	6640	7461	8059	8752	9454	10188	10897	11501	12265
HTG ASSEMBLIES	720	720	960	960	1242	1242	1482	1482	1722	1722	1962
HTG MTIHM	9	9	11	11	14	14	17	17	19	19	22
TOTAL ASSEMBLIES	51634	57252	62550	70033	76159	83040	90858	97418	104840	111433	118581
TOTAL MTIHM	14192	15788	17287	19388	21088	23088	25387	27187	29287	31287	33187

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PWR ASSEMBLIES	51890	54708	57898	60975	63834	67107	69959	72919	76227	78834
PWR MTIHM	22277	23497	24876	26193	27436	28854	30092	31374	32822	33948
BWR ASSEMBLIES	71982	75214	79797	82503	86764	91061	94223	98810	102457	105683
BWR MTIHM	12989	13567	14387	14867	15625	16392	16954	17772	18424	18999
HTG ASSEMBLIES	1962	2202	2202	2442	2442	3924	3924	3924	3924	3924
HTG MTIHM	22	24	24	27	27	42	42	42	42	42
TOTAL ASSEMBLIES	125814	132124	139897	145920	153040	162092	168106	175653	182608	188441
TOTAL MTIHM	35287	37088	39287	41087	43087	45288	47088	49187	51287	52987

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
PWR ASSEMBLIES	82299	85782	89890	93171	97690	102585	107584	113089	117768	123582
PWR MTIHM	35456	36959	38769	40190	42171	44331	46543	48965	51042	53633
BWR ASSEMBLIES	110679	114542	119015	126194	131855	137616	145333	152952	159732	166972
BWR MTIHM	19890	20586	21385	22655	23674	24714	26102	27480	28703	30012
HTG ASSEMBLIES	3924	3924	3924	3924	3924	3924	3924	3924	3924	3924
HTG MTHIM	42	42	42	42	42	42	42	42	42	42
TOTAL ASSEMBLIES	196902	204248	212829	223289	233469	244125	256841	269965	281416	294478
TOTAL MTIHM	55387	57587	60187	62887	65887	69087	72687	76487	79788	83687

	2017	2018	2019	2020
PWR ASSEMBLIES	128149	133421	138688	143672
PWR MTIHM	55664	57991	60334	62542
BWR ASSEMBLIES	173988	181068	188664	197544
BWR MTIHM	31281	32554	33911	35504
HTG ASSEMBLIES	3924	3924	3924	3924
HTG MTIHM	42	42	42	42
TOTAL ASSEMBLIES	306061	318413	331276	345140
TOTAL MTIHM	86987	90587	94287	98087

TABLE A.5. Upper Reference Case, Maximum At-Reactor Capacity-- Projected Annual Storage Requirements

POOL		ASSEMBLIES										WTIHM									
		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
ST LUCIE 1	PWR	29	65	0	56	68	0	67	65	0	69	11	25	0	21	26	0	26	25	0	26
MILLSTONE 1	BWR	103	0	177	0	177	0	169	0	147	0	18	0	32	0	32	0	30	0	26	0
PALISADES	PWR	0	5	0	52	0	60	0	58	50	0	0	2	0	20	0	24	0	23	20	0
OCONEE 1&2	PWR	0	0	37	94	54	52	103	51	91	53	0	0	17	44	25	24	48	24	42	25
ROBINSON 2	PWR	0	0	0	9	43	53	0	42	36	0	0	0	0	4	19	22	0	18	16	0
BRUNSWICK 1	BWR	0	0	0	72	0	164	0	161	138	0	0	0	0	13	0	31	0	30	26	0
LASALLE CTY 1&2	BWR	0	0	0	0	108	193	378	190	165	394	0	0	0	0	20	35	69	35	30	72
OCONEE 3	PWR	0	0	0	0	37	52	0	52	46	0	0	0	0	0	17	24	0	24	21	0
LACROSSE	BWR	0	0	0	0	0	13	24	24	24	0	0	0	0	0	0	1	3	3	3	0
CALVERT CLF 1&2	PWR	0	0	0	0	0	0	10	82	72	87	0	0	0	0	0	0	4	31	27	32
PILGRIM 1	BWR	0	0	0	0	0	0	71	0	147	0	0	0	0	0	0	0	12	0	26	0
BRUNSWICK 2	BWR	0	0	0	0	0	0	123	162	0	164	0	0	0	0	0	0	23	30	0	31
PRAIRIE ISL 1&2	PWR	0	0	0	0	0	0	0	18	66	36	0	0	0	0	0	0	0	6	21	13
ZION 1&2	PWR	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
BYRON 1&2	PWR	0	0	0	0	0	0	0	0	0	76	0	0	0	0	0	0	0	0	0	33
INDIAN PT 2	PWR	0	0	0	0	0	0	0	0	0	36	0	0	0	0	0	0	0	0	0	16
BIG ROCK 1	BWR	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	1
OYSTER CRK 1	BWR	0	0	0	0	0	0	0	0	0	89	0	0	0	0	0	0	0	0	0	16
FORT CALHOUN	PWR	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	4
SAN ONOFRE 1,2,&3	PWR	0	0	0	0	0	0	0	0	0	74	0	0	0	0	0	0	0	0	0	29
POINT BEACH 1&2	PWR	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	6
PWR TOTAL		29		37		282		188		354		11		17		87		77		147	
			70		211		217		368		461		27		69		93		151		184
BWR TOTAL		103		177		285		765		621		18		32		51		137		111	
			0		72		378		537		655		0		13		67		98		119
TOTAL		132		214		487		945		975		29		49		138		214		257	
			70		283		587		905		1116		27		102		161		249		303

TABLE A.5. Upper Reference Case, Maximum At-Reactor Capacity--
Projected Annual Storage Requirements (cont'd)

POOL		ASSEMBLIES										MTIHM									
		1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
ST LUCIE 1	PWR	58	0	84	52	0	65	55	0	62	55	22	0	24	20	0	25	21	0	24	21
MILLSTONE 1	BWR	149	0	163	0	184	0	143	0	158	144	26	0	29	0	33	0	25	0	28	26
PALISADES	PWR	51	0	56	0	63	57	0	59	0	49	20	0	22	0	25	23	0	24	0	20
OCONEE 1&2	PWR	91	49	101	41	56	101	88	0	97	88	42	23	47	19	26	47	41	0	45	41
ROBINSON 2	PWR	47	39	39	0	58	41	0	42	50	0	19	17	17	0	24	18	0	18	20	0
BRUNSWICK 1	BWR	142	153	0	124	0	159	138	0	148	137	27	29	0	23	0	30	26	0	28	26
LASALLE CTY 1&2	BWR	167	178	357	150	208	374	181	191	355	181	30	32	67	27	37	68	29	35	65	29
OCONEE 3	PWR	45	49	50	0	56	51	0	52	48	0	21	23	23	0	26	24	0	24	22	0
LACROSSE	BWR	24	24	24	24	24	0	0	0	0	0	3	3	3	3	3	0	0	0	0	0
CALVERT CLF 1&2	PWR	73	77	80	66	90	82	70	83	78	71	27	26	30	25	34	31	26	31	29	27
PILGRIM 1	BWR	147	0	159	0	0	166	0	166	0	140	26	0	28	0	0	29	0	29	0	25
BRUNSWICK 2	BWR	143	0	156	0	173	159	0	164	149	0	27	0	29	0	32	30	0	31	28	0
PRAIRIE ISL 1&2	PWR	61	65	67	55	37	66	59	69	64	29	22	23	24	19	13	24	21	24	23	10
ZION 1&2	PWR	110	58	60	98	67	61	105	62	58	105	50	27	27	45	31	28	48	28	27	48
BYRON 1&2	PWR	84	81	120	57	50	130	62	62	140	61	27	34	53	24	21	59	26	26	59	26
INDIAN PT 2	PWR	52	0	57	0	65	58	0	60	0	51	23	0	26	0	29	26	0	27	0	23
BIG ROCK 1	BWR	0	17	16	12	16	16	15	16	0	0	0	2	2	2	2	2	2	2	0	0
OYSTER CRK 1	BWR	111	0	115	94	0	120	106	0	112	105	20	0	21	17	0	21	19	0	20	19
FORT CALHOUN	PWR	34	0	37	30	0	30	33	0	37	34	12	0	13	11	0	13	12	0	13	12
SAN ONOFRE 1,2,&3	PWR	83	131	90	111	103	137	80	140	89	199	33	51	36	44	42	54	32	55	36	79
POINT BEACH 1&2	PWR	49	52	53	43	60	54	47	56	51	48	18	19	19	16	22	19	17	20	16	17
BRAIDWOOD 1&2	PWR	3	81	56	172	49	60	150	61	71	82	1	34	24	73	21	29	63	26	30	35
BEAVER VALLEY 1	PWR	29	0	57	0	65	0	50	60	0	61	13	0	26	0	30	0	23	20	0	24
MAINE YANKEE	PWR	20	0	60	50	0	62	53	0	50	0	11	0	25	19	0	24	20	0	22	0
LIMERICK 1	BWR	65	179	0	149	206	0	153	187	0	159	12	32	0	26	37	0	27	33	0	20
SEQUOYAH 1&2	PWR	31	66	67	109	75	60	59	139	66	59	14	30	31	50	34	31	27	64	30	27
ARK NUCLEAR 1	PWR	0	4	0	41	56	0	45	0	40	45	0	2	0	19	26	0	21	0	22	21
NINE MILE PT1	BWR	0	143	0	124	0	157	0	160	0	135	0	25	0	21	0	27	0	27	0	23
MILLSTONE 2	PWR	0	22	0	42	61	0	40	53	0	40	0	0	0	10	23	0	10	20	0	10
DAVIS-BESSE 1	PWR	0	49	0	41	56	0	44	52	0	44	0	23	0	19	20	0	21	24	0	21
ENRICO FERMI2	BWR	0	0	120	0	272	0	214	251	0	215	0	0	22	0	50	0	39	46	0	39
PEACHBOTTOM 2	BWR	0	0	170	155	0	193	160	0	184	0	0	0	30	27	0	34	29	0	33	0
FITZPATRICK	BWR	0	0	52	119	0	151	120	0	144	130	0	0	9	21	0	27	23	0	26	23
SALEM 1	PWR	0	0	17	54	0	60	59	0	65	59	0	0	0	25	0	31	27	0	30	27
HADDAM NECK	PWR	0	0	0	19	49	0	39	47	0	30	0	0	0	7	10	0	14	17	0	14
COOK 1&2	PWR	0	0	0	47	70	75	50	70	130	59	0	0	0	20	35	30	27	31	50	27
DUANE ARNOLD	BWR	0	0	0	25	0	101	60	0	103	07	0	0	0	4	0	10	10	0	10	15
COOPER STN	BWR	0	0	0	73	105	95	03	97	07	02	0	0	0	13	19	17	15	10	10	15
PEACHBOTTOM 3	BWR	0	0	0	133	0	107	0	102	170	0	0	0	0	24	0	33	0	34	32	0
WASH NUCLEAR2	BWR	0	0	0	52	140	143	107	140	117	114	0	0	0	9	20	25	19	20	21	20
DRESDEN 2	BWR	0	0	0	0	100	0	115	130	0	110	0	0	0	0	10	0	19	23	0	19
GRAND GULF 1	BWR	0	0	0	0	242	220	0	232	217	0	0	0	0	0	43	40	0	41	30	0
NORTH ANNA 1&2	PWR	0	0	0	0	30	109	40	55	103	47	0	0	0	0	10	50	21	25	40	22
KEWAUNEE	PWR	0	0	0	0	0	32	27	32	30	27	0	0	0	0	2	12	10	12	11	10
ARK NUCLEAR 2	PWR	0	0	0	0	0	30	49	0	55	0	0	0	0	0	0	15	20	0	23	0
HATCH 1&2	BWR	0	0	0	0	0	7	143	170	316	144	0	0	0	0	0	1	27	32	50	27
SUSQUEHANNA 1&2	BWR	0	0	0	0	0	11	160	403	107	170	0	0	0	0	0	2	29	70	32	29
SALEM 2	PWR	0	0	0	0	0	19	0	72	60	0	0	0	0	0	0	0	0	34	31	0
GINNA	PWR	0	0	0	0	0	0	23	29	25	23	0	0	0	0	0	3	0	10	0	0

TABLE A.5. Upper Reference Case, Maximum At-Reactor Capacity--
Projected Annual Storage Requirements (cont'd)

POOL		ASSEMBLIES										MTIHM									
		1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
VT YANKEE 1	BWR	0	0	0	0	0	59	0	114	166	0	0	0	0	0	0	11	0	20	19	0
DRESDEN 3	BWR	0	0	0	0	0	0	76	137	0	116	0	0	0	0	0	0	13	23	0	19
BROWNS FERRY3	BWR	0	0	0	0	0	0	34	198	0	167	0	0	0	0	0	0	6	36	0	30
WATTS BAR 1&2	PWR	0	0	0	0	0	0	143	0	136	78	0	0	0	0	0	0	66	0	63	36
ST LUCIE 2	PWR	0	0	0	0	0	0	0	62	59	0	0	0	0	0	0	0	0	24	23	0
TURKEY PT 3&4	PWR	0	0	0	0	0	0	0	0	25	56	0	0	0	0	0	0	0	0	11	26
BROWNS FERRY1&2	BWR	0	0	0	0	0	0	0	0	65	167	0	0	0	0	0	0	0	0	12	30
LIMERICK 2	BWR	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	2
PWR TOTAL		909	823	1137	1128	1236	1498	1492	1423	1718	1586	377	340	474	470	525	625	632	594	728	639
BWR TOTAL		948	694	1342	1234	1682	2328	2039	2962	2626	2499	178	122	239	218	299	416	363	525	473	445
TOTAL		1857	1517	2479	2362	2918	3824	3531	4385	4344	4085	547	462	714	688	824	1041	995	1119	1201	1084

TABLE A.5. Upper Reference Case, Maximum At-Reactor Capacity-- Projected Annual Storage Requirements (cont'd)

POOL		ASSEMBLIES										:	MTIHM									
		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	:	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
ST LUCIE 1	PWR	0	55	82	0	67	80	0	64	15	0	:	0	21	31	0	26	31	0	24	6	0
PALISADES	PWR	0	50	0	41	0	0	0	0	0	0	:	0	20	0	16	0	0	0	0	0	0
OCONEE 1&2	PWR	115	0	130	73	52	63	177	0	0	0	:	53	0	60	34	24	29	82	0	0	0
ROBINSON 2	PWR	45	44	52	0	0	0	0	0	0	0	:	20	18	23	0	0	0	0	0	0	0
BRUNSWICK 1	BWR	0	138	203	0	166	195	0	159	146	0	:	0	26	38	0	31	36	0	36	27	0
LASALLE CTY 1&2	BWR	210	320	238	135	386	231	192	371	170	192	:	38	58	43	25	70	42	35	68	31	35
OCONEE 3	PWR	57	44	65	0	53	62	0	0	0	0	:	26	20	30	0	25	29	0	0	0	0
CALVERT CLF 1&2	PWR	92	70	103	58	85	101	84	217	73	0	:	34	26	39	22	32	37	31	81	27	0
PILGRIM 1	BWR	0	141	0	118	0	0	0	0	0	0	:	0	25	0	21	0	0	0	0	0	0
BRUNSWICK 2	BWR	181	137	0	116	165	0	165	159	0	0	:	34	26	0	22	31	0	31	30	0	0
PRAIRIE ISL 1&2	PWR	77	50	87	48	71	83	155	0	0	0	:	27	21	31	17	25	29	55	0	0	0
ZION 1&2	PWR	70	52	155	44	64	149	193	0	0	0	:	32	24	71	20	29	68	88	0	0	0
BYRON 1&2	PWR	102	123	90	91	148	87	87	142	65	93	:	43	52	38	38	63	37	37	60	27	39
INDIAN PT 2	PWR	84	0	73	0	59	72	0	0	0	0	:	29	0	33	0	27	33	0	0	0	0
OYSTER CRK 1	BWR	0	101	0	0	0	0	0	0	0	0	:	0	18	0	0	0	0	0	0	0	0
FORT CALHOUN	PWR	0	34	48	0	39	46	0	0	0	0	:	0	12	17	0	14	16	0	0	0	0
SAN ONOFRE 1,2,&3	PWR	0	316	117	68	96	114	95	92	85	95	:	0	122	47	27	39	46	38	37	34	38
POINT BEACH 1&2	PWR	61	47	69	141	0	0	0	0	0	0	:	22	17	25	51	0	0	0	0	0	0
BRAIDWOOD 1&2	PWR	102	61	146	91	74	102	87	69	103	93	:	43	26	62	38	31	69	37	29	69	39
BEAVER VALLEY 1	PWR	0	51	74	0	61	0	60	58	0	0	:	0	24	34	0	28	0	28	27	0	0
MAINE YANKEE	PWR	70	53	0	45	65	0	0	0	0	0	:	27	20	0	17	25	0	0	0	0	0
LIMERICK 1	BWR	207	0	233	133	0	225	0	181	167	0	:	37	0	41	24	0	40	0	32	30	0
SEQUOYAH 1&2	PWR	76	117	86	49	70	107	70	67	62	141	:	35	54	39	23	32	77	32	31	29	65
ARK NUCLEAR 1	PWR	0	44	0	36	53	0	52	0	0	0	:	0	20	0	17	25	0	24	0	0	0
NINE MILE PT1	BWR	0	135	0	0	0	0	0	0	0	0	:	0	23	0	0	0	0	0	0	0	0
MILLSTONE 2	PWR	0	48	66	0	57	66	0	51	0	0	:	0	18	25	0	22	26	0	19	0	0
DAVIS-BESSE 1	PWR	57	0	65	37	0	62	52	0	47	53	:	27	0	30	17	0	29	24	0	22	25
ENRICO FERMI2	BWR	0	211	0	100	253	0	255	0	223	0	:	0	30	0	33	46	0	46	0	41	0
PEACHBOTTOM 2	BWR	210	107	0	130	200	0	200	0	0	0	:	30	30	0	25	35	0	35	0	0	0
FITZPATRICK	BWR	0	129	109	0	153	104	0	140	0	0	:	0	23	34	0	27	33	0	20	0	0
SALEM 1	PWR	0	50	87	0	71	83	0	67	61	0	:	0	27	40	0	33	30	0	31	20	0
COOK 1&2	PWR	84	123	86	54	71	92	147	67	60	270	:	34	53	40	22	33	37	63	31	27	120
DUANE ARNOLD	BWR	0	80	130	0	105	126	0	101	0	0	:	0	16	23	0	19	22	0	10	0	0
COOPER STN	BWR	90	61	112	69	91	117	90	0	0	0	:	10	15	20	13	17	21	16	0	0	0
PEACHBOTTOM 3	BWR	211	101	0	135	103	0	102	0	0	0	:	37	29	0	24	34	0	34	0	0	0
WASH NUCLEAR2	BWR	102	107	100	07	137	175	130	140	111	137	:	29	19	32	15	24	31	23	25	20	24
DRESDEN 2	BWR	101	0	171	0	0	0	0	0	0	0	:	25	0	29	0	0	0	0	0	0	0
GRAND GULF 1	BWR	250	100	0	104	235	0	234	220	0	234	:	45	35	0	20	41	0	41	40	0	41
NORTH ANNA 1&2	PWR	02	92	00	30	112	07	50	100	40	50	:	20	43	31	10	52	31	20	50	23	20
KEWAUNEE	PWR	35	27	40	22	33	30	33	0	0	0	:	13	10	15	0	13	15	13	0	0	0
ARK NUCLEAR 2	PWR	04	49	0	43	59	0	00	57	0	59	:	27	20	0	10	25	0	25	24	0	25
HATCH 1&2	BWR	100	207	211	121	344	200	172	724	0	171	:	35	53	39	22	04	30	32	134	0	32
SUSQUEHANNA 1&2	BWR	445	109	250	204	205	241	405	197	179	400	:	77	29	43	49	35	42	70	34	31	70
SALEM 2	PWR	01	02	0	51	74	0	74	71	0	74	:	37	20	0	23	34	0	34	33	0	34
GINNA	PWR	30	23	34	0	0	0	0	0	0	0	:	11	0	12	0	0	0	0	0	0	0
VT YANKEE 1	BWR	127	90	0	02	0	137	0	0	0	0	:	23	17	0	15	0	24	0	0	0	0
DRESDEN 3	BWR	151	0	170	0	0	0	0	0	0	0	:	20	0	20	0	0	0	0	0	0	0
BROWNS FERRY3	BWR	219	0	240	0	201	237	0	192	170	0	:	40	0	45	0	30	43	0	35	32	0
WATTS BAR 1&2	PWR	0	110	139	0	143	0	100	132	0	170	:	0	54	04	0	00	0	77	01	0	01

TABLE A.5. Upper Reference Case, Maximum At-Reactor Capacity--
Projected Annual Storage Requirements (cont'd)

		ASSEMBLIES										MTIHM									
POOL		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
ST LUCIE 2	PWR	69	53	0	44	63	0	63	61	0	64	27	21	0	17	25	0	25	24	0	25
TURKEY PT 3&4	PWR	46	35	82	29	41	157	0	0	0	0	21	16	38	13	19	72	0	0	0	0
BROWNS FERRY1&2	BWR	437	168	247	279	0	476	199	193	353	199	79	31	45	51	0	86	36	35	64	36
LIMERICK 2	BWR	260	0	180	0	192	287	0	179	0	239	46	0	34	0	34	37	0	32	0	42
CRYSTAL RVR 3	PWR	23	0	76	0	64	0	63	0	56	0	11	0	36	0	30	0	29	0	26	0
TROJAN	PWR	13	35	52	29	43	58	43	41	0	0	6	16	24	13	20	23	20	19	0	0
RANCHO SECO 1	PWR	35	0	65	38	0	84	0	61	0	0	16	0	30	18	0	30	0	24	0	0
CLINTON 1	BWR	0	10	0	185	151	0	179	144	0	196	0	2	0	34	26	0	33	27	0	35
CALLAWAY 1	PWR	0	18	0	52	74	0	74	70	0	74	0	0	0	22	32	0	32	30	0	32
PALO VERDE 1	PWR	0	0	25	0	81	80	0	79	59	0	0	0	10	0	34	32	0	33	23	0
PALO VERDE 3	PWR	0	0	39	100	0	74	96	0	74	103	0	0	15	42	0	29	40	0	29	43
QUAD CITIES 1&2	BWR	0	0	75	197	140	187	712	0	0	0	0	0	13	35	25	29	125	0	0	0
MCGUIRE 1	PWR	0	0	20	44	0	76	63	61	0	63	0	0	8	19	0	32	27	26	0	27
WATERFORD 3	PWR	0	0	30	0	70	92	0	74	67	0	0	0	10	0	33	39	0	31	20	0
INDIAN PT 3	PWR	0	0	70	47	0	80	0	64	0	0	0	0	32	21	0	30	0	29	0	0
FARLEY 1	PWR	0	0	0	30	0	71	57	0	53	57	0	0	0	10	0	33	20	0	25	20
PALO VERDE 2	PWR	0	0	0	41	0	97	67	0	72	67	0	0	0	10	0	40	20	0	30	20
MCGUIRE 2	PWR	0	0	0	29	63	75	0	61	56	63	0	0	0	12	27	32	0	20	24	27
RVR BEND 1	BWR	0	0	0	30	109	0	109	101	0	173	0	0	0	6	31	0	31	30	0	32
THREE MILE ISL 1	PWR	0	0	0	0	17	74	0	0	0	0	0	0	0	0	0	34	0	0	0	0
VOGTLE 1&2	PWR	0	0	0	0	0	45	88	141	81	91	0	0	0	0	0	21	41	65	30	42
WOLF CREEK 1	PWR	0	0	0	0	0	29	0	64	59	0	0	0	0	0	0	13	0	30	27	0
SHOREHAM	BWR	0	0	0	0	0	129	0	154	178	0	0	0	0	0	0	24	0	20	32	0
SEABROOK 1	PWR	0	0	0	0	0	22	0	53	61	70	0	0	0	0	0	10	0	24	20	32
HOPE CREEK	BWR	0	0	0	0	0	99	202	0	179	203	0	0	0	0	0	10	30	0	33	30
SUMMER 1	PWR	0	0	0	0	0	10	0	57	53	0	0	0	0	0	0	0	0	20	25	0
FARLEY 2	PWR	0	0	0	0	0	0	11	54	0	60	0	0	0	0	0	0	5	25	0	20
PERRY 1	BWR	0	0	0	0	0	0	113	0	174	196	0	0	0	0	0	0	20	0	31	35
BEAVER VALLEY 2	PWR	0	0	0	0	0	0	13	0	71	82	0	0	0	0	0	0	0	0	33	30
NINE MILE PT2	BWR	0	0	0	0	0	0	31	0	267	0	0	0	0	0	0	0	5	0	45	0
PWR TOTAL		1530		2431		2201		2286		1450		650		1040		945		991		620	
			1958		1522		2701		2194		1904		819		639		1161		951		930
BWR TOTAL		3520		2844		3406		3640		2323		620		507		630		653		417	
			2042		2454		3152		3429		2340		511		440		567		622		420
TOTAL		5050		5275		5607		5926		3773		1270		1555		1574		1644		1045	
			4000		3976		5053		5023		4244		1330		1079		1729		1573		1250

TABLE A.5. Upper Reference Case, Maximum At-Reactor Capacity--
Projected Annual Storage Requirements (cont'd)

POOL		ASSEMBLIES 2017	2018	2019	2020	MTIHM 2017	2018	2019	2020
LASALLE CTY 1&2	BWR	264	196	162	336	48	35	29	61
BYRON 1&2	PWR	121	73	87	145	51	31	37	61
SAN ONOFRE 1,2,&3	PWR	133	0	161	0	54	0	65	0
BRAIDWOOD 1&2	PWR	78	178	87	81	36	75	37	34
LIMERICK 1	BWR	129	187	0	165	23	33	0	29
SEQUOYAH 1&2	PWR	49	69	59	123	22	32	27	57
ENRICO FERMI2	BWR	176	251	0	223	32	46	0	41
WASH NUCLEAR2	BWR	102	129	124	109	18	23	22	19
GRAND GULF 1	BWR	161	0	197	204	28	0	35	36
NORTH ANNA 1&2	PWR	38	156	0	0	18	72	0	0
SUSQUEHANNA 1&2	BWR	140	201	341	177	24	35	59	31
SALEM 2	PWR	51	0	62	0	23	0	28	0
BROWNS FERRY3	BWR	138	0	166	0	25	0	30	0
WATTS BAR 1&2	PWR	134	0	164	0	62	0	76	0
ST LUCIE 2	PWR	44	62	0	55	17	24	0	21
BROWNS FERRY1&2	BWR	136	393	0	939	25	71	0	170
LIMERICK 2	BWR	178	0	221	0	32	0	39	0
CLINTON 1	BWR	143	0	179	164	26	0	33	30
CALLAWAY 1	PWR	52	0	61	64	22	0	26	27
PALO VERDE 1	PWR	57	67	0	71	24	26	0	30
PALO VERDE 3	PWR	0	83	96	0	0	33	40	0
MCGUIRE 1	PWR	44	64	53	0	19	27	22	0
WATERFORD 3	PWR	54	76	0	68	23	32	0	29
PALO VERDE 2	PWR	0	81	56	0	0	34	22	0
MCGUIRE 2	PWR	43	0	53	55	18	0	22	23
RVR BEND 1	BWR	115	0	140	146	21	0	26	27
VOGTLE 1&2	PWR	140	88	87	160	65	41	40	74
WOLF CREEK 1	PWR	46	65	0	58	21	30	0	27
SHOREHAM	BWR	153	196	0	177	28	36	0	32
SEABROOK 1	PWR	54	0	67	62	25	0	31	29
HOPE CREEK	BWR	0	200	171	0	0	37	32	0
SUMMER 1	PWR	41	59	0	51	19	27	0	24
FARLEY 2	PWR	39	0	0	0	18	0	0	0
PERRY 1	BWR	136	0	165	170	24	0	29	30
BEAVER VALLEY 2	PWR	0	77	75	0	0	35	35	0
NINE MILE PT2	BWR	229	0	285	0	39	0	49	0
BELLEFONTE 1	PWR	46	0	87	0	21	0	40	0
DIABLO CANYON 2	PWR	0	15	0	65	0	6	0	28
DIABLO CANYON 1	PWR	0	22	0	65	0	9	0	28
BELLEFONTE 2	PWR	0	59	0	81	0	27	0	37
COMANCHE PK 1&2	PWR	0	0	71	123	0	0	29	50
PWR TOTAL		1256	1326			551	577		
			1294		1327			563	578
BWR TOTAL		2200	2151			394	383		
			1747		2810			315	507
TOTAL		3458	3477			945	960		
			3041		4137			878	1085

TABLE A.6. Upper Reference Case, Maximum At-Reactor Capacity--
Projected Cumulative Storage Requirements

POOL		ASSEMBLIES										MTIHM									
		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
ST LUCIE 1	PWR	29	94	94	150	218	218	285	350	350	419	11	35	35	57	83	83	108	133	133	159
MILLSTONE 1	BWR	103	103	280	280	457	457	626	626	773	773	18	18	50	50	81	81	111	111	137	137
PALISADES	PWR	0	5	5	57	57	117	117	176	226	226	0	2	2	22	22	46	46	69	89	89
OCONEE 1&2	PWR	0	0	37	131	185	237	340	391	482	535	0	0	17	61	86	110	157	181	223	248
ROBINSON 2	PWR	0	0	0	9	52	105	105	147	183	183	0	0	0	4	23	44	44	63	78	78
BRUNSWICK 1	BWR	0	0	0	72	72	236	236	397	535	535	0	0	0	13	13	44	44	74	100	100
LASALLE CTY 1&2	BWR	0	0	0	0	188	361	679	869	1634	1428	0	0	0	0	26	55	124	158	188	260
OCONEE 3	PWR	0	0	0	0	37	89	89	141	186	186	0	0	0	0	17	41	41	65	86	86
LACROSSE	BWR	0	0	0	0	0	13	37	61	85	85	0	0	0	0	0	1	4	7	9	9
CALVERT CLF 1&2	PWR	0	0	0	0	0	0	18	92	164	251	0	0	0	0	0	0	4	34	61	94
PILGRIM 1	BWR	0	0	0	0	0	0	71	71	218	218	0	0	0	0	0	0	12	12	38	38
BRUNSWICK 2	BWR	0	0	0	0	0	0	123	285	285	449	0	0	0	0	0	0	23	53	53	84
PRAIRIE ISL 1&2	PWR	0	0	0	0	0	0	0	18	78	114	0	0	0	0	0	0	0	0	28	46
ZION 1&2	PWR	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
BYRON 1&2	PWR	0	0	0	0	0	0	0	0	0	78	0	0	0	0	0	0	0	0	0	33
INDIAN PT 2	PWR	0	0	0	0	0	0	0	0	0	36	0	0	0	0	0	0	0	0	0	16
BIG ROCK 1	BWR	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	1
OYSTER CRK 1	BWR	0	0	0	0	0	0	0	0	0	89	0	0	0	0	0	0	0	0	0	16
FORT CALHOUN	PWR	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	4
SAN ONOFRE 1,2,&3	PWR	0	0	0	0	0	0	0	0	0	74	0	0	0	0	0	0	0	0	0	29
POINT BEACH 1&2	PWR	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	6
PWR TOTAL		29	99	136	347	549	768	946	1314	1668	2129	11	37	55	144	236	324	481	552	699	883
BWR TOTAL		103	103	280	352	637	1067	1772	2389	2930	3585	18	18	50	63	114	181	318	416	526	646
TOTAL		132	202	416	699	1186	1773	2718	3623	4598	5714	29	56	104	207	345	505	719	968	1225	1529

TABLE A.6. Upper Reference Case, Maximum At-Reactor Capacity-- Projected Cumulative Storage Requirements (cont'd)

POOL		ASSEMBLIES										MTIHM									
		1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
ST LUCIE 1	PWR	477	477	541	593	593	658	713	713	775	838	182	182	206	226	226	251	272	272	295	316
MILLSTONE 1	BWR	922	922	1085	1085	1289	1269	1412	1412	1578	1714	164	164	193	193	225	225	251	251	279	304
PALISADES	PWR	276	276	332	332	395	452	452	511	511	568	110	110	132	132	157	180	180	204	204	223
OCONEE 1&2	PWR	626	675	776	817	873	974	1062	1062	1159	1247	298	313	359	378	404	451	492	492	537	577
ROBINSON 2	PWR	238	269	308	308	366	407	407	449	499	499	97	114	131	131	155	173	173	191	211	211
BRUNSWICK 1	BWR	677	830	830	954	954	1113	1251	1251	1399	1536	126	155	155	178	178	208	234	234	261	287
LASALLE CTY 1&2	BWR	1595	1773	2148	2298	2498	2878	3031	3222	3577	3738	298	323	398	417	454	522	552	586	651	680
OCONEE 3	PWR	231	288	338	338	386	437	437	489	537	537	107	130	153	153	179	202	202	226	249	249
LACROSSE	BWR	109	133	157	181	205	205	205	205	205	205	12	14	17	20	22	22	22	22	22	22
CALVERT CLF 1&2	PWR	324	481	481	547	637	719	789	872	958	1021	121	147	177	201	235	268	292	323	352	379
PILGRIM 1	BWR	365	365	524	524	524	698	698	858	858	998	64	64	92	92	92	122	122	151	151	176
BRUNSWICK 2	BWR	592	592	748	748	921	1088	1088	1244	1393	1393	111	111	140	140	172	202	202	233	260	260
PRAIRIE ISL 1&2	PWR	175	240	307	362	399	467	526	595	659	688	62	85	109	128	141	166	186	211	234	244
ZION 1&2	PWR	111	169	229	327	394	455	568	622	688	785	51	77	105	149	188	208	256	284	311	359
BYRON 1&2	PWR	142	223	349	486	456	595	657	719	859	928	66	94	148	172	193	252	278	364	363	389
INDIAN PT 2	PWR	88	88	145	145	218	288	268	328	328	379	40	40	65	65	95	121	121	148	146	171
BIG ROCK 1	BWR	6	25	41	53	71	87	102	118	118	118	1	3	5	7	9	11	13	15	15	15
OYSTER CRK 1	BWR	200	200	315	489	489	529	635	635	747	852	36	36	56	73	73	94	113	113	133	152
FORT CALHOUN	PWR	44	44	81	111	111	149	182	182	219	253	16	16	29	39	39	53	65	65	78	90
SAN ONOFRE 1,2,&3	PWR	157	286	378	489	592	729	889	949	1038	1237	63	114	150	194	235	289	321	376	412	491
POINT BEACH 1&2	PWR	66	118	171	214	274	328	375	431	482	530	24	43	62	77	99	118	135	156	174	191
BRAIDWOOD 1&2	PWR	3	84	148	312	361	429	579	640	711	793	1	36	59	132	153	181	245	271	301	335
BEAVER VALLEY 1	PWR	29	29	86	86	151	151	201	261	261	312	13	13	40	40	70	70	93	121	121	145
MAINE YANKEE	PWR	28	28	88	138	138	200	253	253	311	311	11	11	34	53	53	77	97	97	119	119
LIMERICK 1	BWR	65	244	244	393	599	599	752	939	939	1098	12	43	43	70	106	106	133	166	166	195
SEQUOYAH 1&2	PWR	31	97	164	273	348	416	475	614	679	738	14	45	75	126	160	191	219	283	312	340
ARK NUCLEAR 1	PWR	0	4	4	45	101	101	146	146	194	239	0	2	2	21	47	47	68	68	90	111
NINE MILE PT1	BWR	0	143	143	267	267	424	424	584	584	719	0	25	25	46	46	73	73	100	100	123
MILLSTONE 2	PWR	0	22	22	64	125	125	173	226	226	274	0	8	8	24	48	48	66	86	86	105
DAVIS-BESSE 1	PWR	0	49	49	98	146	146	190	242	242	286	0	23	23	42	68	68	89	113	113	134
ENRICO FERMI2	BWR	0	0	120	120	392	392	686	857	857	1072	0	0	22	22	71	71	110	156	156	195
PEACHBOTTOM 2	BWR	0	0	170	325	325	518	684	684	868	868	0	0	30	58	58	92	121	121	154	154
FITZPATRICK	BWR	0	0	52	171	171	322	450	450	594	724	0	0	9	30	30	57	80	80	105	129
SALEM 1	PWR	0	0	17	71	71	139	198	198	263	322	0	0	0	33	33	64	91	91	121	148
HADDAM NECK	PWR	0	0	0	19	68	68	107	154	154	192	0	0	0	7	25	25	39	56	56	70
COOK 1&2	PWR	0	0	0	47	123	198	256	332	468	527	0	0	0	20	55	85	112	143	201	229
DUANE ARNOLD	BWR	0	0	0	25	25	126	214	214	317	484	0	0	0	4	4	22	38	38	56	72
COOPER STN	BWR	0	0	0	73	178	273	356	453	540	622	0	0	0	13	32	50	65	83	98	113
PEACHBOTTOM 3	BWR	0	0	0	133	133	328	328	512	698	698	0	0	0	24	24	57	57	91	122	122
WASH NUCLEAR2	BWR	0	0	0	62	198	341	448	594	711	825	0	0	0	9	35	60	79	105	125	145
DRESDEN 2	BWR	0	0	0	0	106	106	221	359	359	475	0	0	0	0	18	18	37	60	60	80
GRAND GULF 1	BWR	0	0	0	0	242	470	470	702	919	919	0	0	0	0	43	83	83	124	162	162
NORTH ANNA 1&2	PWR	0	0	0	0	38	147	193	248	351	398	0	0	0	0	18	68	89	115	162	184
KEWAUNEE	PWR	0	0	0	0	0	38	85	97	127	154	0	0	0	0	2	14	25	37	48	59
ARK NUCLEAR 2	PWR	0	0	0	0	0	36	85	85	148	148	0	0	0	0	0	15	35	35	58	58
HATCH 1&2	BWR	0	0	0	0	0	7	156	328	636	788	0	0	0	0	0	1	28	69	118	145
SUSQUEHANNA 1&2	BWR	0	0	0	0	0	11	186	583	778	940	0	0	0	0	0	2	31	101	133	162
SALEM 2	PWR	0	0	0	0	0	19	19	91	159	159	0	0	0	0	0	9	9	43	74	74
GINNA	PWR	0	0	0	0	0	9	32	61	86	109	0	0	0	0	0	3	11	21	38	38

TABLE A.6. Upper Reference Case, Maximum At-Reactor Capacity--
Projected Cumulative Storage Requirements (cont'd)

		ASSEMBLIES										MTIHM									
POOL		1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
VT YANKEE 1	BWR	0	0	0	0	0	59	59	173	279	279	0	0	0	0	0	11	11	31	50	50
DRESDEN 3	BWR	0	0	0	0	0	0	76	213	213	329	0	0	0	0	0	0	13	36	36	55
BROWNS FERRY3	BWR	0	0	0	0	0	0	34	232	232	399	0	0	0	0	0	0	6	42	42	72
WATTS BAR 1&2	PWR	0	0	0	0	0	0	143	143	279	357	0	0	0	0	0	0	68	66	129	165
ST LUCIE 2	PWR	0	0	0	0	0	0	0	62	121	121	0	0	0	0	0	0	0	24	47	47
TURKEY PT 3&4	PWR	0	0	0	0	0	0	0	0	25	81	0	0	0	0	0	0	0	0	11	37
BROWNS FERRY1&2	BWR	0	0	0	0	0	0	0	0	65	232	0	0	0	0	0	0	0	0	12	42
LIMERICK 2	BWR	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	2
PWR TOTAL		3038		4998		7362		10352		13493		1260		2074		3070		4327		5650	
			3861		6126		8868		11775		14999		1600		2544		3895		4921		6288
BWR TOTAL		4533		6589		9485		13850		19438		816		1177		1694		2473		3471	
			5227		7803		11811		16812		21937		938		1395		2110		2998		3916
TOTAL		7571		11587		16847		24202		32931		2076		3252		4764		6800		9120	
			9088		13929		20671		28587		36936		2538		3940		5895		7919		10204

TABLE A.6. Upper Reference Case, Maximum At-Reactor Capacity--
Projected Cumulative Storage Requirements (cont'd)

POOL		ASSEMBLIES										MTIHM									
		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
ST LUCIE 1	PWR	830	885	967	967	1034	1114	1114	1178	1193	1193	316	337	369	369	394	425	425	449	455	455
MILLSTONE 1	BWR	1714	1714	1714	1714	1714	1714	1714	1714	1714	1714	304	304	304	304	304	304	304	304	304	304
PALISADES	PWR	560	610	610	651	651	651	651	651	651	651	223	243	243	260	260	260	260	260	260	260
OCONEE 1&2	PWR	1362	1382	1492	1565	1617	1680	1857	1857	1857	1857	631	631	691	725	749	778	860	860	860	860
ROBINSON 2	PWR	544	588	640	640	640	640	640	640	640	640	231	249	272	272	272	272	272	272	272	272
BRUNSWICK 1	BWR	1536	1674	1877	1877	2043	2238	2238	2397	2543	2543	287	313	351	351	382	418	418	448	475	475
LASALLE CTY 1&2	BWR	3948	4268	4506	4641	5027	5258	5456	5821	5991	6183	719	777	820	845	915	957	992	1060	1090	1125
OCONEE 3	PWR	594	638	703	703	756	818	818	818	818	818	275	295	325	325	350	379	379	379	379	379
LACROSSE	BWR	205	205	205	205	205	205	205	205	205	205	22	22	22	22	22	22	22	22	22	22
CALVERT CLF 1&2	PWR	1113	1183	1286	1344	1429	1530	1614	1831	1904	1904	413	440	478	500	532	569	600	682	709	709
PILGRIM 1	BWR	996	1137	1137	1255	1255	1255	1255	1255	1255	1255	176	201	201	221	221	221	221	221	221	221
BRUNSWICK 2	BWR	1574	1711	1711	1827	1992	1992	2167	2316	2316	2316	294	320	320	342	373	373	403	433	433	433
PRAIRIE ISL 1&2	PWR	765	823	910	958	1029	1112	1267	1267	1267	1267	271	292	322	339	365	394	449	449	449	449
ZION 1&2	PWR	855	907	1062	1106	1178	1319	1512	1512	1512	1512	391	414	485	505	535	603	691	691	691	691
BYRON 1&2	PWR	1022	1145	1235	1326	1474	1561	1648	1798	1855	1946	432	484	522	561	624	660	697	757	785	824
INDIAN PT 2	PWR	443	443	516	516	575	647	647	647	647	647	200	200	233	233	260	292	292	292	292	292
BIG ROCK 1	BWR	118	118	118	118	118	118	118	118	118	118	15	15	15	15	15	15	15	15	15	15
OYSTER CRK 1	BWR	852	953	953	953	953	953	953	953	953	953	152	170	170	170	170	170	170	170	170	170
FORT CALHOUN	PWR	253	287	335	335	374	420	420	420	420	420	90	102	119	119	133	149	149	149	149	149
SAN ONOFRE 1,2,&3	PWR	1237	1553	1670	1738	1834	1948	2043	2135	2220	2315	491	613	660	688	727	773	811	848	882	921
POINT BEACH 1&2	PWR	591	638	707	848	848	848	848	848	848	848	213	230	255	306	306	306	306	306	306	306
BRAIDWOOD 1&2	PWR	895	956	1102	1193	1287	1429	1516	1585	1748	1841	379	404	466	505	536	604	641	678	739	779
BEAVER VALLEY 1	PWR	312	363	437	437	498	498	558	616	616	616	145	169	203	203	231	231	259	286	286	286
MAINE YANKEE	PWR	381	434	434	479	544	544	544	544	544	544	148	166	166	183	208	208	208	208	208	208
LIMERICK 1	BWR	1385	1385	1538	1671	1671	1896	1896	2077	2244	2244	231	231	273	296	296	336	336	368	398	398
SEQUOYAH 1&2	PWR	814	931	1017	1066	1136	1303	1373	1440	1502	1643	375	428	468	491	523	600	632	663	691	756
ARK NUCLEAR 1	PWR	239	283	283	319	372	372	424	424	424	424	111	131	131	148	172	172	197	197	197	197
NINE MILE PT1	BWR	719	854	854	854	854	854	854	854	854	854	123	147	147	147	147	147	147	147	147	147
MILLSTONE 2	PWR	274	322	388	388	445	513	513	584	584	584	105	123	148	148	170	196	196	215	215	215
DAVIS-BESSE 1	PWR	343	343	408	445	445	507	559	559	606	659	161	161	191	208	208	237	262	282	284	309
ENRICO FERMI2	BWR	1072	1283	1283	1463	1716	1716	1971	1971	2194	2194	195	234	234	266	312	312	359	359	399	399
PEACHBOTTOM 2	BWR	1086	1253	1253	1392	1592	1592	1792	1792	1792	1792	193	222	222	247	282	282	316	318	318	318
FITZPATRICK	BWR	724	853	1042	1042	1195	1379	1379	1527	1527	1527	129	151	185	185	212	245	245	271	271	271
SALEM 1	PWR	322	388	467	467	538	621	621	688	749	749	148	174	214	214	247	285	285	316	344	344
HADDAM NECK	PWR	192	192	192	192	192	192	192	192	192	192	70	70	70	70	70	70	70	70	70	70
COOK 1&2	PWR	611	734	820	874	945	1037	1184	1251	1319	1589	283	316	355	377	410	447	510	541	568	688
DUANE ARNOLD	BWR	484	492	622	622	727	853	853	954	954	954	72	88	111	111	129	152	152	170	170	170
COOPER STN	BWR	721	802	914	983	1074	1191	1281	1281	1281	1281	131	146	167	179	196	217	233	233	233	233
PEACHBOTTOM 3	BWR	981	1062	1062	1197	1398	1398	1582	1582	1582	1582	168	188	188	212	240	240	280	280	280	280
WASH NUCLEAR2	BWR	987	1094	1274	1361	1498	1673	1803	1943	2054	2191	174	193	224	240	264	295	318	342	362	386
DRESDEN 2	BWR	626	626	797	797	797	797	797	797	797	797	105	105	134	134	134	134	134	134	134	134
GRAND GULF 1	BWR	1176	1371	1371	1535	1776	1776	2004	2230	2230	2464	207	242	242	271	312	312	354	393	393	435
NORTH ANNA 1&2	PWR	460	552	620	659	771	838	894	1083	1052	1188	213	255	286	304	356	387	413	463	486	512
KEWAUNEE	PWR	189	216	258	278	311	350	383	383	383	383	72	82	97	106	118	133	146	146	146	146
ARK NUCLEAR 2	PWR	204	253	253	296	365	365	415	472	472	531	85	106	106	124	148	148	173	197	197	222
HATCH 1&2	BWR	966	1253	1464	1585	1929	2135	2367	3031	3031	3202	179	232	272	294	358	396	428	562	562	594
SUSQUEHANNA 1&2	BWR	1386	1554	1804	2088	2293	2534	2939	3136	3315	3721	239	269	312	361	396	438	508	542	573	643
SALEM 2	PWR	248	302	302	353	427	427	501	572	572	646	111	140	140	163	197	197	231	264	264	298
GINNA	PWR	139	182	196	196	196	196	196	196	196	196	49	57	69	69	69	69	69	69	69	69

TABLE A.6. Upper Reference Case, Maximum At-Reactor Capacity-- Projected Cumulative Storage Requirements (cont'd)

POOL		ASSEMBLIES 2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	MTIHM 2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
VT YANKEE 1	BWR	486	502	502	584	584	721	721	721	721	721	72	89	89	104	104	128	128	128	128	128
DRESDEN 3	BWR	480	480	650	650	650	650	650	650	650	650	80	80	109	109	109	109	109	109	109	109
BROWNS FERRY3	BWR	618	618	864	864	1065	1302	1302	1494	1670	1670	112	112	157	157	193	236	236	271	303	303
WATTS BAR 1&2	PWR	357	473	612	612	755	755	921	1053	1053	1229	165	218	282	282	348	348	425	486	486	567
ST LUCIE 2	PWR	190	243	243	287	350	350	413	474	474	538	74	95	95	112	136	136	161	184	184	209
TURKEY PT 3&4	PWR	127	162	244	273	314	471	471	471	471	471	58	74	112	125	144	216	216	216	216	216
BROWNS FERRY1&2	BWR	669	837	1084	1363	1363	1839	2038	2231	2584	2783	121	152	197	247	247	334	370	405	469	505
LIMERICK 2	BWR	270	270	459	459	651	858	858	1037	1037	1276	48	48	81	81	115	152	152	184	184	226
CRYSTAL RVR 3	PWR	23	23	101	101	165	165	228	228	284	284	11	11	47	47	76	76	106	106	132	132
TROJAN	PWR	13	48	100	129	172	222	265	306	306	306	6	22	46	60	80	103	123	142	142	142
RANCHO SECO 1	PWR	35	35	100	138	138	202	202	253	253	253	16	16	46	64	64	94	94	117	117	117
CLINTON 1	BWR	0	16	16	195	346	346	525	669	669	859	0	2	2	36	64	64	97	124	124	159
CALLAWAY 1	PWR	0	18	18	76	144	144	216	288	288	362	0	8	8	36	61	61	93	123	123	154
PALO VERDE 1	PWR	0	0	25	25	166	166	166	265	324	324	0	0	10	10	44	75	75	108	132	132
PALO VERDE 3	PWR	0	0	39	139	139	213	309	309	383	486	0	0	15	57	57	86	126	126	158	199
QUAD CITIES 1&2	BWR	0	0	76	272	412	579	1291	1291	1291	1291	0	0	13	48	73	102	228	228	228	228
MCGUIRE 1	PWR	0	0	26	64	64	140	203	264	264	327	0	0	8	27	27	59	86	112	112	138
WATERFORD 3	PWR	0	0	38	38	116	208	208	282	349	349	0	0	16	16	49	87	87	118	146	146
INDIAN PT 3	PWR	0	0	76	117	117	197	197	261	261	261	0	0	32	53	53	90	90	119	119	119
FARLEY 1	PWR	0	0	0	38	38	109	166	166	219	276	0	0	0	18	18	51	77	77	102	128
PALO VERDE 2	PWR	0	0	0	41	41	138	205	205	277	344	0	0	0	18	18	57	83	83	113	140
MCGUIRE 2	PWR	0	0	0	29	92	167	167	228	284	347	0	0	0	12	39	71	71	96	120	147
RVR BEND 1	BWR	0	0	0	36	199	199	368	529	529	702	0	0	0	6	37	37	68	98	98	130
THREE MILE ISL 1	PWR	0	0	0	0	17	91	91	91	91	91	0	0	0	0	6	42	42	42	42	42
VOGTLE 1&2	PWR	0	0	0	0	0	45	133	274	355	448	0	0	0	0	0	21	62	127	165	207
WOLF CREEK 1	PWR	0	0	0	0	0	29	29	93	152	152	0	0	0	0	0	13	13	43	70	70
SHOREHAM	BWR	0	0	0	0	0	129	129	283	461	461	0	0	0	0	0	24	24	52	84	84
SEABROOK 1	PWR	0	0	0	0	0	22	22	76	136	206	0	0	0	0	0	10	10	35	63	95
HOPE CREEK	BWR	0	0	0	0	0	99	361	361	488	583	0	0	0	0	0	18	58	58	89	127
SUMMER 1	PWR	0	0	0	0	0	18	18	75	128	128	0	0	0	0	0	8	8	35	59	59
FARLEY 2	PWR	0	0	0	0	0	0	11	65	65	125	0	0	0	0	0	0	5	30	30	58
PERRY 1	BWR	0	0	0	0	0	0	113	113	287	483	0	0	0	0	0	0	20	20	51	86
BEAVER VALLEY 2	PWR	0	0	0	0	0	0	13	13	84	166	0	0	0	0	0	0	6	6	39	77
NINE MILE PT2	BWR	0	0	0	0	0	0	31	31	298	298	0	0	0	0	0	0	5	5	51	51
PWR TOTAL		16529	20918	24641	29628	33272						6938	8805	10389	12541	14120					
		18487	22448	27342	31822	35176						7757	9444	11550	13492	14958					
BWR TOTAL		25457	31143	37083	43875	49627						4542	5560	6630	7851	8890					
		28299	33597	40235	47304	51967						5053	6001	7197	8473	9310					
TOTAL		41986	52061	61724	73503	82899						11480	14365	17019	20392	23010					
		46786	56037	67577	79126	87143						12810	15445	18748	21985	24268					

TABLE A.6. Upper Reference Case, Maximum At-Reactor Capacity--
Projected Cumulative Storage Requirements (cont'd)

		ASSEMBLIES				MTIHM			
POOL		2017	2018	2019	2020	2017	2018	2019	2020
ST LUCIE 1	PWR	1193	1193	1193	1193	455	455	455	455
MILLSTONE 1	BWR	1714	1714	1714	1714	304	304	304	304
PALISADES	PWR	651	651	651	651	260	260	260	260
OCONEE 1&2	PWR	1857	1857	1857	1857	860	860	860	860
ROBINSON 2	PWR	648	648	648	648	272	272	272	272
BRUNSWICK 1	BWR	2543	2543	2543	2543	475	475	475	475
LASALLE CTY 1&2	BWR	6447	6637	6799	7135	1173	1208	1238	1299
OCONEE 3	PWR	818	818	818	818	379	379	379	379
LACROSSE	BWR	205	205	205	205	22	22	22	22
CALVERT CLF 1&2	PWR	1984	1984	1984	1984	709	709	709	709
PILGRIM 1	BWR	1255	1255	1255	1255	221	221	221	221
BRUNSWICK 2	BWR	2316	2316	2316	2316	433	433	433	433
PRAIRIE ISL 1&2	PWR	1267	1267	1267	1267	449	449	449	449
ZION 1&2	PWR	1512	1512	1512	1512	691	691	691	691
BYRON 1&2	PWR	2069	2142	2229	2374	875	906	943	1004
INDIAN PT 2	PWR	647	647	647	647	292	292	292	292
BIG RDCK 1	BWR	118	118	118	118	15	15	15	15
OYSTER CRK 1	BWR	953	953	953	953	170	170	170	170
FORT CALHOUN	PWR	420	420	420	420	149	149	149	149
SAN ONOFRE 1,2,&3	PWR	2448	2448	2609	2609	974	974	1039	1039
POINT BEACH 1&2	PWR	848	848	848	848	306	306	306	306
BRAIDWOOD 1&2	PWR	1911	2089	2176	2257	808	884	920	955
BEAVER VALLEY 1	PWR	616	616	616	616	286	286	286	286
MAINE YANKEE	PWR	544	544	544	544	208	208	208	208
LIMERICK 1	BWR	2373	2560	2560	2725	421	454	454	483
SEQUOYAH 1&2	PWR	1692	1761	1828	1943	779	810	838	894
ARK NUCLEAR 1	PWR	424	424	424	424	197	197	197	197
NINE MILE PT1	BWR	854	854	854	854	147	147	147	147
MILLSTONE 2	PWR	564	564	564	564	215	215	215	215
DAVIS-BESSE 1	PWR	659	659	659	659	309	309	309	309
ENRICO FERMI2	BWR	2370	2621	2621	2844	431	477	477	518
PEACHBOTTOM 2	BWR	1792	1792	1792	1792	318	318	318	318
FITZPATRICK	BWR	1527	1527	1527	1527	271	271	271	271
SALEM 1	PWR	749	749	749	749	344	344	344	344
HADDAM NECK	PWR	192	192	192	192	70	70	70	70
COOK 1&2	PWR	1589	1589	1589	1589	688	688	688	688
DUANE ARNOLD	BWR	954	954	954	954	170	170	170	170
COOPER STN	BWR	1281	1281	1281	1281	233	233	233	233
PEACHBOTTOM 3	BWR	1582	1582	1582	1582	280	280	280	280
WASH NUCLEAR2	BWR	2293	2422	2546	2655	464	427	448	468
DRESDEN 2	BWR	797	797	797	797	134	134	134	134
GRAND GULF 1	BWR	2625	2625	2822	3026	463	463	498	534
NORTH ANNA 1&2	PWR	1146	1382	1382	1382	529	602	602	602
KEWAUNEE	PWR	383	383	383	383	146	146	146	146
ARK NUCLEAR 2	PWR	531	531	531	531	222	222	222	222
HATCH 1&2	BWR	3282	3282	3282	3282	594	594	594	594
SUSQUEHANNA 1&2	BWR	3861	4062	4463	4580	667	702	761	791
SALEM 2	PWR	697	697	759	759	321	321	350	350
GINNA	PWR	196	196	196	196	69	69	69	69

TABLE A.6. Upper Reference Case, Maximum At-Reactor Capacity--
Projected Cumulative Storage Requirements (cont'd)

		ASSEMBLIES				MTIHM			
POOL		2017	2018	2019	2020	2017	2018	2019	2020
VT YANKEE 1	BWR	721	721	721	721	128	128	128	128
DRESDEN 3	BWR	650	650	650	650	109	109	109	109
BROWNS FERRY3	BWR	1808	1808	1974	1974	328	328	358	358
WATTS BAR 1&2	PWR	1363	1363	1527	1527	629	629	705	705
ST LUCIE 2	PWR	582	644	644	699	226	251	251	272
TURKEY PT 3&4	PWR	471	471	471	471	216	216	216	216
BROWNS FERRY1&2	BWR	2919	3312	3312	4251	530	601	601	772
LIMERICK 2	BWR	1454	1454	1675	1675	258	258	297	297
CRYSTAL RVR 3	PWR	284	284	284	284	132	132	132	132
TROJAN	PWR	306	306	306	306	142	142	142	142
RANCHO SECO 1	PWR	253	253	253	253	117	117	117	117
CLINTON 1	BWR	1002	1002	1181	1345	185	185	219	249
CALLAWAY 1	PWR	414	414	475	539	176	176	202	230
PALO VERDE 1	PWR	381	448	448	519	155	182	182	211
PALO VERDE 3	PWR	486	569	665	665	199	231	271	271
QUAD CITIES 1&2	BWR	1291	1291	1291	1291	228	228	228	228
MCGUIRE 1	PWR	371	435	488	488	157	184	206	206
WATERFORD 3	PWR	403	479	479	547	169	201	201	229
INDIAN PT 3	PWR	261	261	261	261	119	119	119	119
FARLEY 1	PWR	276	276	276	276	128	128	128	128
PALO VERDE 2	PWR	344	425	481	481	146	173	196	196
MCGUIRE 2	PWR	398	398	443	498	165	165	187	211
RVR BEND 1	BWR	817	817	957	1103	151	151	177	204
THREE MILE ISL 1	PWR	91	91	91	91	42	42	42	42
VOGTLE 1&2	PWR	586	674	761	921	272	313	353	427
WOLF CREEK 1	PWR	198	263	263	321	92	122	122	149
SHOREHAM	BWR	614	810	810	987	112	148	148	180
SEABROOK 1	PWR	268	268	327	389	128	128	151	179
HOPE CREEK	BWR	683	883	1054	1054	127	164	196	196
SUMMER 1	PWR	169	228	228	279	78	106	106	129
FARLEY 2	PWR	164	164	164	164	76	76	76	76
PERRY 1	BWR	619	619	784	954	110	110	139	169
BEAVER VALLEY 2	PWR	166	243	318	318	77	112	147	147
NINE MILE PT2	BWR	527	527	812	812	96	96	138	138
BELLEFONTE 1	PWR	46	46	133	133	21	21	61	61
DIABLO CANYON 2	PWR	0	15	15	80	0	6	6	34
DIABLO CANYON 1	PWR	0	22	22	87	0	9	9	37
BELLEFONTE 2	PWR	0	59	59	148	0	27	27	64
COMANCHE PK 1&2	PWR	0	0	71	194	0	0	29	78
PWR TOTAL		36432	39052			15109	16849		
		37726	40379			16072	17226		
BWR TOTAL		54167	58065			9784	10402		
		55914	60075			10019	10909		
TOTAL		90599	97117			25213	27851		
		93640	101254			26091	28135		

TABLE A.7. Upper Reference Case, Maximum At-Reactor Capacity Plus Transshipment--Projected Annual Storage Requirements

POOL		ASSEMBLIES										MTIHM									
		1987	1987	1988	1990	1991	1992	1993	1994	1995	1996	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
MILLSTONE 1	BWR	103	0	177	0	177	0	169	0	147	0 :	18	0	32	0	32	0	30	0	26	0
PALISADES	PWR	0	5	0	52	0	60	0	58	50	0 :	0	2	0	20	0	24	0	23	20	0
BRUNSWICK 2	BWR	0	0	0	0	33	0	162	152	0	164 :	0	0	0	0	6	0	30	30	0	31
BRUNSWICK 1	BWR	0	0	0	0	0	164	0	161	138	0 :	0	0	0	0	0	31	0	30	26	0
LACROSSE	BWR	0	0	0	0	0	13	24	24	24	0 :	0	0	0	0	0	1	3	3	3	0
CALVERT CLF 1&2	PWR	0	0	0	0	0	0	10	82	72	87 :	0	0	0	0	0	0	4	31	27	32
PILGRIM 1	BWR	0	0	0	0	0	0	71	0	147	0 :	0	0	0	0	0	0	12	0	26	0
PRAIRIE ISL 1&2	PWR	0	0	0	0	0	0	0	18	60	36 :	0	0	0	0	0	0	0	6	21	13
INDIAN PT 2	PWR	0	0	0	0	0	0	0	0	0	36 :	0	0	0	0	0	0	0	0	0	16
BIG ROCK 1	BWR	0	0	0	0	0	0	0	0	0	8 :	0	0	0	0	0	0	0	0	0	1
OYSTER CRK 1	BWR	0	0	0	0	0	0	0	0	0	89 :	0	0	0	0	0	0	0	0	0	16
FORT CALHOUN	PWR	0	0	0	0	0	0	0	0	0	10 :	0	0	0	0	0	0	0	0	0	4
SAN ONOFRE 1,2,&3	PWR	0	0	0	0	0	0	0	0	0	74 :	0	0	0	0	0	0	0	0	0	29
POINT BEACH 1&2	PWR	0	0	0	0	0	0	0	0	0	17 :	0	0	0	0	0	0	0	0	0	6
PWR TOTAL		0		0		0		10		182		0		0		0		4		60	
			5		52		60		150		260		2		20		24		60		100
BWR TOTAL		103		177		210		420		450		10		32		30		75		60	
			0		0		177		340		261		0		0		32		63		40
TOTAL		103		177		210		430		630		10		32		30		70		140	
			5		52		230		500		520		2		20		50		120		140

TABLE A.7. Upper Reference Case, Maximum At-Reactor Capacity Plus Transshipment--Projected Annual Storage Requirements (cont'd)

POOL		ASSEMBLIES										MTIHM									
		1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
MILLSTONE 1	BWR	149	0	163	0	184	0	143	0	158	144	26	0	29	0	33	0	25	0	28	26
PALISADES	PWR	51	0	56	0	63	57	0	59	0	49	26	0	22	0	25	23	0	24	0	20
BRUNSWICK 2	BWR	143	0	156	0	173	159	0	164	149	0	27	0	29	0	32	30	0	31	28	0
BRUNSWICK 1	BWR	142	153	0	124	0	159	138	0	148	137	27	29	0	23	0	30	26	0	28	26
LACROSSE	BWR	24	24	24	24	24	0	0	0	0	0	3	3	3	3	3	0	0	0	0	0
CALVERT CLF 1&2	PWR	73	77	80	66	90	82	70	83	78	71	27	26	30	25	34	31	26	31	29	27
PILGRIM 1	BWR	147	0	159	0	0	166	0	166	0	140	26	0	28	0	0	29	0	29	0	25
PRAIRIE ISL 1&2	PWR	61	65	67	55	37	68	59	69	64	29	22	23	24	19	13	24	21	24	23	10
INDIAN PT 2	PWR	52	0	57	0	65	58	0	60	0	51	23	0	26	0	29	26	0	27	0	23
BIG ROCK 1	BWR	0	17	16	12	18	16	15	16	0	0	0	2	2	2	2	2	2	2	0	0
OYSTER CRK 1	BWR	111	0	115	94	0	120	105	0	112	105	20	0	21	17	0	21	19	0	20	19
FORT CALHOUN	PWR	34	0	37	30	0	38	33	0	37	34	12	0	13	11	0	13	12	0	13	12
SAN ONOFRE 1,2,&3	PWR	83	131	90	111	103	137	80	140	89	199	33	51	36	44	42	54	32	55	36	79
POINT BEACH 1&2	PWR	49	52	53	43	60	54	47	56	51	48	18	19	19	16	22	19	17	20	18	17
ZION 1&2	PWR	10	58	60	98	67	61	105	62	58	105	5	27	27	45	31	28	48	28	27	48
BYRON 1&2	PWR	64	81	120	57	50	139	62	62	140	61	27	34	53	24	21	59	26	26	59	26
BRAIDWOOD 1&2	PWR	102	61	56	172	49	60	150	61	71	62	77	34	24	73	21	29	63	26	30	35
MAINE YANKEE	PWR	20	0	60	50	0	62	53	0	50	0	11	0	23	19	0	24	20	0	22	0
DAVIS-BESSE 1	PWR	0	49	0	41	50	0	44	52	0	44	0	23	0	19	20	0	21	24	0	21
ENRICO FERMI2	BWR	0	0	120	0	272	0	214	251	0	215	0	0	22	0	50	0	39	46	0	39
TURKEY PT 3&4	PWR	0	0	40	32	45	41	70	41	39	50	0	0	21	15	21	19	32	19	18	20
ST LUCIE 1	PWR	0	0	64	52	0	65	55	0	62	55	0	0	24	20	0	25	21	0	24	21
ST LUCIE 2	PWR	0	0	60	0	67	61	0	62	59	0	0	0	23	0	26	24	0	24	23	0
FITZPATRICK	BWR	0	0	52	119	0	151	120	0	144	130	0	0	9	21	0	27	23	0	20	23
ARK NUCLEAR 2	PWR	0	0	0	23	0	50	49	0	55	0	0	0	0	10	0	24	20	0	23	0
ARK NUCLEAR 1	PWR	0	0	0	0	50	0	45	0	40	45	0	0	0	0	20	0	21	0	22	21
DRESDEN 2	BWR	0	0	0	90	140	0	115	130	0	110	0	0	0	10	25	0	19	23	0	19
DRESDEN 3	BWR	0	0	0	107	149	0	110	137	0	110	0	0	0	10	25	0	19	23	0	19
QUAD CITIES 1&2	BWR	0	0	0	100	301	130	117	270	120	117	0	0	0	19	53	24	21	49	23	21
LASALLE CTY 1&2	BWR	0	0	0	150	200	374	101	191	355	101	0	0	0	27	37	60	29	35	65	29
HADDAM NECK	PWR	0	0	0	19	49	0	39	47	0	30	0	0	0	7	10	0	14	17	0	14
COOK 1&2	PWR	0	0	0	47	76	75	50	76	130	59	0	0	0	20	35	30	27	31	59	27
DUANE ARNOLD	BWR	0	0	0	25	0	101	00	0	103	07	0	0	0	4	0	10	10	0	10	15
COOPER STN	BWR	0	0	0	73	105	95	03	07	07	02	0	0	0	13	19	17	15	10	10	15
PEACHBOTTOM 2	BWR	0	0	0	3	0	193	100	0	104	0	0	0	0	1	0	34	29	0	33	0
PEACHBOTTOM 3	BWR	0	0	0	149	0	107	0	102	170	0	0	0	0	20	0	33	0	34	32	0
LIMERICK 1	BWR	0	0	0	149	200	0	153	107	0	159	0	0	0	20	37	0	27	33	0	20
LIMERICK 2	BWR	0	0	0	0	125	173	0	150	0	100	0	0	0	0	22	31	0	20	0	19
WASH NUCLEAR2	BWR	0	0	0	52	140	143	107	140	117	114	0	0	0	9	20	25	19	20	21	20
GRAND GULF 1	BWR	0	0	0	0	242	220	0	232	217	0	0	0	0	0	43	40	0	41	30	0
SALEM 2	PWR	0	0	0	0	19	71	0	72	00	0	0	0	0	0	9	33	0	34	31	0
SALEM 1	PWR	0	0	0	0	0	00	59	0	05	59	0	0	0	0	0	31	27	0	30	27
KEWAUNEE	PWR	0	0	0	0	0	32	27	32	30	27	0	0	0	0	2	12	10	12	11	10
HATCH 1&2	BWR	0	0	0	0	0	7	143	170	310	144	0	0	0	0	0	1	27	32	59	27
SUSQUEHANNA 1&2	BWR	0	0	0	0	0	11	109	403	107	170	0	0	0	0	0	2	29	70	32	29
GINNA	PWR	0	0	0	0	0	9	23	29	25	23	0	0	0	0	0	3	0	10	9	0
VT YANKEE 1	BWR	0	0	0	0	0	59	0	114	100	0	0	0	0	0	0	11	0	20	19	0
BROWNS FERRY3	BWR	0	0	0	0	0	0	0	114	0	107	0	0	0	0	0	0	0	21	0	30
BROWNS FERRY1&2	BWR	0	0	0	0	0	0	0	0	103	107	0	0	0	0	0	0	0	0	33	30

TABLE A.7. Upper Reference Case, Maximum At-Reactor Capacity Plus Transshipment--Projected Annual Storage Requirements (cont'd)

POOL		ASSEMBLIES										MTIHM									
		1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
BELLEFONTE 2	PWR	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	7
PWR TOTAL		687		912		958		1128		1233		275		367		406		467		507	
			594		896		1304		1063		1151		237		365		531		433		478
BWR TOTAL		716		805		2299		2161		2872		128		142		406		384		517	
			194		1287		2478		3152		2577		33		226		444		559		460
TOTAL		1403		1717		3257		3289		4105		403		509		806		852		1024	
			788		2183		3782		4215		3728		270		591		974		992		938

TABLE A.7. Upper Reference Case, Maximum At-Reactor Capacity Plus Transshipment--Projected Annual Storage Requirements (cont'd)

POOL		ASSEMBLIES										MTIHM									
		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
MILLSTONE 1	BWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PALISADES	PWR	0	50	0	41	0	0	0	0	0	0	0	20	0	16	0	0	0	0	0	0
BRUNSWICK 2	BWR	101	137	0	116	165	0	165	159	0	0	34	26	0	22	31	0	31	30	0	0
BRUNSWICK 1	BWR	0	138	203	0	166	195	0	159	146	0	0	26	38	0	31	36	0	30	27	0
LACROSSE	BWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CALVERT CLF 1&2	PWR	92	70	103	56	85	101	84	217	73	0	34	26	39	22	32	37	31	81	27	0
PILGRIM 1	BWR	0	141	0	110	0	0	0	0	0	0	0	25	0	21	0	0	0	0	0	0
PRAIRIE ISL 1&2	PWR	77	58	87	48	71	83	155	0	0	0	27	21	31	17	25	29	55	0	0	0
INDIAN PT 2	PWR	64	0	73	0	59	72	0	0	0	0	29	0	33	0	27	33	0	0	0	0
BIG ROCK 1	BWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OYSTER CRK 1	BWR	0	101	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0
FORT CALHOUN	PWR	0	34	48	0	39	46	0	0	0	0	0	12	17	0	14	16	0	0	0	0
SAN ONOFRE 1,2,&3	PWR	0	316	117	68	98	114	95	92	85	95	0	122	47	27	39	46	38	37	34	38
POINT BEACH 1&2	PWR	61	47	69	141	0	0	0	0	0	0	22	17	25	51	0	0	0	0	0	0
ZION 1&2	PWR	70	52	155	44	64	149	193	0	0	0	32	24	71	20	29	68	88	0	0	0
BYRON 1&2	PWR	102	123	90	91	148	87	87	142	66	93	43	52	38	38	63	37	37	60	27	39
BRAIDWOOD 1&2	PWR	102	61	146	91	74	102	87	69	103	93	43	26	62	38	31	69	37	29	69	39
MAINE YANKEE	PWR	70	53	0	45	65	0	0	0	0	0	27	20	0	17	25	0	0	0	0	0
DAVIS-BESSE 1	PWR	57	0	65	37	0	62	52	0	47	53	27	0	30	17	0	29	24	0	22	25
ENRICO FERMI2	BWR	0	211	0	100	253	0	255	0	223	0	0	30	0	33	40	0	40	0	41	0
TURKEY PT 3&4	PWR	40	35	82	29	41	157	0	0	0	0	21	10	30	13	19	72	0	0	0	0
ST LUCIE 1	PWR	0	55	82	0	67	80	0	64	15	0	0	21	31	0	20	31	0	24	0	0
ST LUCIE 2	PWR	69	53	0	44	63	0	63	61	0	64	27	21	0	17	25	0	25	24	0	25
FITZPATRICK	BWR	0	129	189	0	153	184	0	148	0	0	0	23	34	0	27	33	0	20	0	0
ARK NUCLEAR 2	PWR	64	49	0	43	59	0	60	57	0	59	27	20	0	10	25	0	25	24	0	25
ARK NUCLEAR 1	PWR	0	44	0	30	53	0	52	0	0	0	0	20	0	17	25	0	24	0	0	0
DRESDEN 2	BWR	151	0	171	0	0	0	0	0	0	0	25	0	29	0	0	0	0	0	0	0
DRESDEN 3	BWR	151	0	170	0	0	0	0	0	0	0	25	0	20	0	0	0	0	0	0	0
QUAD CITIES 1&2	BWR	300	110	173	197	140	167	712	0	0	0	54	20	30	35	25	29	125	0	0	0
LASALLE CTY 1&2	BWR	210	320	230	135	300	231	192	371	170	192	30	50	43	25	70	42	35	60	31	35
HADDAM NECK	PWR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COOK 1&2	PWR	84	123	86	54	71	92	147	67	60	270	34	53	40	22	33	37	63	31	27	120
DUANE ARNOLD	BWR	0	80	130	0	105	120	0	101	0	0	0	10	23	0	19	22	0	10	0	0
COOPER STN	BWR	99	01	112	69	91	117	90	0	0	0	10	15	20	13	17	21	10	0	0	0
PEACHBOTTOM 2	BWR	210	167	0	139	200	0	200	0	0	0	39	30	0	25	35	0	35	0	0	0
PEACHBOTTOM 3	BWR	211	101	0	135	193	0	192	0	0	0	37	29	0	24	34	0	34	0	0	0
LIMERICK 1	BWR	207	0	233	133	0	225	0	101	107	0	37	0	41	24	0	40	0	32	30	0
LIMERICK 2	BWR	200	0	109	0	102	207	0	179	0	239	40	0	34	0	34	37	0	32	0	42
WASH NUCLEAR2	BWR	102	107	100	07	137	175	130	140	111	137	29	19	32	15	24	31	23	25	20	24
GRAND GULF 1	BWR	250	190	0	104	235	0	234	220	0	234	45	35	0	29	41	0	41	40	0	41
SALEM 2	PWR	01	02	0	51	74	0	74	71	0	74	37	20	0	23	34	0	34	33	0	34
SALEM 1	PWR	0	50	07	0	71	03	0	07	01	0	0	27	40	0	33	30	0	31	20	0
KEWAUNEE	PWR	35	27	40	22	33	39	33	0	0	0	13	10	15	0	13	15	13	0	0	0
HATCH 1&2	BWR	100	207	211	121	344	200	172	724	0	171	35	53	39	22	04	30	32	134	0	32
SUSQUEHANNA 1&2	BWR	445	109	250	204	205	241	405	197	179	400	77	29	43	49	35	42	70	34	31	70
GINNA	PWR	30	23	34	0	0	0	0	0	0	0	11	0	12	0	0	0	0	0	0	0
VT YANKEE 1	BWR	127	90	0	02	0	137	0	0	0	0	23	17	0	15	0	24	0	0	0	0
BROWNS FERRY3	BWR	219	0	240	0	201	237	0	192	170	0	40	0	45	0	30	43	0	35	32	0
BROWNS FERRY1&2	BWR	437	100	247	279	0	470	199	193	353	199	79	31	45	51	0	00	30	35	04	30

TABLE A.7. Upper Reference Case, Maximum At-Reactor Capacity Plus Transshipment--Projected Annual Storage Requirements (cont'd)

POOL		ASSEMBLIES										MTIHM									
		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
BELLEFONTE 2	PWR	103	0	72	91	0	80	0	70	82	0	47	0	33	41	0	36	0	32	37	0
SEQUOYAH 1&2	PWR	76	117	86	49	70	167	70	87	62	141	35	54	39	23	32	77	32	31	29	65
WATTS BAR 1&2	PWR	0	116	139	0	143	0	166	132	0	176	0	54	64	0	66	0	77	61	0	81
BELLEFONTE 1	PWR	0	61	72	0	74	0	88	76	0	92	0	28	33	0	34	0	46	32	0	42
BEAVER VALLEY 2	PWR	46	54	0	79	0	70	76	0	71	82	21	25	0	36	0	32	35	0	33	38
BEAVER VALLEY 1	PWR	0	51	74	0	61	0	60	58	0	0	0	24	34	0	28	0	28	27	0	0
CRYSTAL RVR 3	PWR	23	0	78	0	64	0	63	0	56	0	11	0	36	0	30	0	29	0	26	0
TROJAN	PWR	13	35	52	29	43	50	43	41	0	0	6	16	24	13	20	23	20	19	0	0
RANCHO SECO 1	PWR	35	0	65	38	0	64	0	51	0	0	16	0	30	18	0	30	0	24	0	0
CLINTON 1	BWR	0	10	0	185	151	0	179	144	0	190	0	2	0	34	28	0	33	27	0	35
NINE MILE PT1	BWR	0	114	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0
NINE MILE PT2	BWR	0	0	239	0	245	0	267	0	267	0	0	0	41	0	42	0	49	0	45	0
CALLAWAY 1	PWR	0	10	0	52	74	0	74	70	0	74	0	0	0	22	32	0	32	30	0	32
NORTH ANNA 1&2	PWR	0	73	60	39	112	67	55	109	49	56	0	34	31	10	52	31	25	50	23	26
SURRY 1&2	PWR	0	0	57	64	46	210	0	0	0	0	0	0	26	29	21	96	0	0	0	0
PALO VERDE 3	PWR	0	0	57	100	0	74	96	0	74	103	0	0	22	42	0	29	40	0	29	43
PALO VERDE 1	PWR	0	0	0	0	81	80	0	79	59	0	0	0	0	0	34	32	0	33	23	0
PALO VERDE 2	PWR	0	0	0	40	0	97	67	0	72	67	0	0	0	19	0	40	26	0	30	26
WATERFORD 3	PWR	0	0	30	0	70	92	0	74	67	0	0	0	10	0	33	39	0	31	20	0
INDIAN PT 3	PWR	0	0	70	47	0	80	0	64	0	0	0	0	32	21	0	30	0	29	0	0
RVR BEND 1	BWR	0	0	0	30	169	0	169	161	0	173	0	0	0	6	31	0	31	30	0	32
THREE MILE ISL 1	PWR	0	0	0	0	17	74	0	0	0	0	0	0	0	0	0	34	0	0	0	0
FARLEY 1	PWR	0	0	0	0	0	60	57	0	53	57	0	0	0	0	0	20	26	0	25	26
FARLEY 2	PWR	0	0	0	0	0	0	60	54	0	60	0	0	0	0	0	0	20	25	0	26
OCONEE 1&2	PWR	0	0	0	0	0	61	177	0	0	0	0	0	0	0	0	20	82	0	0	0
OCONEE 3	PWR	0	0	0	0	0	62	0	0	0	0	0	0	0	0	0	29	0	0	0	0
MCGUIRE 1	PWR	0	0	0	0	0	76	63	61	0	63	0	0	0	0	0	32	27	26	0	27
MCGUIRE 2	PWR	0	0	0	0	0	75	0	61	50	63	0	0	0	0	0	32	0	26	24	27
CATAWBA 1	PWR	0	0	0	0	0	75	64	61	0	65	0	0	0	0	0	32	27	26	0	27
CATAWBA 2	PWR	0	0	0	0	0	76	63	60	0	63	0	0	0	0	0	32	27	25	0	27
VOGTLE 1&2	PWR	0	0	0	0	0	45	60	141	61	91	0	0	0	0	0	21	41	65	30	42
WOLF CREEK 1	PWR	0	0	0	0	0	29	0	64	59	0	0	0	0	0	0	13	0	30	27	0
SHOREHAM	BWR	0	0	0	0	0	129	0	154	176	0	0	0	0	0	0	24	0	20	32	0
MILLSTONE 2	PWR	0	0	0	0	0	67	0	51	0	0	0	0	0	0	0	20	0	19	0	0
MILLSTONE 3	PWR	0	0	0	0	0	0	74	71	0	74	0	0	0	0	0	0	34	33	0	34
SEABROOK 1	PWR	0	0	0	0	0	22	0	53	61	70	0	0	0	0	0	10	0	24	20	32
HOPE CREEK	BWR	0	0	0	0	0	99	202	0	179	203	0	0	0	0	0	10	30	0	33	30
SUMMER 1	PWR	0	0	0	0	0	10	0	57	53	0	0	0	0	0	0	0	0	20	25	0
PERRY 1	BWR	0	0	0	0	0	0	113	0	174	196	0	0	0	0	0	0	20	0	31	35
PWR TOTAL		1400	2292		2096	2686		1532				590	990		903	1170		665			
			1918	1579		3198	2526		2198				806	667		1384	1098		960		
BWR TOTAL		3826	3181		3731	3896		2323				680	565		671	697		417			
			2937	2454		3152	3429		2340				520	440		567	622		420		
TOTAL		5226	5473		5827	6582		3855				1271	1555		1574	1867		1082			
			4855	4033		6350	5955		4538				1334	1107		1951	1721		1389		

TABLE A.7. Upper Reference Case, Maximum At-Reactor Capacity Plus Transshipment--Projected Annual Storage Requirements (contd)

POOL		ASSEMBLIES 2017	2018	2019	2020	MTIHM 2017	2018	2019	2020
SAN ONOFRE 1,2,&3	PWR	133	0	161	0	54	0	65	0
BYRON 1&2	PWR	121	73	87	145	51	31	37	61
BRAIDWOOD 1&2	PWR	76	178	87	81	30	75	37	34
ENRICO FERMI2	BWR	176	251	0	223	32	46	0	41
ST LUCIE 2	PWR	44	62	0	55	17	24	0	21
LASALLE CTY 1&2	BWR	264	198	162	336	48	35	29	61
LIMERICK 1	BWR	129	187	0	165	23	33	0	29
LIMERICK 2	BWR	178	0	221	0	32	0	39	0
WASH NUCLEAR2	BWR	102	129	124	109	18	23	22	19
GRAND GULF 1	BWR	161	0	197	204	28	0	35	36
SALEM 2	PWR	51	0	62	0	23	0	28	0
SUSQUEHANNA 1&2	BWR	140	201	341	177	24	35	59	31
BROWNS FERRY3	BWR	138	0	166	764	25	0	30	139
BROWNS FERRY1&2	BWR	136	393	0	175	25	71	0	32
BELLEFONTE 2	PWR	76	89	0	81	32	41	0	37
SEQUOYAH 1&2	PWR	49	69	59	123	22	32	27	57
WATTS BAR 1&2	PWR	134	0	164	0	62	0	76	0
BELLEFONTE 1	PWR	76	0	87	0	32	0	40	0
BEAVER VALLEY 2	PWR	0	77	75	0	0	35	35	0
CLINTON 1	BWR	143	0	179	184	26	0	33	30
NINE MILE PT2	BWR	229	0	285	0	39	0	49	0
CALLAWAY 1	PWR	52	0	61	64	22	0	26	27
NORTH ANNA 1&2	PWR	38	156	0	0	18	72	0	0
PALO VERDE 3	PWR	0	83	96	0	0	33	40	0
PALO VERDE 1	PWR	57	67	0	71	24	26	0	30
PALO VERDE 2	PWR	0	81	56	0	0	34	22	0
WATERFORD 3	PWR	54	76	0	68	23	32	0	29
RVR BEND 1	BWR	116	0	140	146	21	0	26	27
FARLEY 2	PWR	39	0	0	0	18	0	0	0
MCGUIRE 1	PWR	44	64	53	0	19	27	22	0
MCGUIRE 2	PWR	43	0	53	55	18	0	22	23
CATAWBA 1	PWR	44	62	53	0	19	26	22	0
CATAWBA 2	PWR	43	63	0	55	18	27	0	23
VOGTLE 1&2	PWR	140	88	87	160	65	41	40	74
WOLF CREEK 1	PWR	46	65	0	58	21	30	0	27
SHOREHAM	BWR	153	196	0	177	28	36	0	32
MILLSTONE 3	PWR	51	0	62	64	24	0	29	30
SEABROOK 1	PWR	54	0	67	62	25	0	31	29
HOPE CREEK	BWR	0	200	171	0	0	37	32	0
SUMMER 1	PWR	41	59	0	51	19	27	0	24
PERRY 1	BWR	136	0	165	170	24	0	29	30
DIABLO CANYON 1	PWR	0	37	0	65	0	16	0	28
DIABLO CANYON 2	PWR	0	0	0	65	0	0	0	28
COMANCHE PK 1&2	PWR	0	0	71	123	0	0	29	50
PWR TOTAL		1488	1449	1441	1446	655	629	628	630
BWR TOTAL		2200	1747	2151	2810	394	316	383	507
TOTAL		3688	3196	3592	4256	1048	944	1011	1137

TABLE A.8. Upper Reference Case, Maximum At-Reactor Capacity Plus Transshipment--Projected Cumulative Storage Requirements

POOL		ASSEMBLIES										MTIHM									
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
MILLSTONE 1	BWR	103	103	280	280	457	457	626	626	773	773	10	10	50	50	81	81	111	111	137	137
PALISADES	PWR	0	5	5	57	57	117	117	175	225	225	0	2	2	22	22	46	46	69	89	89
BRUNSWICK 2	BWR	0	0	0	0	33	33	195	357	357	521	0	0	0	0	6	6	36	67	67	97
BRUNSWICK 1	BWR	0	0	0	0	0	164	164	326	463	463	0	0	0	0	0	31	31	61	87	87
LACROSSE	BWR	0	0	0	0	0	13	37	61	85	85	0	0	0	0	0	1	4	7	9	9
CALVERT CLF 1&2	PWR	0	0	0	0	0	0	18	92	164	251	0	0	0	0	0	0	4	34	61	94
PILGRIM 1	BWR	0	0	0	0	0	0	71	71	218	218	0	0	0	0	0	0	12	12	38	38
PRAIRIE ISL 1&2	PWR	0	0	0	0	0	0	0	18	78	114	0	0	0	0	0	0	0	6	28	40
INDIAN PT 2	PWR	0	0	0	0	0	0	0	0	0	36	0	0	0	0	0	0	0	0	0	16
BIG ROCK 1	BWR	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	1
OYSTER CRK 1	BWR	0	0	0	0	0	0	0	0	0	89	0	0	0	0	0	0	0	0	0	16
FORT CALHOUN	PWR	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	4
SAN ONOFRE 1,2,&3	PWR	0	0	0	0	0	0	0	0	6	74	0	0	0	0	0	0	0	0	0	29
POINT BEACH 1&2	PWR	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	6
PWR TOTAL		0	5	5	57	57	117	127	285	467	727	0	2	2	22	22	46	50	110	178	278
BWR TOTAL		103	103	280	280	490	667	1093	1440	1896	2157	10	10	50	50	87	119	195	258	338	386
TOTAL		103	108	285	337	547	784	1220	1725	2363	2884	10	20	52	72	110	165	244	368	516	664

TABLE A.8. Upper Reference Case, Maximum At-Reactor Capacity Plus Transshipment--Projected Cumulative Storage Requirements (cont'd)

		ASSEMBLIES										MTIHM									
POOL		1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
MILLSTONE 1	BWR	922	922	1085	1085	1269	1269	1412	1412	1570	1714	164	164	193	193	225	225	251	251	279	304
PALISADES	PWR	276	276	332	332	395	452	452	511	511	560	110	110	132	132	157	180	180	204	204	223
BRUNSWICK 2	BWR	664	664	828	828	993	1152	1152	1316	1485	1485	124	124	153	153	186	215	215	246	274	274
BRUNSWICK 1	BWR	605	758	758	882	882	1041	1179	1179	1327	1464	113	142	142	165	165	195	220	220	248	274
LACROSSE	BWR	109	133	157	181	205	205	205	205	205	205	12	14	17	20	22	22	22	22	22	22
CALVERT CLF 1&2	PWR	324	481	481	547	637	719	789	872	950	1021	121	147	177	201	235	266	292	323	352	379
PILGRIM 1	BWR	365	365	524	524	524	696	696	656	856	996	64	64	92	92	92	122	122	151	151	176
PRAIRIE ISL 1&2	PWR	175	240	307	362	399	467	526	595	659	666	62	85	109	128	141	166	186	211	234	244
INDIAN PT 2	PWR	88	88	145	145	210	268	268	328	328	379	40	40	65	65	95	121	121	148	148	171
BIG ROCK 1	BWR	8	25	41	53	71	87	102	118	118	118	1	3	5	7	9	11	13	15	15	15
OYSTER CRK 1	BWR	200	200	315	409	409	529	635	635	747	852	36	36	56	73	73	94	113	113	133	152
FORT CALHOUN	PWR	44	44	81	111	111	149	182	182	219	253	16	16	29	39	39	53	65	65	78	90
SAN ONOFRE 1,2,&3	PWR	157	288	378	489	592	729	809	949	1038	1237	53	114	158	194	235	289	321	376	412	491
POINT BEACH 1&2	PWR	66	118	171	214	274	328	375	431	482	536	24	43	62	77	99	118	135	156	174	191
ZION 1&2	PWR	10	68	128	228	293	354	459	521	579	684	5	31	58	103	134	162	210	238	265	313
BYRON 1&2	PWR	64	145	271	328	378	517	579	641	781	842	27	61	115	139	168	219	245	271	330	356
BRAIDWOOD 1&2	PWR	182	263	319	491	548	608	758	819	898	972	77	111	135	208	228	257	321	346	376	411
MAINE YANKEE	PWR	28	28	88	138	138	200	253	253	311	311	11	11	34	53	53	77	97	97	119	119
DAVIS-BESSE 1	PWR	0	49	49	98	146	146	196	242	242	286	0	23	23	42	68	68	89	113	113	134
ENRICO FERMI2	BWR	0	0	120	120	392	392	606	857	857	1072	0	0	22	22	71	71	110	156	156	195
TURKEY PT 3&4	PWR	0	0	46	78	123	164	234	275	314	370	0	0	21	36	56	75	107	128	144	170
ST LUCIE 1	PWR	0	0	64	116	116	181	238	238	298	353	0	0	24	44	44	69	98	98	114	135
ST LUCIE 2	PWR	0	0	60	60	127	188	188	250	309	309	0	0	23	23	49	73	73	97	120	120
FITZPATRICK	BWR	0	0	52	171	171	322	456	456	594	724	0	0	9	30	30	57	80	80	105	129
ARK NUCLEAR 2	PWR	0	0	0	23	23	81	130	130	185	185	0	0	0	10	10	34	54	54	77	77
ARK NUCLEAR 1	PWR	0	0	0	0	56	56	101	101	149	194	0	0	0	0	26	26	47	47	69	90
DRESDEN 2	BWR	0	0	0	90	246	246	361	499	499	615	0	0	0	16	41	41	66	84	84	103
DRESDEN 3	BWR	0	0	0	107	256	256	371	508	508	624	0	0	0	18	43	43	62	85	85	105
QUAD CITIES 1&2	BWR	0	0	0	108	409	545	662	940	1068	1185	0	0	0	19	72	96	117	166	188	209
LASALLE CTY 1&2	BWR	0	0	0	150	358	730	891	1082	1437	1598	0	0	0	27	65	133	162	197	262	291
HADDAM NECK	PWR	0	0	0	19	68	68	107	154	154	192	0	0	0	7	25	25	39	56	56	70
COOK 1&2	PWR	0	0	0	47	123	198	256	332	488	527	0	0	0	20	55	85	112	143	201	229
DUANE ARNOLD	BWR	0	0	0	25	25	126	214	214	317	404	0	0	0	4	4	22	38	38	56	72
COOPER STN	BWR	0	0	0	73	178	273	356	453	540	622	0	0	0	13	32	50	65	83	98	113
PEACHBOTTOM 2	BWR	0	0	0	3	3	196	362	362	546	546	0	0	0	1	1	35	64	64	97	97
PEACHBOTTOM 3	BWR	0	0	0	149	149	336	336	528	706	706	0	0	0	26	26	60	60	94	125	125
LIMERICK 1	BWR	0	0	0	149	355	355	508	695	695	854	0	0	0	26	63	63	90	123	123	151
LIMERICK 2	BWR	0	0	0	0	126	298	298	454	454	580	0	0	0	0	22	53	53	80	80	99
WASH NUCLEAR2	BWR	0	0	0	52	198	341	448	594	711	825	0	0	0	9	35	60	79	105	125	145
GRAND GULF 1	BWR	0	0	0	0	242	478	478	702	919	919	0	0	0	0	43	83	83	124	162	162
SALEM 2	PWR	0	0	0	0	19	90	90	162	230	230	0	0	0	0	9	41	41	75	107	107
SALEM 1	PWR	0	0	0	0	0	68	127	127	192	251	0	0	0	0	0	31	58	58	88	115
KEWAUNEE	PWR	0	0	0	0	0	38	85	97	127	154	0	0	0	0	2	14	25	37	48	59
HATCH 1&2	BWR	0	0	0	0	0	7	150	320	636	780	0	0	0	0	0	1	20	59	118	145
SUSQUEHANNA 1&2	BWR	0	0	0	0	0	11	180	583	776	940	0	0	0	0	0	2	31	101	133	162
GINNA	PWR	0	0	0	0	0	9	32	61	86	109	0	0	0	0	0	3	11	21	30	38
VT YANKEE 1	BWR	0	0	0	0	0	59	59	173	279	279	0	0	0	0	0	11	11	31	50	50
BROWNS FERRY3	BWR	0	0	0	0	0	0	0	114	114	281	0	0	0	0	0	0	0	21	21	51

TABLE A.8. Upper Reference Case, Maximum At-Reactor Capacity Plus Transshipment--Projected Cumulative Storage Requirements (cont'd)

		ASSEMBLIES										MTIHM									
POOL		1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
BROWNS FERRY1&2	BWR	0	0	0	0	0	0	0	0	183	350	0	0	0	0	0	0	0	0	33	64
BELLEFONTE 2	PWR	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	7
PWR TOTAL		1414	2008	2920	3816	4774	6078	7206	8289	9502	10653	553	798	1157	1522	1922	2453	2920	3354	3861	4339
BWR TOTAL		2873	3067	3872	5159	7458	9936	12097	15249	18121	20698	514	547	690	916	1322	1766	2150	2709	3225	3685
TOTAL		4287	5075	6792	8975	12232	16014	19303	23518	27623	31351	1067	1338	1847	2438	3244	4219	5070	6062	7086	8024

TABLE A.8. Upper Reference Case, Maximum At-Reactor Capacity Plus Transshipment--Projected Cumulative Storage Requirements (cont'd)

POOL		ASSEMBLIES										MTIHM									
		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
MILLSTONE 1	BWR	1714	1714	1714	1714	1714	1714	1714	1714	1714	1714	304	304	304	304	304	304	304	304	304	304
PALISADES	PWR	560	610	610	651	651	651	651	651	651	651	223	243	243	260	260	260	260	260	260	260
BRUNSWICK 2	BWR	1648	1783	1783	1899	2064	2064	2229	2388	2388	2388	308	333	333	355	386	386	417	446	446	446
BRUNSWICK 1	BWR	1464	1602	1805	1805	1971	2186	2186	2325	2471	2471	274	300	338	338	369	405	405	435	462	462
LACROSSE	BWR	205	205	205	205	205	205	205	205	205	205	22	22	22	22	22	22	22	22	22	22
CALVERT CLF 1&2	PWR	1113	1183	1286	1344	1429	1536	1614	1831	1984	1984	413	440	478	500	532	569	600	682	709	709
PILGRIM 1	BWR	996	1137	1137	1255	1255	1255	1255	1255	1255	1255	176	201	201	221	221	221	221	221	221	221
PRAIRIE ISL 1&2	PWR	765	823	910	958	1029	1112	1287	1287	1287	1287	271	292	322	339	365	394	449	449	449	449
INDIAN PT 2	PWR	443	443	516	516	575	647	647	647	647	647	200	200	233	233	260	292	292	292	292	292
BIG ROCK 1	BWR	118	118	118	118	118	118	118	118	118	118	15	15	15	15	15	15	15	15	15	15
OYSTER CRK 1	BWR	852	953	953	953	953	953	953	953	953	953	152	170	170	170	170	170	170	170	170	170
FORT CALHOUN	PWR	253	287	335	335	374	420	420	420	420	420	98	102	119	119	133	149	149	149	149	149
SAN ONOFRE 1,2,&3	PWR	1237	1553	1670	1738	1834	1948	2043	2135	2220	2315	491	613	660	688	727	773	811	848	882	921
POINT BEACH 1&2	PWR	591	638	787	848	848	848	848	848	848	848	213	230	255	306	306	306	306	306	306	306
ZION 1&2	PWR	754	806	961	1065	1069	1218	1411	1411	1411	1411	345	368	439	459	489	557	645	645	645	645
BYRON 1&2	PWR	944	1067	1157	1248	1396	1483	1578	1712	1777	1878	399	451	489	528	591	627	664	724	752	791
BRAIDWOOD 1&2	PWR	1074	1135	1281	1372	1446	1608	1695	1764	1927	2026	454	486	542	580	612	666	717	746	815	854
MAINE YANKEE	PWR	381	434	434	479	544	544	544	544	544	544	146	166	166	183	208	208	208	208	208	208
DAVIS-BESSE 1	PWR	343	343	406	445	445	507	559	559	606	659	161	161	191	208	208	237	262	262	284	309
ENRICO FERMI2	BWR	1072	1283	1283	1483	1716	1716	1971	1971	2194	2194	195	234	234	266	312	312	359	359	399	399
TURKEY PT 3&4	PWR	416	451	533	562	603	760	760	760	760	760	191	207	245	258	277	349	349	349	349	349
ST LUCIE 1	PWR	353	408	490	490	557	637	637	701	716	716	135	156	187	187	213	243	243	268	274	274
ST LUCIE 2	PWR	378	431	431	475	538	538	601	662	662	726	147	168	168	185	209	209	234	258	258	282
FITZPATRICK	BWR	724	853	1042	1042	1195	1379	1379	1527	1527	1527	129	151	185	185	212	245	245	271	271	271
ARK NUCLEAR 2	PWR	249	298	298	341	408	408	468	517	517	576	104	124	124	142	167	167	192	215	216	241
ARK NUCLEAR 1	PWR	194	236	238	274	327	327	379	379	379	379	90	110	110	127	152	152	176	176	176	176
DRESDEN 2	BWR	766	766	937	937	937	937	937	937	937	937	128	128	157	157	157	157	157	157	157	157
DRESDEN 3	BWR	775	775	945	945	945	945	945	945	945	945	130	130	158	158	158	158	158	158	158	158
QUAD CITIES 1&2	BWR	1491	1607	1780	1977	2117	2284	2996	2996	2996	2996	263	283	314	348	373	403	528	528	528	528
LASALLE CTY 1&2	BWR	1808	2128	2366	2501	2887	3118	3310	3681	3851	4043	329	387	431	455	525	568	602	670	701	736
HADDAM NECK	PWR	192	192	192	192	192	192	192	192	192	192	76	76	76	76	76	76	76	76	76	76
COOK 1&2	PWR	811	734	820	874	945	1037	1184	1251	1319	1589	263	316	355	377	416	447	516	541	568	688
DUANE ARNOLD	BWR	464	492	622	622	727	853	853	954	954	954	72	88	111	111	129	152	152	176	176	176
COOPER STN	BWR	721	802	914	983	1074	1191	1281	1281	1281	1281	131	146	167	179	196	217	233	233	233	233
PEACHBOTTOM 2	BWR	764	931	931	1078	1278	1278	1478	1478	1478	1478	135	165	165	198	225	225	261	261	261	261
PEACHBOTTOM 3	BWR	917	1078	1078	1213	1406	1406	1598	1598	1598	1598	163	191	191	215	249	249	283	283	283	283
LIMERICK 1	BWR	1061	1061	1294	1427	1427	1652	1652	1833	2000	2000	188	188	229	253	253	293	293	325	355	355
LIMERICK 2	BWR	820	820	1009	1009	1201	1408	1408	1587	1587	1826	145	145	179	179	213	250	250	281	281	324
WASH NUCLEAR2	BWR	987	1094	1274	1361	1498	1673	1803	1943	2054	2191	174	193	224	240	264	295	318	342	362	386
GRAND GULF 1	BWR	1175	1371	1371	1535	1778	1778	2004	2238	2238	2464	207	242	242	271	312	312	354	393	393	435
SALEM 2	PWR	311	373	373	424	498	498	572	643	643	717	144	172	172	196	230	230	264	296	296	330
SALEM 1	PWR	251	309	396	396	467	550	550	617	678	678	115	142	182	182	214	253	253	283	311	311
KEWAUNEE	PWR	189	216	256	278	311	350	383	383	383	383	72	82	97	106	118	133	146	146	146	146
HATCH 1&2	BWR	966	1253	1464	1585	1929	2135	2387	3031	3031	3202	179	232	272	294	358	396	428	562	562	594
SUSQUEHANNA 1&2	BWR	1385	1554	1804	2088	2293	2534	2939	3136	3315	3721	239	269	312	361	396	438	508	542	573	643
GINNA	PWR	139	162	196	196	196	196	196	196	196	196	49	57	69	69	69	69	69	69	69	69
VT YANKEE 1	BWR	406	502	502	584	584	721	721	721	721	721	72	89	89	104	104	128	128	128	128	128
BROWNS FERRY3	BWR	500	500	746	746	947	1184	1184	1378	1552	1552	91	91	135	135	172	215	215	250	282	282

TABLE A.8. Upper Reference Case, Maximum At-Reactor Capacity Plus Transshipment--Projected Cumulative Storage Requirements (cont'd)

POOL		ASSEMBLIES										MTIHM									
		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
BROWNS FERRY1&2	BWR	787	955	1202	1481	1481	1957	2156	2349	2702	2981	143	173	218	269	269	355	391	426	491	527
BELLEFONTE 2	PWR	119	119	191	282	282	362	362	432	514	514	54	54	87	129	129	165	165	197	234	234
SEQUOYAH 1&2	PWR	76	193	279	328	398	585	635	702	764	905	35	89	128	151	183	268	292	323	352	417
WATTS BAR 1&2	PWR	0	116	255	255	398	398	564	696	696	872	0	54	118	118	184	184	268	321	321	402
BELLEFONTE 1	PWR	0	61	133	133	207	207	295	365	365	457	0	28	61	61	94	94	135	166	166	208
BEAVER VALLEY 2	PWR	46	100	100	179	179	249	326	325	396	478	21	46	46	83	83	115	150	150	183	220
BEAVER VALLEY 1	PWR	0	51	125	125	186	186	246	304	304	304	0	24	58	58	86	86	114	141	141	141
CRYSTAL RVR 3	PWR	23	23	101	101	165	165	228	228	284	284	11	11	47	47	76	76	106	106	132	132
TROJAN	PWR	13	48	100	129	172	222	265	306	306	306	6	22	46	60	80	103	123	142	142	142
RANCHO SECO 1	PWR	35	35	100	138	138	202	202	253	253	253	16	16	46	64	64	94	94	117	117	117
CLINTON 1	BWR	0	10	10	195	348	348	525	669	669	859	0	2	2	36	64	64	97	124	124	159
NINE MILE PT1	BWR	0	114	114	114	114	114	114	114	114	114	0	20	20	20	20	20	20	20	20	20
NINE MILE PT2	BWR	0	0	239	239	484	484	771	771	1038	1038	0	0	41	41	82	82	131	131	177	177
CALLAWAY 1	PWR	0	18	18	76	144	144	218	288	288	362	0	8	8	30	61	61	93	123	123	154
NORTH ANNA 1&2	PWR	0	73	141	188	292	359	414	523	572	628	0	34	65	83	135	168	191	242	264	290
SURRY 1&2	PWR	0	0	57	121	167	377	377	377	377	377	0	0	26	56	77	173	173	173	173	173
PALO VERDE 3	PWR	0	0	57	157	157	231	327	327	401	504	0	0	22	64	64	93	133	133	163	206
PALO VERDE 1	PWR	0	0	0	0	81	181	181	240	299	299	0	0	0	0	34	65	65	98	122	122
PALO VERDE 2	PWR	0	0	0	48	48	145	212	212	284	351	0	0	0	19	19	59	86	86	116	142
WATERFORD 3	PWR	0	0	38	38	116	208	208	282	349	349	0	0	16	16	49	87	87	118	146	146
INDIAN PT 3	PWR	0	0	78	117	117	197	197	261	261	261	0	0	32	53	53	90	90	119	119	119
RVR BEND 1	BWR	0	0	0	30	199	199	368	529	529	702	0	0	0	6	37	37	68	98	98	130
THREE MILE ISL 1	PWR	0	0	0	0	17	91	91	91	91	91	0	0	0	0	8	42	42	42	42	42
FARLEY 1	PWR	0	0	0	0	0	60	117	117	170	227	0	0	0	0	0	28	54	54	79	105
FARLEY 2	PWR	0	0	0	0	0	0	60	114	114	174	0	0	0	0	0	0	28	53	53	81
OCONEE 1&2	PWR	0	0	0	0	0	61	238	238	238	238	0	0	0	0	0	28	110	110	110	110
OCONEE 3	PWR	0	0	0	0	0	62	62	62	62	62	0	0	0	0	0	29	29	29	29	29
MCGUIRE 1	PWR	0	0	0	0	0	76	139	200	200	263	0	0	0	0	0	32	59	85	85	111
MCGUIRE 2	PWR	0	0	0	0	0	75	75	136	192	255	0	0	0	0	0	32	32	58	81	108
CATAWBA 1	PWR	0	0	0	0	0	75	139	200	200	265	0	0	0	0	0	32	59	85	85	112
CATAWBA 2	PWR	0	0	0	0	0	76	139	199	199	262	0	0	0	0	0	32	59	84	84	111
VOGTLE 1&2	PWR	0	0	0	0	0	45	133	274	355	448	0	0	0	0	0	21	62	127	165	207
WOLF CREEK 1	PWR	0	0	0	0	0	29	29	93	152	152	0	0	0	0	0	13	13	43	70	70
SHOREHAM	BWR	0	0	0	0	0	129	129	283	461	461	0	0	0	0	0	24	24	52	84	84
MILLSTONE 2	PWR	0	0	0	0	0	67	67	118	118	118	0	0	0	0	0	26	26	45	45	45
MILLSTONE 3	PWR	0	0	0	0	0	0	74	145	145	219	0	0	0	0	0	0	34	67	67	101
SEABROOK 1	PWR	0	0	0	0	0	22	22	75	136	206	0	0	0	0	0	10	10	35	63	95
HOPE CREEK	BWR	0	0	0	0	0	99	301	301	480	683	0	0	0	0	0	18	56	56	89	127
SUMMER 1	PWR	0	0	0	0	0	18	18	75	128	128	0	0	0	0	0	8	8	35	59	59
PERRY 1	BWR	0	0	0	0	0	0	113	113	287	483	0	0	0	0	0	0	20	20	51	86
PWR TOTAL		12053	16263	19938	25822	29880						4929	6726	8295	10850	12613					
		13971	17842	23136	28348	32078						5736	7393	9679	11948	13582					
BWR TOTAL		24524	30642	36827	43875	49627						4365	5458	6570	7834	8873					
		27461	33096	39979	47304	51967						4893	5898	7137	8456	9293					
TOTAL		36577	46905	56765	69697	79507						9295	12184	14865	18683	21488					
		41432	50938	63115	75652	84045						10629	13291	16816	20404	22875					

TABLE A.8. Upper Reference Case, Maximum At-Reactor Capacity Plus Transshipment--Projected Cumulative Storage Requirements (cont'd)

POOL		ASSEMBLIES				MTIHM			
		2017	2018	2019	2020	2017	2018	2019	2020
MILLSTONE 1	BWR	1714	1714	1714	1714	304	304	304	304
PALISADES	PWR	651	651	651	651	260	260	260	260
BRUNSWICK 2	BWR	2388	2388	2388	2388	446	446	446	446
BRUNSWICK 1	BWR	2471	2471	2471	2471	462	462	462	462
LACROSSE	BWR	205	205	205	205	22	22	22	22
CALVERT CLF 1&2	PWR	1904	1904	1904	1904	709	709	709	709
PILGRIM 1	BWR	1255	1255	1255	1255	221	221	221	221
PRAIRIE ISL 1&2	PWR	1267	1267	1267	1267	449	449	449	449
INDIAN PT 2	PWR	847	847	847	847	292	292	292	292
BIG ROCK 1	BWR	118	118	118	118	15	15	15	15
OYSTER CRK 1	BWR	953	953	953	953	170	170	170	170
FORT CALHOUN	PWR	420	420	420	420	149	149	149	149
SAN ONOFRE 1,2,&3	PWR	2448	2448	2609	2609	974	974	1039	1039
POINT BEACH 1&2	PWR	848	848	848	848	306	306	306	306
ZION 1&2	PWR	1411	1411	1411	1411	645	645	645	645
BYRON 1&2	PWR	1991	2064	2151	2296	842	873	910	971
BRAIDWOOD 1&2	PWR	2090	2268	2355	2436	884	959	996	1030
MAINE YANKEE	PWR	544	544	544	544	208	208	208	208
DAVIS-BESSE 1	PWR	859	859	859	859	309	309	309	309
ENRICO FERMI2	BWR	2370	2621	2621	2844	431	477	477	518
TURKEY PT 3&4	PWR	760	760	760	760	349	349	349	349
ST LUCIE 1	PWR	716	716	716	716	274	274	274	274
ST LUCIE 2	PWR	770	832	832	887	300	324	324	345
FITZPATRICK	BWR	1527	1527	1527	1527	271	271	271	271
ARK NUCLEAR 2	PWR	576	576	576	576	241	241	241	241
ARK NUCLEAR 1	PWR	379	379	379	379	176	176	176	176
DRESDEN 2	BWR	937	937	937	937	157	157	157	157
DRESDEN 3	BWR	945	945	945	945	158	158	158	158
QUAD CITIES 1&2	BWR	2996	2996	2996	2996	528	528	528	528
LASALLE CTY 1&2	BWR	4387	4497	4659	4995	784	819	848	909
HADDAM NECK	PWR	192	192	192	192	78	78	78	78
COOK 1&2	PWR	1589	1589	1589	1589	688	688	688	688
DUANE ARNOLD	BWR	954	954	954	954	170	170	170	170
COOPER STN	BWR	1281	1281	1281	1281	233	233	233	233
PEACHBOTTOM 2	BWR	1470	1470	1470	1470	261	261	261	261
PEACHBOTTOM 3	BWR	1598	1598	1598	1598	283	283	283	283
LIMERICK 1	BWR	2129	2316	2316	2481	377	411	411	440
LIMERICK 2	BWR	2004	2004	2225	2225	355	355	394	394
WASH NUCLEAR2	BWR	2293	2422	2546	2655	404	427	448	468
GRAND GULF 1	BWR	2625	2625	2822	3026	463	463	498	534
SALEM 2	PWR	768	768	830	830	354	354	382	382
SALEM 1	PWR	678	678	678	678	311	311	311	311
KEWAUNEE	PWR	383	383	383	383	146	146	146	146
HATCH 1&2	BWR	3202	3202	3202	3202	594	594	594	594
SUSQUEHANNA 1&2	BWR	3861	4062	4463	4580	687	702	761	791
GINNA	PWR	196	196	196	196	69	69	69	69
VT YANKEE 1	BWR	721	721	721	721	128	128	128	128
BROWNS FERRY3	BWR	1690	1690	1856	2620	307	307	337	476
BROWNS FERRY1&2	BWR	3037	3430	3430	3805	551	623	623	655
BELLEFONTE 2	PWR	564	673	673	754	266	307	307	344

TABLE A.8. Upper Reference Case, Maximum At-Reactor Capacity Plus Transshipment--Projected Cumulative Storage Requirements (cont'd)

POOL		ASSEMBLIES 2017	2018	2019	2020	MTIHM 2017	2018	2019	2020
SEQUOYAH 1&2	PWR	954	1023	1082	1205	439	471	498	555
WATTS BAR 1&2	PWR	1006	1006	1170	1170	464	464	540	540
BELLEFONTE 1	PWR	527	527	614	614	240	240	280	280
BEAVER VALLEY 2	PWR	478	555	630	630	220	256	290	290
BEAVER VALLEY 1	PWR	304	304	304	304	141	141	141	141
CRYSTAL RVR 3	PWR	284	284	284	284	132	132	132	132
TROJAN	PWR	306	306	306	306	142	142	142	142
RANCHO SECO 1	PWR	253	253	253	253	117	117	117	117
CLINTON 1	BWR	1002	1002	1181	1345	185	185	219	249
NINE MILE PT1	BWR	114	114	114	114	20	20	20	20
NINE MILE PT2	BWR	1267	1267	1552	1552	216	216	264	264
CALLAWAY 1	PWR	414	414	475	539	170	170	202	230
NORTH ANNA 1&2	PWR	666	822	822	822	300	300	300	300
SURRY 1&2	PWR	377	377	377	377	173	173	173	173
PALO VERDE 3	PWR	504	587	683	683	200	230	270	270
PALO VERDE 1	PWR	356	423	423	494	140	172	172	202
PALO VERDE 2	PWR	351	432	488	488	142	170	190	190
WATERFORD 3	PWR	403	479	479	547	160	201	201	229
INDIAN PT 3	PWR	261	261	261	261	110	110	110	110
RVR BEND 1	BWR	617	617	957	1103	151	151	177	204
THREE MILE ISL 1	PWR	91	91	91	91	42	42	42	42
FARLEY 1	PWR	227	227	227	227	105	105	105	105
FARLEY 2	PWR	213	213	213	213	99	99	99	99
OCONEE 1&2	PWR	238	238	238	238	110	110	110	110
OCONEE 3	PWR	62	62	62	62	29	29	29	29
MCGUIRE 1	PWR	307	371	424	424	130	157	179	179
MCGUIRE 2	PWR	298	298	351	406	126	126	148	172
CATAWBA 1	PWR	309	371	424	424	131	157	179	179
CATAWBA 2	PWR	305	368	368	423	129	156	156	179
VOGTLE 1&2	PWR	586	674	761	921	272	313	353	427
WOLF CREEK 1	PWR	198	263	263	321	92	122	122	149
SHOREHAM	BWR	614	810	810	987	112	148	148	180
MILLSTONE 2	PWR	118	118	118	118	45	45	45	45
MILLSTONE 3	PWR	270	270	332	396	125	125	153	183
SEABROOK 1	PWR	260	260	327	389	120	120	151	179
HOPE CREEK	BWR	683	883	1054	1054	127	164	196	196
SUMMER 1	PWR	169	228	228	279	78	106	106	129
PERRY 1	BWR	619	619	784	954	110	110	139	169
DIABLO CANYON 1	PWR	0	37	37	102	0	16	16	43
DIABLO CANYON 2	PWR	0	0	0	65	0	0	0	28
COMANCHE PK 1&2	PWR	0	0	71	194	0	0	29	78
PWR TOTAL		33586	38456			14236	15493		
		35015	37982			14865	16124		
BWR TOTAL		54167	58065			9687	10385		
		55914	60875			10002	10892		
TOTAL		87733	94521			23923	25878		
		90929	98777			24868	27016		

APPENDIX B

MAP OF FEDERAL REGIONS

APPENDIX B

	Region	States
I	New England	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont
II	New York New Jersey	New Jersey, New York
III	Middle Atlantic	Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia
IV	South Atlantic	Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee
V	Midwest	Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin
VI	Southwest	Arkansas, Louisiana, New Mexico, Oklahoma, Texas
VII	Central	Iowa, Kansas, Missouri, Nebraska
VIII	North Central	Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming
IX	West	Arizona, California, Hawaii, Nevada
X	Northwest	Alaska, Idaho, Oregon, Washington

FIGURE B.1. Federal Regions

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