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Estimates of the Financial Consequences of Nuclear Power Reactor Accidents

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ABSTRACT

This report develops preliminary techniques for estimating the financial consequences of potential nuclear power reactor accidents. Offsite cost estimates are based on CRAC2 calculations. Costs are assigned to health effects as well as property damage. Onsite costs are estimated for worker health effects, replacement power, and cleanup costs. Several classes of costs are not included, such as indirect costs, socio-economic costs, and health care costs. Present value discounting is explained and then used to calculate the life cycle cost of the risks of potential reactor accidents. Results of the financial consequence estimates for 156 reactor-site combinations are summarized, and detailed estimates are provided in an appendix. The results indicate that, in general, onsite costs dominate the consequences of potential accidents.

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1. Introduction

A number of recent developments have created an increased awareness of the need for the ability to evaluate the financial consequences of reactor accidents. Included in these is the Nuclear Regulatory Commission's current efforts to develop a set of safety goals which include an ALARA (as low as reasonably achievable) criterion, which defines the nature of cost-effective improvements, and therefore requires the ability to measure the degree of improvement. Even before such a criterion is adopted, financial risk analysis tools are valuable additions to the decision making process for evaluating cost-benefit tradeoffs for proposed design requirements or backfit proposals. In addition, recent experience at Three Mile Island has focused attention on the potential for tremendous financial consequences in even minor accidents (at least when minor is defined in terms of health effects). In a recent paper, Starr and Whipple [1] explore the possibility of using the utilities' financial self-interest as a basis for increased cooperation with the NRC and a less adversarial relationship with the regulatory body.

In order to further explore the potential role of financial risks in the regulatory process, it is necessary to have a better understanding of what these risks are. In this report we will examine the financial consequences of potential accidents at existing nuclear power plants. The estimates of health consequences and offsite financial consequences will be based on CRAC2 (Calculation of Reactor Accident Consequences, Version 2) predictions which were made to support a recent project which evaluated the impact of alternative siting criteria [2]. Costs for replacement power are based on studies ongoing now at Argonne National Laboratories.

The methods developed in this project, and the results presented in this report have a number of potential applications. Value/impact analyses are playing an increasingly visible role in decision making in the regulatory process, and there is a specific, immediate need for simple value/impact analysis tools for support of the decision making processes in the Severe Accident Rulemaking. In addition, a means of value/impact analysis is critical to the practical implementation of an ALARA criterion based on cost, such as the one proposed in the ACRS (Advisory Committee on Reactor Safeguards) safety goals [3]. The results presented in this report can be used to gain a better understanding of the relative importance of the contributors to financial consequences. In addition, the information on the range of consequences can be useful in a reevaluation of the liability limits of the Price-Anderson Act.

As in all studies of this nature, it is important to point out the large uncertainties in all results. The uncertainties in the CRAC2 code have been discussed at length in other places [2,4]. In addition, source terms, which play a significant role in determining the consequences predicted with the CRAC2 model, are the subject of considerable discussion [5]. Studies examining the sensitivity of results to changes of the magnitude proposed by Rahn and Levenson [2] indicate that offsite consequence predictions could change considerably if the current source terms are discarded in favor of the new, smaller ones proposed. In addition to the uncertainties in the CRAC2 predictions, additional uncertainty is added in the estimates of onsite effects, such as cleanup and replacement power costs. These uncertainties will be quantified to the extent possible, and sensitivity studies will be included to help judge the impact of the uncertainty.

We begin in the next section with an overview of the CRAC2 code and the prediction of offsite consequences. The following section will discuss the methods used for converting the CRAC2 results into the form appropriate for use in this study. Section 4 explains the use of present value discounting and presents the formulæ for discounting used in this study. The next section discusses the assignment of dollar values to health effects. In section 6 we discuss the estimation of onsite consequences. Section 7 is a summary of the results. In section 8 we examine the sensitivity of the results to assumptions made in the course of the calculations. This section is followed by an appendix containing estimates of the financial consequences at all sites which are currently operating or hold construction permits.

2. Offsite Consequences

The offsite consequence analyses presented in this report were calculated using the CRAC2 [4] code, an improved version of the code originally developed for the United States Reactor Safety Study

(RSS). CRAC2 employs a straightline Gaussian plume model to represent the transport and dispersion of radionuclides released in reactor accidents. The model allows for changes in weather (based on hourly observations) during the transport of the plume; however, it assumes that wind direction remains constant (hence, straightline). Radiation dose to the public is based on both external exposure from airborne and deposited radionuclides and internal exposure from inhaled and ingested radionuclides. Duration of external dose is determined by the evacuation scenario defined by the user, which allows specification of both evacuation and sheltering zones, as well as unprotected areas. Internal dose duration is the remainder of the life of the exposed individual. The manner in which health effects are calculated from dose will be described in detail in a later section.

In addition to calculating health effects, the CRAC2 model also provides estimates of offsite economic consequences. The data on which the economic consequence estimates are based are generally detailed only down to the state level. Thus, particular industries or areas of economic activity in the vicinity of a plant are not taken into consideration. All costs are expressed in 1980 dollars [2, Appendix A]. Economic consequences not included in the CRAC2 code are all onsite costs (capital loss, replacement power, cleanup), economic costs of health effects, costs of litigation, and indirect costs (such as shut down of adjacent or other reactors, loss of industrial capacity and jobs, etc).

CRAC2 results are based on the simulation of a number of weather sequences sampled according to a statistical model. (A comparison of the effectiveness of the CRAC2 sampling procedure with the sampling procedure used in the RSS version of CRAC can be found in [6]). The results from these sequences are combined to generate a distribution of results, which is frequently presented as a complementary cumulative distribution function (CCDF). In this report we will present all results as means (averages) of the distributions estimated by CRAC2.

The CRAC2 results presented in this report are from calculations performed as part of a project to support NRC activity on reactor siting criteria [2]. Calculations were performed for 91 sites in the United States which had reactors with operating licenses or construction permits. Many of these sites have more than one reactor, and therefore the results presented in the appendix to this report show 156 reactor-site combinations. The CRAC2 runs used the actual population distributions surrounding the sites, based on the 1970 census, and a wind rose recorded at the site over a one-year period. All persons within 10 miles of the reactor were assumed to evacuate to 15 miles (at which point they are assumed to receive no additional exposure) at a speed of 10 miles per hour after a delay of either 1, 3, or 5 hours (with weights on the delay times of 30%, 40%, and 30% respectively). Because of the difficulty in obtaining consistently high quality hourly weather observations for all the selected reactor sites, a surrogate meteorological record was derived from data collected by the National Weather Service at a station with meteorological conditions similar to those at the plant [7]. Since the objective of the project for which these CRAC2 runs were performed was to provide guidance in siting, all CRAC2 runs assumed an 1120 MWe PWR reactor, not the reactor existing at the site. Thus, the results calculated in these CRAC2 runs are not directly representative of the actual potential consequences of an accident at the site. In a following section we discuss how we scaled these results to derive an approximation of potential consequences for the actual site reactor.

An accident spectrum consisting of five accident groups, ranging from a gap activity release to a large scale fuel melt with large atmospheric release, was developed by the NRC to represent the range of fission product release in potential accidents [8]. These groups are:

- Group 1—Severe core damage. Essentially involves loss of all installed safety features. Severe direct breach of containment. (similar to PWR2)
- Group 2—Severe core damage. Containment fails to isolate. Fission product release mitigating systems (e.g., sprays, supression pool, fan coolers) operate to reduce release. (similar to PWR5)
- Group 3—Severe core damage. Containment fails by basemat melt-through. All other release mitigation systems have funtioned as designed. (similar to PWR6)
- Group 4—Limited to moderate core damage. Containment systems operate but in a somewhat degraded mode. (similar to PWR9)

• Group 5—Limited core damage. No failures of engineered safety features beyond those postulated by the various design basis accidents are assumed. The most severe accident in this group includes substantial core melt, but containment functions as designed. (an order of magnitude smaller than PWR9)

For the purpose of decision making such as in siting and emergency response, the NRC has defined five releases, denoted SST1-SST5 (Siting Source Term), to represent the five accident groups [2]. By assigning appropriate probabilities to the five source terms, this set of releases can be used to represent the risk from any current LWR design.

CRAC2 calculates three major classes of public health effects. These are: early fatalities, early injuries, and latent cancer fatalities. In addition, CRAC2 also calculates thyroid and genetic effects, which will not be discussed in this report. Early fatalities are estimated on the basis of exposure to the bone marrow, lung, and gastrointestinal tract, and are observed within one year of exposure. Bone marrow damage is the major contributor. The risk of early fatalities for a given dose is determined by a dose-response curve. The dose-response curve used for the calculations presented here is taken from the RSS, and is called Curve B, which assumes supportive treatment of exposed individuals. (Supportive treatment indicates procedures such as reverse isolation, large doses of antibiotics, and transfusions of whole-blood packed cells or platelets.) Dose-response curves are defined for both greater and lesser degrees of treatment. However, it is believed that adequate facilities do not exist to supply the greater level of treatment required to justify the "heroic effort" response curve, while the minimal effort response curve assumes that only standard hospitilization techniques are used to treat the exposed population. Curve B has an $LD_{50/60}$ (dose to bone marrow at which 50% of the exposed population is expected to die within 60 days) of 510 rads. All persons exposed to greater than 615 rads are assumed to have a 100% mortality rate, and no deaths are assumed for persons receiving less than 320 rads.

Persons receiving large doses who do not die are subject to early injuries, which are defined as non-fatal radiation induced illnesses requiring medical attention or hospitalization, and include prodromal vomiting, skin illnesses, and immunological system impairment. These early health effects are estimated on the basis of early dose to the whole body, lung, and gastrointestinal tract. Whole body dose dominates the effect. Rate of effects is determined from dose by means of dose-response curves, as were early fatalities. The dose-response curves for early injuries were also drawn from the RSS.

The final health effect we are concerned with is latent cancer fatalities. Latent cancers are based on early and chronic dose, and are assumed to have a ten-year latency period followed by a period at risk for the remainder of the individual's life (except leukemia which has a 30 year plateau). The dose-response curve for latent cancer fatalities is taken from the BEIR I report, and is linear in dose. Dose effectiveness factors are used to reduce the effect of low doses in a manner similar to the linear-quadratic model of dose response.

Two other CRAC2 results will be presented for each reactor-site combination in the tables accompanying this report. These are person-rem and property damage. Person-rem is the total population dose commitment, expressed in rem, from the postulated accident. Property damage, which is measured in 1980 dollars, is a measure of the economic consequences of an accident. Economic effects taken into account include lost wages, relocation expenses of the evacuated population, decontamination costs, lost public and private property, and interdicted land and farm crop costs, all calculated on the basis of statewide landuse and land value data, and the population distribution surrounding the specific site. Further details on the treatment of economic consequences can be found in references [2,9]. Economic consequences which are not included are the cost of providing health care to the affected population, all onsite costs, litigation costs, and indirect costs. In addition, no dollar value is assigned to health effects. The manner in which these factors are treated in this report will be detailed in the following sections.

Table 1 below lists the means of the selected effects for the five releases at the Indian Point site, (which is located in the Hudson Valley approximately 40 miles north of New York City), conditional on the stated release and an 1120 MWe PWR. This table shows that even at one of the most densely populated sites in the United States, SST4 and SST5 lead to essentially no offsite consequences. Because of this lack of offsite consequences, results from SST4 and SST5 will not be presented in the tables for

each of the 156 reactor-site combinations. Treatment of onsite consequences for SST4 and SST5 will be discussed in the section on onsite consequences.

Indian Point CRAC2 RESULTS: Mean Effects Conditional on Release

	CIGIOS ILES CEIO. NICON ENCODO CONGICIONO ON LUCIOSES						
RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY		
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE		
SST1	831.0	3640.0	8110.0	1.25E+08	1.18E+10		
SST2	0.1	18.0	587.0	1.10E+07	1.46E+08		
SST3	0.0	0.0	1.8	3.23E+04	1.95E+07		
SST4	0.0	0.0	0.04	7.70E+02	0.0		
SST5	0.0	0.0	0.003	7.70E+01	0.0		

Table 1

3. Scaling to Power Level

All the CRAC2 calculations performed for the siting study, and which will be used for this project, assumed an 1120 MWe PWR at the site, rather than the actual reactor type and size. The type of reactor is not critical since the source terms were derived to represent any LWR design by appropriate selection of weights for the five releases. The power level of the reactor, and hence the core radionuclide inventory, plays a significant role in determining the magnitude of consequences. Sensitivity analyses [2] indicate that inventory scales fairly linearly with power level, and that consequences scale approximately linearly with inventory in a range surrounding 1120 MWe that includes most of the reactor sizes covered in this study. The differences between linearly scaled consequences and those calculated exactly can err in either direction, (that is, there is no systematic bias), and are within the range of values representing uncertainties due to other factors. Therefore, all results presented in this report as being representative of the true power level at the plant are derived by taking the results from CRAC2 analyses assuming an 1120 MWe power level and then scaling the result by $\frac{(actual power level)}{1120}$. Table 2 below shows the predicted consequences for Indian Point Unit 2, which has power level of 873 MWe. These mean values are the same as those in Table 1 scaled by $\frac{873}{1120} = .86$.

Indian Point Unit 2 SCALED RESULTS: Mean Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	647.7	2837.3	6321.5	9.74E+07	9.20E+09
SST2	0.1	14.0	457.5	8.57E+06	1.14E+08
SST3	0.0	0.0	1.4	2.52E+04	1.52E+07

Table 2

4. Discounting

In evaluating the economic consequences of a potential accident that can occur anytime in the life of a plant, we must sum terms for costs or risks occurring over a period of several years. This creates a problem since a dollar expended today and a dollar expended ten years in the future do not necessarily have the same value today to the recipient. This arises from the fact that the dollar received today could be put in a bank and interest collected for ten years, in addition to the flexibility of having the dollar

available for use before the ten years are over. One way to compare dollars that arrive at different points in time is to find the amount of money which must be placed in a bank today to have the same amount of money at the time the other income is scheduled to arrive. The sum of money which must be put in the bank today to achieve a specified sum at a point in the future is called the discounted present value of the later sum, and the interest rate is called the discount rate. Thus, the discounted present value of \$1.00 received one year from today, assuming a 10% discount rate, is \$.91 ($\$.91 \times 0.1 + \$.91 = \1.00). This type of calculation is called present value discounting. An excellent introduction to this subject can be found in an essay by Kenneth Arrow in [10] or most introductory economics texts.

In this report we have used discounting formulæ based on continuous discounting. The first formula presented here is used in calculations of the present worth of early health effects and offsite property damage. The present value of a cost C_0 which occurs with a frequency f is given by:

$$\int_{t_{i}}^{t_{f}} e^{-rt} C_{0} f dt = C_{0} f \frac{e^{-rt_{i}} - e^{-rt_{f}}}{r}$$
 (1)

where

r = effective discount rate

f = frequency of accident costing C_0

 $t_i = \text{time of onset of risk of accident}$

 $t_f = \text{time of end of risk of accident.}$

For an operating plant like Indian Point Unit 2, t_i is 0. We will assume a 40 year plant life, so $t_f = 32$ for Indian Point Unit 2, which began operation in 1974 and therefore has only 32 years of remaining operational life. We will use r = .04 which is typical of the true discount rate experienced over the past several years. (The true, or real, discount rate is approximately the difference between the rate of inflation and the rate of interest on debt, such as the banking industry's prime rate.) In the discussion section we will examine the impact of this assumption. For these values, the multiplier of $C_0 f$ for formula (1) is 18.05.

The next formula is for calculating the present value of an expense which recurs for a number of years, such as the 10 year cleanup expense discussed in Section 6. The present value of an expense C_0 recurring for M years is given by:

$$\int_{t_i}^{t_f} f \int_{t}^{t+M} C_0 e^{-rt'} dt' dt = \frac{C_0 f e^{-rt_i}}{r^2} \left(1 - e^{-r(t_f - t_i)}\right) \left(1 - e^{-rM}\right)$$
 (2)

Cleanup expense has t_i, t_f , and r as above, and M = 10. The multiplier of $C_0 f$ is therefore 148.76.

The last formula we need is for calculating the present value of an expense that will recur until a fixed date, rather than for a fixed number of years. This is the formula that applies to the replacement power costs which are charged for the remaining life of the plant (see section 6).

$$\int_{t_i}^{t_f} f \int_{t}^{t_f} C_0 e^{-rt'} dt' dt = \frac{C_0 f}{r} \left[\frac{e^{-rt_i} - e^{-rt_f}}{r} - e^{-rt_f} (t_f - t_i) \right]$$
(3)

For Indian Point Unit 2 the multiplier of $C_0 f$ is 228.79.

(For the reader interested in fine details, the use of the frequency f in the above formulæ implicitly allows repeat accidents at a reactor. The formulæ can be corrected to prohibit this situation. However, the correction would considerably complicate the formulæ, and for the accident frequencies under consideration the difference in results would be extremely small, appearing in the third or fourth decimal place of the answer.)

The impact of the start date on the multipliers arises from two mechanisms. As the start date moves farther into the past, the multiplier shrinks since the remaining life of the plant is reduced, and therefore t_i remains 0 while t_f gets smaller. As the start date moves farther into the future, the multiplier shrinks because there are more years of discounting intervening between the present and the onset of the risk.

Thus, the multipliers achieve their maxima for start dates in the current year, 1982. The table below shows values of the three multipliers for several start dates to give an indication of the impact of the start date on the discounted present value.

Comparison of Multipliers for Different Start Dates

START DATE	MULTIPLIER (1)	MULTIPLIER (2) M=10	MULTIPLIER (3)
1967	15.80	130.25	165.15
1974	18.05	148.76	228.79
1982	19.95	164.45	296.92
1987	16.34	134.64	243.10
1992	13.37	110.23	199.03

Table 3

The selection of the actual discount rate will have a significant impact on the predicted consequences, and to some degree on their relative magnitudes. Sensitivity to discount rate will be examined in Section 8.

5. Health Effects Costs

The assignment of a dollar value to various health effects is certain to be one of the most difficult and potentially controversial aspects of the estimation of the financial consequences of an accident. There does not appear to be any universally accepted method for assigning a value to a life, let alone a single price ascribed to the value of a life. One method that has been used is to impute a social perception of the worth of a life from the expenditures that society is willing to make in order to prevent a death. The work of Cohen [11] is an example of this technique. This approach leads to widely varying values on human lifes, from the low tens of thousands of dollars for some cancer prevention tests and highway maintenance, to hundreds of thousands of dollars per life for some auto safety features, to millions of dollars per life for some mine safety and radiological standards. A second complicating feature of assessing the value of a life is that studies have indicated that people place a different value on a lost life depending on the circumstances under which the death occurred. For example, a death in an involuntary, novel situation is perceived as being worse, or more costly, than a death from a familiar activity such as automobile driving [12]. Another confounding factor, especially for the reactor accident case, is the assessment of the difference in value for an immediate death compared to a delayed death, like a cancer fatality. One approach to dealing with this aspect is to use a concept of life shortening rather than a value for a life. Life shortening measures the number of lost years, and therefore may assign a lower value to the death of an older person than for younger person, or for a delayed death versus an immediate death.

A recent report by a subcommittee of the ACRS [3] proposes values for early deaths and delayed deaths. The values are \$5 million and \$1 million respectively. (The value for early deaths was proposed in combination with a risk aversion criterion, and therefore is actually expressed in "equivalent deaths". Equivalent deaths are calculated for a given accident by raising the consequences of the accident to the 1.2 power, and therefore for accidents with large consequences the effective valuation on life will be larger than \$5 million.) The values were proposed in the context of an ALARA (as low as reasonably achievable) criterion to require improvements to a reactor facility. The Nuclear Regulatory Commission has proposed, in NUREG-0880 [13], the use of a value of \$1000 per man rem averted. This extrapolates to approximately \$10 million per latent cancer fatality. In neither of these cases has a rationale for selecting these figures been given, and therefore there is no basis for discussing their merit in this report.

Rather than enter the controversy by attempting to place a value on human life, we will treat the issue by using empirical values of society's willingness to expend resources to avert a death. This approach is useful in the context of this report since we are trying to develop techniques which can be used to develop a value/impact approach for potential regulatory application. Therefore, the use of empirical societal values from life-saving technological "fixes" in comparable circumstances is an appropriate approach in this context. We have chosen a value of \$1 million for early fatalities and \$100,000 for early injuries and latent cancers. The choice of these values is only a starting point for discussion; a later section on sensitivities will examine the impact of the selection of these particular values, and provide insight into the results if other values are selected. The lower figure is in the range (although slightly larger) of imputed life values based on various medical treatments or screening techniques, mostly related to cancers, which are comparable to the delayed deaths caused by radiological accidents. The higher figure is larger than most values for traffic safety programs or equipment, which are used to prevent prompt deaths, comparable to the early death as defined for our purposes. In addition, it is in the range of the imputed life values based on other considerations such as aircraft safety. (These comparisons are based on the imputed values in [11].) For the purposes of accounting for cost, it is assumed that effects are charged for when the accident occurs. While these particular values may cause controversy, the discussion of sensitivities in Section 8 shows that these assumptions have relatively little impact on the overall conclusions. Thus, while the actual values used are important in many areas of application, the conclusions of this report are relatively unaffected by values within the range of general discussion. Note that these costs are used to represent the expenditure that society is willing to make to avert a loss of life, and do not include the costs for medical care. Table 4 below shows the mean (average) costs for the offsite consequences conditional on the stated release.

Indian Point Unit 2
OFFSITE COSTS: Conditional on Release

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RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY			
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)			
SST1	6.47E+08	2.84E+08	6.32E+08	9.20E+09			
SST2	1.00E+05	1.40E+06	4.58E+07	1.14E+08			
SST3	0.0	0.0	1.40E+05	1.52E+07			

Table 4

Table 5 below shows the discounted present value of the costs in Table 4 summed over the life of Indian Point Unit 2, assuming frequency f_i (expresssed per year) for release i. Thus, early fatality, early injury, latent cancer fatality, and property damage values are discounted to the present using discounting formula (1). The values in the tables have units of dollars and represent the discounted present value of the risks summed over the plant life; they are not the cost of any single accident. Thus, if one were to assign a value of 10^{-5} to f_1 , (this value is selected for illustrative purposes only), the expected mean lifetime risk due to property damage would be \$1.66 \times 10⁶. This does not imply, however, that accidents with larger consequences could not occur.

Indian Point Unit 2 BDISCOUNTED PRESENT VALUE OF OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.17E + 10 \times f_1$	$5.12E + 09 \times f_1$	$1.14E + 10 \times f_1$	$1.66E + 11 \times f_1$
SST2	$1.08E + 06 \times f_2$	$2.53E + 07 \times f_2$	$8.26E + 08 \times f_2$	$2.05E + 09 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$2.53E + 06 \times f_3$	$2.74E + 08 \times f_3$

Table 5

6. Onsite Consequences

The CRAC2 code was designed to provide estimates of the offsite consequences of reactor accidents and therefore does not provide estimates of the onsite consequences of an accident, either in terms of health effects or financial effects. In order to carry out the task of estimating the consequences of an accident, we have divided the consequences into four areas; plant personnel health effects, replacement power costs, cleanup costs, and capital costs.

An examination of NRC regulations concerning reactor operating procedures during emergencies, as well as procedures of the utilities, indicated that during a major emergency in which a significant release is imminent there would be approximately 40 persons on the site in either the control room or the technical support center, both of which are required to provide a degree of protection from a radiological release [14]. Using an assumption of essentially a worst possible case, we assume that an SST1 release results in 10 early fatalities and 30 early injuries onsite. The significantly lower levels of hazard for the other releases are assumed to cause no early effects to reactor personnel. In the discussion and sensitivity analysis section we will examine the impact of this assumption on the overall conclusions, and how to estimate the consequences under different assumptions.

Estimates of replacement power costs are based on preliminary results from an ongoing research project at Argonne National Laboratory [15]. In this method replacement power costs are estimated on the basis of the cost of replacement fuels and power availability for each National Electric Reliability Council (NERC) region. The dominant factor in determining these costs is the relative proportion of oil fired backup plants versus economical alternative sources (for example coal or hydro). In [15] the cost of replacement power is estimated to be

$$C_0 = (0.286 \times R + 0.086)10^6$$
 \$ per MW year

where R is the fraction of replacement energy by oil-fired or noneconomy power purchases. The values of R by NERC region (defined in Figure 1) are:

MARCA NPCC		$\frac{20\%}{95\%}$
MAAC		50%
MAIN		15%
ERCOT		50%
SPP		40%
WSCC	California	95%
	not California	25%
\mathbf{SERC}		15%
ECAR		5%

Table 6

This cost formula is based on the assumption that the reactor had a 65% availability prior to the accident. The value derived by this method is then multiplied by the power level of the plant, and summed over a number of years corresponding to the remaining life of the plant, with discounting and inflation in fuel price taken into account.

Using the replacement cost of electricity for the full remaining life of the plant imputes a value for the lost capital cost of the plant, since, by purchasing power, the income stream of the plant is maintained, although the net income may become negative if rates do not increase corresponding to the replacement power costs. Thus, this replacement power cost estimation procedure using actual cost for the remaining life of the plant eliminates the need to include a seperate term for the lost capital expense. It should be noted that for cases with remaining plant life greater than ten years, it may be possible to build a new facility, either coal or nuclear, that could replace the lost capacity at a lower cost than that obtained using the calculation above. However, estimating the effect of a replacement plant is very complex since it involves changes to the capacity expansion plan of the utility, interaction with other

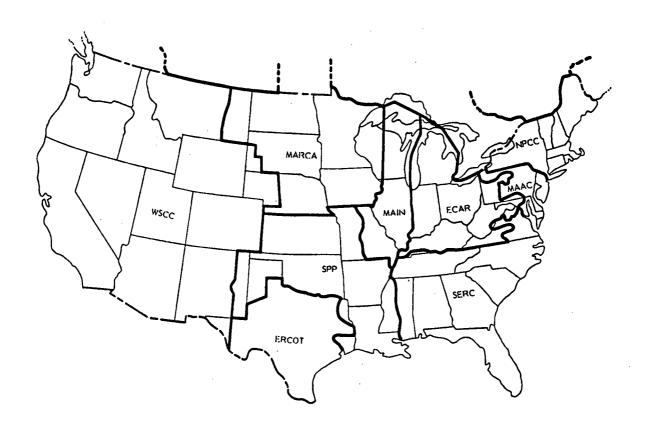


Figure 1. NERC Regions

utilities in the region, as well as other factors relating to the overall economy. Means of incorporating these factors are currently being researched at Argonne. Estimates of the impact of including these effects will be included in the discussion section at the end of this report.

Cleanup costs for reactor accidents are difficult to estimate due to a lack of experience and data. For the initial stages of this project we will use a value of \$100 million dollars per year for ten years which represents the cost of early decommissioning or cleanup and repair, depending upon the severity of the accident. This figure is comparable to current estimates of the cleanup costs for the Three Mile Island accident [16].

Table 7 below shows the estimates of these contributors for the Indian Point Unit 2. Note that the health effects costs only apply to SST1, and the other costs to SST1, 2, and 3. SST4 and 5 are not expected to produce any onsite health effects, and may leave the plant in a repairable state. Thus, the replacement power may not have to be purchased for the remaining life of the plant, but rather for a shorter period. The discounted value of that cost could be estimated using discounting formula (2). At the moment, we have no estimate for the cleanup (or repair) costs of SST4 or 5.

Indian Point 2

Onsite Health Effects: \$ 1.30E+07 (conditional on SST1)

\$ 2.35E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power: \$3.12E+08 (per year, conditional on SST1,2, or 3)

 $7.14E+10 \times f_i$ (discounted over remaining plant life)

Cleanup: \$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.49E+10 \times f_i$ (discounted over remaining plant life)

Table 7

Table 8 below shows the mean (average) costs of an accident at Indian Point in 1982. The health effects costs are magnitude times the dollar values discussed earlier, the offsite property damage costs are the scaled estimates of means from CRAC2, conditional on the release, and the onsite costs are the per year conditional costs from Table 7 above, summed over the period for which they are paid (10 years for cleanup costs and 32 years (remaining plant life) for replacement power), and discounted assuming a 4% real discount rate. Thus all the entries are the present net value in 1982 of an accident occurring in 1982.

Indian Point Unit 2
MEAN TOTAL COSTS: Conditional on Release

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	1.56E+09	9.20E+09	6.43E+09	1.72E+10
SST2	4.73E+07	1.14E+08	6.43E+09	6.59E+09
SST3	1.40E+05	1.52E+07	6.43E+09	6.45E+09

Table 8

The following table shows the discounted present value of the life cycle risk from Indian Point Unit 2. This risk represents the sum over all future years of operation, and therefore is not conditional on an accident. Rather, the expressions contain a term for the accident frequency f, which must be multiplied out to arrive at a discounted present value for the life cycle risk.

Indian Point Unit 2 DISCOUNTED PRESENT VALUE OF TOTAL COSTS

RELEASE CATEGORY	OFFSITE HEATLH COSTS	OFFSITE PROPERTY COSTS	ONSITE COSTS	TOTAL COSTS
SST1	$2.82E + 10 \times f_1$	$1.66E + 11 \times f_1$	$8.66E + 10 \times f_1$	$2.81E + 11 \times f_1$
SST2	$8.52E + 08 \times f_2$	$2.05E + 09 \times f_2$	$8.63E + 10 \times f_2$	$8.92E + 10 \times f_2$
SST3	$2.53E + 06 \times f_3$	$2.74E + 08 \times f_3$	$8.63E + 10 \times f_3$	$8.66E + 10 \times f_3$

Table 9

7. Summary of Results

This section summarizes the detailed results presented in Appendix A. It is important to again caution the reader and potential user of these data that the results are derived from CRAC2 analyses assuming an 1120 MWe PWR at each site. These results were then scaled linearly by power level. Thus, the data do not represent the conclusions of PRAs performed for each site and reactor, but rather are approximations. As in all applications of this nature, the data are subject to uncertainty. However, we believe that the nature of the uncertainties is such that comparisons among plants are fairly accurate in relative rankings.

Early fatalities show the most variability of the various health effects. Figure 2 is a CCDF (complementary cumulative distribution function) of the mean number of early fatalities at each of the 156 reactor-site combinations, conditional on an SST1 release. The mean of this CCDF is 69, which is exceeded almost 25% of the time. As can be seen in the CCDF, the mean number of fatalities for the various reactor-site combinations span more than four orders of magnitude.

Figure 3 is the CCDF of mean early injuries. Mean early injuries for the reactor-site combinations span about two and one-half orders of magnitude, compared to the four orders for mean early fatalities. The mean of this CCDF is 345, and like early fatalities, the mean is exceeded approximately 30% of the time. The CCDF of latent cancer fatalities is shown in Figure 4. With the exception of one outlier, the data fall within two orders of magnitude. The mean of the distribution is 1450, and is exceeded about 30% of the time. Thus, the shape of the three health effects CCDFs are very similar to each other in that each has a mean exceeded 25–30% of the time, and each has an 's'-shape (indicative of a lognormal distribution).

Figures 5,6,and 7 are the CCDFs of mean person-rem for SST1,2, and 3 respectively. The three curves are almost identical in shape, each is just the next larger release shifted to the left. As in the CCDFs presented earlier, the mean of each of these distributions is exceeded 30-40% of the time.

Figure 8,9, and 10 illustrate the CCDFs for various economic consequences. Figure 8 is a plot of the mean offsite property damage costs, conditional on an SST1 release. There are about two orders of magnitude spread, although 90% of the values fall within a one order of magnitude range. Figure 9 is a CCDF of mean total health effects costs conditional on an SST1 release. These costs show about two orders of magnitude of variation, which is much less than the four orders observed in early fatalities. The narrowing of the spread indicates the importance of the costs of latent cancer fatalities in determining the overall health effects costs. Figure 10 is the CCDF of mean total financial costs for an SST1 release. The CCDF shows very little variability. This is due to the dominance of cleanup costs and replacement power costs in determining the overall cost. (The Indian Point site used in the example tables in this report is the exception to this general conclusion.)

Sensitivity and Discussion

In a number of areas discussed above there is considerable uncertainty regarding the values selected. In this section we will examine the sensitivity of results and conclusions to the particular values selected.

The area which may contain the greatest uncertainty is the selection of values for loss of life, since this value cannot be determined in a technical manner; it is really a social or political question. Using the values for health effects given in Section 5, health effects costs account for approximately 12% of the total offsite discounted costs for the SST1 release. (This is the average over all sites and reactors.) The minimum value was 5% of total offsite cost, while the maximum was less than 25%. Figure 11 is a CCDF of the ratio of health effects costs to total offsite effects costs (health effects costs plus property damage), conditional on SST1. It is apparent that the 12% mean is exceeded approximately 40% of the time. Thus, in general an order of magnitude or greater increase in the value assigned to loss of life is necessary to increase the cost of health effects to a level making it a significant contributor to the offsite cost of an accident. Figure 12 is a CCDF of the ratio of discounted health effects costs to total accident costs including replacement power and cleanup costs, conditional on SST1. At most, health effects costs contribute just over 10% of the total cost, and more typically contribute 5% or less, further reducing the impact of changes in values assigned to loss of life. The portion of total offsite costs represented by health effects costs for SST2 is 16% minimum, 30% average, and 48% maximum, while SST3 is 0.5% minimum, 3% average, and only 11% maximum. Thus, SST2 has a greater sensitivity to change in life values, although a factor of five change is still necessary to bring health effects costs to the level of offsite property damage. It should be noted, however, that for SST2 and 3 the total offsite costs are more than an order of magnitude smaller than the onsite costs, and therefore an order of magnitude change in the health effects costs would have negligible effect in determining the overall costs for these accidents.

Some participants in the debate on the valuing of human lives argue that it is improper to discount the dollars associated with loss of life, since this is implicitly discounting the value of a life lost in the future. While we do not agree with this argument since it can lead to inefficient utilization of social resources, we have examined the impact on the conclusions presented in this paper if health effects costs are not discounted. Figure 13 is a CCDF of the fraction of total offsite costs which represent non-discounted health effects, conditional on SST1. In comparing this figure to Figure 11, one can see that the maximum fraction has increased from about 20% of the total costs to 50%. However, this large fraction occurs with very low frequency, and 80% of the time health effects, even without discounting, account for at most 25% of the offsite costs, which in turn represent only a fraction of the total costs.

Recently, some attention has been focused on the use of \$1000 per person rem averted as the basis for an ALARA criterion on reduction of public risk from reactor accidents [17]. For SST1 accidents, the discounted present value (over the life of the plant) of person rem times \$1000 ranges from a minimum of 79% of the total (onsite and offsite) cost of an accident to more than 16 times the total cost, with average discounted present value cost equal to 9 times the total cost using the formulation described in this paper. SST2 has a minimum of 6%, maximum of almost 1000%, and a mean of 200%. For the SST3 release, the maximum value represented by using the \$1000 per person rem value is only 3% of the total accident cost. The use of the \$1000 per person rem as a proxy for only the health effects costs is also subject to considerable variability. For the the SST1 release, the person rem estimates exceed the modeled value by factors ranging from 50 to over 450, with an average of approximately 240. SST2 and 3 both have overestimates by factors averaging 450. Thus, even if the values assigned to loss of life were to be increased by an order of magnitude, the person rem proxy value would still overestimate the value of health effects by a large amount.

Several uncertainties are associated with the onsite cost estimates. The first is the magnitude of the onsite health effects. Onsite health effects account for less than 1% of the total onsite costs for SST1, and therefore a significant increase in the values assigned to loss of life would be required to have any impact. (It seems implausible that more injuries would occur, since the 40 casualties used assumes a 100% casualty rate, with 25% of the casualties being fatal.) Even assuming this level of casualties would have little or no effect on the other releases since the cleanup costs and replacement power costs remain the same, and completely dominate the onsite costs.

The second area of question in onsite costs is the assumption that replacement power is purchased for the remaining life of the plant. Because of discounting, approximately 60% of the present value for replacement power is due to expenditures in the first 10 years which is probably the minimum amount of time necessary to build a new plant. In addition, even the remaining years would still have a cost, which could be no less than one-fourth the estimated replacement power cost, and therefore the total

replacement power costs would change by no more than 30%. Replacement power costs account for 50% of the total costs (average over all sites) for SST1, and therefore the approximation based on purchasing replacement power for the remaining life of the plant could change the total costs by no more than 15%

Different discount schedules (with identical discount rates) are used for various costs and therefore changes in the discount factor affect different costs in different ways. For the health effects and offsite property damage which are discounted at the time of occurrence, and cleanup, which has a cost recurring for ten years, the present value increases by about 40% when the discount rate is dropped from .04 to .02. Eliminating discounting altogether (0.0 discount rate) causes present values to double for plants with start dates near or before 1982. As the start date moves farther into the future, the difference increases to almost a factor of four for start dates well into the 1990s. The value drops by about 40% when the discount rate is doubled to .08. The present value of the replacement power changes only slightly faster than these first two terms.

A series of sensitivity calculations was performed as part of the siting study [2] to evaluate the impact of uncertainties in the source term, especially in line with reductions suggested in [5]. The table below shows the relative reductions in mean offsite consequences at the Indian Point site, with all consequences scaled to 100 for the original SST1 source term. In general, it appears that the relative contribution to offsite costs of its constituent factors will remain unchanged with reductions in the source term (although the importance of early fatalities does decrease somewhat). The contribution of offsite costs to total cost is reduced however, since the onsite costs are fairly independent of the size of the source term.

Sensitivity of Mean Consequences to Reductions in SST1

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
SIZE	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	100	100	100	100	100
$SST1 \times .5*$	30	35	74	82	62
$SST1 \times .1$	1	4	32	39	11
$SST1 \times .05$	0.2	2	19	24	5
$SST1 \times .01$	0.03	1	5	6.7	0.71

^{*}Release fractions reduced for all isotopes except noble gases

Table 10

A number of costs for an accident were not included in the calculations presented in this report. These costs include medical care, litigation, and indirect costs. It is difficult to estimate these costs, but some very crude estimates indicate that some may be of importance. Medical costs can be divided among treatment of early fatalities, early injuries, and latent cancers, both fatal and non-fatal. The costs assigned to the early effects will probably be small in comparison to the \$1 million and \$100,000 assigned to these effects. The costs of medical treatment of the latent cancers may be larger than the \$100,000 associated with latent cancer fatalities, especially when non-fatal cancers are taken into account. The indirect costs could be very large if they are to take into account national economic repercussions such as closing of other nuclear power plants, loss of industrial capacity and jobs, effects on financial markets, socio-economic impacts, etc. Estimates of these effects [18,19] indicate that they may be larger than all the effects discussed in this report. However, many of these costs are widely dispersed and would be difficult to link to the accident, at least in terms of establishing legal liability.

While the range of variation due to uncertainty may have significant impact when comparing estimated values to absolute figures, such as the cost of a design modification, they do not significantly change the relative contributions of the various factors to the overall financial consequences of an accident. In addition, except for possible indirect costs which were not evaluated in this paper, the magnitude of these changes is generally within the range of uncertainties due to the CRAC2 code, the selection of source term, the estimation of accident probabilities, and onsite cost estimates.

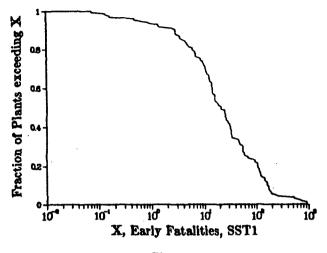


Figure 2

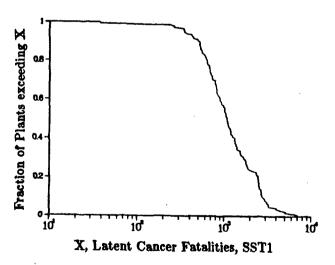


Figure 4

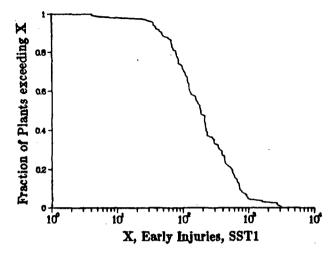


Figure 3

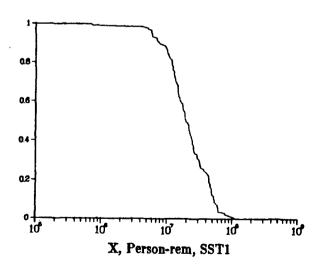


Figure 5

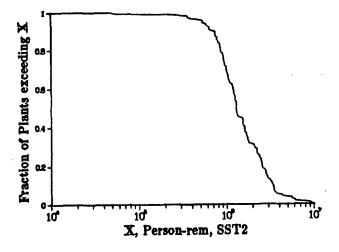


Figure 6

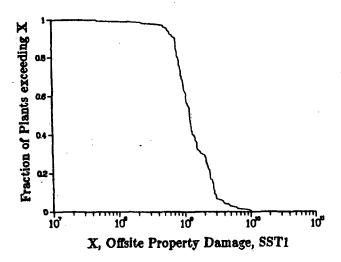


Figure 8

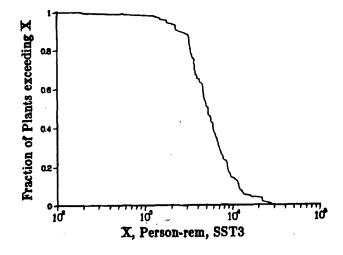


Figure 7

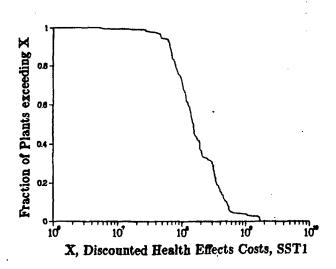
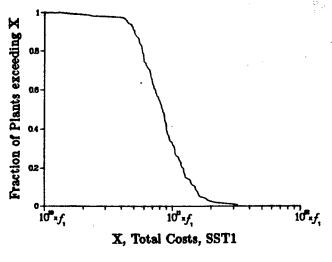


Figure 9





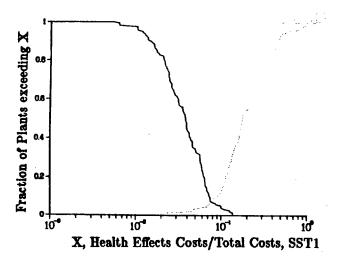


Figure 12

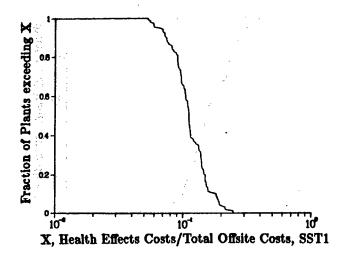


Figure 11

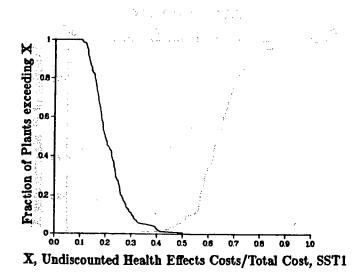


Figure 13

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Appendix A

ALLENS CREEK

Scale Factor 1.071

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

	RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
:	SST1	30.7	93.1	618.0	1.13E+07	1.15E+09
1	○ SST2.	0.0	0.9	48.8	8.81E+05	1.91E+07
	SST3	0.0	0.0	0.2	3.64E+03	7.09E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

1	RELEASE		EARLY INJURIES	LATENT CANCER FATALITIES	PERSON	PROPERTY DAMAGE
1	SST1	32.9	99.7	662.1		1.23E+09
	SST2	Q	(1.0	52.3	9.44E+05	2.05E+07
1	00- SST3 €	Z + 0.0	0.0	0.2	3.90E+03	7.60E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

ľ	RELEASE			LATENT CANCER	PROPERTY
:	CATEGORY	FATALITIES (\$'s)	/INJURIES:(\$'s):	FATALITIES (\$!s)	DAMAGE (\$'s)
	SST1	$5.37E + 08 \times f_1$	$1.63E + 08 \times f_1$	$1.08E + 09 \times f_1$	$2.01E+10 \times f_1$
		,	, , , , , , , , , , , , , , , , , , , ,	$8.54E + 07 \times f_2$	
;	SST3	$0.00E+00\times f_3$	$0.00E+00\times f_3$	$3.54E + 05 \times f_3$	$1.24E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects: $\frac{1}{1000}$ \$1.30E+07-	
(Replacement Power: Where $1.3 2.75E + 0.8$) (of the large granianes with \$6.68E+10 $\times f_i$)	
(Cleanup: Well's as investible of the $1.00\mathrm{E} \pm 08$ for i dealer generalization appears $1.35\mathrm{E} \pm 10 imes f_i$	

Interpretation of this table is explained on page 10

TOTAL COSTS

1	RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL					
i	CATEGORY	HEATLH COSTS	PROPERTY COSTS.	COSTS	COSTS					
				$8.05E + 10 \times f_1$	$1.02E + 11 \times f_1$					
:	SST2	$8.70E + 07 \times f_2$	$3.34E + 08 \times f_2$	$8.03E + 10 \times f_2$	$8.07E + 10 \times f_2$					
	SST3	$3.54E + 05 \times f_3$	$1.24E + 07 \times f_3$	$8.03E + 10 \times f_3$	$8.03E + 10 \times f_3$					

ARKANSAS

Unit 1

Date of Operation: 1974

Power Level (MWe): 836

NERC Region: SPP

Scale Factor 0.746

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	16.6	146.0	952.0	1.71E+07	1.02E+09
SST2	0.0	0.2	81.6	1.47E + 06	2.14E+07
SST3	0.0	0.0	0.3	5.94E+03	2.31E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	12.4	109.0	710.6	1.28E+07	7.61E+08
SST2	0.0	0.1	60.9	1.10E+06	1.60E+07
SST3	0.0	0.0	0.2	4.43E+03	1.72E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE CATEGORY	EARLY FATALITIES (\$'s)		LATENT CANCER FATALITIES (\$'s)	PROPERTY DAMAGE (\$'s)
SST1	$2.24E + 08 \times f_1$	$1.97E + 08 \times f_1$	$1.28E + 09 \times f_1$	$1.37E + 10 \times f_1$
SST2	$0.00\text{E} + 00 \times f_2$	$2.12E + 05 \times f_2$	$1.10E + 08 \times f_2$	$2.88E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$4.43E + 05 \times f_3$	$3.11E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.35E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.68E+08 (per year, conditional on SST1,2, or 3)

\$ 3.83E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.49E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.70E + 09 \times f_1$	$1.37E + 10 \times f_1$	$5.34E + 10 \times f_1$	$6.89E + 10 \times f_1$
SST2	$1.10E + 08 \times f_2$	$2.88E + 08 \times f_2$	$5.32E + 10 \times f_2$	$5.36E + 10 \times f_2$
SST3	$4.43E + 05 \times f_3$	$3.11E + 07 \times f_3$	$5.32E + 10 \times f_3$	$5.32E + 10 \times f_3$

ARKANSAS

Unit 2

Date of Operation: 1980

Power Level (MWe): 912

NERC Region: SPP

Scale Factor 0.814

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	16.6	146.0	952.0	1.71E+07	1.02E+09
SST2	0.0	0.2	81.6	1.47E+06	2.14E+07
SST3	0.0	0.0	0.3	5.94E+03	2.31E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	13.5	118.9	775.2	1.39E+07	8.31E+08
SST2	0.0	0.1	66.4	1.20E+06	1.74E+07
· SST3	0.0	0.0	0.3	4.84E+03	1.88E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

		•	,	
RELEASE	EARLY		LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$2.64E + 08 \times f_1$	$2.32E + 08 \times f_1$	$1.51E + 09 \times f_1$	$1.62E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$2.50E + 05 \times f_2$	$1.30E + 08 \times f_2$	$3.40E + 08 \times f_2$
SST3	$0.00E+00\times f_3$	$0.00\text{E} + 00 \times f_3$	$5.23E + 05 \times f_3$	$3.67E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.54E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$1.83E+08 (per year, conditional on SST1,2, or 3)

\$ 5.13E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.61E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$2.01E + 09 \times f_1$	$1.62E + 10 \times f_1$	$6.76E + 10 \times f_1$	$8.59E + 10 \times f_1$
SST2	$1.30E + 08 \times f_2$	$3.40E + 08 \times f_2$	$6.74E+10\times f_2$	$6.78E + 10 \times f_2$
SST3	$5.23E + 05 \times f_3$	$3.67E + 07 \times f_3$	$6.74E + 10 \times f_3$	$6.74E + 10 \times f_3$

BAILLY

Unit 1 Date of Operation: 1987 Power Level (MWe): 645 NERC Region: ECAR Scale Factor 0.576

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

:	RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
	CATEGORY	FATALITIES	INJURIES ²	FATALITIES :	REM.	/ DAMAGE:
:	SST1	57.8	1170.0	3250.0	5.50E+07	4.19E+09
1	SST2	0.0	0.5	264.0	4.88E+06	6.51E+07
;	SSI₃	0.0	υ.υ	9.0	1.51E+04	8.40 <u>b</u> +00

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SCALED RESULTS: Mean Offsite Effects Conditional on Release

	RELEASE		EARLY	LATENT CANCER	PERSON	PROPERTY
:	CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
:	SST1	33.3	673.8	1871.7	3.17E+07	2.41E+09
	SST2	0.0	0.3	152.0	2.81E+06	3.75E+07
	SST3	0.0	0.0	015	9.27E+03	4.84E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

	RELEASE	EARLY		LATENT CANCER	
ţ	CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
	SST1	$5.44E + 08 \times f_1$	$1.10E + 09 \times f_1$	$3.06E + 09 \times f_1$	$3.94E + 10 \times f_1$
:	SST2	$0.00E + 00 \times f_2$	$4.77E + 05 \times f_2$	$2.48E + 08 \times f_2$	$6.12E + 08 \times f_2$
:	SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$8.43E+05\times f_3$	$7.90E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects: \$1.30E+07 (conditional on SST1)

\$ 2.12E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power: \$ 6.47E+07 (per year, conditional on SST1,2, or 3)

\$ 1.57E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup: \$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.35E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

. [RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
	CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
	SST1	$4.70E + 09 \times f_1$	$3.94E + 10 \times f_1$	$2.94E + 10 \times f_1$	$7.35E + 10 \times f_1$
	SST2	$2.49E + 08 \times f_2$	$6.12E + 08 \times f_2$	$2.92E + 10 \times f_2$	$3.01E + 10 \times f_2$
	SST3	$8.43E + 05 \times f_3$	$7.90E + 07 \times f_3$	$2.92E + 10 \times f_3$	$2.93E + 10 \times f_3$

BEAVER VALLEY

Unit 1

Date of Operation: 1977

Power Level (MWe): 833

NERC Region: MAAC

Scale Factor 0.744

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	147.0	1230.0	3350.0	5.70E+07	3.74E+09
SST2	0.0	0.4	203.0	3.84E + 06	6.17E+07
SST3	0.0	0.0	0.6	1.15E+04	1.39E+07

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	109.3	914.8	2491.6	4.24E+07	2.78E+09
SST2	0.0	0.3	151.0	2.86E+06	4.59E+07
SST3	0.0	. 0.0	0.5	8.55E+03	1.03E+07

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY FATALITIES (\$'s)	EARLY INJURIES (\$'s)	LATENT CANCER FATALITIES (\$'s)	PROPERTY DAMAGE (\$'s)
SST1	$2.06E + 09 \times f_1$	$1.72E + 09 \times f_1$		$5.24E+10\times f_1$
SST2	$0.00E + 00 \times f_2$	$5.10E + 05 \times f_2$	$2.84E + 08 \times f_2$	$8.64E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$8.94E + 05 \times f_3$	$1.95E + 08 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.45E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.91E+08 (per year, conditional on SST1,2, or 3)

\$ 4.87E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ $1.55E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE HEATLH COSTS	OFFSITE PROPERTY COSTS	ONSITE COSTS	TOTAL COSTS
SST1	$8.48E + 09 \times f_1$	$5.24E + 10 \times f_1$	$6.44E + 10 \times f_1$	
SST2	$2.85E + 08 \times f_2$	$8.64E + 08 \times f_2$	$6.42E + 10 \times f_2$	$6.53E + 10 \times f_2$
SST3	$8.94E + 05 \times f_3$	$1.95E + 08 \times f_3$	$6.42E + 10 \times f_3$	$6.44E + 10 \times f_3$

BEAVER VALLEY

Unit 2

Date of Operation: 1986

Power Level (MWe): 833

NERC Region: MAAC

Scale Factor 0.744

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	147.0	1230.0	3350.0	5.70E+07	3.74E+09
SST2	0.0	0.4	203.0	3.84E+06	6.17E+07
SST3	0.0	0.0	0.6	1.15E+04	1.39E+07

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	109.3	914.8	2491.6	4.24E+07	2.78E+09
SST2	0.0	0.3	151.0	2.86E+06	4.59E+07
SST3	0.0	0.0	0.5	8.55E+03	1.03E+07

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

			- • • • • • • • • • • • • • • • • • • •	
RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.86E + 09 \times f_1$	$1.56E + 09 \times f_1$	$4.24E + 09 \times f_1$	$4.73E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$4.60E + 05 \times f_2$	$2.57E + 08 \times f_2$	$7.80E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00\text{E} + 00 \times f_3$	$8.07E + 05 \times f_3$	$1.76E + 08 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.21E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.91E+08 (per year, conditional on SST1,2, or 3)

\$ 4.83E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.40E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

TOTAL COSTS								
RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL				
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS				
SST1	$7.65E + 09 \times f_1$	$4.73E + 10 \times f_1$	$6.25\text{E} + 10 \times f_1$	$1.17E + 11 \times f_1$				
SST2	$2.57E + 08 \times f_2$	$7.80E + 08 \times f_2$	$6.23E + 10 \times f_2$	$6.33E + 10 \times f_2$				
SST3	$8.07E + 05 \times f_3$	$1.76E + 08 \times f_3$	$6.23E + 10 \times f_3$	$6.25E + 10 \times f_3$				

BELLEFONT

Unit 1

Date of Operation: 1983

Power Level (MWe): 1213

NERC Region: SERC

Scale-Factor 1.083

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	63.0	106.0	1030.0	1.95E+07	1.11E+09
SST2	0.1	5.6	70.4	1.25E+06	1.72E+07
SST3	0.0	0.0	0.3	5.17E+03	2.17E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	68.2	114.8	1115.5	2.11E+07	1.20E+09
SST2	0.1	6.0	76.2	1.35E+06	1.86E+07
SST3	0.0	0.0	0.3	5.60E + 03	2.35E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE CATEGORY	EARLY FATALITIES (\$'s)	EARLY INJURIES (\$'s)	LATENT CANCER FATALITIES (\$'s)	PROPERTY DAMAGE (\$'s)
SST1	<u> </u>	$2.20E + 08 \times f_1$		$2.30E + 10 \times f_1$
SST2	$1.71E + 06 \times f_2$	$1.16E + 07 \times f_2$	$1.46E + 08 \times f_2$	$3.57E + 08 \times f_2$
SST3	$0.00E+00\times f_3$	$0.00E+00\times f_3$	$5.94E + 05 \times f_3$	$4.51E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.49E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.56E+08 (per year, conditional on SST1,2, or 3)

\$ $4.46E+10 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.58E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$3.67E + 09 \times f_1$	$2.30E + 10 \times f_1$	$6.07E + 10 \times f_1$	$8.74E + 10 \times f_1$
SST2	$1.59E + 08 \times f_2$	$3.57E + 08 \times f_2$	$6.04E + 10 \times f_2$	$6.09E + 10 \times f_2$
SST3	$5.94E+05\times f_3$	$4.51E + 07 \times f_3$	$6.04E+10\times f_3$	$6.05E + 10 \times f_3$

BELLEFONT

Unit 2 Date of Operation: 1984

Power Level (MWe): 1213

NERC Region: SERC

Scale Factor 1.083

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	63.0	106.0	1030.0	1.95E+07	1.11E+09
SST2	0.1	5.6	70.4	1.25E+06	1.72E+07
SST3	0.0	0.0	0.3	5.17E+03	2.17E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	68.2	114.8	1115.5	2.11E+07	1.20E+09
SST2	0.1	6.0	76.2	1.35E+06	1.86E+07
SST3	0.0	0.0	0.3	5.60E+03	2.35E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.26E + 09 \times f_1$	$2.11E + 08 \times f_1$	$2.05E+09 \times f_{.1}$	$2.21E+10 \times f_1$
SST2	$1.65E + 06 \times f_2$	$1.11E + 07 \times f_2$	$1.40E + 08 \times f_2$	$3.43E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$5.71E + 05 \times f_3$	$4.33E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.39E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.56E+08 (per year, conditional on SST1,2, or 3)

\$ 4.29E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.52E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$3.52E + 09 \times f_1$	$2.21E+10 \times f_1$	$5.83E + 10 \times f_1$	$8.39E + 10 \times f_1$
SST2	$1.53E + 08 \times f_2$	$3.43E + 08 \times f_2$	$5.80E + 10 \times f_2$	$5.85E + 10 \times f_2$
SST3	$5.71E + 05 \times f_3$	$4.33E + 07 \times f_3$	$5.80E + 10 \times f_3$	$5.81E + 10 \times f_3$

BIG ROCK PT

Will think to Date of Operation: 1962 the at Power Level (MWe): 63 and to NERC Region: MAIN Scale Factor 0.056

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

1	RELEASE:	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
-	SST1	14.8	90.4	675.0	1.30E+07	8.21E+08
	SST2	0.0	0.5	53.1	9.61E+05	1.00E+07
T	SST3	1 v(1)-j-(0)0 (r	0.0	0.2	3.98E+03	7.56E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	0.8	5.1 - 13	38.0	7.31E+05	4.62E+07
SST2	0.0	0.0	3.0	5.41E+04	5.63E+05
SST3	0.0	0.0	0.0	2.24E+02	4.25E+04

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

		•		
RELEASE	EARLY		LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.15E + 07 \times f_1$	$7.00E + 06 \times f_1$	$5.23E + 07 \times f_1$	$6.36E + 08 \times f_1$
SST2	$0.00E + 00 \times f_2$	$4.14E + 04 \times f_2$	$4.11E + 06 \times f_2$	$7.74E + 06 \times f_2$
SST3	$0.00E+00\times f_3$	$0.00E + 00 \times f_3$	$1.70E + 04 \times f_3$	$5.85E + 05 \times f_3$

Interpretation of this table is explained on page:7

ONSITE COSTS

Onsite Health Effects: When \$1.30E+07 (conditional on SST1) When the state of the s Fig. 1. And a restriction of the $1.79E + 0.8 \times f_1 \times (discounted over remaining plant life)$

Replacement Power: *** \$ 8.12E+06.** (per year, conditional on SST1,2, or 3) dealth dealth grand the ration of \$19.70E \pm 08 imes f_i imes (discounted over remaining plant life)

Cleanup: 10 the parameter of \$1.00E+08 (per year, conditional on SST1,2, or 3) with realing air is a small $1.13E+10 imes f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL			
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS			
SST1	$7.07E + 07 \times f_1$	$6.36E + 08 \times f_1$	$1.25E + 10 \times f_1$	$1.32E+10\times f_1$			
SST2	$4.15E + 06 \times f_2$	$7.74E + 06 \times f_2$	$1.23E + 10 \times f_2$	$1.23E + 10 \times f_2$			
SST3	$1.70E + 04 \times f_3$	$5.85E + 05 \times f_3$	$1.23E + 10 \times f_3$	$1.23E + 10 \times f_3$			

BLACK FOX

Unit 1

Date of Operation: 1985

Power Level (MWe): 1150

NERC Region: SPP

Scale Factor 1.027

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	13.4	222.0	780.0	1.43E+07	1.24E+09
SST2	0.0	0.0	69.1	1.27E+06	1.79E+07
SST3	0.0	0.0	0.3	4.48E+03	4.58E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	13.8	227.9	800.9	1.47E+07	1.27E+09
SST2	0.0	0.0	71.0	1.30E+06	1.84E+07
SST3	0.0	0.0	0.3	4.60E+03	4.70E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE CATEGORY	EARLY FATALITIES (\$'s)	EARLY INJURIES (\$'s)	LATENT CANCER FATALITIES (\$'s)	PROPERTY DAMAGE (\$'s)
SST1	$2.43E + 08 \times f_1$	$4.03E + 08 \times f_1$	$1.42E + 09 \times f_1$	$2.25E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$1.32E + 04 \times f_2$	$1.26E + 08 \times f_2$	$3.25E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E+00\times f_3$	$4.54E + 05 \times f_3$	$8.32E + 06 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.30E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 2.30E+08 (per year, conditional on SST1,2, or 3)

 $$6.07E+10 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.46E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$2.06E + 09 \times f_1$	$2.25E + 10 \times f_1$	$7.55E+10\times f_1$	$1.00E + 11 \times f_1$
SST2	$1.26E + 08 \times f_2$	$3.25E + 08 \times f_2$	$7.53E+10\times f_2$	$7.57E + 10 \times f_2$
SST3	$4.54E + 05 \times f_3$	$8.32E + 06 \times f_3$	$7.53E+10\times f_3$	$7.53E+10 \times f_3$

BLACK FOX

Unit 2

Date of Operation: 1988

Power Level (MWe): 1150

NERC Region: SPP

Scale Factor 1.027

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY .	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	13.4	222.0	· 780.0	1.43E+07	1.24E+09
SST2	0.0	0.0	69.1	1.27E+06	1.79E+07
SST3	0.0	0.0	0.3	4.48E+03	4.58E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	13.8	227.9	800.9	1.47E+07	1.27E+09
SST2	0.0	0.0	71.0	1.30E+06	1.84E+07
SST3	0.0	0.0	0.3	4.60E+03	4.70E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$2.16E + 08 \times f_1$	$3.58E + 08 \times f_1$	$1.26E + 09 \times f_1$	$2.00E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$1.17E + 04 \times f_2$	$1.11E + 08 \times f_2$	$2.88E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E+00\times f_3$	$4.03E + 05 \times f_3$	$7.38E + 06 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.04E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 2.30E+08 (per year, conditional on SST1,2, or 3)

\$ 5.38E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.29E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.83E + 09 \times f_1$	$2.00E + 10 \times f_1$	$6.70E + 10 \times f_1$	$8.88E + 10 \times f_1$
SST2	$1.11E + 08 \times f_2$	$2.88E + 08 \times f_2$	$6.68E + 10 \times f_2$	$6.72E + 10 \times f_2$
SST3	$4.03E + 05 \times f_3$	$7.38E + 06 \times f_3$	$6.68E + 10 \times f_3$	$6.68E + 10 \times f_3$

BRAIDWOOD

Unit 1

Date of Operation: 1985

Power Level (MWe): 1120

NERC Region: MAIN

Scale Factor 1.000

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	159.0	422.0	3240.0	5.96E+07	3.85E+09
SST2	0.1	10.2	239.0	4.33E+06	4.53E+07
SST3	0.0	0.0	0.9	1.63E+04	2.18E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	159.0	422.0	3240.0	5.96E+07	3.85E+09
SST2	0.1	10.2	239.0	4.33E+06	4.53E+07
SST3	0.0	0.0	0.9	1.63E+04	2.18E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE CATEGORY	EARLY FATALITIES (\$'s)	EARLY INJURIES (\$'s)	LATENT CANCER FATALITIES (\$'s)	PROPERTY DAMAGE (\$'s)
SST1	$2.81E + 09 \times f_1$	$7.47E + 08 \times f_1$	$5.73E + 09 \times f_1$	$6.81E + 10 \times f_1$
SST2	$9.40E + 05 \times f_2$	$1.81E + 07 \times f_2$	$4.23E + 08 \times f_2$	$8.02E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$1.60E + 06 \times f_3$	$3.86E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.30E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.44E+08 (per year, conditional on SST1,2, or 3)

\$ 3.80E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.46E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$9.29E + 09 \times f_1$	$6.81E + 10 \times f_1$	$5.28E + 10 \times f_1$	$1.30E + 11 \times f_1$
SST2	$4.42E + 08 \times f_2$	$8.02E + 08 \times f_2$	$5.26E+10 \times f_2$	$5.38E + 10 \times f_2$
SST3	$1.60E + 06 \times f_3$	$3.86E + 07 \times f_3$	$5.26E + 10 \times f_3$	$5.26E + 10 \times f_3$

BRAIDWOOD

Unit 2 Date of Operation: 1986 Power Level (MWe): 1120

NERC Region: MAIN

Scale Factor 1.000

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	159.0	422.0	3240.0	5.96E+07	3.85E+09
SST2	0.1	10.2	239.0	4.33E+06	4.53E+07
SST3	0.0	0.0	0.9	1.63E + 04	2.18E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	159.0	422.0	3240.0	5.96E+07	3.85E+09
SST2	0.1	10.2	239.0	4.33E+06	4.53E+07
SST3	0.0	0.0	0.9	1.63E+04	2.18E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i) ·

		•		
RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$2.70E + 09 \times f_1$	$7.18E + 08 \times f_1$	$5.51E + 09 \times f_1$	$6.55E + 10 \times f_1$
SST2	$9.03E + 05 \times f_2$	$1.73E + 07 \times f_2$	$4.06E + 08 \times f_2$	$7.70E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$1.54E + 06 \times f_3$	$3.71E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.21E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.44E+08 (per year, conditional on SST1,2, or 3)

 $3.65E+10 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.40E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL	
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS	
SST1	$8.93E + 09 \times f_1$	$6.55E + 10 \times f_1$	$5.08E + 10 \times f_1$	$1.25E+11\times f_1$	
SST2	$4.25E + 08 \times f_2$	$7.70E + 08 \times f_2$	$5.05E + 10 \times f_2$	$5.17E + 10 \times f_2$	
SST3	$1.54E + 06 \times f_3$	$3.71E + 07 \times f_3$	$5.05E + 10 \times f_3$	$5.06E + 10 \times f_3$	ļ

BROWNS FERRY

Unit 1

Date of Operation: 1974

Power Level (MWe): 1067

NERC Region: SERC

Scale Factor 0.953

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	25.1	224.0	968.0	1.78E+07	1.12E+09
SST2	0.0	0.0	69.4	1.28E+06	1.86E+07
SST3	0.0	0.0	0.3	4.84E+03	2.82E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

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RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY			
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE			
SST1	23.9	213.4	922.2	1.70E+07	1.07E+09			
SST2	0.0	0.0	66.1	1.22E+06	1.77E+07			
SST3	0.0	0.0	0.3	4.61E+03	2.69E+06			

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$4.32E + 08 \times f_1$	$3.85E + 08 \times f_1$	$1.66E + 09 \times f_1$	$1.93E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$5.62E + 04 \times f_2$	$1.19E + 08 \times f_2$	$3.20E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$4.63E + 05 \times f_3$	$4.85E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.35E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.38E+08 (per year, conditional on SST1,2, or 3)

 $3.15E+10 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.49E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

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RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL				
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS				
SST1	$2.48E + 09 \times f_1$	$1.93E + 10 \times f_1$	$4.66E + 10 \times f_1$	$6.83E + 10 \times f_1$				
SST2	$1.19E + 08 \times f_2$	$3.20E + 08 \times f_2$	$4.63E + 10 \times f_2$	$4.68E + 10 \times f_2$				
SST3	$4.63E + 05 \times f_3$	$4.85E + 07 \times f_3$	$4.63E + 10 \times f_3$	$4.64E + 10 \times f_3$				

BROWNS FERRY

Unit 2

Date of Operation: 1975

Power Level (MWe): 1067

NERC Region: SERC

Scale Factor 0.953

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	25.1	224.0	968.0	1.78E+07	1.12E+09
SST2	0.0	0.0	69.4	1.28E + 06	1.86E+07
SST3	0.0	0.0	0.3	4.84E+03	2.82E + 06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	23.9	213.4	922.2	1.70E+07	1.07E+09
SST2	0.0	0.0	66.1	1.22E+06	1.77E+07
SST3	0.0	0.0	0.3	4.61E+03	2.69E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY		LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$4.38E + 08 \times f_1$	$3.91E + 08 \times f_1$	$1.69E + 09 \times f_1$	$1.95E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$5.71E + 04 \times f_2$	$1.21E + 08 \times f_2$	$3.25E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$4.70E + 05 \times f_3$	$4.92E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$1.30E+07 (conditional on SST1)

\$ 2.38E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.38E+08 (per year, conditional on SST1,2, or 3)

\$ 3.27E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.51E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL		
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS		
SST1	$2.52E + 09 \times f_1$	$1.95E + 10 \times f_1$	$4.80E + 10 \times f_1$	$7.01E+10 \times f_1$		
SST2	$1.21E + 08 \times f_2$	$3.25E + 08 \times f_2$	$4.78E + 10 \times f_2$	$4.82E + 10 \times f_2$		
SST3	$4.70E + 05 \times f_3$	$4.92E + 07 \times f_3$	$4.78E + 10 \times f_3$	$4.78E + 10 \times f_3$		

BROWNS FERRY

Unit 3

Date of Operation: 1977

Power Level (MWe): 1077

NERC Region: SERC

Scale Factor 0.962

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	25.1	224.0	968.0	1.78E+07	1.12E+09
SST2	0.0	0.0	69.4	1.28E+06	1.86E+07
SST3	0.0	0.0	0.3	4.84E+03	2.82E + 06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	24.1	215.4	930.8	1.71E+07	1.08E+09
SST2	0.0	0.0	66.7	1.23E+06	1.79E+07
SST3	0.0	0.0	0.3	4.65E+03	2.71E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$4.55E + 08 \times f_1$	$4.06E + 08 \times f_1$	$1.75E + 09 \times f_1$	$2.03E+10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$5.92E + 04 \times f_2$	$1.26E + 08 \times f_2$	$3.37E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E+00\times f_3$	$4.87E + 05 \times f_3$	$5.11E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.45E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.39E+08 (per year, conditional on SST1,2, or 3)

 $3.54E+10 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.55E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$2.61E + 09 \times f_1$	$2.03E+10 \times f_1$	$5.12E + 10 \times f_1$	$7.41E + 10 \times f_1$
SST2	$1.26E + 08 \times f_2$	$3.37E + 08 \times f_2$	$5.09E + 10 \times f_2$	$5.14E + 10 \times f_2$
SST3	$4.87E + 05 \times f_3$	$5.11E + 07 \times f_3$	$5.09E + 10 \times f_3$	$5.10E + 10 \times f_3$

BRUNSWICK

Unit 1

Date of Operation: 1977

Power Level (MWe): 790

NERC Region: SERC

Scale Factor 0.705

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	11.6	118.0	885.0	1.66E+07	1.05E+09
SST2	0.0	0.0	98.2	1.78E+06	1.77E+07
SST3	0.0	0.0	0.4	7.42E + 03	8.06E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES .	INJURIES	FATALITIES	REM	DAMAGE
SST1	8.2	83.2	624.2	1.17E+07	7.41E+08
SST2	0.0	0.0	69.3	1.26E+06	1.25E+07
SST3	0.0	0.0	0.3	5.23E+03	5.69E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.54E + 08 \times f_1$	$1.57E + 08 \times f_1$	$1.18E + 09 \times f_1$	$1.39E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$1.30E + 04 \times f_2$	$1.30E + 08 \times f_2$	$2.35E + 08 \times f_2$
SST3	$0.00E+00\times f_3$	$0.00E+00 \times f_3$	$5.46E + 05 \times f_3$	$1.07E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.45E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.02E+08 (per year, conditional on SST1,2, or 3)

\$ 2.60E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.55E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

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RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.49E + 09 \times f_1$	$1.39E + 10 \times f_1$	$4.17E + 10 \times f_1$	$5.72E + 10 \times f_1$
SST2	$1.30E + 08 \times f_2$	$2.35E + 08 \times f_2$	$4.15E + 10 \times f_2$	$4.19E + 10 \times f_2$
SST3	$5.46E + 05 \times f_3$	$1.07E + 07 \times f_3$	$4.15E + 10 \times f_3$	$4.15E + 10 \times f_3$

BRUNSWICK

Unit 2

Date of Operation: 1975

Power Level (MWe): 790

NERC Region: SERC.

Scale Factor 0.705

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	11.6	118.0	885.0	1.66E+07	1.05E+09
SST2	0.0	0.0	98.2	1.78E+06	1.77E+07
SST3	0.0	0.0	0.4	7.42E+03	8.06E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	8.2	83.2	624.2	1.17E+07	7.41E+08
SST2	0.0	0.0	69.3	1.26E+06	1.25E+07
SST3	0.0	0.0	0.3	5.23E + 03	5.69E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.50E + 08 \times f_1$	$1.52E + 08 \times f_1$	$1.14E + 09 \times f_1$	$1.36E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$1.26E + 04 \times f_2$	$1.27E + 08 \times f_2$	$2.29E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$5.31E + 05 \times f_3$	$1.04E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.38E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.02E+08 (per year, conditional on SST1,2, or 3)

\$ 2.42E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.51E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.45E + 09 \times f_1$	$1.36E + 10 \times f_1$	$3.95E + 10 \times f_1$	$5.46E + 10 \times f_1$
SST2	$1.27E + 08 \times f_2$	$2.29E + 08 \times f_2$	$3.93E + 10 \times f_2$	$3.97E + 10 \times f_2$
SST3	$5.31E + 05 \times f_3$	$1.04E + 07 \times f_3$	$3.93E + 10 \times f_3$	$3.93E + 10 \times f_3$

BYRON

Unit 1

Date of Operation: 1983

Power Level (MWe): 1120

NERC Region: MAIN

Scale Factor 1.000

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	54.0	334.0	2540.0	4.81E+07	2.75E+09
SST2	0.1	4.3	193.0	3.50E+06	3.57E+07
SST3	0.0	0.0	0.7	1.33E+04	1.97E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	54.0	334.0	2540.0	4.81E+07	2.75E+09
SST2	0.1	4.3	193.0	3.50E + 06	3.57E+07
SST3	0.0	0.0	0.7	1.33E+04	1.97E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY		LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.04E + 09 \times f_1$	$6.40E + 08 \times f_1$	$4.87E + 09 \times f_1$	$5.27E + 10 \times f_1$
SST2	$1.73E + 06 \times f_2$	$8.15E + 06 \times f_2$	$3.70E + 08 \times f_2$	$6.84E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E+00 \times f_3$	$1.41E + 06 \times f_3$	$3.78E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.49E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.44E+08 (per year, conditional on SST1,2, or 3)

\$ $4.12E+10 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.58E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$6.54E + 09 \times f_1$	$5.27E + 10 \times f_1$	$5.72E + 10 \times f_1$	$1.16E + 11 \times f_1$
SST2	$3.80E + 08 \times f_2$	$6.84E + 08 \times f_2$	$5.70E + 10 \times f_2$	$5.80E + 10 \times f_2$
SST3	$1.41E + 06 \times f_3$	$3.78E + 07 \times f_3$	$5.70E + 10 \times f_3$	$5.70E + 10 \times f_3$

BYRON

Unit 2

Date of Operation: 1983

Power Level (MWe): 1120

NERC Region: MAIN

Scale Factor 1.000

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	54.0	334.0	2540.0	4.81E+07	2.75E+09
SST2	0.1	4.3	193.0	3.50E+06	3.57E+07
SST3	0.0	0.0	0.7	1.33E+04	1.97E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	54.0	334.0	2540.0	4.81E+07	2.75E+09
SST2	0.1	4.3	193.0	3.50E+06	3.57E+07
SST3	0.0	0.0	0.7	1.33E+04	1.97E + 06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.04E + 09 \times f_1$	$6.40E + 08 \times f_1$	$4.87E + 09 \times f_1$	$5.27E + 10 \times f_1$
SST2	$1.73E + 06 \times f_2$	$8.15E + 06 \times f_2$	$3.70E + 08 \times f_2$	$6.84E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E+00\times f_3$	$1.41E + 06 \times f_3$	$3.78E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.49E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.44E+08 (per year, conditional on SST1,2, or 3)

 $4.12E+10 \times f_i$

(discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.58E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

		I O III I O O O I O		
RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$6.54E + 09 \times f_1$	$5.27E + 10 \times f_1$	$5.72E + 10 \times f_1$	$1.16E + 11 \times f_1$
SST2	$3.80E + 08 \times f_2$	$6.84E + 08 \times f_2$	$5.70E + 10 \times f_2$	$5.80E + 10 \times f_2$
SST3	$1.41E + 06 \times f_3$	$3.78E + 07 \times f_3$	$5.70E + 10 \times f_3$	$5.70E + 10 \times f_3$

CALLAWAY

Unit 1

Date of Operation: 1982

Power Level (MWe): 1150

NERC Region: SPP

Scale Factor 1.027

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	9.9	104.0	1220.0	2.42E+07	1.16E+09
SST2	0.0	0.0	86.5	1.58E+06	1.40E+07
SST3	0.0	0.0	0.3	5.90E+03	3.52E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	10.1	106.8	1252.7	2.48E+07	1.19E+09
SST2	0.0	0.0	88.8	1.62E + 06	1.44E+07
SST3	0.0	0.0	0.3	6.06E+03	3.61E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$2.02E + 08 \times f_1$	$2.13E + 08 \times f_1$	$2.50E + 09 \times f_1$	$2.38E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$8.07E + 04 \times f_2$	$1.77E + 08 \times f_2$	$2.87E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$6.72E + 05 \times f_3$	$7.21E + 06 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.59E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 2.30E+08 (per year, conditional on SST1,2, or 3)

\$ 6.84E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.64E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$2.91E + 09 \times f_1$	$2.38E + 10 \times f_1$	$8.51E + 10 \times f_1$	$1.12E + 11 \times f_1$
SST2	$1.77E + 08 \times f_2$	$2.87E + 08 \times f_2$	$8.49E + 10 \times f_2$	$8.53E + 10 \times f_2$
SST3	$6.72E + 05 \times f_3$	$7.21E + 06 \times f_3$	$8.49E + 10 \times f_3$	$8.49E + 10 \times f_3$

CALLAWAY

Unit 2

Date of Operation: 1987

Power Level (MWe): 1150

NERC Region: SPP

Scale Factor 1.027

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	9.9	104.0	· 1220.0	2.42E + 07	1.16E+09
SST2	0.0	0.0	86.5	1.58E+06	1.40E+07
SST3	0.0	0.0	0.3	5.90E+03	3.52E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	10.1	106.8	1252.7	2.48E+07	1.19E + 09
SST2	0.0	0.0	88.8	1.62E + 06	1.44E+07
SST3	0.0	0.0	0.3	6.06E + 03	3.61E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY		LATENT CANCER	
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.66E + 08 \times f_1$	$1.74E + 08 \times f_1$	$2.05E + 09 \times f_1$	$1.95E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$6.61E + 04 \times f_2$	$1.45E + 08 \times f_2$	$2.35E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E+00\times f_3$	$5.50E + 05 \times f_3$	$5.90E + 06 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.12E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 2.30E+08 (per year, conditional on SST1,2, or 3)

\$ 5.60E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.35E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

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RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$2.39E + 09 \times f_1$	$1.95E + 10 \times f_1$	$6.97E + 10 \times f_1$	$9.15E + 10 \times f_1$
SST2	$1.45E + 08 \times f_2$	$2.35E + 08 \times f_2$	$6.95E + 10 \times f_2$	$6.99E + 10 \times f_2$
SST3	$5.50E + 05 \times f_3$	$5.90E + 06 \times f_3$	$6.95E + 10 \times f_3$	$6.95E + 10 \times f_3$

CALVERT CLIFFS

Unit 1

Date of Operation: 1975

Power Level (MWe): 850

NERC Region: MAAC

Scale Factor 0.759

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	18.3	170.0	2390.0	4.76E+07	1.73E+09
SST2	0.0	0.1	124.0	2.30E+06	1.89E+07
SST3	0.0	0.0	0.4	7.84E+03	1.52E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	13.9	129.0	1813.8	3.61E+07	1.31E+09
SST2	0.0	0.1	94.1	1.75E+06	1.43E+07
SST3	0.0	0.0	0.3	5.95E+03	1.15E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY		LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$2.54E + 08 \times f_1$	$2.36E + 08 \times f_1$	$3.32E + 09 \times f_1$	$2.41E+10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$1.07E + 05 \times f_2$	$1.72E + 08 \times f_2$	$2.63E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$6.05E + 05 \times f_3$	$2.11E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.38E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.95E+08 (per year, conditional on SST1,2, or 3)

\$ 4.63E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.51E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

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RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$3.81E + 09 \times f_1$	$2.41E + 10 \times f_1$	$6.16E + 10 \times f_1$	$8.95E + 10 \times f_1$
SST2	$1.73E + 08 \times f_2$	$2.63E + 08 \times f_2$	$6.14E + 10 \times f_2$	$6.18E + 10 \times f_2$
SST3	$6.05E + 05 \times f_3$	$2.11E + 07 \times f_3$	$6.14E + 10 \times f_3$	$6.14E + 10 \times f_3$

CALVERT CLIFFS

Unit 2

Date of Operation: 1977

Power Level (MWe): 850

NERC Region: MAAC

Scale Factor 0.759

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	18.3	170.0	2390.0	4.76E+07	1.73E+09
SST2	0.0	0.1	124.0	2.30E+06	1.89E+07
SST3	0.0	0.0	0.4	7.84E + 03	1.52E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	13.9	129.0	1813.8	3.61E+07	1.31E+09
SST2	0.0	0.1	94.1	1.75E+06	1.43E+07
SST3	0.0	0.0	0.3	5.95E+03	1.15E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY		LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$2.62E + 08 \times f_1$	$2.43E + 08 \times f_1$	$3.42E + 09 \times f_1$	$2.47E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$1.10E + 05 \times f_2$	$1.77E + 08 \times f_2$	$2.70E + 08 \times f_2$
SST3	$0.00E+00\times f_3$	$0.00E + 00 \times f_3$	$6.22E + 05 \times f_3$	$2.17E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.45E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.95E+08 (per year, conditional on SST1,2, or 3)

\$ 4.97E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.55E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

	RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
	CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
i	SST1	$3.92E + 09 \times f_1$	$2.47E + 10 \times f_1$	$6.54E + 10 \times f_1$	$9.41E + 10 \times f_1$
	SST2	$1.77E + 08 \times f_2$	$2.70E + 08 \times f_2$	$6.52E + 10 \times f_2$	$6.56E + 10 \times f_2$
	SST3	$6.22E + 05 \times f_3$	$2.17E + 07 \times f_3$	$6.52E + 10 \times f_3$	$6.52E + 10 \times f_3$

CATAWBA

Unit 1

Date of Operation: 1983

Power Level (MWe): 1145

NERC Region: SERC

Scale Factor 1.022

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	102.0	710.0	1480.0	2.51E+07	1.98E+09
SST2	0.0	0.2	109.0	2.04E+06	3.14E+07
SST3	0.0	0.0	0.4	6.45E+03	5.68E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

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RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	104.3	725.8	1513.0	2.57E+07	2.02E+09
SST2	0.0	0.2	111.4	2.09E+06	3.21E+07
SST3	0.0	0.0	0.4	6.59E+03	5.81E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$2.00E + 09 \times f_1$	$1.39E + 09 \times f_1$	$2.90E + 09 \times f_1$	$3.88E + 10 \times f_1$
SST2	$0.00E+00\times f_2$	$3.61E + 05 \times f_2$	$2.14E + 08 \times f_2$	$6.15E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$7.06E + 05 \times f_3$	$1.11E + 08 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.49E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.48E+08 (per year, conditional on SST1,2, or 3)

\$ $4.21E+10 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.58E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

		TOTAL COSTS	'	
RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$6.29E + 09 \times f_1$	$3.88E + 10 \times f_1$	$5.82E + 10 \times f_1$	$1.03E + 11 \times f_1$
SST2	$2.14E + 08 \times f_2$	$6.15E + 08 \times f_2$	$5.79E + 10 \times f_2$	$5.87E + 10 \times f_2$
SST3	$7.06E + 05 \times f_3$	$1.11E + 08 \times f_3$	$5.79E + 10 \times f_3$	$5.80E + 10 \times f_3$

CATAWBA

Unit 2

Date of Operation: 1985

Power Level (MWe): 1145

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NERC Region: SERC

Scale Factor 1.022

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	102.0	710.0	1480.0	2.51E+07	1.98E+09
SST2	0.0	0.2	109.0	2.04E+06	3.14E+07
SST3	0.0	0.0	0.4	6.45E+03	5.68E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	104.3	725.8	1513.0	2.57E+07	2.02E + 09
SST2	0.0	0.2	111.4	2.09E+06	3.21E+07
SST3	0.0	0.0	0.4	6.59E+03	5.81E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

		•		
RELEASE	EARLY		LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.85E + 09 \times f_1$	$1.28E + 09 \times f_1$	$2.68E + 09 \times f_1$	$3.58E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$3.33E + 05 \times f_2$	$1.97E + 08 \times f_2$	$5.68E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$6.51E + 05 \times f_3$	$1.03E + 08 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$1.30E+07 (conditional on SST1)

\$ 2.30E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.48E+08 (per year, conditional on SST1,2, or 3)

\$ 3.89E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.46E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

TOTHE COSTS									
RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL					
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS					
SST1	$5.81E + 09 \times f_1$	$3.58E + 10 \times f_1$	$5.37E + 10 \times f_1$	$9.53E + 10 \times f_1$					
SST2	$1.98E + 08 \times f_2$	$5.68E + 08 \times f_2$	$5.35E + 10 \times f_2$	$5.42E+10\times f_2$					
SST3	$6.51E + 05 \times f_3$	$1.03E + 08 \times f_3$	$5.35E + 10 \times f_3$	$5.36E + 10 \times f_3$					

CHEROKEE

Unit 1

Date of Operation: 1990

Power Level (MWe): 1280

NERC Region: SERC

Scale Factor 1.143

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	27.2	252.0	1150.0	2.10E+07	1.35E+09
SST2	0.0	0.1	76.2	1.42E+06	1.69E+07
SST3	0.0	0.0	0.3	4.95E+03	2.91E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	31.1	288.0	1314.3	2.40E + 07	1.54E+09
SST2	0.0	0.2	87.1	1.62E+06	1.93E+07
SST3	0.0	0.0	0.3	5.66E+03	3.33E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

		•		
RELEASE	EARLY	EARLY	LATENT CANCER	
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$4.50E + 08 \times f_1$	$4.17E + 08 \times f_1$	$1.90E + 09 \times f_1$	$2.24E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$2.19E + 05 \times f_2$	$1.26E + 08 \times f_2$	$2.80E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E+00\times f_3$	$4.55E + 05 \times f_3$	$4.82E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 1.88E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.65E+08 (per year, conditional on SST1,2, or 3)

\$ 3.56E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.19E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

TOTAL COSTA									
RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL					
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS					
SST1	$2.77E + 09 \times f_1$	$2.24E + 10 \times f_1$	$4.77E + 10 \times f_1$	$7.28E + 10 \times f_1$					
SST2	$1.26E + 08 \times f_2$	$2.80E + 08 \times f_2$	$4.75E + 10 \times f_2$	$4.79E + 10 \times f_2$					
SST3	$4.55E + 05 \times f_3$	$4.82E + 07 \times f_3$	$4.75E + 10 \times f_3$	$4.76E + 10 \times f_3$					

CHEROKEE

Unit 2

Date of Operation: 1992

Power Level (MWe): 1280

NERC Region: SERC

Scale Factor 1.143

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	27.2	252.0	1150.0	2.10E+07	1.35E+09
SST2	0.0	0.1	76.2	1.42E-∤-06	1.09E+07
SST3	0.0	0.0	0.3	4.95E+03	2.91E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SSTI	31.7	008 Ü	1014 0	<u>٥ ١/١٠٣٠٠ ٢٠</u>	1,57500
SST2	0.0	0.2	87.1	1.62E+06	1.93E+07
SST3	0.0	0.0	0.3	5.66E+03	3.33E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY		LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$4.16E + 08 \times f_1$	$3.85E + 08 \times f_1$	$1.76E + 09 \times f_1$	$2.06E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$2.02E + 05 \times f_2$	$1.16E + 08 \times f_2$	$2.58E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$4.20E + 05 \times f_3$	$4.45E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 1.74E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.65E+08 (per year, conditional on SST1,2, or 3)

\$ 3.28E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.10E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$2.56E + 09 \times f_1$	$2.06E + 10 \times f_1$	$4.40E + 10 \times f_1$	$6.72E + 10 \times f_1$
SST2	$1.17E + 08 \times f_2$	$2.58E + 08 \times f_2$	$4.39E + 10 \times f_2$	$4.42E + 10 \times f_2$
SST3	$4.20E + 05 \times f_3$	$4.45E + 07 \times f_3$	$4.39E + 10 \times f_3$	$4.39E + 10 \times f_3$

CHEROKEE

Unit 3 Date of Operation: 1999

Power Level (MWe): 1280

Scale Factor 1.143

NERC Region: SERC

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	27.2	252.0	1150.0	2.10E+07	1.35E+09
SST2	0.0	0.1	76.2	1.42E+06	1.69E+07
SST3	0.0	0.0	0.3	4.95E+03	2.91E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	31.1	288.0	1314.3	2.40E+07	1.54E+09
SST2	0.0	0.2	87.1	1.62E+06	1.93E+07
SST3	0.0	0.0	0.3	5.66E + 03	3.33E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$3.14E + 08 \times f_1$	$2.91E + 08 \times f_1$	$1.33E + 09 \times f_1$	$1.56E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$1.52E + 05 \times f_2$	$8.80E + 07 \times f_2$	$1.95E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E+00\times f_3$	$3.18E + 05 \times f_3$	$3.36E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 1.31E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.65E+08 (per year, conditional on SST1,2, or 3)

 $2.48E+10 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 8.33E+09 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.93E + 09 \times f_1$	$1.56E + 10 \times f_1$	$3.33E + 10 \times f_1$	$5.08E + 10 \times f_1$
SST2	$8.82E + 07 \times f_2$	$1.95E + 08 \times f_2$	$3.31E + 10 \times f_2$	$3.34E + 10 \times f_2$
SST3	$3.18E + 05 \times f_3$	$3.36E + 07 \times f_3$	$3.31E + 10 \times f_3$	$3.32E + 10 \times f_3$

CLINTON

Unit 1

Date of Operation: 1982

Power Level (MWe): 950

NERC Region: MAIN

Scale Factor 0.848

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	15.9	134.0	2280.0	4.48E+07	2.23E+09
SST2	0.0	0.7	174.0	3.18E+06	3.00E+07
SST3	0.0	0.0	0.7	1.23E+04	1.20E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	13.5	113.7	1933.9	3.80E+07	1.89E+09
SST2	0.0	0.6	147.6	2.70E+06	2.54E+07
SST3	0.0	0.0	0.6	1.04E+04	1.02E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

		•		
RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$2.69E + 08 \times f_1$	$2.27E + 08 \times f_1$	$3.86E + 09 \times f_1$	$3.77E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$1.20E + 06 \times f_2$	$2.94E + 08 \times f_2$	$5.08E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$1.15E + 06 \times f_3$	$2.03E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.59E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.22E+08 (per year, conditional on SST1,2, or 3)

\$ 3.64E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.64E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$4.35E + 09 \times f_1$	$3.77E + 10 \times f_1$	$5.31E + 10 \times f_1$	$9.52E + 10 \times f_1$
SST2	$2.96E + 08 \times f_2$	$5.08E + 08 \times f_2$	$5.28E + 10 \times f_2$	$5.36E + 10 \times f_2$
SST3	$1.15E + 06 \times f_3$	$2.03E + 07 \times f_3$	$5.28E + 10 \times f_3$	$5.28E + 10 \times f_3$

COMMANCHE PEAK

Unit 1

Date of Operation: 1981

Power Level (MWe): 1150

NERC Region: ERCOT

Scale Factor 1.027

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	1.3	37.4	642.0	1.23E + 07	1.19E+09
SST2	0.0	0.0	49.3	9.08E+05	1.83E+07
SST3	0.0	0.0	0.2	3.53E+03	6.02E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

1	RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
	CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
	SST1	1.3	38.4	659.2	1.26E+07	1.22E+09
	SST2	0.0	0.0	50.6	9.32E+05	1.88E+07
	SST3	0.0	0.0	0.2	3.62E+03	6.18E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

		•		
RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$2.62E + 07 \times f_1$	$7.58E + 07 \times f_1$	$1.30E + 09 \times f_1$	$2.41E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$0.00E + 00 \times f_2$	$1.00E + 08 \times f_2$	$3.71E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$3.97E + 05 \times f_3$	$1.22E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.57E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 2.63E+08 (per year, conditional on SST1,2, or 3)

\$ 7.61E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ $1.63E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

		·		
RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.40\text{E} + 09 \times f_1$	$2.41E+10 \times f_1$	$9.26E + 10 \times f_1$	$1.18E+11\times f_1$
SST2	$1.00E + 08 \times f_2$	$3.71E + 08 \times f_2$	$9.23E + 10 \times f_2$	$9.28E + 10 \times f_2$
SST3	$3.97E + 05 \times f_3$	$1.22E + 07 \times f_3$	$9.23E + 10 \times f_3$	$9.23E + 10 \times f_3$

COMMANCHE PEAK

Unit 2

Date of Operation: 1983

Power Level (MWe): 1150

NERC Region: ERCOT

Scale Factor 1.027

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	1.3	37.4	642.0	1.23E+07	1.19E+09
SST2	0.0	0.0	49.3	9.08E+05	1.83E+07
SST3	0.0	0.0	0.2	3.53E+03	6.02E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	1.3	38.4	659.2	1.26E + 07	1.22E+09
SST2	0.0	0.0	50.6	9.32E+05	1.88E+07
SST3	0.0	0.0	0.2	3.62E+03	6.18E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$2.54E + 07 \times f_1$	$7.36E + 07 \times f_1$	$1.26E + 09 \times f_1$	$2.34E+10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$0.00E+00\times f_2$	$9.70E + 07 \times f_2$	$3.60E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$3.86E + 05 \times f_3$	$1.18E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.49E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 2.63E+08 (per year, conditional on SST1,2, or 3)

\$ 7.51E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.58E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.36E + 09 \times f_1$	$2.34E + 10 \times f_1$	$9.12E + 10 \times f_1$	$1.16E + 11 \times f_1$
SST2	$9.70E + 07 \times f_2$	$3.60E + 08 \times f_2$	$9.09E + 10 \times f_2$	$9.14E + 10 \times f_2$
SST3	$3.86E + 05 \times f_3$	$1.18E + 07 \times f_3$	$9.09E + 10 \times f_3$	$9.09E + 10 \times f_3$

D.C. COOK

Unit 1

Date of Operation: 1975

Power Level (MWe): 1054

NERC Region: MAIN

Scale Factor 0.941

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	55.1	585.0	2460.0	4.58E+07	2.36E+09
SST2	0.0	2.2	123.0	2.29E+06	3.57E+07
SST3	0.0	0.0	0.4	7.27E + 03	4.25E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

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RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY		
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE		
SST1	51.9	550.5	2315.0	4.31E+07	2.22E + 09		
SST2	0.0	2.1	115.8	2.16E+06	3.36E+07		
SST3	0.0	0.0	0.4	6.84E+03	4.00E+06		

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY		LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$9.50E + 08 \times f_1$	$1.01E + 09 \times f_1$	$4.24E + 09 \times f_1$	$4.07E + 10 \times f_1$
SST2	$6.17E + 05 \times f_2$	$3.84E + 06 \times f_2$	$2.12E + 08 \times f_2$	$6.16E + 08 \times f_2$
SST3	$0.00E+00\times f_3$	$0.00E+00\times f_3$	$6.95E + 05 \times f_3$	$7.33E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.38E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.36E+08 (per year, conditional on SST1,2, or 3)

 $3.23E+10 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.51E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

		TOTAL COSTS	<u> </u>	· · · · · · · · · · · · · · · · · · ·
RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$6.20E + 09 \times f_1$	$4.07E + 10 \times f_1$	$4.76E + 10 \times f_1$	$9.45E + 10 \times f_1$
SST2	$2.17E + 08 \times f_2$	$6.16E + 08 \times f_2$	$4.74E + 10 \times f_2$	$4.82E + 10 \times f_2$
SST3	$6.95E + 05 \times f_3$	$7.33E + 07 \times f_3$	$4.74E + 10 \times f_3$	$4.75E + 10 \times f_3$

D.C. COOK

Unit 2 Date of Operation: 1978

Power Level (MWe): 1094

NERC Region: MAIN

Scale Factor 0.977

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	55.1	585.0	2460.0	4.58E+07	2.36E+09
SST2	0.0	2.2	123.0	2.29E+06	3.57E+07
SST3	0.0	0.0	0.4	7.27E+03	4.25E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

į	RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
	CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
j	SST1	53.8	571.4	2402.9	4.47E+07	2.31E+09
	SST2	0.0	2.2	120.1	2.24E+06	3.49E+07
	SST3	0.0	0.0	0.4	7.10E+03	4.15E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.03E + 09 \times f_1$	$1.09E + 09 \times f_1$	$4.58E + 09 \times f_1$	$4.40E + 10 \times f_1$
SST2	$6.67E + 05 \times f_2$	$4.16E + 06 \times f_2$	$2.29E + 08 \times f_2$	$6.65E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$7.51E + 05 \times f_3$	$7.92E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.48E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.41E+08 (per year, conditional on SST1,2, or 3)

\$ 3.72E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.57E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$6.70E + 09 \times f_1$	$4.40E + 10 \times f_1$	$5.32E + 10 \times f_1$	$1.04E + 11 \times f_1$
SST2	$2.34E + 08 \times f_2$	$6.65E + 08 \times f_2$	$5.29E + 10 \times f_2$	$5.38E + 10 \times f_2$
SST3	$7.51E + 05 \times f_3$	$7.92E + 07 \times f_3$	$5.29E + 10 \times f_3$	$5.30E + 10 \times f_3$

COOPER

Unit 1

Date of Operation: 1974

Power Level (MWe): 778

NERC Region: MARCA

Scale Factor 0.695

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	4.7	46.8	903.0	1.74E+07	1.28E+09
SST2	0.0	0.1	81.3	1.47E+06	1.86E+07
SST3	0.0	0.0	0.3	6.07E + 03	6.20E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	3.3	32.5	627.3	1.21E+07	8.89E+08
SST2	0.0	0.1	56.5	1.02E+06	1.29E+07
SST3	0.0	0.0	0.2	4.22E+03	4.31E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$5.94E + 07 \times f_1$	$5.87E + 07 \times f_1$	$1.13E + 09 \times f_1$	$1.60E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$1.07E + 05 \times f_2$	$1.02E + 08 \times f_2$	$2.33E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$4.23E + 05 \times f_3$	$7.77E + 06 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.35E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.11E+08 (per year, conditional on SST1,2, or 3)

(discounted over remaining plant life) \$ 2.55E+10 $\times f_i$

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.49E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

	RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
	CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
1	SST1	$1.25E + 09 \times f_1$	$1.60E + 10 \times f_1$	$4.06E + 10 \times f_1$	$5.79E + 10 \times f_1$
	SST2	$1.02E + 08 \times f_2$	$2.33E + 08 \times f_2$	$4.04E + 10 \times f_2$	$4.07E + 10 \times f_2$
	SST3	$4.23E + 05 \times f_3$	$7.77E + 06 \times f_3$	$4.04E + 10 \times f_3$	$4.04E + 10 \times f_3$

CRYSTAL RIVER

Unit 3

Date of Operation: 1977

Power Level (MWe): 825

NERC Region: SERC

Scale Factor 0.737

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	21.3	87.8	585.0	1.08E+07	7.30E+08
SST2	0.0	0.9	65.6	1.17E+06	1.65E+07
SST3	0.0	0.0	0.3	5.07E+03	8.19E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	15.7	64.7	430.9	7.96E + 06	5.38E + 08
SST2	0.0	0.6	48.3	8.62E+05	1.22E+07
SST3	0.0	0.0	0.2	3.73E+03	6.03E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY		LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$2.96E + 08 \times f_1$	$1.22E + 08 \times f_1$	$8.12E + 08 \times f_1$	$1.01E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$1.18E + 06 \times f_2$	$9.10E + 07 \times f_2$	$2.29E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$3.91E + 05 \times f_3$	$1.14E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.45E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.06E+08 (per year, conditional on SST1,2, or 3)

\$ 2.71E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.55E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.23E + 09 \times f_1$	$1.01E + 10 \times f_1$	$4.29E + 10 \times f_1$	$5.43E + 10 \times f_1$
SST2	$9.22E + 07 \times f_2$	$2.29E + 08 \times f_2$	$4.27E + 10 \times f_2$	$4.30E + 10 \times f_2$
SST3	$3.91E + 05 \times f_3$	$1.14E + 07 \times f_3$	$4.27E + 10 \times f_3$	$4.27E + 10 \times f_3$

DAVIS BESSE

Unit 1

Date of Operation: 1977

Power Level (MWe): 906

NERC Region: ECAR

Scale Factor 0.809

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	20.9	424.0	2580.0	5.03E+07	2.79E+09
SST2	0.0	0.6	161.0	3.00E+06	3.43E+07
SST3	0.0	0.0	0.5	9.76E+03	1.54E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	16.9	343.0	2087.0	4.07E+07	2.26E+09
SST2	0.0	0.5	130.2	2.43E+06	2.77E+07
SST3	0.0	0.0	0.4	7.90E+03	1.25E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$3.18E + 08 \times f_1$	$6.46E + 08 \times f_1$	$3.93E + 09 \times f_1$	$4.25E + 10 \times f_1$
SST2	$0.00E+00\times f_2$	$9.00E + 05 \times f_2$	$2.45E + 08 \times f_2$	$5.23E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$8.27E + 05 \times f_3$	$2.35E+07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.45E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 9.09E+07 (per year, conditional on SST1,2, or 3)

\$ $2.32E+10 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.55E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

			TO TIKE COULD	<i>*</i>	
	RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
	CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
	SST1	$4.90E + 09 \times f_1$	$4.25E + 10 \times f_1$	$3.90E + 10 \times f_1$	$8.64E+10\times f_1$
	SST2	$2.46E + 08 \times f_2$	$5.23E + 08 \times f_2$	$3.87E + 10 \times f_2$	$3.95E + 10 \times f_2$
•	SST3	$8.27E + 05 \times f_3$	$2.35E + 07 \times f_3$	$3.87E + 10 \times f_3$	$3.87E + 10 \times f_3$

DIABLO CANYON

Unit 1

Date of Operation: 1981

Power Level (MWe): 1084

NERC Region: CALIF

Scale Factor 0.968

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM .	DAMAGE
SST1	4.7	49.8	1210.0	2.39E+07	1.32E+09
SST2	0.0	0.0	97.6	1.78E+06	1.91E+07
SST3	0.0	0.0	0.4	6.61E + 03	7.14E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	4.5	48.2	1171.1	2.31E+07	1.28E+09
SST2	0.0	0.0	94.5	1.72E+06	1.85E+07
SST3	0.0	0.0	0.4	6.40E+03	6.91E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$8.94E + 07 \times f_1$	$9.52E + 07 \times f_1$	$2.31E + 09 \times f_1$	$2.52E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$0.00E+00\times f_2$	$1.87E + 08 \times f_2$	$3.65E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$7.05E + 05 \times f_3$	$1.36E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$1.30E+07 (conditional on SST1)

\$ 2.57E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 3.88E+08 (per year, conditional on SST1,2, or 3)

\$ 1.12E+11 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.63E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE CATEGORY	OFFSITE HEATLH COSTS	OFFSITE PROPERTY COSTS	ONSITE COSTS	TOTAL COSTS
SST1	$2.50E + 09 \times f_1$	$2.52E + 10 \times f_1$	$1.29E + 11 \times f_1$	$1.56E+11\times f_1$
SST2	$1.87E + 08 \times f_2$	$3.65E + 08 \times f_2$	$1.28E + 11 \times f_2$	$1.29E + 11 \times f_2$
SST3	$7.05E + 05 \times f_3$	$1.36E + 07 \times f_3$	$1.28E + 11 \times f_3$	$1.28E + 11 \times f_3$

DIABLO CANYON

Unit 2

Date of Operation: 1981

Power Level (MWe): 1106

NERC Region: CALIF

Scale Factor 0.988

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	4.7	49.8	1210.0	2.39E+07	1.32E+09
SST2	0.0	0.0	97.6	1.78E+06	1.91E+07
SST3	0.0	0.0	0.4	6.61E+03	7.14E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	4.6	49.2	1194.9	2.36E + 07	1.30E+09
SST2	0.0	0.0	96.4	1.76E+06	1.89E+07
SST3	0.0	0.0	0.4	6.53E + 03	7.05E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY FATALITIES (\$'s)	EARLY INJURIES (\$'s)	LATENT CANCER FATALITIES (\$'s)	PROPERTY DAMAGE (\$'s)
SST1	$9.13E + 07 \times f_1$			$2.57E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$0.00E + 00 \times f_2$	$1.90E + 08 \times f_2$	$3.72E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$7.20E + 05 \times f_3$	$1.39E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.57E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$3.96E+08 (per year, conditional on SST1,2, or 3)

 $1.14E+11 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.63E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$2.55E + 09 \times f_1$	$2.57E + 10 \times f_1$	$1.31E + 11 \times f_1$	$1.59E + 11 \times f_1$
SST2	$1.90E + 08 \times f_2$	$3.72E + 08 \times f_2$	$1.31E + 11 \times f_2$	$1.31E + 11 \times f_2$
SST3	$7.20E + 05 \times f_3$	$1.39E + 07 \times f_3$	$1.31E + 11 \times f_3$	$1.31E + 11 \times f_3$

DRESDEN

Unit 1

Date of Operation: 1960

Power Level (MWe): 200

NERC Region: MAIN

Scale Factor 0.179

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	42.4	536.0	3250.0	6.01E+07	4.22E+09
SST2	0.0	0.3	257.0	4.77E+06	4.06E+07
SST3	0.0	0.0	0.9	1.64E+04	3.19E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	7.6	95.7	580.4	1.07E+07	7.54E+08
SST2	0.0	0.1	45.9	8.52E+05	7.25E+06
SST3	0.0	0.0	0.2	2.93E+03	5.70E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$9.72E + 07 \times f_1$	$1.23E + 08 \times f_1$	$7.45E + 08 \times f_1$	$9.67E + 09 \times f_1$
SST2	$0.00E + 00 \times f_2$	$7.63E + 04 \times f_2$	$5.89E + 07 \times f_2$	$9.30E + 07 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$2.09E + 05 \times f_3$	$7.31E + 06 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 1.67E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 2.58E+07 (per year, conditional on SST1,2, or 3)

\$ 2.62E+09 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.06E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

		TOTAL COSTS	'	
RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$9.65E + 08 \times f_1$	$9.67E + 09 \times f_1$	$1.34E + 10 \times f_1$	$2.40E + 10 \times f_1$
SST2	$5.90E + 07 \times f_2$	$9.30E + 07 \times f_2$	$1.32E + 10 \times f_2$	$1.34E + 10 \times f_2$
SST3	$2.09E + 05 \times f_3$	$7.31E + 06 \times f_3$	$1.32E + 10 \times f_3$	$1.32E + 10 \times f_3$

DRESDEN

Unit 2

Date of Operation: 1970

Power Level (MWe): 800

NERC Region: MAIN

Scale Factor 0.714

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	ŖEM	DAMAGE
SST1	42.4	536.0	3250.0	6.01E+07	4.22E+09
SST2	0.0	0.3	257.0	4.77E + 06	4.06E+07
SST3	0.0	0.0	0.9	1.64E+04	3.19E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	30.3	382.9	2321.4	4.29E+07	3.01E+09
SST2	0.0	0.2	183.6	3.41E+06	2.90E+07
SST3	0.0	0.0	0.7	1.17E+04	2.28E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

		•		
RELEASE	EARLY	EARLY .	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$5.10E + 08 \times f_1$	$6.45E + 08 \times f_1$	$3.91E + 09 \times f_1$	$5.08E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$4.01E + 05 \times f_2$	$3.09E + 08 \times f_2$	$4.88E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$1.10E + 06 \times f_3$	$3.84E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.19E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.03E+08 (per year, conditional on SST1,2, or 3)

\$ 1.99E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.39E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$5.06E + 09 \times f_1$	$5.08E + 10 \times f_1$	$3.40E + 10 \times f_1$	$8.98E + 10 \times f_1$
SST2	$3.10E + 08 \times f_2$	$4.88E + 08 \times f_2$	$3.38E + 10 \times f_2$	$3.45E + 10 \times f_2$
SST3	$1.10E + 06 \times f_3$	$3.84E + 07 \times f_3$	$3.38E + 10 \times f_3$	$3.38E + 10 \times f_3$

DRESDEN

Unit 3

Date of Operation: 1971

Power Level (MWe): 800

NERC Region: MAIN

Scale Factor 0.714

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	42.4	536.0	3250.0	6.01E+07	4.22E+09
SST2	0.0	0.3	257.0	4.77E+06	4.06E+07
SST3	0.0	0.0	0.9	1.64E+04	3.19E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

ļ	RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
1	CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
	SST1	30.3	382.9	2321.4	4.29E+07	3.01E+09
	SST2	0.0	0.2	183.6	3.41E+06	2.90E+07
	SST3	0.0	0.0	0.7	1.17E+04	2.28E + 06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

		`		
RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$5.20E + 08 \times f_1$	$6.57E + 08 \times f_1$	$3.98E + 09 \times f_1$	$5.17E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$4.08E + 05 \times f_2$	$3.15E + 08 \times f_2$	$4.98E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$1.12E + 06 \times f_3$	$3.91E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.23E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.03E+08 (per year, conditional on SST1,2, or 3)

\$ 2.08E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.41E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL					
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS					
SST1	$5.16E + 09 \times f_1$	$5.17E + 10 \times f_1$	$3.52E + 10 \times f_1$	$9.21E + 10 \times f_1$					
SST2	$3.15E + 08 \times f_2$	$4.98E + 08 \times f_2$	$3.50E + 10 \times f_2$	$3.58E + 10 \times f_2$					
SST3	$1.12E + 06 \times f_3$	$3.91E + 07 \times f_3$	$3.50E + 10 \times f_3$	$3.50E + 10 \times f_3$					

DUANE ARNOLD

Unit 1

Date of Operation: 1974

Power Level (MWe): 545

NERC Region: MARCA

Scale Factor 0.487

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	20.6	379.0	1740.0	3.01E+07	2.24E+09
SST2	0.0	0.4	194.0	3.50E + 06	5.24E+07
SST3	0.0	0.0	0.8	1.47E+04	8.17E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

-	RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
	CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
	SST1	10.0	184.4	846.7	1.46E+07	1.09E+09
	SST2	0.0	0.2	94.4	1.70E+06	2.55E+07
	SST3	0.0	0.0	0.4	7.15E+03	3.98E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.81E + 08 \times f_1$	$3.33E + 08 \times f_1$	$1.53E + 09 \times f_1$	$1.97E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$3.71E + 05 \times f_2$	$1.70E + 08 \times f_2$	$4.60E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$7.12E + 05 \times f_3$	$7.18E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

 $2.35E+08 \times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 7.80E+07 (per year, conditional on SST1,2, or 3)

\$ 1.79E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.49E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$2.04E + 09 \times f_1$	$1.97E + 10 \times f_1$	$3.30E + 10 \times f_1$	$5.47E + 10 \times f_1$
SST2	$1.71E + 08 \times f_2$	$4.60E + 08 \times f_2$	$3.27E + 10 \times f_2$	$3.34E + 10 \times f_2$
SST3	$7.12E + 05 \times f_3$	$7.18E + 07 \times f_3$	$3.27E + 10 \times f_3$	$3.28E + 10 \times f_3$

FARLEY

Unit 1

Date of Operation: 1977

Power Level (MWe): 860

NERC Region: SERC

Scale Factor 0.768

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE'
SST1	11.8	84.7	671.0	1.26E + 07	7.27E + 08
SST2	0.0	0.0	55.9	1.02E+06	1.27E+07
SST3	0.0	0.0	0.2	4.31E+03	8.31E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	9.1	65.0	515.2	9.68E+06	5.58E+08
SST2	0.0	0.0	42.9	7.83E+05	9.75E+06
SST3	0.0	0.0	0.2	3.31E+03	6.38E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY		LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.71E + 08 \times f_1$	$1.22E + 08 \times f_1$	$9.70E + 08 \times f_1$	$1.05E + 10 \times f_1$
SST2	$0.00E+00 \times f_2$	$4.37E + 04 \times f_2$	$8.08E + 07 \times f_2$	$1.84E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$3.47E + 05 \times f_3$	$1.20E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ $2.45E+08 \times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.11E+08 (per year, conditional on SST1,2, or 3)

\$ 2.83E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.55E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.26E + 09 \times f_1$	$1.05E + 10 \times f_1$	$4.40E + 10 \times f_1$	$5.58E + 10 \times f_1$
SST2	$8.09E + 07 \times f_2$	$1.84E + 08 \times f_2$	$4.38E + 10 \times f_2$	$4.41E + 10 \times f_2$
SST3	$3.47E + 05 \times f_3$	$1.20E + 07 \times f_3$	$4.38E + 10 \times f_3$	$4.38E + 10 \times f_3$

FARLEY

Unit 2

Date of Operation: 1980

Power Level (MWe): 860

NERC Region: SERC

Scale Factor 0.768

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	11.8	84.7	671.0	1.26E+07	7.27E+08
SST2	0.0	0.0	55.9	1.02E+06	1.27E+07
SST3	0.0	0.0	0.2	4.31E+03	8.31E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	9.1	65.0	515.2	9.68E+06	5.58E+08
SST2	0.0	0.0	42.9	7.83E+05	9.75E+06
SST3	0.0	0.0	0.2	3.31E+03	6.38E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.77E + 08 \times f_1$	$1.27E + 08 \times f_1$	$1.01E + 09 \times f_1$	$1.09E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$4.53E + 04 \times f_2$	$8.38E + 07 \times f_2$	$1.90E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$3.60E + 05 \times f_3$	$1.25E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.54E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.11E+08 (per year, conditional on SST1,2, or 3)

\$ 3.11E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.61E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.31E + 09 \times f_1$	$1.09E + 10 \times f_1$	$4.75E + 10 \times f_1$	$5.97E + 10 \times f_1$
SST2	$8.39E + 07 \times f_2$	$1.90E + 08 \times f_2$	$4.72E + 10 \times f_2$	$4.75E+10\times f_2$
SST3	$3.60E + 05 \times f_3$	$1.25E + 07 \times f_3$	$4.72E + 10 \times f_3$	$4.72E + 10 \times f_3$

FERMI

Unit 2

Date of Operation: 1982

Power Level (MWe): 1100

NERC Region: MAIN

Scale Factor 0.982

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	160.0	972.0	2980.0	5.20E+07	3.57E+09
SST2	0.1	7.1	198.0	3.67E+06	4.64E+07
SST3	0.0	0.0	0.6	1.09E+04	6.79E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	157.1	954.6	2926.8	5.11E+07	3.51E+09
SST2	Γ2 0.1 7.0		194.5	$3.60E + 06 \mid 4.56E + 0$	
SST3	0.0	0.0	0.6	1.07E+04	6.67E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

		•	1 000	
RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$3.14E + 09 \times f_1$	$1.90E + 09 \times f_1$	$5.84E + 09 \times f_1$	$7.00E + 10 \times f_1$
SST2	$1.64E + 06 \times f_2$	$1.39E + 07 \times f_2$	$3.88E + 08 \times f_2$	$9.09E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$1.19E + 06 \times f_3$	$1.33E + 08 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.59E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.42E+08 (per year, conditional on SST1,2, or 3)

\$ 4.21E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.64E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.09E + 10 \times f_1$	$7.00E + 10 \times f_1$	$5.88E + 10 \times f_1$	$1.40E + 11 \times f_1$
SST2	$4.04E + 08 \times f_2$	$9.09E + 08 \times f_2$	$5.85E+10\times f_2$	$5.99E + 10 \times f_2$
SST3	$1.19E + 06 \times f_3$	$1.33E + 08 \times f_3$	$5.85E + 10 \times f_3$	$5.87E + 10 \times f_3$

FITZPATRICK

Unit 1

Date of Operation: 1975

Power Level (MWe): 821

NERC Region: NPCC

Scale Factor 0.733

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	5.0	106.0	1200.0	2.37E+07	1.29E+09
SST2	0.0	0.1	56.9	1.07E+06	1.41E+07
SST3	0.0	0.0	0.2	3.76E+03	3.66E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	3.7	77.7	879.6	1.74E+07	9.46E+08
SST2	0.0	0.0	41.7	7.84E+05	1.03E+07
SST3	0.0	0.0	0.2	2.76E+03	2.68E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

		•		
RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$6.70E + 07 \times f_1$	$1.42E + 08 \times f_1$	$1.61E + 09 \times f_1$	$1.73E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$8.21E + 04 \times f_2$	$7.64E + 07 \times f_2$	$1.89E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$2.79E + 05 \times f_3$	$4.92E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.38E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 2.94E+08 (per year, conditional on SST1,2, or 3)

\$ 6.98E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.51E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

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RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL					
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS '	COSTS					
SST1	$1.82E + 09 \times f_1$	$1.73E + 10 \times f_1$	$8.51E + 10 \times f_1$	$1.04E + 11 \times f_1$					
SST2	$7.65E+07\times f_2$	$1.89E + 08 \times f_2$	$8.49E + 10 \times f_2$	$8.52E + 10 \times f_2$					
SST3	$2.79E + 05 \times f_3$	$4.92E + 07 \times f_3$	$8.49E + 10 \times f_3$	$8.49E + 10 \times f_3$					

FORKED RIVER

Unit 1

Date of Operation: 1986

Power Level (MWe): 1120

NERC Region: MAAC

Scale Factor 1.000

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	83.5	531.0	4420.0	8.55E+07	4.06E+09
SST2	0.0	0.8	197.0	3.71E+06	2.69E+07
SST3	0.0	0.0	0.6	1.12E+04	3.52E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	83.5	531.0	4420.0	8.55E+07	4.06E+09
SST2	0.0	0.8	197.0	3.71E+06	2.69E+07
SST3	0.0	0.0	0.6	1.12E+04	3.52E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.42E + 09 \times f_1$	$9.03E + 08 \times f_1$	$7.52E + 09 \times f_1$	$6.90E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$1.32E + 06 \times f_2$	$3.35E + 08 \times f_2$	$4.57E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$1.06E + 06 \times f_3$	$5.98E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.21E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 2.56E+08 (per year, conditional on SST1,2, or 3)

\$ 6.49E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.40E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$9.84E + 09 \times f_1$	$6.90E + 10 \times f_1$	$7.91E + 10 \times f_1$	$1.58E + 11 \times f_1$
SST2	$3.36E + 08 \times f_2$	$4.57E + 08 \times f_2$	$7.89E + 10 \times f_2$	$7.97E + 10 \times f_2$
SST3	$1.06E + 06 \times f_3$	$5.98E + 07 \times f_3$	$7.89E + 10 \times f_3$	$7.90E + 10 \times f_3$

FORT CALHOUN

Unit 1 Date of Operation: 1973 Power Level (MWe): 457

NERC Region: MARCA

Scale Factor 0.408

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	50.2	435.0	1050.0	1.69E+07	1.83E+09
SST2	0.1	3.0	114.0	2.06E+06	2.77E+07
SST3	0.0	0.0	0.4	7.76E+03	1.33E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

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RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY	
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE	
SST1	20.5	177.5	428.4	6.90E+06	7.47E+08	
SST2	0.0	1.2	46.5	8.41E+05	1.13E+07	
SST3	0.0	0.0	0.2	3.17E+03	5.43E+05	

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$3.64E + 08 \times f_1$	$3.15E + 08 \times f_1$	$7.61E + 08 \times f_1$	$1.33E + 10 \times f_1$
SST2	$8.26E + 05 \times f_2$	$2.18E + 06 \times f_2$	$8.26E + 07 \times f_2$	$2.01E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$3.13E + 05 \times f_3$	$9.64E + 06 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.31E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 6.54E+07 (per year, conditional on SST1,2, or 3)

 $1.44E + 10 \times f_i$

(discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.46E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

		101111		
RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.44E + 09 \times f_1$	$1.33E+10 \times f_1$	$2.93E + 10 \times f_1$	$4.40E + 10 \times f_1$
SST2	$8.56E + 07 \times f_2$	$2.01E + 08 \times f_2$	$2.90E + 10 \times f_2$	$2.93E + 10 \times f_2$
SST3	$3.13E + 05 \times f_3$	$9.64E + 06 \times f_3$	$2.90E + 10 \times f_3$	$2.90E + 10 \times f_3$

FORT ST. VRAIN

Unit 1

Date of Operation: 1979

Power Level (MWe): 330

NERC Region: WSCC

Scale Factor 0.295

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	14.7	223.0	812.0	1.42E+07	1.43E+09
SST2	0.0	0.0	82.2	1.53E+06	1.43E+07
SST3	0.0	0.0	0.3	4.49E+03	8.58E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	4.3	65.7	239.3	4.18E + 06	4.21E+08
SST2	0.0	0.0	24.2	4.51E+05	4.21 E +06
SST3	0.0	0.0	0.1	1.32E+03	2.53E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$8.36E + 07 \times f_1$	$1.27E + 08 \times f_1$	$4.62E + 08 \times f_1$	$8.14E + 09 \times f_1$
SST2	$0.00E + 00 \times f_2$	$1.61E + 03 \times f_2$	$4.68E + 07 \times f_2$	$8.14E + 07 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E+00\times f_3$	$1.43E + 05 \times f_3$	$4.88E + 06 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.51E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 5.20E+07 (per year, conditional on SST1,2, or 3)

\$ 1.41E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.59E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$6.72E + 08 \times f_1$	$8.14E + 09 \times f_1$	$3.03E + 10 \times f_1$	$3.91E + 10 \times f_1$
SST2	$4.68E + 07 \times f_2$	$8.14E + 07 \times f_2$	$3.01E + 10 \times f_2$	$3.02E + 10 \times f_2$
SST3	$1.43E + 05 \times f_3$	$4.88E + 06 \times f_3$	$3.01E + 10 \times f_3$	$3.01E + 10 \times f_3$

FRE GINNA

Unit 1

Date of Operation: 1970

Power Level (MWe): 490

NERC Region: NPCC

Scale Factor 0.438

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	11.1	371.0	1900.0	3.67E+07	1.93E+09
SST2	. 0.0	0.1	88.8	1.69E+06	1.95E+07
SST3	0.0	0.0	0.3	5.13E+03	3.43E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	4.9	162.3	831.3	1.61E+07	8.44E+08
SST2	0.0	0.1	38.9	7.39E + 05	8.53E+06
SST3	0.0	0.0	0.1	2.24E+03	1.50E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE CATEGORY	EARLY FATALITIES (\$'s)	EARLY INJURIES (\$'s)	LATENT CANCER FATALITIES (\$'s)	PROPERTY DAMAGE (\$'s)
SST1	$8.18E + 07 \times f_1$	$2.73E + 08 \times f_1$	$1.40E + 09 \times f_1$	$1.42E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$1.02E + 05 \times f_2$	$6.54E + 07 \times f_2$	$1.44E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$2.10E + 05 \times f_3$	$2.53E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.19E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$1.75E+08 (per year, conditional on SST1,2, or 3)

\$ 3.38E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.39E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.76E + 09 \times f_1$	$1.42E + 10 \times f_1$	$4.79E + 10 \times f_1$	$6.38E + 10 \times f_1$
SST2	$6.55E + 07 \times f_2$	$1.44E + 08 \times f_2$	$4.77E + 10 \times f_2$	$4.79E + 10 \times f_2$
SST3	$2.10E + 05 \times f_3$	$2.53E + 07 \times f_3$	$4.77E + 10 \times f_3$	$4.77E + 10 \times f_3$

GRAND GULF

Unit 1

Date of Operation: 1982

Power Level (MWe): 1250

NERC Region: SERC

Scale Factor 1.116

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER		PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	13.8	72.8	695.0	1.30E+07	7.79E+08
SST2	0.0	0.7	59.5	1.07E + 06	1.39E + 07
SST3	0.0	0.0	0.3	4.70E+03	7.67E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY		
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE		
SST1	15.4	81.3	775.7	1.45E+07	8.69E+08		
SST2	0.0	0.7	66.4	1.19E+06	1.55E+07		
SST3	0.0	0.0	0.3	5.25E + 03	8.56E+05		

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY		LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$3.07E + 08 \times f_1$	$1.62E + 08 \times f_1$	$1.55E + 09 \times f_1$	$1.73E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$1.45E + 06 \times f_2$	$1.32E + 08 \times f_2$	$3.10E + 08 \times f_2$
SST3	$0.00E+00\times f_3$	$0.00E + 00 \times f_3$	$5.81E + 05 \times f_3$	$1.71E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.59E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.61E+08 (per year, conditional on SST1,2, or 3)

\$ $4.78E+10 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.64E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$2.02E + 09 \times f_1$	$1.73E + 10 \times f_1$	$6.45E + 10 \times f_1$	$8.39E + 10 \times f_1$
SST2	$1.34E + 08 \times f_2$	$3.10E + 08 \times f_2$	$6.43E + 10 \times f_2$	$6.47E + 10 \times f_2$
SST3	$5.81E + 05 \times f_3$	$1.71E + 07 \times f_3$	$6.43E + 10 \times f_3$	$6.43E + 10 \times f_3$

GRAND GULF

Unit 2

Date of Operation: 1986

Power Level (MWe): 1250

NERC Region: SERC

Scale Factor 1.116

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	13.8	72.8	695.0	1.30E+07	7.79E+08
SST2	0.0	0.7	59.5	1.07E+06	1.39E+07
SST3	0.0	0.0	0.3	4.70E+03	7.67E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	15.4	81.3	775.7	1.45E+07	8.69E+08
SST2	0.0	. 0.7	66.4	1.19E+06	1.55E+07
SST3	0.0	0.0	0.3	5.25E+03	8.56E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$2.62E + 08 \times f_1$	$1.38E + 08 \times f_1$	$1.32E + 09 \times f_1$	$1.48E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$1.24E + 06 \times f_2$	$1.13E + 08 \times f_2$	$2.64E + 08 \times f_2$
SST3	$0.00E+00\times f_3$	$0.00E + 00 \times f_3$	$4.95E + 05 \times f_3$	$1.46E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1) \$ 2.21E+08 $\times f_1^+$ (discounted over remaining plant life)

Replacement Power:

\$ 1.61E+08 (per year, conditional on SST1,2, or 3)

\$ $4.08E+10 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.40E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.72E + 09 \times f_1$	$1.48E + 10 \times f_1$	$5.50E + 10 \times f_1$	$7.15E + 10 \times f_1$
SST2	$1.14E + 08 \times f_2$	$2.64E + 08 \times f_2$	$5.48E + 10 \times f_2$	$5.52E + 10 \times f_2$
SST3	$4.95E + 05 \times f_3$	$1.46E + 07 \times f_3$	$5.48E + 10 \times f_3$	$5.48E + 10 \times f_3$

HADDEM NECK

Unit 1

Date of Operation: 1968

Power Level (MWe): 575

NERC Region: NPCC

Scale Factor 0.513

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

ſ	RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
١	CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
Ì	SST1	112.0	891.0	2090.0	3.52E + 07	2.70E+09
I	SST2	0.0	1.2	156.0	2.93E+06	3.63E+07
ľ	SST3	0.0	0.0	0.5	8.81E+03	5.62E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	57.5	457.4	1073.0	1.81E+07	1.39E+09
SST2	0.0	0.6	80.1	1.50E+06	1.86E+07
SST3	0.0	0.0	0.3	4.52E+03	2.89E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$9.29E + 08 \times f_1$	$7.39E + 08 \times f_1$	$1.73E + 09 \times f_1$	$2.24E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$1.00E + 06 \times f_2$	$1.29E + 08 \times f_2$	$3.01E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$4.08E + 05 \times f_3$	$4.66E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.10E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 2.06E+08 (per year, conditional on SST1,2, or 3)

\$ 3.59E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.33E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$3.40E + 09 \times f_1$	$2.24E + 10 \times f_1$	$4.94E + 10 \times f_1$	$7.52E + 10 \times f_1$
SST2	$1.30E + 08 \times f_2$	$3.01E + 08 \times f_2$	$4.92E + 10 \times f_2$	$4.96E + 10 \times f_2$
SST3	$4.08E + 05 \times f_3$	$4.66E + 07 \times f_3$	$4.92E + 10 \times f_3$	$4.92E + 10 \times f_3$

HARTSVILLE

Unit A1

Date of Operation: 1986

Power Level (MWe): 1233

NERC Region: SERC

Scale Factor 1.101

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	18.5	140.0	972.0	1.85E+07	1.13E+09
SST2	0.0	0.0	64.0	1.18E+06	1.51E+07
SST3	0.0	0.0	0.2	4.48E+03	1.20E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

	RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
	CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
	SST1	20.4	154.1	1070.1	2.04E + 07	1.24E+09
ſ	SST2	0.0	0.0	70.5	1.30E + 06	1.66E+07
	SST3	0.0	0.0	0.3	4.93E+03	1.32E + 06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

		•		
RELEASE	EARLY		LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$3.46E + 08 \times f_1$	$2.62E + 08 \times f_1$	$1.82E + 09 \times f_1$	$2.12E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$6.94E + 04 \times f_2$	$1.20E + 08 \times f_2$	$2.83E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$4.66E + 05 \times f_3$	$2.25E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.21E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.59E+08 (per year, conditional on SST1,2, or 3)

\$ $4.02E+10 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.40E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

		TO TIME OUD IN		
RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$2.43E + 09 \times f_1$	$2.12E + 10 \times f_1$	$5.44E + 10 \times f_1$	$7.80E + 10 \times f_1$
SST2	$1.20E + 08 \times f_2$	$2.83E + 08 \times f_2$	$5.42E + 10 \times f_2$	$5.46E + 10 \times f_2$
SST3	$4.66E + 05 \times f_3$	$2.25E + 07 \times f_3$	$5.42E + 10 \times f_3$	$5.42E + 10 \times f_3$

HARTSVILLE

Unit A2

Date of Operation: 1987

Power Level (MWe): 1233

NERC Region: SERC

Scale Factor 1.101

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	18.5	140.0	972.0	1.85E+07	1.13E+09
SST2	0.0	0.0	64.0	1.18E+06	1.51E+07
SST3	0.0	0.0	0.2	4.48E+03	1.20E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	20.4	154.1	1070.1	2.04E+07	1.24E+09
SST2	0.0	0.0	70.5	1.30E+06	1.66E+07
SST3	0.0	0.0	0.3	4.93E+03	1.32E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

		`		
RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$3.33E + 08 \times f_1$	$2.52E + 08 \times f_1$	$1.75E + 09 \times f_1$	$2.03E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$6.67E + 04 \times f_2$	$1.15E + 08 \times f_2$	$2.72E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$4.48E + 05 \times f_3$	$2.16E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.12E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.59E+08 (per year, conditional on SST1,2, or 3)

\$ 3.86E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.35E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

	<u> </u>	I O IIII O O O I	·	
RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$2.33E + 09 \times f_1$	$2.03E+10 \times f_1$	$5.23E + 10 \times f_1$	$7.50E + 10 \times f_1$
SST2	$1.15E + 08 \times f_2$	$2.72E + 08 \times f_2$	$5.21E + 10 \times f_2$	$5.25E + 10 \times f_2$
SST3	$4.48E + 05 \times f_3$	$2.16E + 07 \times f_3$	$5.21E + 10 \times f_3$	$5.21E + 10 \times f_3$

HATCH

Unit 1

Date of Operation: 1975

Power Level (MWe): 786

NERC Region: SERC

Scale Factor 0.702

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	4.0	62.0	767.0	1.48E+07	8.63E+08
SST2	0.0	0.0	63.5	1.15E+06	1.31E+07
SST3	0.0	0.0	0.2	4.40E+03	5.59E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	2.8	43.5	538.3	1.04E+07	6.06E+08
SST2	0.0	0.0	44.6	8.07E+05	9.19E+06
SST3	0.0	0.0	0.2	3.09E+03	3.92E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

		•		
RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$5.14E + 07 \times f_1$	$7.97E + 07 \times f_1$	$9.86E + 08 \times f_1$	$1.11E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$5.07E + 04 \times f_2$	$8.16E + 07 \times f_2$	$1.68E + 08 \times f_2$
SST3	$0.00E+00\times f_3$	$0.00E + 00 \times f_3$	$3.15E + 05 \times f_3$	$7.19E + 06 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.38E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.01E+08 (per year, conditional on SST1,2, or 3)

\$ 2.41E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.51E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

		101112		
RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.12E + 09 \times f_1$	$1.11E + 10 \times f_1$	$3.94E + 10 \times f_1$	$5.16E + 10 \times f_1$
SST2	$8.17E + 07 \times f_2$	$1.68E + 08 \times f_2$	$3.92E + 10 \times f_2$	$3.94E + 10 \times f_2$
SST3	$3.15E + 05 \times f_3$	$7.19E + 06 \times f_3$	$3.92E + 10 \times f_3$	$3.92E + 10 \times f_3$

HATCH

Unit 2

Date of Operation: 1979

Power Level (MWe): 786

NERC Region: SERC

Scale Factor 0.702

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	4.0	62.0	767.0	1.48E+07	8.63E+08
SST2	0.0	0.0	63.5	1.15E+06	1.31E+07
SST3	0.0	0.0	0.2	4.40E+03	5.59E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	2.8	43.5	538.3	1.04E+07	6.06E+08
SST2	0.0	. 0.0	44.6	8.07E+05	9.19E+06
SST3	0.0	0.0	0.2	3.09E+03	3.92E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

		•		
RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$5.42E + 07 \times f_1$	$8.40E + 07 \times f_1$	$1.04E + 09 \times f_1$	$1.17E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$5.34E + 04 \times f_2$	$8.60E + 07 \times f_2$	$1.78E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$3.32E + 05 \times f_3$	$7.57E + 06 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.51E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.01E+08 (per year, conditional on SST1,2, or 3)

\$ 2.76E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.59E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

		TOTAL COSTS		
RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.18E + 09 \times f_1$	$1.17E + 10 \times f_1$	$4.37E + 10 \times f_1$	$5.66E + 10 \times f_1$
SST2	$8.61E + 07 \times f_2$	$1.78E + 08 \times f_2$	$4.35E + 10 \times f_2$	$4.38E + 10 \times f_2$
SST3	$3.32E + 05 \times f_3$	$7.57E + 06 \times f_3$	$4.35E + 10 \times f_3$	$4.35E+10 \times f_3$

INDIAN POINT

Unit 2

Date of Operation: 1974

Power Level (MWe): 873

NERC Region: NPCC

Scale Factor 0.779

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	831.0	3640.0	8110.0	1.25E+08	1.18E+10
SST2	0.1	18.0	587.0	1.1 0 E+07	1.46E+08
SST3	0.0	0.0	1.8	3.23E+04	1.95E+07

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	647.7	2837.3	6321.5	9.74E+07	9.20E+09
SST2	0.1	14.0	457.5	8.57E+06	1.14E+08
SST3	0.0	0.0	1.4	2.52E+04	1.52E+07

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.17E + 10 \times f_1$	$5.12E + 09 \times f_1$	$1.14E + 10 \times f_1$	$1.66E + 11 \times f_1$
SST2	$1.08E + 06 \times f_2$	$2.53E + 07 \times f_2$	$8.26E + 08 \times f_2$	$2.05E + 09 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$2.53E + 06 \times f_3$	$2.74E + 08 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.35E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 3.12E+08 (per year, conditional on SST1,2, or 3)

\$ 7.14E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.49E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$2.82E + 10 \times f_1$	$1.66E + 11 \times f_1$	$8.66E + 10 \times f_1$	$2.81E + 11 \times f_1$
SST2	$8.52E + 08 \times f_2$	$2.05E + 09 \times f_2$	$8.63E + 10 \times f_2$	$8.92E + 10 \times f_2$
SST3	$2.53E + 06 \times f_3$	$2.74E + 08 \times f_3$	$8.63E + 10 \times f_3$	$8.66E + 10 \times f_3$

INDIAN POINT

Unit 3

Date of Operation: 1976

Power Level (MWe): 965

NERC Region: NPCC

Scale Factor 0.862

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	831.0	3640.0	8110.0	1.25E + 08	1.18E+10
SST2	0.1	18.0	587.0	1.10E+07	1.46E+08
SST3	0.0	0.0	1.8	3.23E+04	1.95E+07

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	716.0	3136.3	6987.6	1.08E+08	1.02E+10
SST2	0.1	15.5	505.8	9.48E+06	1.26E + 08
SST3	0.0	0.0	1.6	2.78E+04	1.68E+07

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

		,	- • • • •	
RELEASE	EARLY		LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.33E + 10 \times f_1$	$5.83E + 09 \times f_1$	$1.30E + 10 \times f_1$	$1.89E + 11 \times f_1$
SST2	$1.23E + 06 \times f_2$	$2.88E + 07 \times f_2$	$9.40E + 08 \times f_2$	$2.34E + 09 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$2.88E + 06 \times f_3$	$3.12E + 08 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.42E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 3.45E+08 (per year, conditional on SST1,2, or 3)

\$ 8.51E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.53E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$3.21E + 10 \times f_1$	$1.89E + 11 \times f_1$	$1.01E + 11 \times f_1$	$3.22E + 11 \times f_1$
SST2	$9.70E + 08 \times f_2$	$2.34E + 09 \times f_2$	$1.00E + 11 \times f_2$	$1.04E + 11 \times f_2$
SST3	$2.88E + 06 \times f_3$	$3.12E + 08 \times f_3$	$1.00E + 11 \times f_3$	$1.01E + 11 \times f_3$

KEWAUNEE

Unit 1

Date of Operation: 1974

Power Level (MWe): 535

NERC Region: MARCA

Scale Factor 0.478

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	1.2	77.7	1240.0	2.49E+07	1.60E+09
SST2	0.0	0.0	70.2	1.31E+06	1.44E + 07
SST3	0.0	0.0	0.3	4.72E + 03	1.06E + 06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	0.6	37.1	592.3	1.19E+07	7.64E+08
SST2	0.0	0.0	33.5	6.26E+05	6.88E+06
SST3	0.0	0.0	0.1	2.25E+03	5.06E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

		•		
RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.06E + 07 \times f_1$	$6.70E + 07 \times f_1$	$1.07E + 09 \times f_1$	$1.38E+10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$3.22E + 02 \times f_2$	$6.05E + 07 \times f_2$	$1.24E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$2.24E + 05 \times f_3$	$9.14E + 06 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.35E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 7.66E+07 (per year, conditional on SST1,2, or 3)

 $1.75E+10 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.49E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.15E + 09 \times f_1$	$1.38E + 10 \times f_1$	$3.26E + 10 \times f_1$	$4.76E + 10 \times f_1$
SST2	$6.05E + 07 \times f_2$	$1.24E + 08 \times f_2$	$3.24E + 10 \times f_2$	$3.26E + 10 \times f_2$
SST3	$2.24E + 05 \times f_3$	$9.14E + 06 \times f_3$	$3.24E + 10 \times f_3$	$3.24E + 10 \times f_3$

LASALLE

Unit 1

Date of Operation: 1981

Power Level (MWe): 1078

NERC Region: MAIN

Scale Factor 0.962

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	25.8	182.0	2800.0	5.48E+07	3.10E+09
SST2	0.0	0.6	196.0	3.61E+06	3.34E+07
SST3	0.0	0.0	0.7	1.33E+04	1.31E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	24.8	175.2	2695.0	5.27E+07	2.98E+09
SST2	0.0	0.5	188.6	3.47E+06	3.21E+07
SST3	0.0	0.0	0.7	1.28E + 04	1.26E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$4.90E + 08 \times f_1$	$3.46E + 08 \times f_1$	$5.32E + 09 \times f_1$	$5.89E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$1.05E + 06 \times f_2$	$3.73E + 08 \times f_2$	$6.35E + 08 \times f_2$
SST3	$0.00E+00\times f_3$	$0.00E + 00 \times f_3$	$1.41E + 06 \times f_3$	$2.49E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.57E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.39E+08 (per year, conditional on SST1,2, or 3)

\$ $4.01E+10 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.63E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE HEATLH COSTS	OFFSITE PROPERTY COSTS	ONSITE COSTS	TOTAL COSTS
SST1	$6.16E + 09 \times f_1$		$5.67E + 10 \times f_1$	
SST2	$3.74E + 08 \times f_2$	<u> </u>	$5.64E + 10 \times f_2$	
SST3	$1.41E + 06 \times f_3$	$2.49E + 07 \times f_3$	$5.64E + 10 \times f_3$	$5.64E + 10 \times f_3$

LASALLE

Unit 2 Date of Operation: 1982

Power Level (MWe): 1078

NERC Region: MAIN

Scale Factor 0.962

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	25.8	182.0	2800.0	5.48E+07	3.10E+09
SST2	0.0	0.6	196.0	3.61E+06	3.34E+07
SST3	0.0	0.0	0.7	1.33E+04	1.31E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	24.8	175.2	2695.0	5.27E+07	2.98E+09
SST2	0.0	0.5	188.6	3.47E+06	3.21E+07
SST3	0.0	0.0	0.7	1.28E+04	1.26E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

		•		
RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$4.95E + 08 \times f_1$	$3.50E + 08 \times f_1$	$5.38E + 09 \times f_1$	$5.95E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$1.06E + 06 \times f_2$	$3.76E + 08 \times f_2$	$6.41E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$1.42E + 06 \times f_3$	$2.52E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.59E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.39E+08 (per year, conditional on SST1,2, or 3)

\$ $4.13E+10 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.64E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

į	RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
	CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
	SST1	$6.22E + 09 \times f_1$	$5.95E + 10 \times f_1$	$5.80E + 10 \times f_1$	$1.24E + 11 \times f_1$
	SST2	$3.77E + 08 \times f_2$	$6.41E + 08 \times f_2$	$5.77E + 10 \times f_2$	$5.87E + 10 \times f_2$
	SST3	$1.42E + 06 \times f_3$	$2.52E + 07 \times f_3$	$5.77E + 10 \times f_3$	$5.77E + 10 \times f_3$

LA CROSSE

Unit 1

Date of Operation: 1969

Power Level (MWe): 50

NERC Region: MARCA

Scale Factor 0.045

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

į	RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
	CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
	SST1	31.8	202.0	854.0	1.57E+07	1.12E+09
	SST2	0.0	1.8	57.6	1.05E+06	1.95E+07
	SST3	0.0	0.0	0.2	4.01E+03	7.86E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	1.4	9.0	38.1	7.01E+05	5.00E+07
SST2	0.0	0.1	2.6	4.69E+04	8.71E+05
SST3	0.0	0.0	0.0	1.79E+02	3.51E+04

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$2.34E + 07 \times f_1$	$1.49E + 07 \times f_1$	$6.29E + 07 \times f_1$	$8.26E + 08 \times f_1$
SST2	$0.00E + 00 \times f_2$	$1.33E + 05 \times f_2$	$4.25E + 06 \times f_2$	$1.44E + 07 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$1.64E + 04 \times f_3$	$5.79E + 05 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.15E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$7.16E+06 (per year, conditional on SST1,2, or 3)

\$ 1.31E+09 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.36E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.01E + 08 \times f_1$	$8.26E + 08 \times f_1$	$1.51E + 10 \times f_1$	$1.61E + 10 \times f_1$
SST2	$4.38E + 06 \times f_2$	$1.44E + 07 \times f_2$	$1.49E + 10 \times f_2$	$1.49E + 10 \times f_2$
SST3	$1.64E + 04 \times f_3$	$5.79E + 05 \times f_3$	$1.49E + 10 \times f_3$	$1.49E + 10 \times f_3$

LIMERICK

Unit 1

Date of Operation: 1985

Power Level (MWe): 1055

NERC Region: MAAC

Scale Factor 0.942

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	973.0	2840.0	5400.0	8.24E+07	6.61E+09
SST2	2.2	66.4	368.0	6.40E+06	1.05E+08
SST3	0.0	0.0	1.3	2.32E+04	1.45E+07

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	916.5	2675.2	5086.6	7.76E+07	6.23E+09
SST2	2.1	62.5	346.6	6.03 E +06	9.89E+07
SST3	0.0	0.0	1.2	2.19E + 04	1.37E+07

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.62E + 10 \times f_1$	$4.73E + 09 \times f_1$	$9.00E + 09 \times f_1$	$1.10E + 11 \times f_1$
SST2	$3.63E + 07 \times f_2$	$1.11E + 08 \times f_2$	$6.13E + 08 \times f_2$	$1.75E + 09 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$2.13E + 06 \times f_3$	$2.42E + 08 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.30E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 2.42E+08 (per year, conditional on SST1,2, or 3)

\$ 6.36E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $$1.46E+10 \times f_i$$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$3.00E + 10 \times f_1$	$1.10E + 11 \times f_1$	$7.84E + 10 \times f_1$	$2.19E + 11 \times f_1$
SST2	$7.60E + 08 \times f_2$	$1.75E + 09 \times f_2$	$7.82E + 10 \times f_2$	$8.07E + 10 \times f_2$
SST3	$2.13E + 06 \times f_3$	$2.42E + 08 \times f_3$	$7.82E + 10 \times f_3$	$7.85E + 10 \times f_3$

LIMERICK

Unit 2

Date of Operation: 1987

Power Level (MWe): 1055

NERC Region: MAAC

Scale Factor 0.942

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	973.0	2840.0	5400.0	8.24E+07	6.61E+09
SST2	2.2	66.4	368.0	6.40E+06	1.05E+08
SST3	0.0	0.0	1.3	2.32E + 04	1.45E+07

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	916.5	2675.2	5086.6	7.76E+07	6.23E+09
SST2	2.1	62.5	346.6	6.03E+06	9.89E+07
SST3	0.0	0.0	1.2	2.19E+04	1.37E + 07

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.50E+10\times f_1$	$4.37E + 09 \times f_1$	$8.31E + 09 \times f_1$	$1.02E + 11 \times f_1$
SST2	$3.35E + 07 \times f_2$	$1.02E + 08 \times f_2$	$5.66E + 08 \times f_2$	$1.62E + 09 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$1.97E + 06 \times f_3$	$2.23E + 08 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.12E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 2.42E+08 (per year, conditional on SST1,2, or 3)

\$ 5.87E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.35E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

		IOIIIL OODIC	·	
RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$2.77E + 10 \times f_1$	$1.02E + 11 \times f_1$	$7.24E + 10 \times f_1$	$2.02E + 11 \times f_1$
SST2	$7.02E + 08 \times f_2$	$1.62E + 09 \times f_2$	7.22 E $+10 \times f_2$	$7.45E + 10 \times f_2$
SST3	$1.97E + 06 \times f_3$	$2.23E + 08 \times f_3$	$7.22E + 10 \times f_3$	$7.24E+10\times f_3$

MARBLE HILL

Unit 1

Date of Operation: 1986

Power Level (MWe): 1130

NERC Region: ECAR

Scale Factor 1.009

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	27.9	421.0	2400.0	4.51E+07	2.42E+09
SST2	0.0	0.3	179.0	3.28E+06	3.32E+07
SST3	0.0	0.0	0.7	1.19E+04	1.68E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	28.1	424.8	2421.4	4.55E+07	2.44E+09
SST2	0.0	0.3	180.6	3.31E+06	3.35E+07
SST3	0.0	0.0	0.7	1.20E+04	1.70E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$4.79E + 08 \times f_1$	$7.22E + 08 \times f_1$	$4.12E + 09 \times f_1$	$4.15E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$5.58E + 05 \times f_2$	$3.07E + 08 \times f_2$	$5.70E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$1.13E + 06 \times f_3$	$2.88E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

1.30E+07 (conditional on SST1)

\$ 2.21E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.13E+08 (per year, conditional on SST1,2, or 3)

\$ 2.87E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.40E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$5.32E + 09 \times f_1$	$4.15E+10\times f_1$	$4.29E + 10 \times f_1$	$8.97E + 10 \times f_1$
SST2	$3.08E + 08 \times f_2$	$5.70E + 08 \times f_2$	$4.27E + 10 \times f_2$	$4.36E + 10 \times f_2$
SST3	$1.13E + 06 \times f_3$	$2.88E + 07 \times f_3$	$4.27E + 10 \times f_3$	$4.27E + 10 \times f_3$

MARBLE HILL

Unit 2

Date of Operation: 1987

Power Level (MWe): 1130

NERC Region: ECAR

Scale Factor 1.009

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	27.9	421.0	2400.0	4.51E+07	2.42E+09
SST2	0.0	0.3	179.0	3.28E+06	3.32E+07
SST3	0.0	0.0	0.7	1.19E+04	1.68E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	28.1	424.8	2421.4	4.55E + 07	2.44E+09
SST2	0.0	0.3	180.6	3.31E+06	3.35E+07
SST3	0.0	0.0	0.7	1.20E+04	1.70E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$4.60E + 08 \times f_1$	$6.94E + 08 \times f_1$	$3.96E + 09 \times f_1$	$3.99E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$5.36E + 05 \times f_2$	$2.95E + 08 \times f_2$	$5.47E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00\text{E} + 00 \times f_3$	$1.09E + 06 \times f_3$	$2.77E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.12E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.13E+08 (per year, conditional on SST1,2, or 3)

\$ 2.76E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.35E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

	TO ME COSTS							
	RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL			
	CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS			
	SST1	$5.11E + 09 \times f_1$	$3.99E + 10 \times f_1$	$4.12E + 10 \times f_1$	$8.62E + 10 \times f_1$			
1	SST2	$2.96E + 08 \times f_2$	$5.47E + 08 \times f_2$	$4.10E + 10 \times f_2$	$4.19E + 10 \times f_2$			
i	SST3	$1.09E + 06 \times f_3$	$2.77E + 07 \times f_3$	$4.10E + 10 \times f_3$	$4.10E + 10 \times f_3$			

ME YANKEE

Unit 1

Date of Operation: 1972

Power Level (MWe): 790

NERC Region: NPCC

Scale Factor 0.705

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

	RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
İ	CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
Ţ	SST1	4.1	34.1	770.0	1.58E+07	3.08E+08
Ì	SST2	0.0	0.0	28.8	5.39E+05	3.08E+06
Į	SST3	0.0	0.0	0.1	1.78E+03	1.41E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	2.9	24.1	543.1	1.11E+07	2.17E+08
SST2	0.0	0.0	20.3	3.80E+05	2.17E+06
SST3	0.0	0.0	0.1	1.26E+03	9.95E+04

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$5.04E + 07 \times f_1$	$4.20E + 07 \times f_1$	$9.49E + 08 \times f_1$	$3.80E + 09 \times f_1$
SST2	$0.00E+00 \times f_2$	$0.00E + 00 \times f_2$	$3.55E + 07 \times f_2$	$3.80E + 07 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E+00\times f_3$	$1.23E + 05 \times f_3$	$1.74E + 06 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.27E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 2.83E+08 (per year, conditional on SST1,2, or 3)

\$ 5.96E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.44E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.04E + 09 \times f_1$	$3.80E + 09 \times f_1$	$7.42E + 10 \times f_1$	$7.90E + 10 \times f_1$
SST2	$3.55E + 07 \times f_2$	$3.80E + 07 \times f_2$	$7.40E + 10 \times f_2$	$7.41E + 10 \times f_2$
SST3	$1.23E + 05 \times f_3$	$1.74E + 06 \times f_3$	$7.40E + 10 \times f_3$	$7.40E + 10 \times f_3$

MCGUIRE

Unit 1

Date of Operation: 1980

Power Level (MWe): 1180

· NERC Region: SERC

Scale Factor 1.054

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	134.0	675.0	1580.0	2.70E+07	2.01E+09
SST2	0.0	2.2	131.0	2.40E+06	3.22E+07
SST3	0.0	0.0	0.5	8.91E+03	3.57E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	141.2	711.2	1664.6	2.84E+07	2.12E+09
SST2	0.0	2.3	138.0	2.53E + 06	3.39E+07
SST3	0.0	0.0	0.5	9.39E+03	3.76E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$2.76E + 09 \times f_1$	$1.39E + 09 \times f_1$	$3.25E + 09 \times f_1$	$4.14E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$4.57E + 06 \times f_2$	$2.70E + 08 \times f_2$	$6.63E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$1.02E + 06 \times f_3$	$7.35E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.54E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.52E+08 (per year, conditional on SST1,2, or 3)

\$ $4.27E+10 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.61E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE PROPERTY COSTS	ONSITE COSTS	TOTAL COSTS
SST1	$7.40E + 09 \times f_1$		$5.90E + 10 \times f_1$	
SST2	$2.74E + 08 \times f_2$	$6.63E + 08 \times f_2$	$5.88E + 10 \times f_2$	$5.97E + 10 \times f_2$
SST3	$1.02E + 06 \times f_3$	$7.35E + 07 \times f_3$	$5.88E + 10 \times f_3$	$5.88E + 10 \times f_3$

MCGUIRE

Unit 2

Date of Operation: 1982

Power Level (MWe): 1180

NERC Region: SERC

Scale Factor 1.054

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	134.0	675.0	1580.0	2:70E+07	2.01E+09
SST2	. 0.0	2.2	131.0	2.40E+06	3.22E+07
SST3	0.0	0.0	0.5	8.91E+03	3.57E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELE	ASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEG	ORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST	rı	141.2	711.2	1664.6	2.84E + 07	2.12E+09
SST	Γ2	0.0	2.3	138.0	2.53E + 06	3.39E+07
SST	Г3	0.0	0.0	0.5	9.39E+03	3.76E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$2.82E + 09 \times f_1$	$1.42E + 09 \times f_1$	$3.32E + 09 \times f_1$	$4.23E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$4.67E + 06 \times f_2$	$2.75E + 08 \times f_2$	$6.77E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00\text{E} + 00 \times f_3$	$1.04E + 06 \times f_3$	$7.50E+07\times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.59E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.52E+08 (per year, conditional on SST1,2, or 3)

\$ 4.52E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.64E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$7.56E + 09 \times f_1$	$4.23E + 10 \times f_1$	$6.19E + 10 \times f_1$	$1.12E + 11 \times f_1$
SST2	$2.80E + 08 \times f_2$	$6.77E + 08 \times f_2$	$6.16E + 10 \times f_2$	$6.26E + 10 \times f_2$
SST3	$1.04E + 06 \times f_3$	$7.50E+07\times f_3$	$6.16E + 10 \times f_3$	$6.17E + 10 \times f_3$

MIDLAND

Unit 1

Date of Operation: 1984

Power Level (MWe): 530

NERC Region: MAIN

Scale Factor 0.473

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	324:0	1090.0	2200.0	3.30E+07	2.00E+09
SST2	0.2	13.0	126.0	2.15E+06	4.97E+07
SST3	0.0	0.0	0.5	9.70E+03	5.98E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY	
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE	
SST1	153.3	515.8	1041.1	1.56E+07	9.46E+08	
SST2	0.1	6.2	59.6	1.02E+06	2.35E+07	
SST3	0.0	0.0	0.3	4.59E+03	2.83E + 06	

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i).

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$2.82E + 09 \times f_1$	$9.50E + 08 \times f_1$	$1.92E + 09 \times f_1$	$1.74E + 10 \times f_1$
SST2	$1.95E + 06 \times f_2$	$1.13E + 07 \times f_2$	$1.10E + 08 \times f_2$	$4.33E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$4.62E + 05 \times f_3$	$5.21E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.39E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 6.83E+07 (per year, conditional on SST1,2, or 3)

\$ 1.87E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.52E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

10 1110 00010								
RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL				
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS				
SST1	$5.69E + 09 \times f_1$	$1.74E + 10 \times f_1$	$3.41E + 10 \times f_1$	$5.73E + 10 \times f_1$				
SST2	$1.23E + 08 \times f_2$	$4.33E + 08 \times f_2$	$3.39E + 10 \times f_2$	$3.45E + 10 \times f_2$				
SST3	$4.62E + 05 \times f_3$	$5.21E + 07 \times f_3$	$3.39E + 10 \times f_3$	$3.40E + 10 \times f_3$				

MIDLAND

Unit 2

Date of Operation: 1983

Power Level (MWe): 805

NERC Region: MAIN

Scale Factor 0.719

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	324.0	1090.0	2200.0	3.30E+07	2.00E+09
SST2	0.2	13.0	126.0	2.15E+06	4.97E+07
SST3	0.0	0.0	0.5	9.70E+03	5.98E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	232.9	783.4	1581.3	2.37E+07	1.44E+09
SST2	0.2	9.3	90.6	1.55E+06	3.57E+07
SST3	0.0	0.0	0.4	6.97E+03	4.30E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$4.46E + 09 \times f_1$	$1.50E + 09 \times f_1$	$3.03E + 09 \times f_1$	$2.76E + 10 \times f_1$
SST2	$3.09E + 06 \times f_2$	$1.79E + 07 \times f_2$	$1.74E + 08 \times f_2$	$6.85E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E+00\times f_3$	$7.30E + 05 \times f_3$	$8.24E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

 $$2.49E+08 \times f_1$$ (discounted over remaining plant life)

Replacement Power:

\$ 1.04E+08 (per year, conditional on SST1,2, or 3)

\$ 2.96E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.58E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

			TO XXIII OUN XX		
	RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
	CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
	SST1	$9.00E + 09 \times f_1$	$2.76E + 10 \times f_1$	$4.57E + 10 \times f_1$	$8.22E + 10 \times f_1$
	SST2	$1.95E + 08 \times f_2$	$6.85E + 08 \times f_2$	$4.54E + 10 \times f_2$	$4.63E + 10 \times f_2$
•	SST3	$7.30E + 05 \times f_3$	$8.24E + 07 \times f_3$	$4.54E+10\times f_3$	$4.55E + 10 \times f_3$

MILLSTONE

Unit 1

Date of Operation: 1970

Power Level (MWe): 660

Scale Factor 0.589

NERC Region: NPCC

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	243.0	992.0	3150.0	5.09E+07	2.75E+09
SST2	0.0	4.5	159.0	2.87E + 06	6.50E+07
SST3	- 0.0	0.0	0.6	1.14E+04	1.08E+07

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	143.2	584.6		3.00E+07	1.62E+09
SST2	0.0	2.7	93.7	1.69E+06	3.83E+07
SST3	0.0	0.0	0.4	6.72E + 03	6.36E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$2.41E + 09 \times f_1$	$9.85E + 08 \times f_1$	$3.13E + 09 \times f_1$	$2.73E + 10 \times f_1$
SST2	$2.03E + 05 \times f_2$	$4.50E + 06 \times f_2$	$1.58E + 08 \times f_2$	$6.45E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$6.21E + 05 \times f_3$	$1.07E + 08 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.19E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 2.36E+08 (per year, conditional on SST1,2, or 3)

\$ 4.55E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.39E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE .	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$6.52E + 09 \times f_1$	$2.73E + 10 \times f_1$	$5.96E + 10 \times f_1$	$9.34E + 10 \times f_1$
SST2	$1.63E + 08 \times f_2$	$6.45E + 08 \times f_2$	$5.94E + 10 \times f_2$	$6.02E + 10 \times f_2$
SST3	$6.21E + 05 \times f_3$	$1.07E + 08 \times f_3$	$5.94E+10 \times f_3$	$5.95E+10\times f_3$

MILLSTONE

Unit 2

Date of Operation: 1975

Power Level (MWe): 870

NERC Region: NPCC

Scale Factor 0.777

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	243.0	992.0	3150.0	5.09E+07	2.75E+09
SST2	0.0	4.5	159.0	2.87E+06	6.50E+07
SST3	0.0	0.0	0.6	1.14E+04	1.08E+07

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	188.8	770.6	2446.9	3.95E+07	2.14E+09
SST2	0.0	3.5	123.5	2.23E+06	5.05E+07
SST3	0.0	0.0	0.5	8.86E+03	8.39E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

	· ·	•		•
RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$3.46E + 09 \times f_1$	$1.41E + 09 \times f_1$	$4.48E + 09 \times f_1$	$3.91E + 10 \times f_1$
SST2	$2.92E + 05 \times f_2$	$6.45E + 06 \times f_2$	$2.26E + 08 \times f_2$	$9.25E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$8.91E + 05 \times f_3$	$1.54E + 08 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.38E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 3.11E+08 (per year, conditional on SST1,2, or 3)

\$ 7.40E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.51E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

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RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$9.35E + 09 \times f_1$	$3.91E + 10 \times f_1$	$8.93E + 10 \times f_1$	$1.38E + 11 \times f_1$
SST2	$2.33E + 08 \times f_2$	$9.25E + 08 \times f_2$	$8.91E + 10 \times f_2$	$9.02E + 10 \times f_2$
SST3	$8.91E + 05 \times f_3$	$1.54E + 08 \times f_3$	$8.91E + 10 \times f_3$	$8.92E + 10 \times f_3$

MILLSTONE

Unit 3

Date of Operation: 1986

Power Level (MWe): 1150

NERC Region: NPCC

Scale Factor 1.027

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	243.0	992.0	3150.0	5.09E+07	2.75E+09
SST2	0.0	4.5	159.0	2.87E+06	6.50E+07
SST3	0.0	0.0	0.6	1.14E+04	1.08E + 07

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	249.5	1018.6	3234.4	5.23E+07	2.82E+09
SST2	0.0	4.7	163.3	2.95E+06	6.67E+07
SST3	0.0	0.0	0.6	1.17E+04	1.11E+07

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

		•		
RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$4.24E + 09 \times f_1$	$1.73E + 09 \times f_1$	$5.50E + 09 \times f_1$	$4.80E + 10 \times f_1$
SST2	$3.58E + 05 \times f_2$	$7.91E + 06 \times f_2$	$2.78E + 08 \times f_2$	$1.13E + 09 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$1.09E + 06 \times f_3$	$1.89E + 08 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.21E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 4.11E+08 (per year, conditional on SST1,2, or 3)

\$ 1.04E+11 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.40E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

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RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL			
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS			
SST1	$1.15E + 10 \times f_1$	$4.80E + 10 \times f_1$	$1.18E + 11 \times f_1$	$1.78E + 11 \times f_1$			
SST2	$2.86E + 08 \times f_2$	$1.13E + 09 \times f_2$	$1.18E + 11 \times f_2$	$1.20E + 11 \times f_2$			
SST3	$1.09E + 06 \times f_3$	$1.89E + 08 \times f_3$	$1.18E + 11 \times f_3$	$1.18E + 11 \times f_3$			

MONTICELLO

Unit 1

Date of Operation: 1971

Power Level (MWe): 536

NERC Region: MARCA

Scale Factor 0.479

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	12.3	202.0	1060.0	1.88E+07	1.72E+09
SST2	0.0	0.1	97.9	1.81E+06	2.23E+07
SST3	0.0	0.0	0.4	6.85E+03	1.41E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
CATEGORY SST1	FATALITIES 5.9	INJURIES 96.7	507.3	9.00E+06	
SST2	0.0	0.0	46.9	8.66E+05	
SST3	0.0	0.0	0.2	3.28E+03	6.75E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

			• • • • • • • • • • • • • • • • • • • •	
RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.01E + 08 \times f_1$	$1.66E + 08 \times f_1$	$8.71E + 08 \times f_1$	$1.41E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$6.55E + 04 \times f_2$	$8.04E+07 \times f_2$	$1.83E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$3.14E + 05 \times f_3$	$1.16E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.23E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 7.68E+07 (per year, conditional on SST1,2, or 3)

\$ 1.55E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.41E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

				· · · 	
	RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
1	CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
	SST1	$1.14E + 09 \times f_1$		$2.99E + 10 \times f_1$	
	SST2	$8.05E + 07 \times f_2$	$1.83E + 08 \times f_2$	$2.96E + 10 \times f_2$	$2.99E + 10 \times f_2$
	SST3	$3.14E + 05 \times f_3$	$1.16E + 07 \times f_3$	$2.96E + 10 \times f_3$	$2.96E + 10 \times f_3$

NINE MILE PT.

Unit 1

Date of Operation: 1969

Power Level (MWe): 610

NERC Region: NPCC

Scale Factor 0.545

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

į	RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
	CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
į	SST1	5.2	108.0	1220.0	2.41E + 07	1.31E+09
	SST2	0.0	0.1	57.5	1.08E+06	1.42E+07
	SST3	0.0	0.0	0.2	3.79E + 03	3.66E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	2.8	58.8	664.5	1.31E+07	7.13E + 08
SST2	0.0	0.0	31.3	5.88E+05	7.73E+06
SST3	0.0	0.0	0.1	2.06E+03	1.99E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

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RELEASE	EARLY		LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$4.63E + 07 \times f_1$	$9.71E + 07 \times f_1$	$1.10E + 09 \times f_1$	$1.18E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$5.69E + 04 \times f_2$	$5.17E + 07 \times f_2$	$1.28E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$1.88E + 05 \times f_3$	$3.29E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.15E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 2.18E+08 (per year, conditional on SST1,2, or 3)

\$ 4.00E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.36E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.24E + 09 \times f_1$	$1.18E + 10 \times f_1$	$5.39E + 10 \times f_1$	$6.69E + 10 \times f_1$
SST2	$5.18E + 07 \times f_2$	$1.28E + 08 \times f_2$	$5.37E + 10 \times f_2$	$5.38E + 10 \times f_2$
SST3	$1.88E + 05 \times f_3$	$3.29E + 07 \times f_3$	$5.37E + 10 \times f_3$	$5.37E + 10 \times f_3$

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Unit 2 D

Date of Operation: 1986

Power Level (MWe): 1080

NERC Region: NPCC

Scale Factor 0.964

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	5.2	108.0	1220.0	2.41E+07	1.31E+09
SST2	0.0	0.1	57.5	1.08E + 06	1.42E+07
SST3	0.0	0.0	0.2	3.79E+03	3.66E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	5.0	104.1	1176.4	2.32E+07	1.26E+09
SST2	0.0	0.1	55.4	1.04E+06	1.37E+07
SST3	0.0	0.0	0.2	3.65E+03	3.53E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE CATEGORY	EARLY FATALITIES (\$'s)	EARLY INJURIES (\$'s)	LATENT CANCER FATALITIES (\$'s)	PROPERTY DAMAGE (\$'s)
SST1	$8.44E + 07 \times f_1$	$1.77E + 08 \times f_1$	$2.00E + 09 \times f_1$	$2.15E + 10 \times f_1$
SST2	$0.00E+00 \times f_2$	$1.04E + 05 \times f_2$	$9.43E + 07 \times f_2$	$2.33E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$3.43E + 05 \times f_3$	$6.00E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$1.30E+07 (conditional on SST1)

\$ 2.21E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 3.86E+08 (per year, conditional on SST1,2, or 3)

\$ 9.77E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.40E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

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RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL					
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS					
SST1	$2.26E + 09 \times f_1$	$2.15E + 10 \times f_1$	$1.12E+11\times f_1$	$1.36E + 11 \times f_1$					
SST2	$9.44E + 07 \times f_2$	$2.33E + 08 \times f_2$	$1.12E+11\times f_2$	$1.12E + 11 \times f_2$					
SST3	$3.43E + 05 \times f_3$	$6.00E + 07 \times f_3$	$1.12E+11\times f_3$	$1.12E + 11 \times f_3$					

Unit 1

Date of Operation: 1978

Power Level (MWe): 850

NERC Region: SERC

Scale Factor 0.759

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

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RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	14.2	91.9		3.71E+07	1.18E+09
SST2	0.0	0.1	74.7	1.40E+06	1.09E+07
SST3	0.0	0.0	0.3	4.50E+03	7.51E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	10.8	69.7	1396.4	2.82E+07	8.96E+08
SST2	0.0	0.1	56.7	1.06E+06	8.27E+06
SST3	0.0	0.0	0.2	3.42E+03	5.70E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$2.06E + 08 \times f_1$	$1.33E + 08 \times f_1$	$2.66E + 09 \times f_1$	$1.71E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$1.18E + 05 \times f_2$	$1.08E + 08 \times f_2$	$1.58E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$3.62E + 05 \times f_3$	$1.09E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.48E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.10E+08 (per year, conditional on SST1,2, or 3)

 $2.89E + 10 \times f_i$

(discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.57E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$3.00E + 09 \times f_1$	$1.71E + 10 \times f_1$	$4.49E + 10 \times f_1$	$6.49E + 10 \times f_1$
SST2	$1.08E + 08 \times f_2$	$1.58E + 08 \times f_2$	$4.46E + 10 \times f_2$	$4.49E + 10 \times f_2$
SST3	$3.62E + 05 \times f_3$	$1.09E + 07 \times f_3$	$4.46E + 10 \times f_3$	$4.46E + 10 \times f_3$

Unit 2 Date of Operation: 1980

Power Level (MWe): 850

NERC Region: SERC

Scale Factor 0.759

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	14.2	91.9	1840.0	3.71E+07	1.18E+09
SST2	0.0	0.1	74.7	1.40E+06	1.09E+07
SST3	0.0	0.0	0.3	4.50E+03	7.51E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	10.8	69.7	1396.4	2.82E+07	8.96E+08
SST2	0.0	0.1	56.7	1.06E+06	8.27E+06
SST3	0.0	0.0	0.2	3.42E+03	5.70E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$2.10E + 08 \times f_1$	$1.36E + 08 \times f_1$	$2.73E + 09 \times f_1$	$1.75E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$1.21E + 05 \times f_2$	$1.11E + 08 \times f_2$	$1.62E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$3.71E + 05 \times f_3$	$1.11E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

 $2.54E+08 \times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.10E+08 (per year, conditional on SST1,2, or 3)

\$ 3.07E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.61E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

	RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
	CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
1	SST1	$3.07E + 09 \times f_1$	$1.75E + 10 \times f_1$	$4.71E + 10 \times f_1$	$6.77E + 10 \times f_1$
ĺ	SST2	$1.11E + 08 \times f_2$	$1.62E + 08 \times f_2$	$4.68E + 10 \times f_2$	$4.71E + 10 \times f_2$
	SST3	$3.71E + 05 \times f_3$	$1.11E + 07 \times f_3$	$4.68E + 10 \times f_3$	$4.68E + 10 \times f_3$

Unit 3

Date of Operation: 1987

Power Level (MWe): 934

NERC Region: SERC

Scale Factor 0.834

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	14.2	91.9	1840.0	3.71E+07	1.18E+09
SST2	0.0	0.1	74.7	1.40E+06	1.09E+07
SST3	0.0	0.0	0.3	4.50E + 03	7.51E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	11.8	76.6	1534.4	3.09E+07	9.84E+08
SST2	0.0	0.1	62.3	1.17E + 06	9.09E+06
SST3	0.0	0.0	0.2	3.75E+03	6.26E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

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Г	RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
(CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
	SST1	$1.93E + 08 \times f_1$	$1.25E + 08 \times f_1$	$2.51E + 09 \times f_1$	$1.61E + 10 \times f_1$
ſ	SST2	$0.00E+00\times f_2$	$1.11E + 05 \times f_2$	$1.02E + 08 \times f_2$	$1.48E + 08 \times f_2$
	SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$3.41E + 05 \times f_3$	$1.02E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ $2.12E + 08 \times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.20E+08 (per year, conditional on SST1,2, or 3)

\$ 2.93E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.35E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$2.83E + 09 \times f_1$	$1.61E + 10 \times f_1$	$4.29E + 10 \times f_1$	$6.18E + 10 \times f_1$
SST2	$1.02E + 08 \times f_2$	$1.48E + 08 \times f_2$	$4.27E + 10 \times f_2$	$4.30E + 10 \times f_2$
SST3	$3.41E + 05 \times f_3$	$1.02E + 07 \times f_3$	$4.27E + 10 \times f_3$	$4.27E + 10 \times f_3$

Unit 4

Date of Operation: 1988

Power Level (MWe): 934

NERC Region: SERC

Scale Factor 0.834

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	14.2	91.9	1840.0	3.71E+07	1.18E+09
SST2	0.0	0.1	74.7	1.40E+06	1.09E+07
SST3	0.0	0.0	0.3	4.50E+03	7.51E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY	
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE	
SST1	11.8	76.6	1534.4	3.09E+07	9.84E+08	
SST2	0.0	0.1	62.3	1.17E + 06	9.09E+06	
SST3	0.0	0.0	0.2	3.75E+03	6.26E+05	

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY		LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.86E + 08 \times f_1$	$1.20E + 08 \times f_1$	$2.41E + 09 \times f_1$	$1.54E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$1.07E + 05 \times f_2$	$9.78E + 07 \times f_2$	$1.43E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$3.27E + 05 \times f_3$	$9.83E + 06 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

 $2.04E+08 \times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.20E+08 (per year, conditional on SST1,2, or 3)

\$ 2.81E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.29E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$2.71E + 09 \times f_1$	$1.54E + 10 \times f_1$	$4.13E + 10 \times f_1$	$5.94E + 10 \times f_1$
SST2	$9.79E + 07 \times f_2$	$1.43E + 08 \times f_2$	$4.11E + 10 \times f_2$	$4.13E + 10 \times f_2$
SST3	$3.27E + 05 \times f_3$	$9.83E + 06 \times f_3$	$4.11E + 10 \times f_3$	$4.11E + 10 \times f_3$

OCONEE

Unit 1

Date of Operation: 1973

Power Level (MWe): 860

NERC Region: SERC

Scale Factor 0.768

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	20.2	236.0	1060.0	1.90E+07	1.20E+09
SST2	0.0	0.0	70.1	1.30E+06	2.36E+07
SST3	0.0	0.0	0.3	4.76E+03	4.27E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	15.5	181.2	813.9	1.46E+07	9.21E+08
SST2	0.0	0.0	53.8	9.98E+05	1.81E+07
SST3	0.0	0.0	0.2	3.66E+03	3.28E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$2.76E + 08 \times f_1$	$3.22E + 08 \times f_1$	$1.45E + 09 \times f_1$	$1.64\text{E} + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$4.12E + 04 \times f_2$	$9.56E + 07 \times f_2$	$3.22E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$3.60E + 05 \times f_3$	$5.82E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.31E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.11E+08 (per year, conditional on SST1,2, or 3)

\$ 2.44E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.46E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

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RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$2.04E + 09 \times f_1$	$1.64E + 10 \times f_1$	$3.92E + 10 \times f_1$	$5.77E + 10 \times f_1$
SST2	$9.57E + 07 \times f_2$	$3.22E + 08 \times f_2$	$3.90E + 10 \times f_2$	$3.94E + 10 \times f_2$
SST3	$3.60E + 05 \times f_3$	$5.82E + 07 \times f_3$	$3.90E + 10 \times f_3$	$3.91E + 10 \times f_3$

OCONEE

Unit 2

Date of Operation: 1974

Power Level (MWe): 860

NERC Region: SERC

Scale Factor 0.768

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	20.2	236.0	1060.0	1.90E+07	1.20E+09
SST2	0.0	0.0	70.1	1.30E+06	2.36E+07
SST3	0.0	0.0	0.3	4.76E + 03	4.27E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	15.5	181.2	813.9	1.46E+07	9.21E+08
SST2	0.0	0.0	53.8	9.98E+05	1.81E+07
SST3	0.0	0.0	0.2	3.66E+03	3.28E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

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RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
S Ş T1	$2.80E + 08 \times f_1$	$3.27E + 08 \times f_1$	$1.47E + 09 \times f_1$	$1.66E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$4.19E + 04 \times f_2$	$9.72E + 07 \times f_2$	$3.27E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$3.66E + 05 \times f_3$	$5.92E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

 $2.35E+08 \times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.11E+08 (per year, conditional on SST1,2, or 3)

 $2.54E+10 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.49E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$2.08E + 09 \times f_1$	$1.66E + 10 \times f_1$	$4.05E + 10 \times f_1$	$5.92E + 10 \times f_1$
SST2	$9.72E + 07 \times f_2$	$3.27E + 08 \times f_2$	$4.02E + 10 \times f_2$	$4.07E + 10 \times f_2$
SST3	$3.66E + 05 \times f_3$	$5.92E + 07 \times f_3$	$4.02E + 10 \times f_3$	$4.03E+10 \times f_3$

OCONEE

Unit 3

Date of Operation: 1974

Power Level (MWe): 860

NERC Region: SERC

Scale Factor 0.768

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY.	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	20.2	236.0	1060.0	1.90E + 07	1.20E + 09
SST2	0.0	0.0	70.1	1.30E+06	2.36E+07
SST3	0.0	0.0	0.3	4.76E + 03	4.27E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	15.5	181.2	813.9	1.46E+07	9.21E+08
SST2	0.0	0.0	53.8	9.98E+05	1.81E+07
SST3	0.0	0.0	0.2	3.66E+03	3.28E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$2.80E + 08 \times f_1$	$3.27E + 08 \times f_1$	$1.47E + 09 \times f_1$	$1.66E + 10 \times f_1$
SST2	$0.00E+00\times f_2$	$4.19E + 04 \times f_2$	$9.72E + 07 \times f_2$	$3.27E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E+00\times f_3$	$3.66E + 05 \times f_3$	$5.92E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

 $2.35E+08 \times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.11E+08 (per year, conditional on SST1,2, or 3)

\$ 2.54E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.49E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$2.08E + 09 \times f_1$	$1.66E + 10 \times f_1$	$4.05E+10 \times f_1$	$5.92E + 10 \times f_1$
SST2	$9.72E + 07 \times f_2$	$3.27E + 08 \times f_2$	$4.02E + 10 \times f_2$	$4.07E + 10 \times f_2$
SST3	$3.66E + 05 \times f_3$	$5.92E + 07 \times f_3$	$4.02E + 10 \times f_3$	$4.03E + 10 \times f_3$

OYSTER CREEK

Unit 1

Date of Operation: 1969

Power Level (MWe): 620

NERC Region: MAAC

Scale Factor 0.554

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

Γ	RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
1	CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
	SST1	83.5	531.0	4420.0	8.55E+07	4.06E+09
	SST2	0.0	0.8	197.0	3.71E+06	2.69E+07
	SST3	0.0	0.0	0.6	1.12E+04	3.52E + 06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

1	RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
	CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
	SST1	46.2	293.9	2446.8	4.73E+07	2.25E+09
	SST2	0.0	0.4	109.1	2.05E+06	1.49E+07
	SST3	0.0	0.0	0.3	6.20E+03	1.95E+06
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Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

		•		
RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$7.63E + 08 \times f_1$	$4.85E + 08 \times f_1$	$4.04E + 09 \times f_1$	$3.71E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$7.07E + 05 \times f_2$	$1.80E + 08 \times f_2$	$2.46E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$5.69E + 05 \times f_3$	$3.22E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.15E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.42E+08 (per year, conditional on SST1,2, or 3)

\$ 2.61E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.36E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$5.29E + 09 \times f_1$	$3.71E + 10 \times f_1$	$3.99E + 10 \times f_1$	$8.23E + 10 \times f_1$
SST2	$1.81E + 08 \times f_2$	$2.46E + 08 \times f_2$	$3.97E + 10 \times f_2$	$4.01E+10 \times f_2$
SST3	$5.69E + 05 \times f_3$	$3.22E + 07 \times f_3$	$3.97E + 10 \times f_3$	$3.97E + 10 \times f_3$

PALISADE

Unit 1

Date of Operation: 1971

Power Level (MWe): 740

NERC Region: MAIN

Scale Factor 0.661

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM.	DAMAGE
SST1	37.3	247.0	1740.0	3.25E+07	1.54E+09
SST2	0.0	1.3	89.7	1.65E+06	2.29E+07
SST3	0.0	0.0	0.3	5.64E+03	2.94E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	24.6	163.2	1149.6	2.15E+07	1.02E+09
SST2	0.0	0.9	59.3	1.09E + 06	1.51E+07
SST3	0.0	0.0	0.2	3.73E+03	1.94E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY		LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$4.23E + 08 \times f_1$	$2.80E + 08 \times f_1$	$1.97E + 09 \times f_1$	$1.75E+10\times f_1$
SST2	$1.80E + 05 \times f_2$	$1.46E + 06 \times f_2$	$1.02E + 08 \times f_2$	$2.60E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$3.54E + 05 \times f_3$	$3.33E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.23E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 9.54E+07 (per year, conditional on SST1,2, or 3)

\$ 1.92E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.41E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$2.68E + 09 \times f_1$	$1.75E+10\times f_1$	$3.36E + 10 \times f_1$	$5.38E + 10 \times f_1$
SST2	$1.03E + 08 \times f_2$	$2.60E + 08 \times f_2$	$3.34E + 10 \times f_2$	$3.38E + 10 \times f_2$
SST3	$3.54E + 05 \times f_3$	$3.33E + 07 \times f_3$	$3.34E + 10 \times f_3$	$3.34E + 10 \times f_3$

PALO VERDE

Unit 1 Date of Operation: 1983 Power Level (MWe): 1270

NERC Region: WSCC

Scale Factor 1.134

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	5.8	59.1	448.0	8.84E+06	7.32E+08
SST2	0.0	0.2	25.8	4.73E+05	8.84E+06
SST3	0.0	0.0	0.1	1.57E+03	2.14E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	6.6	67.0	508.0	1.00E+07	8.30E+08
SST2	0.0	0.2	29.3	5.36E+05	1.00E+07
SST3	0.0	0.0	0.1	1.78E+03	2.43E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.27E + 08 \times f_1$	$1.28E + 08 \times f_1$	$9.74E + 08 \times f_1$	$1.59E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$4.65E + 05 \times f_2$	$5.61E + 07 \times f_2$	$1.92E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$1.90E + 05 \times f_3$	$4.65E + 06 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.49E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 2.00E+08 (per year, conditional on SST1,2, or 3)

\$ 5.71E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.58E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.23E + 09 \times f_1$	$1.59E + 10 \times f_1$	$7.31E + 10 \times f_1$	$9.03E + 10 \times f_1$
SST2	$5.65E + 07 \times f_2$	$1.92E + 08 \times f_2$	$7.29E + 10 \times f_2$	$7.31E + 10 \times f_2$
SST3	$1.90E + 05 \times f_3$	$4.65E + 06 \times f_3$	$7.29E + 10 \times f_3$	$7.29E + 10 \times f_3$

PALO VERDE

Unit 2 Date of Operation: 1984

Power Level (MWe): 1270

NERC Region: WSCC

Scale Factor 1.134

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	5.8	59.1	448.0	8.84E+06	7.32E+08
SST2	0.0	0.2	25.8	4.73E+05	8.84E+06
SST3	0.0	0.0	0.1	1.57E + 03	2.14E + 05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	6.6	67.0	508.0	1.00E+07	8.30E+08
SST2	0.0	0.2	29.3	5.36E+05	1.00E+07
SST3	0.0	0.0	0.1	1.78E+03	2.43E + 05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

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RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.22E + 08 \times f_1$	$1.23E + 08 \times f_1$	$9.36E + 08 \times f_1$	$1.53E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$4.47E + 05 \times f_2$	$5.39E + 07 \times f_2$	$1.85E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$1.83E + 05 \times f_3$	$4.47E + 06 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.39E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 2.00E+08 (per year, conditional on SST1,2, or 3)

\$ 5.48E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.52E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.18E + 09 \times f_1$	$1.53E + 10 \times f_1$	$7.02E + 10 \times f_1$	$8.67E + 10 \times f_1$
SST2	$5.43E + 07 \times f_2$	$1.85E + 08 \times f_2$	$7.00E + 10 \times f_2$	$7.02E + 10 \times f_2$
SST3	$1.83E + 05 \times f_3$	$4.47E + 06 \times f_3$	$7.00E + 10 \times f_3$	$7.00E + 10 \times f_3$

PALO VERDE

Unit 3

Date of Operation: 1986

Power Level (MWe): 1270

NERC Region: WSCC

Scale Factor 1.134

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

ſ	RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
1	CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
ĺ	SST1	5.8	59.1	448.0	8.84E+06	7.32E+08
	SST2	0.0	0.2	25.8	4.73E+05	8.84E+06
١	SST3	0.0	0.0	0.1	1.57E+03	2.14E + 05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	6.6	67.0	508.0	1.00E+07	8.30E+08
SST2	0.0	0.2	29.3	5.36E+05	1.00E+07
SST3	0.0	0.0	0.1	1.78E + 03	2.43E + 05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY FATALITIES (\$'s)	EARLY INJURIES (\$'s)	LATENT CANCER FATALITIES (\$'s)	PROPERTY DAMAGE (\$'s)
SST1	$1.12E + 08 \times f_1$	<u> </u>	$8.64E + 08 \times f_1$	$1.41\text{E} + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$4.13E + 05 \times f_2$	$4.97E + 07 \times f_2$	$1.70E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$1.69E + 05 \times f_3$	$4.13E + 06 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.21E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 2.00E+08 (per year, conditional on SST1,2, or 3)

\$ 5.06E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.40E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.09E + 09 \times f_1$	$1.41E + 10 \times f_1$	$6.48E + 10 \times f_1$	$8.00E+10\times f_1$
SST2	$5.02E + 07 \times f_2$	$1.70E + 08 \times f_2$	$6.46E + 10 \times f_2$	$6.48E + 10 \times f_2$
SST3	$1.69E + 05 \times f_3$	$4.13E + 06 \times f_3$	$6.46E + 10 \times f_3$	$6.46E + 10 \times f_3$

PEACH BOTTOM

Unit 2 Date of Operation: 1974 Power Level (MWe): 1065

NERC Region: MAAC

Scale Factor 0.951

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	96.6	404.0	2800.0	5.41E+07	2.58E+09
SST2	0.0	0.0	137.0	2.61E+06	2.09E+07
SST3	0.0	0.0	0.4	7.69E + 03	2.58E + 06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	91.9	384.2	2662.5	5.14E+07	2.45E+09
SST2	0.0	0.0	130.3	2.48E+06	1.99E+07
SST3	0.0	0.0	0.4	7.31E+03	2.45E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

		,		
RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.66E + 09 \times f_1$	$6.93E + 08 \times f_1$	$4.81E + 09 \times f_1$	$4.43E+10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$3.83E + 04 \times f_2$	$2.35E + 08 \times f_2$	$3.59E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$7.36E + 05 \times f_3$	$4.43E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.35E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 2.44E+08 (per year, conditional on SST1,2, or 3)

\$ 5.58E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.49E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

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RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL		
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS		
SST1	$7.16E + 09 \times f_1$	$4.43E + 10 \times f_1$	$7.09E + 10 \times f_1$	$1.22E+11\times f_1$		
SST2	$2.35E + 08 \times f_2$	$3.59E + 08 \times f_2$	$7.07E + 10 \times f_2$	$7.13E + 10 \times f_2$		
SST3	$7.36E + 05 \times f_3$	$4.43E + 07 \times f_3$	$7.07E + 10 \times f_3$	$7.07E + 10 \times f_3$		

PEACH BOTTOM

Unit 3 Date of Operation: 1974 Power Level (MWe): 1065

NERC Region: MAAC

Scale Factor 0.951

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

F	RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
C.	ATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
	SST1	96.6	404.0	2800.0	5.41E+07	2.58E+09
	SST2	0.0	0.0	137.0	2.61E+06	2.09E+07
	SST3	0.0	0.0	0.4	7.69E+03	2.58E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	91.9	384.2	2662.5	5.14E+07	2.45E+09
SST2	0.0	0.0	130.3	2.48E+06	1.99E+07
SST3	0.0	0.0	0.4	7.31E+03	2.45E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.66E + 09 \times f_1$	$6.93E + 08 \times f_1$	$4.81E + 09 \times f_1$	$4.43E+10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$3.83E + 04 \times f_2$	$2.35E + 08 \times f_2$	$3.59E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$7.36E + 05 \times f_3$	$4.43E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$1.30E+07 (conditional on SST1)

\$ 2.35E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 2.44E+08 (per year, conditional on SST1,2, or 3)

 $5.58E+10 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.49E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$7.16E + 09 \times f_1$	$4.43E + 10 \times f_1$	$7.09E + 10 \times f_1$	$1.22E + 11 \times f_1$
SST2	$2.35E + 08 \times f_2$	$3.59E + 08 \times f_2$	$7.07E + 10 \times f_2$	$7.13E + 10 \times f_2$
SST3	$7.36E + 05 \times f_3$	$4.43E + 07 \times f_3$	$7.07E + 10 \times f_3$	$7.07E + 10 \times f_3$

PEBBLE SPRINGS

Unit 1 Date of Operation: 1988

Power Level (MWe): 1260

NERC Region: WSCC

Scale Factor 1.125

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	0.4	3.7	233.0	4.61E+06	4.31E+08
SST2	0.0	0.0	17.5	3.20E+05	4.57E+06
SST3	0.0	0.0	0.1	1.33E + 03	9.10E+04

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	0.5	4.1	262.1	5.19E+06	4.85E+08
SST2	0.0	0.0	19.7		5.14E+06
SST3	0.0	0.0	0.1	1.50E+03	1.02E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$7.26E + 06 \times f_1$	$6.50E + 06 \times f_1$	$4.11E + 08 \times f_1$	$7.61E + 09 \times f_1$
SST2	$0.00E+00\times f_2$	$2.63E + 03 \times f_2$	$3.09E + 07 \times f_2$	$8.07E + 07 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E+00\times f_3$	$1.32E + 05 \times f_3$	$1.61E + 06 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$1.30E+07 (conditional on SST1)

\$ 2.04E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.98E+08 (per year, conditional on SST1,2, or 3)

\$ $4.64E+10 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.29E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$4.25E + 08 \times f_1$	$7.61E + 09 \times f_1$	$5.95E + 10 \times f_1$	$6.75E + 10 \times f_1$
SST2	$3.09E + 07 \times f_2$	$8.07E + 07 \times f_2$	$5.93E + 10 \times f_2$	$5.94E + 10 \times f_2$
SST3	$1.32E + 05 \times f_3$	$1.61E + 06 \times f_3$	$5.93E + 10 \times f_3$	$5.93E + 10 \times f_3$

PEBBLE SPRINGS

Unit 2

Date of Operation: 1990

Power Level (MWe): 1260

NERC Region: WSCC

Scale Factor 1.125

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	0.4	3.7	233.0	4.61E+06	4.31E+08
SST2	0.0	0.0	17.5	3.20E + 05	4.57E+06
SST3	0.0	0.0	0.1	1.33E+03	9.10E+04

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	0.5	4.1	262.1	5.19E+06	4.85E+08
SST2	0.0	0.0	19.7	3.60E+05	5.14E+06
SST3	0.0	0.0	0.1	1.50E+03	1.02E + 05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

		,		
RELEASE	EARLY		LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$6.70E + 06 \times f_1$	$6.00E + 06 \times f_1$	$3.80E + 08 \times f_1$	$7.03E + 09 \times f_1$
SST2	$0.00E + 00 \times f_2$	$2.43E + 03 \times f_2$	$2.85E + 07 \times f_2$	$7.45E + 07 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E+00\times f_3$	$1.22E + 05 \times f_3$	$1.48E + 06 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$1.30E+07 (conditional on SST1)

\$ 1.88E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.98E+08 (per year, conditional on SST1,2, or 3)

\$ $4.28E+10 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.19E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

			I O IIII O O O I N		
	RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
	CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
-	SST1	$3.92E + 08 \times f_1$	$7.03E + 09 \times f_1$	$5.49E + 10 \times f_1$	$6.23E + 10 \times f_1$
	SST2	$2.85E + 07 \times f_2$	$7.45E + 07 \times f_2$	$5.47E + 10 \times f_2$	$5.48E + 10 \times f_2$
	SST3	$1.22E + 05 \times f_3$	$1.48E + 06 \times f_3$	$5.47E + 10 \times f_3$	$5.47E + 10 \times f_3$

PERKINS

Unit 1

Date of Operation: 1999

Power Level (MWe): 1280

NERC Region: SERC

Scale Factor 1.143

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	97.8	521.0	1530.0	2.67E+07	1.84E+09
SST2	0.0	2.1	123.0	2.24E+06	2.90E+07
SST3	0.0	0.0	0.5	8.42E+03	3.06E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	111.8	595.4	1748.6	3.05E+07	2.10E+09
SST2	0.0	2.4	140.6	2.56E + 06	3.31E+07
SST3	0.0	0.0	0.5	9.62E+03	3.50E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

			,		
ļ	RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
	CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
	SST1	$1.13E + 09 \times f_1$	$6.02E + 08 \times f_1$	$1.77E + 09 \times f_1$	$2.13E + 10 \times f_1$
	SST2	$0.00E + 00 \times f_2$	$2.46E + 06 \times f_2$	$1.42E + 08 \times f_2$	$3.35E + 08 \times f_2$
	SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$5.41E + 05 \times f_3$	$3.54E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 1.31E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.65E+08 (per year, conditional on SST1,2, or 3)

\$ 2.48E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 8.33E+09 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

		I O IIIL O O O Z	·	
RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$3.50E + 09 \times f_1$	$2.13E+10 \times f_1$	$3.33E + 10 \times f_1$	$5.80E + 10 \times f_1$
SST2	$1.45E + 08 \times f_2$	$3.35E + 08 \times f_2$	$3.31E + 10 \times f_2$	$3.36E + 10 \times f_2$
SST3	$5.41E + 05 \times f_3$	$3.54E + 07 \times f_3$	$3.31E + 10 \times f_3$	$3.32E + 10 \times f_3$

PERRY

Unit 1

Date of Operation: 1984

Power Level (MWe): 1205

NERC Region: ECAR

Scale Factor 1.076

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

1	RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
	SST1	94.8	516.0	2460.0	4.40E+07	2.45E+09
	SST2	0.1	4.2	164.0	2.97E+06	4.62E+07
	SST3	0.0	0.0	0.6	1.06E+04	6.88E + 06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	102.0	555.2	2646.7	4.73E+07	2.64E+09
SST2	0.1	4.5	176.4	3.20E+06	4.97E+07
SST3	0.0	0.0	0.6	1.14E+04	7.40E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.88E + 09 \times f_1$	$1.02E + 09 \times f_1$	$4.87E + 09 \times f_1$	$4.86E + 10 \times f_1$
SST2	$1.37E + 06 \times f_2$	$8.32E + 06 \times f_2$	$3.25E + 08 \times f_2$	$9.16E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$1.16E + 06 \times f_3$	$1.36E + 08 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.39E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.21E+08 (per year, conditional on SST1,2, or 3)

\$ 3.31E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.52E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

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RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$7.78E + 09 \times f_1$	$4.86E + 10 \times f_1$	$4.85E + 10 \times f_1$	$1.05E + 11 \times f_1$
SST2	$3.35E + 08 \times f_2$	$9.16E + 08 \times f_2$	$4.83E + 10 \times f_2$	$4.96E + 10 \times f_2$
SST3	$1.16E + 06 \times f_3$	$1.36E + 08 \times f_3$	$4.83E + 10 \times f_3$	$4.84E + 10 \times f_3$

PERRY

Unit 2

Date of Operation: 1988

Power Level (MWe): 1205

NERC Region: ECAR

Scale Factor 1.076

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

ſ	RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
	CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
	SST1	94.8	516.0	2460.0	4.40E+07	2.45E+09
Ī	SST2	0.1	4.2	164.0	2.97E+06	4.62E+07
Ī	SST3	0.0	0.0	0.6	1.06E+04	6.88E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	102.0	555.2	2646.7	4.73E+07	2.64E+09
SST2	0.1	4.5	176.4	3.20E+06	4.97E+07
SST3	0.0	0.0	0.6	1.14E+04	7.40E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.60E + 09 \times f_1$	$8.71E + 08 \times f_1$	$4.15E + 09 \times f_1$	$4.14E+10 \times f_1$
SST2	$1.17E + 06 \times f_2$	$7.09E + 06 \times f_2$	$2.77E + 08 \times f_2$	$7.80E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$9.90E + 05 \times f_3$	$1.16E + 08 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$1.30E+07 (conditional on SST1)

\$ 2.04E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.21E+08 (per year, conditional on SST1,2, or 3)

\$ 2.82E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.29E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

		TOTAL CONTR		
RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$6.63E + 09 \times f_1$	$4.14E + 10 \times f_1$	$4.14E + 10 \times f_1$	$8.94E + 10 \times f_1$
SST2	$2.85E + 08 \times f_2$	$7.80E + 08 \times f_2$	$4.12E + 10 \times f_2$	$4.22E + 10 \times f_2$
SST3	$9.90E + 05 \times f_3$	$1.16E + 08 \times f_3$	$4.12E + 10 \times f_3$	$4.13E + 10 \times f_3$

PHIPPS

Unit 1

Date of Operation: 1999

Power Level (MWe): 1233

NERC Region: SERC

Scale Factor 1.101

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	166.0	302.0	1270.0	2.28E+07	1.28E+09
SST2	0.3	16.1	82.2	1.39E+06	2.39E+07
SST3	0.0	0.0	0.3	6.12E+03	1.91E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	182.7	332.5	1398.1	2.51E+07	1.41E+09
SST2	0.3	17.7	90.5	1.53E+06	2.63E+07
SST3	0.0	0.0	0.4	6.74E+03	2.10E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.85E + 09 \times f_1$	$3.36E + 08 \times f_1$	$1.41E + 09 \times f_1$	$1.42E + 10 \times f_1$
SST2	$3.13E + 06 \times f_2$	$1.79E + 07 \times f_2$	$9.15E + 07 \times f_2$	$2.66E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$3.75E + 05 \times f_3$	$2.13E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 1.31E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.59E+08 (per year, conditional on SST1,2, or 3)

\$ 2.39E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 8.33E+09 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$3.60E + 09 \times f_1$	$1.42E + 10 \times f_1$	$3.24E + 10 \times f_1$	$5.02E + 10 \times f_1$
SST2	$1.13E + 08 \times f_2$	$2.66E + 08 \times f_2$	$3.22E + 10 \times f_2$	$3.26E + 10 \times f_2$
SST3	$3.75E + 05 \times f_3$	$2.13E + 07 \times f_3$	$3.22E + 10 \times f_3$	$3.23E + 10 \times f_3$

PILGRIM

Unit 1

Date of Operation: 1972

Power Level (MWe): 670

NERC Region: NPCC

Scale Factor 0.598

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

1	RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
	CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
	SST1	70.9	298.0	1460.0	2.70E + 07	1.37E+09
	SST2	0.0	2.4	84.8	1.55E+06	1.69E+07
	SST3	0.0	0.0	0.3	5.34E + 03	2.82E + 06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	42.4	178.3	873.4	1.62E+07	8.20E+08
SST2	0.0	1.5	50.7	9.27E+05	1.01E+07
SST3	0.0	0.0	0.2	3.19E+03	1.69E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

		•		
RELEASE	EARLY		LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$7.41E + 08 \times f_1$	$3.11E + 08 \times f_1$	$1.53E + 09 \times f_1$	$1.43E + 10 \times f_1$
SST2	$2.30E + 05 \times f_2$	$2.55E + 06 \times f_2$	$8.86E + 07 \times f_2$	$1.77E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$3.10E + 05 \times f_3$	$2.95E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$1.30E+07 (conditional on SST1)

\$ 2.27E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 2.40E+08 (per year, conditional on SST1,2, or 3)

\$ 5.05E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.44E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$2.58E + 09 \times f_1$	$1.43E + 10 \times f_1$	$6.52E + 10 \times f_1$	$8.21E + 10 \times f_1$
SST2	$9.14E + 07 \times f_2$	$1.77E + 08 \times f_2$	$6.49E + 10 \times f_2$	$6.52E + 10 \times f_2$
SST3	$3.10E + 05 \times f_3$	$2.95E + 07 \times f_3$	$6.49E + 10 \times f_3$	$6.50E + 10 \times f_3$

POINT BEACH

Unit 1

Date of Operation: 1970

Power Level (MWe): 497

NERC Region: MARCA

Scale Factor 0.444

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	7.7	106.0	1370.0	2.73E+07	1.75E+09
SST2	0.0	0.3	76.9	1.44E+06	1.71E+07
SST3	0.0	0.0	0.3	5.04E+03	2.16E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

	RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
t	SST1	3.4	47.0	607.9	1.21E+07	7.77E+08
ľ	SST2	0.0	0.1	34.1	6.39E+05	7.59E+06
ļ	SST3	0.0	0.0	0.1	2.24E+03	9.59E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

		•		
RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$5.73E + 07 \times f_1$	$7.92E + 07 \times f_1$	$1.02E + 09 \times f_1$	$1.31E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$2.38E + 05 \times f_2$	$5.75E + 07 \times f_2$	$1.28E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$2.08E + 05 \times f_3$	$1.61E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.19E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 7.12E+07 (per year, conditional on SST1,2, or 3)

\$ 1.37E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.39E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

TOTAL COSTS							
RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL			
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS			
SST1	$1.16E + 09 \times f_1$	· · · · · · · · · · · · · · · · · · ·	$2.78E + 10 \times f_1$				
SST2	$5.77E + 07 \times f_2$	$1.28E + 08 \times f_2$	$2.76E + 10 \times f_2$	$2.78E + 10 \times f_2$			
SST3	$2.08E + 05 \times f_3$	$1.61E + 07 \times f_3$	$2.76E + 10 \times f_3$	$2.76E + 10 \times f_3$			

POINT BEACH

Unit 2

Date of Operation: 1972

Power Level (MWe): 497

NERC Region: MARCA

Scale Factor 0.444

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

Γ	RELEASE	· EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
ı	CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
ſ	SST1	7.7	106.0	1370.0	2.73E+07	1.75E+09
ſ	SST2	0.0	0.3	76.9	1.44E+06	1.71E+07
Ī	SST3	0.0	0.0	0.3	5.04E+03	2.16E + 06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	3.4	47.0	607.9	1.21E+07	7.77E+08
SST2	0.0	0.1	34.1	6.39E+05	7.59E+06
SST3	0.0	0.0	0.1	2.24E+03	9.59E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$5.95E + 07 \times f_1$	$8.22E + 07 \times f_1$	$1.06E + 09 \times f_1$	$1.36E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$2.47E + 05 \times f_2$	$5.96E + 07 \times f_2$	$1.33E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$2.16E + 05 \times f_3$	$1.67E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.27E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 7.12E+07 (per year, conditional on SST1,2, or 3)

\$ 1.50E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.44E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.20E + 09 \times f_1$	$1.36E + 10 \times f_1$	$2.96E + 10 \times f_1$	$4.44E + 10 \times f_1$
SST2	$5.99E + 07 \times f_2$	$1.33E + 08 \times f_2$	$2.94E + 10 \times f_2$	$2.96E + 10 \times f_2$
SST3	$2.16E + 05 \times f_3$	$1.67E + 07 \times f_3$	$2.94E + 10 \times f_3$	$2.94E + 10 \times f_3$

PRAIRIE

Unit 1

Date of Operation: 1973

Power Level (MWe): 520

NERC Region: MARCA

Scale Factor 0.464

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	55.6	261.0	1430.0	2.54E+07	1.93E+09
SST2	0.0	2.4	113.0	2.07E+06	2.72E+07
SST3	0.0	0.0	0.4	7.79E+03	2.01E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	25.8	121.2	663.9	1.18E+07	8.96E+08
SST2	0.0	1.1	52.5	9.61E+05	1.26E+07
SST3	0.0	0.0	0.2	3.62E + 03	9.33E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY		LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$4.59E + 08 \times f_1$	$2.15E + 08 \times f_1$	$1.18E + 09 \times f_1$	$1.59E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$1.95E + 06 \times f_2$	$9.32E + 07 \times f_2$	$2.24E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E+00\times f_3$	$3.57E + 05 \times f_3$	$1.66E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.31E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 7.45E+07 (per year, conditional on SST1,2, or 3)

\$ 1.64E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.46E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.85E + 09 \times f_1$	$1.59E + 10 \times f_1$	$3.12E + 10 \times f_1$	$4.90E + 10 \times f_1$
SST2	$9.52E + 07 \times f_2$	$2.24E + 08 \times f_2$	$3.10E + 10 \times f_2$	$3.13E + 10 \times f_2$
SST3	$3.57E + 05 \times f_3$	$1.66E + 07 \times f_3$	$3.10E + 10 \times f_3$	$3.10E + 10 \times f_3$

PRAIRIE

Unit 2 Date of Operation: 1974

Power Level (MWe): 520

Fower Level (MIVVe). 5.

NERC Region: MARCA

Scale Factor 0.464

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	55.6	261.0	1430.0	2.54E+07	1.93E+09
SST2	0.0	2.4	113.0	2.07E+06	2.72E+07
SST3	0.0	0.0	0.4	7.79E+03	2.01E + 06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	25.8	121.2	663.9	1.18E+07	8.96E+08
SST2	0.0	1.1	52.5	9.61E+05	1.26E+07
SST3	0.0	0.0	0.2	3.62E+03	9.33E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$4.66E + 08 \times f_1$	$2.19E + 08 \times f_1$	$1.20E + 09 \times f_1$	$1.62E + 10 \times f_1$
SST2	$0.00E+00\times f_2$	$1.99E + 06 \times f_2$	$9.47E + 07 \times f_2$	$2.28E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$3.63E + 05 \times f_3$	$1.68E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

* \$ 1.30E+07 (conditional on SST1)

\$ 2.35E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 7.45E+07 (per year, conditional on SST1,2, or 3)

 $1.70E+10 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.49E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

	-			
RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.88E + 09 \times f_1$	$1.62E + 10 \times f_1$	$3.21E + 10 \times f_1$	$5.02E + 10 \times f_1$
SST2	$9.67E + 07 \times f_2$	$2.28E + 08 \times f_2$	$3.19E + 10 \times f_2$	$3.22E + 10 \times f_2$
SST3	$3.63E + 05 \times f_3$	$1.68E + 07 \times f_3$	$3.19E + 10 \times f_3$	$3.19E + 10 \times f_3$

QUAD CITIES

Unit 1

Date of Operation: 1972

Power Level (MWe): 800

NERC Region: MAIN

Scale Factor 0.714

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

1	RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
	CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
	SST1	17.0	293.0	1860.0	3.50E+07	2.18E+09
	SST2	0.0	0.0	171.0	3.12E+06	3.30E+07
	SST3	0.0	0.0	0.7	1.21E+04	1.61E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	12.1	209.3	1328.6	2.50E+07	1.56E+09
SST2	0.0	0.0	122.1	2.23E+06	2.36E+07
SST3	0.0	0.0	0.5	8.64E+03	1.15E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

		•		
RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$2.12E + 08 \times f_1$	$3.66E + 08 \times f_1$	$2.32E + 09 \times f_1$	$2.72E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$4.57E + 04 \times f_2$	$2.13E + 08 \times f_2$	$4.12E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$8.34E + 05 \times f_3$	$2.01E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.27E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$1.03E+08 (per year, conditional on SST1,2, or 3)

\$ 2.17E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.44E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

i	RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
	CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
	SST1	$2.90E + 09 \times f_1$	$2.72E + 10 \times f_1$	$3.64E + 10 \times f_1$	$6.65E + 10 \times f_1$
	SST2	$2.13E + 08 \times f_2$	$4.12E + 08 \times f_2$	$3.61E + 10 \times f_2$	$3.68E + 10 \times f_2$
	SST3	$8.34E + 05 \times f_3$	$2.01E + 07 \times f_3$	$3.61E + 10 \times f_3$	$3.62E + 10 \times f_3$

QUAD CITIES

Unit 2 Date of Operation: 1972

Power Level (MWe): 800

NERC Region: MAIN

Scale Factor 0.714

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	17.0	293.0	1860.0	3.50E+07	2.18E+09
SST2	0.0	0.0	171.0	3.12E+06	3.30E+07
SST3	0.0	0.0	0.7	1.21E+04	1.61E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

	RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
•	CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
	SST1	12.1	209.3	1328.6	2.50E+07	1.56E+09
	SST2	0.0	0.0	122.1	2.23E+06	2.36E+07
	SST3	0.0	0.0	0.5	8.64E+03	1.15E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$2.12E + 08 \times f_1$	$3.66E + 08 \times f_1$	$2.32E + 09 \times f_1$	$2.72E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$4.57E + 04 \times f_2$	$2.13E + 08 \times f_2$	$4.12E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$8.34E + 05 \times f_3$	$2.01E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.27E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.03E+08 (per year, conditional on SST1,2, or 3)

 $2.17E+10 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.44E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

		TOTAL COST	,	_
RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$2.90E + 09 \times f_1$	$2.72E + 10 \times f_1$	$3.64E + 10 \times f_1$	$6.65E+10\times f_1$
SST2	$2.13E + 08 \times f_2$	$4.12E + 08 \times f_2$	$3.61E + 10 \times f_2$	$3.68E + 10 \times f_2$
SST3	$8.34E + 05 \times f_3$	$2.01E + 07 \times f_3$	$3.61E + 10 \times f_3$	$3.62E + 10 \times f_3$

RANCHO SECO

Unit 1

Date of Operation: 1975

Power Level (MWe): 913

NERC Region: CALIF

Scale Factor 0.815

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	15.1	112.0	865.0	1.55E+07	1.29E+09
SST2	0.0	0.0	87.4	1.61E+06	1.49E+07
SST3	0.0	0.0	0.3	5.90E+03	8.55E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	12.3	91.3	705.1	1.26E+07	1.05E+09
SST2	0.0	0.0	71.2	1.31E+06	1.21E+07
SST3	0.0	0.0	0.3	4.81E+03	6.97E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

		•	- • • • • • • • • • • • • • • • • • • •	
RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$2.26E + 08 \times f_1$	$1.67E + 08 \times f_1$	$1.29E + 09 \times f_1$	$1.93E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$3.23E + 04 \times f_2$	$1.31E + 08 \times f_2$	$2.23E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$4.93E + 05 \times f_3$	$1.28E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$1.30E+07 (conditional on SST1)

\$ 2.38E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 3.27E+08 (per year, conditional on SST1,2, or 3)

\$ 7.76E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.51E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

Ì	RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL						
į	CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS						
	SST1	$1.68E + 09 \times f_1$	$1.93E + 10 \times f_1$	$9.30E + 10 \times f_1$	$1.14E+11\times f_1$						
	SST2	$1.31E + 08 \times f_2$	$2.23E + 08 \times f_2$	$9.27E + 10 \times f_2$	$9.31E + 10 \times f_2$						
i	SST3	$4.93E + 05 \times f_3$	$1.28E + 07 \times f_3$	$9.27E + 10 \times f_3$	$9.27E + 10 \times f_3$						

RIVERBEND

Unit 1

Date of Operation: 1984

Power Level (MWe): 940

NERC Region: SPP

Scale Factor 0.839

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	31.0	201.0	750.0	1.29E+07	9.40E+08
SST2	0.0	0.2	59.8	1.10E+06	1.56E+07
SST3	0.0	0.0	0.2	4.22E+03	2.04E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	26.0	168.7	629.5	1.08E+07	7.89E+08
SST2	0.0	0.2	50.2	9.23E+05	1.31E+07
SST3	0.0	0.0	0.2	3.54E+03	1.71E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

		•		
RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$4.79E + 08 \times f_1$	$3.11E + 08 \times f_1$	$1.16E + 09 \times f_1$	$1.45E + 10 \times f_1$
SST2	$0.00E+00\times f_2$	$3.65E + 05 \times f_2$	$9.24E + 07 \times f_2$	$2.41E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$3.63E + 05 \times f_3$	$3.15E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.39E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.88E+08 (per year, conditional on SST1,2, or 3)

\$ 5.16E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.52E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

TO ME COSTO								
RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL				
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS				
SST1	$1.95E + 09 \times f_1$	$1.45E + 10 \times f_1$	$6.71E + 10 \times f_1$	$8.35E + 10 \times f_1$				
SST2	$9.28E + 07 \times f_2$	$2.41E + 08 \times f_2$	$6.68E + 10 \times f_2$	$6.71E + 10 \times f_2$				
SST3	$3.63E + 05 \times f_3$	$3.15E + 07 \times f_3$	$6.68E + 10 \times f_3$	$6.68E + 10 \times f_3$				

ROBINSON

Unit 2

Date of Operation: 1971

Power Level (MWe): 665

NERC Region: SERC

Scale Factor 0.594

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	15.8	168.0	877.0	1.58E+07	9.99E+08
SST2	0.0	0.0	59.4	1.09E+06	1.58E+07
SST3	0.0	0.0	0.2	4.21E+03	2.41E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	9.4	99.8	520.7	9.38E+06	5.93E+08
SST2	0.0	0.0	35.3	6.47E + 05	9.38E+06
SST3	0.0	0.0	0.1	2.50E+03	1.43E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.61E + 08 \times f_1$	$1.71E + 08 \times f_1$	$8.94E + 08 \times f_1$	$1.02E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$1.08E + 04 \times f_2$	$6.05E + 07 \times f_2$	$1.61E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$2.37E + 05 \times f_3$	$2.46E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.23E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$8.57E+07 (per year, conditional on SST1,2, or 3)

 $1.73E+10 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.41E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.23E + 09 \times f_1$	$1.02E + 10 \times f_1$	$3.17E + 10 \times f_1$	$4.31E+10 \times f_1$
SST2	$6.05E + 07 \times f_2$	$1.61E + 08 \times f_2$	$3.14E + 10 \times f_2$	$3.17E + 10 \times f_2$
SST3	$2.37E + 05 \times f_3$	$2.46E + 07 \times f_3$	$3.14E + 10 \times f_3$	$3.15E + 10 \times f_3$

SAINT LUCIE

Unit 1

Date of Operation: 1976

Power Level (MWe): 777

NERC Region: SERC

Scale Factor 0.694

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	77.3	312.0	695.0	1.01E+07	9.55 E +08
SST2	0.0	0.6	68.6	1.22E + 06	3.58E+07
SST3	0.0	0.0	0.4	6.73E+03	4.16E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	53.6	216.5	482.2	7.01E+06	6.63E+08
SST2	0.0	0.4	. 47.6	8.46E+05	2.48E + 07
SST3	0.0	0.0	0.3	4.67E+03	2.89E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$9.97E + 08 \times f_1$	$4.02E + 08 \times f_1$	$8.96E + 08 \times f_1$	$1.23E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$7.31E + 05 \times f_2$	$8.84E + 07 \times f_2$	$4.62E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$4.80E + 05 \times f_3$	$5.36E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.42E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 2.47E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.53E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$2.29E + 09 \times f_1$	$1.23E + 10 \times f_1$	$4.02E + 10 \times f_1$	$5.48E + 10 \times f_1$
SST2	$8.92E + 07 \times f_2$	$4.62E + 08 \times f_2$	$4.00E + 10 \times f_2$	$4.05E+10 \times f_2$
SST3	$4.80E + 05 \times f_3$	$5.36E + 07 \times f_3$	$4.00E + 10 \times f_3$	$4.01E + 10 \times f_3$

SAINT LUCIE

Unit 2

Date of Operation: 1983

Power Level (MWe): 777

NERC Region: SERC

Scale Factor 0.694

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	77.3	312.0	695.0	1.01E+07	9.55E+08
SST2	0.0	0.6	68.6	1.22E+06	3.58E+07
SST3	0.0	0.0	0.4	6.73E+03	4.16E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	53.6	216.5	482.2	7.01E+06	6.63E+08
SST2	0.0	0.4	47.6	8.46E+05	2.48E+07
SST3	0.0	0.0	0.3	4.67E+03	2.89E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.03E + 09 \times f_1$	$4.15E + 08 \times f_1$	$9.24E + 08 \times f_1$	$1.27E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$7.54E + 05 \times f_2$	$9.12E + 07 \times f_2$	$4.76E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$4.95E + 05 \times f_3$	$5.53E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.49E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 2.86E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.58E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$2.37E + 09 \times f_1$	$1.27E + 10 \times f_1$	$4.46E + 10 \times f_1$	$5.97E + 10 \times f_1$
SST2	$9.20E + 07 \times f_2$	$4.76E + 08 \times f_2$	$4.44E + 10 \times f_2$	$4.49E + 10 \times f_2$
SST3	$4.95E + 05 \times f_3$	$5.53E + 07 \times f_3$	$4.44E + 10 \times f_3$	$4.44E + 10 \times f_3$

SALEM

Unit 1

Date of Operation: 1977

Power Level (MWe): 1090

NERC Region: MAAC

Scale Factor 0.973

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	122.0	438.0	2980.0	5.69E+07	2.74E+09
SST2	0.0	0.0	160.0	3.02E + 06	2.11E+07
SST3	0.0	0.0	0.5	9.07E+03	2.67E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	118.7	426.3	2900.2	5.54E+07	2.67E+09
SST2	0.0	0.0	155.7	2.94E + 06	2.05E+07
SST3	0.0	0.0	0.5	8.83E+03	2.60E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$2.24E + 09 \times f_1$	$8.03E + 08 \times f_1$	$5.46E + 09 \times f_1$	$5.02E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$6.76E + 03 \times f_2$	$2.93E + 08 \times f_2$	$3.87E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$9.28E + 05 \times f_3$	$4.89E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

 $2.45E+08 \times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 2.50E+08 (per year, conditional on SST1,2, or 3)

\$ 6.37E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.55E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE CATEGORY	OFFSITE HEATLH COSTS	OFFSITE PROPERTY COSTS	ONSITE COSTS	TOTAL COSTS
SST1	$8.50E + 09 \times f_1$	$5.02E + 10 \times f_1$	$7.94E + 10 \times f_1$	$1.38E + 11 \times f_1$
SST2	$2.93E + 08 \times f_2$	$3.87E + 08 \times f_2$	$7.92E + 10 \times f_2$	$7.99E + 10 \times f_2$
SST3	$9.28E + 05 \times f_3$	$4.89E + 07 \times f_3$	$7.92E + 10 \times f_3$	$7.93E + 10 \times f_3$

SALEM

Unit 2 Date of Operation: 1981

Power Level (MWe): 1115

NERC Region: MAAC

Scale Factor 0.996

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	122.0	438.0	2980.0	5.69E+07	2.74E+09
SST2	0.0	0.0	160.0	3.02E + 06	2.11E+07
SST3	0.0	0.0	0.5	9.07E+03	2.67E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER		PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	121.5	436.0	2966.7	5.66E+07	2.73E+09
SST2	0.0	0.0	159.3	3.01E+06	2.10E + 07
SST3	0.0	0.0	0.5	9.03E+03	2.66E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

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RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$2.40E + 09 \times f_1$	$8.61E + 08 \times f_1$	$5.86E + 09 \times f_1$	$5.39E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$7.25E + 03 \times f_2$	$3.15E + 08 \times f_2$	$4.15E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$9.95E + 05 \times f_3$	$5.25E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.57E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 2.55E+08 (per year, conditional on SST1,2, or 3)

\$ 7.37E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ $1.63E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

		TO ITED CONTR	•	
RELEASE	OFFSITE -	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$9.12E + 09 \times f_1$	$5.39E + 10 \times f_1$	$9.03E + 10 \times f_1$	$1.53E + 11 \times f_1$
SST2	$3.15E + 08 \times f_2$	$4.15E + 08 \times f_2$	$9.00E + 10 \times f_2$	$9.07E + 10 \times f_2$
SST3	$9.95E + 05 \times f_3$	$5.25E + 07 \times f_3$	$9.00E + 10 \times f_3$	$9.01E + 10 \times f_3$

SAN ONOFRE

Unit 1

Date of Operation: 1968

Power Level (MWe): 436

NERC Region: CALIF

Scale Factor 0.389

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	10.6	153.0	1810.0	3.30E+07	2.78E+09
SST2	0.0	0.0	154.0	2.85E+06	2.49E+07
SST3	0.0	0.0	0.5	8.84E+03	2.50E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	4.1	59.6	704.6	1.28E+07	1.08E+09
SST2	0.0	0.0	60.0	1.11E+06	9.69E+06
SST3	0.0	0.0	0.2	3.44E+03	9.73E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

R	ELEASE	EARLY		LATENT CANCER	PROPERTY
CA	ATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
	SST1	$6.67E + 07 \times f_1$	$9.63E + 07 \times f_1$	$1.14E + 09 \times f_1$	$1.75E + 10 \times f_1$
	SST2	$0.00E + 00 \times f_2$	$1.39E + 03 \times f_2$	$9.69E + 07 \times f_2$	$1.57E + 08 \times f_2$
	SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$3.11E + 05 \times f_3$	$1.57E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.10E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.56E+08 (per year, conditional on SST1,2, or 3)

 $2.72E+10 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.33E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.30E + 09 \times f_1$	$1.75E + 10 \times f_1$	$4.07E + 10 \times f_1$	$5.95E + 10 \times f_1$
SST2	$9.69E + 07 \times f_2$	$1.57E + 08 \times f_2$	$4.05E + 10 \times f_2$	$4.08E + 10 \times f_2$
SST3	$3.11E + 05 \times f_3$	$1.57E + 07 \times f_3$	$4.05E + 10 \times f_3$	$4.05E + 10 \times f_3$

SAN ONOFRE

Unit 2

Date of Operation: 1981

Power Level (MWe): 1100

NERC Region: CALIF

Scale Factor 0.982

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	10.6	153.0	1810.0	3.30E+07	2.78E+09
SST2	0.0	0.0	154.0	2.85E+06	2.49E+07
SST3	0.0	0.0	0.5	8.84E+03	2.50E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	10.4	150.3	1777.7	3.24E + 07	2.73E+09
SST2	0.0	0.0	151.3	2.80E+06	2.45E+07
SST3	0.0	0.0	0.5	8.68E+03	2.46E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$2.06E + 08 \times f_1$	$2.97E + 08 \times f_1$	$3.51E + 09 \times f_1$	$5.39E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$4.29E + 03 \times f_2$	$2.99E + 08 \times f_2$	$4.83E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$9.58E + 05 \times f_3$	$4.85E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.57E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 3.93E+08 (per year, conditional on SST1,2, or 3)

 $1.14E+11 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.63E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$4.01E + 09 \times f_1$	$5.39E + 10 \times f_1$	$1.30E + 11 \times f_1$	$1.88E + 11 \times f_1$
SST2	$2.99E + 08 \times f_2$	$4.83E + 08 \times f_2$	$1.30E + 11 \times f_2$	$1.31E + 11 \times f_2$
SST3	$9.58E + 05 \times f_3$	$4.85E + 07 \times f_3$	$1.30E + 11 \times f_3$	$1.30E + 11 \times f_3$

SAN ONOFRE

Unit 3

Date of Operation: 1983

Power Level (MWe): 1100

NERC Region: CALIF

Scale Factor 0.982

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	10.6	153.0	1810.0	3.30E+07	2.78E+09
SST2	0.0	0.0	154.0	2.85E+06	2.49E+07
SST3	0.0	0.0	0.5	8.84E + 03	2.50E + 06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	10.4	150.3	1777.7	3.24E+07	2.73E+09
SST2	0.0	0.0	151.3	2.80E+06	2.45E+07
SST3	0.0	0.0	0.5	8.68E+03	2.46E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY		LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$2.00E + 08 \times f_1$	$2.88E + 08 \times f_1$	$3.41E + 09 \times f_1$	$5.23E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$4.16E + 03 \times f_2$	$2.90E + 08 \times f_2$	$4.69E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$9.30E + 05 \times f_3$	$4.71E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$1.30E+07 (conditional on SST1)

\$ 2.49E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 3.93E+08 (per year, conditional on SST1,2, or 3)

 $1.12E+11 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.58E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$3.90E + 09 \times f_1$	$5.23E + 10 \times f_1$	$1.28E + 11 \times f_1$	$1.85E + 11 \times f_1$
SST2	$2.90E + 08 \times f_2$	$4.69E + 08 \times f_2$	$1.28E+11\times f_2$	$1.29E + 11 \times f_2$
SST3	$9.30E + 05 \times f_3$	$4.71E + 07 \times f_3$	$1.28E + 11 \times f_3$	$1.28E + 11 \times f_3$

SEABROOK

Unit 1

Date of Operation: 1983

Power Level (MWe): 1150

NERC Region: NPCC

Scale Factor 1.027

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	13.4	213.0	1010.0	1.81E+07	1.41E+09
SST2	0.0	0.0	54.0	1.02E+06	1.39E+07
SST3	0.0	0.0	0.2	3.19E+03	2.87E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	13.8	218.7	1037.1	1.86E+07	1.45E+09
SST2	0.0	0.0	55.4	1.05E+06	1.43E+07
SST3	0.0	0.0	0.2	3.28E+03	2.95E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

		,	2	
RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$2.64E + 08 \times f_1$	$4.19E + 08 \times f_1$	$1.99E + 09 \times f_1$	$2.78E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$7.38E + 04 \times f_2$	$1.06E + 08 \times f_2$	$2.74E+08\times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E+00\times f_3$	$3.52E + 05 \times f_3$	$5.65E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$1.30E+07 (conditional on SST1)

\$ 2.49E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 4.11E+08 (per year, conditional on SST1,2, or 3)

 $1.17E+11 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.58E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

	RELEASE CATEGORY	OFFSITE HEATLH COSTS	OFFSITE PROPERTY COSTS	ONSITE COSTS	TOTAL COSTS
	SST1	$2.67E + 09 \times f_1$	$2.78E + 10 \times f_1$	$1.33E + 11 \times f_1$	$1.64E + 11 \times f_1$
	SST2	$1.06E + 08 \times f_2$	$2.74E + 08 \times f_2$	$1.33E + 11 \times f_2$	$1.34E + 11 \times f_2$
. !	SST3	$3.52E + 05 \times f_3$	$5.65E + 07 \times f_3$	$1.33E + 11 \times f_3$	$1.33E + 11 \times f_3$

SEABROOK

Unit 2 Date of Operation: 1985 Power Level (MWe): 1150

NERC Region: NPCC

Scale Factor 1.027

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	13.4	213.0	1010.0	1.81E+07	1.41E+09
SST2	0.0	0.0	54.0	1.02E+06	1.39E+07
SST3	0.0	0.0	0.2	3.19E+03	2.87E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	13.8	218.7	1037.1	1.86E+07	1.45E+09
SST2	0.0	0.0	55.4	1.05E+06	1.43E+07
SST3	0.0	0.0	0.2	3.28E+03	2.95E+06

Interpretation of this table is explained on page 3.

OFFSITE COSTS (times frequency f_i)

		•		
RELEASE	EARLY		LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$2.43E + 08 \times f_1$	$3.87E + 08 \times f_1$	$1.84E + 09 \times f_1$	$2.56E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$6.81E + 04 \times f_2$	$9.81E + 07 \times f_2$	$2.53E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$3.25E + 05 \times f_3$	$5.21E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.30E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 4.11E+08 (per year, conditional on SST1,2, or 3)

 $1.08E+11 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.46E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$2.47E + 09 \times f_1$	$2.56E + 10 \times f_1$	$1.23E + 11 \times f_1$	$1.51E + 11 \times f_1$
SST2	$9.82E + 07 \times f_2$	$2.53E + 08 \times f_2$	$1.23E + 11 \times f_2$	$1.23E + 11 \times f_2$
SST3	$3.25E + 05 \times f_3$	$5.21E + 07 \times f_3$	$1.23E + 11 \times f_3$	$1.23E+11\times f_3$

SEQUOYAH

Unit 1

Date of Operation: 1980

Power Level (MWe): 1148

NERC Region: SERC

Scale Factor 1.025

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	114.0	687.0	1330.0	2.21E+07	1.71E+09
SST2	0.0	0.6	94.7	1.75E+06	2.98E+07
SST3	0.0	0.0	0.3	6.17E+03	3.41E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	116.8	704.2	1363.3	2.27E+07	1.75E+09
SST2	0.0	0.6	97.1	1.79E+06	3.05E+07
SST3	0.0	0.0	0.4	6.32E+03	3.50E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE CATEGORY	EARLY FATALITIES (\$'s)	EARLY INJURIES (\$'s)	LATENT CANCER FATALITIES (\$'s)	PROPERTY DAMAGE (\$'s)
SST1	$2.28E + 09 \times f_1$	$1.38E + 09 \times f_1$	$2.66E + 09 \times f_1$	$3.42E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$1.13E + 06 \times f_2$	$1.90E + 08 \times f_2$	$5.97E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$6.87E + 05 \times f_3$	$6.83E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

 $2.54E+08 \times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.48E+08 (per year, conditional on SST1,2, or 3)

\$ 4.15E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.61E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY		PROPERTY COSTS	COSTS	COSTS
SST1	$6.32E + 09 \times f_1$	$3.42E + 10 \times f_1$	$5.79E + 10 \times f_1$	$9.84E + 10 \times f_1$
SST2	$1.91E + 08 \times f_2$	$5.97E + 08 \times f_2$	$5.76E + 10 \times f_2$	$5.84E + 10 \times f_2$
SST3	$6.87E + 05 \times f_3$	$6.83E + 07 \times f_3$	$5.76E + 10 \times f_3$	$5.77E + 10 \times f_3$

SEQUOYAH

Unit 2

Date of Operation: 1981

Power Level (MWe): 1148

NERC Region: SERC

Scale Factor 1.025

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	114.0	687.0	1330.0	2.21E+07	1.71E+09
SST2	0.0	0.6	94.7	1.75E+06	2.98E+07
SST3	0.0	0.0	0.3	6.17E+03	3.41E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	116.8	704.2	1363.3	2.27E+07	1.75E+09
SST2	0.0	0.6	97.1	1.79E+06	3.05E+07
SST3	0.0	0.0	0.4	6.32E + 03	3.50E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$2.31E + 09 \times f_1$	$1.39E + 09 \times f_1$	$2.69E + 09 \times f_1$	$3.46E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$1.14E + 06 \times f_2$	$1.92E + 08 \times f_2$	$6.03E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E+00\times f_3$	$6.94E + 05 \times f_3$	$6.90E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.57E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.48E+08 (per year, conditional on SST1,2, or 3)

\$ 4.27E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.63E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

TOTALE COSTS								
RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL				
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS				
SST1	$6.39E + 09 \times f_1$	$3.46E + 10 \times f_1$	$5.93E + 10 \times f_1$	$1.00E + 11 \times f_1$				
SST2	$1.93E + 08 \times f_2$	$6.03E + 08 \times f_2$	$5.90E + 10 \times f_2$	$5.98E + 10 \times f_2$				
SST3	$6.94E + 05 \times f_3$	$6.90E + 07 \times f_3$	$5.90E + 10 \times f_3$	$5.91E + 10 \times f_3$				

Unit 1

Date of Operation: 1985

Power Level (MWe): 900

NERC Region: SERC

Scale Factor 0.804

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	40.1	259.0	1250.0	2.30E+07	1.51E+09
SST2	0.0	0.4	105.0	1.93E+06	2.09E+07
SST3	0.0	0.0	0.4	7.35E + 03	1.75E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	32.2	208.1	1004.5	1.85E+07	1.21E+09
SST2	0.0	0.3	84.4	1.55E+06	1.68E+07
SST3	0.0	0.0	0.3	5.91E+03	1.41E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$5.70E + 08 \times f_1$	$3.68E + 08 \times f_1$	$1.78E + 09 \times f_1$	$2.15E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$5.18E + 05 \times f_2$	$1.49E+08 \times f_2$	$2.97E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$5.82E + 05 \times f_3$	$2.49E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.30E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.16E+08 (per year, conditional on SST1,2, or 3)

\$ 3.06E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.46E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$2.72E + 09 \times f_1$	$2.15E+10 \times f_1$	$4.54E + 10 \times f_1$	$6.96E + 10 \times f_1$
SST2	$1.50E + 08 \times f_2$	$2.97E + 08 \times f_2$	$4.51E + 10 \times f_2$	$4.56E + 10 \times f_2$
SST3	$5.82E + 05 \times f_3$	$2.49E + 07 \times f_3$	$4.51E + 10 \times f_3$	$4.52E + 10 \times f_3$

Unit 2

Date of Operation: 1988

Power Level (MWe): 900

NERC Region: SERC

Scale Factor 0.804

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	40.1	259.0	1250.0	2.30E+07	1.51E+09
SST2	0.0	0.4	105.0	1.93E+06	2.09E+07
SST3	0.0	0.0	0.4	7.35E+03	1.75E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	32.2	208.1	1004.5	1.85E+07	1.21E+09
SST2	0.0	0.3	84.4	1.55E+06	1.68E+07
SST3	0.0	0.0	0.3	5.91E+03	1.41E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

		,		
RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$5.06E + 08 \times f_1$	$3.27E + 08 \times f_1$	$1.58E + 09 \times f_1$	$1.90E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$4.59E + 05 \times f_2$	$1.32E + 08 \times f_2$	$2.64E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$5.16E + 05 \times f_3$	$2.21E+07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.04E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.16E+08 (per year, conditional on SST1,2, or 3)

\$ 2.71E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.29E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

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RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$2.41E + 09 \times f_1$	$1.90E + 10 \times f_1$	$4.02E + 10 \times f_1$	$6.17E + 10 \times f_1$
SST2	$1.33E + 08 \times f_2$	$2.64E + 08 \times f_2$	$4.00E + 10 \times f_2$	$4.04E + 10 \times f_2$
SST3	$5.16E + 05 \times f_3$	$2.21E + 07 \times f_3$	$4.00E + 10 \times f_3$	$4.01E + 10 \times f_3$

Unit 3

Date of Operation: 1994

Power Level (MWe): 900

NERC Region: SERC

Scale Factor 0.804

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	40.1	259.0	1250.0	2.30E+07	1.51E+09
SST2	0.0	0.4	105.0	1.93E+06	2.09E+07
SST3	0.0	0.0	0.4	7.35E+03	1.75E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	32.2	208.1	1004.5	1.85E+07	1.21E+09
SST2	0.0	0.3	84.4	1.55E+06	1.68E+07
SST3	0.0	0.0	0.3	5.91E+03	1.41E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$3.98E + 08 \times f_1$	$2.57E + 08 \times f_1$	$1.24E + 09 \times f_1$	$1.50E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$3.61E + 05 \times f_2$	$1.04E + 08 \times f_2$	$2.07E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$4.06E + 05 \times f_3$	$1.74E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 1.61E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.16E+08 (per year, conditional on SST1,2, or 3)

 $2.13E+10 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.02E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.89E + 09 \times f_1$	$1.50E + 10 \times f_1$	$3.17E + 10 \times f_1$	$4.85E + 10 \times f_1$
SST2	$1.05E + 08 \times f_2$	$2.07E + 08 \times f_2$	$3.15E + 10 \times f_2$	$3.18E + 10 \times f_2$
SST3	$4.06E + 05 \times f_3$	$1.74E + 07 \times f_3$	$3.15E + 10 \times f_3$	$3.15E + 10 \times f_3$

Unit 4

Date of Operation: 1992

Power Level (MWe): 900

NERC Region: SERC

Scale Factor 0.804

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	40.1	259.0	1250.0	2.30E+07	1.51E+09
SST2	0.0	0.4	105.0	1.93E+06	2.09E+07
SST3	0.0	0.0	0.4	7.35E+03	1.75E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	32.2	208.1	1004.5	1.85E+07	1.21E+09
SST2	0.0	0.3	84.4	1.55E+06	1.68E+07
SST3	0.0	0.0	0.3	5.91E+03	1.41E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY		LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$4.31E + 08 \times f_1$	$2.78E + 08 \times f_1$	$1.34E + 09 \times f_1$	$1.62E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$3.91E + 05 \times f_2$	$1.13E + 08 \times f_2$	$2.25E + 08 \times f_2$
SST3	$0.00\text{E} + 00 \times f_3$	$0.00E+00 \times f_3$	$4.40E + 05 \times f_3$	$1.88E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 1.74E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.16E+08 (per year, conditional on SST1,2, or 3)

\$ 2.31E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.10E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

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RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$2.05E + 09 \times f_1$	$1.62E + 10 \times f_1$	$3.43E + 10 \times f_1$	$5.26E + 10 \times f_1$
SST2	$1.13E + 08 \times f_2$	$2.25E + 08 \times f_2$	$3.41E + 10 \times f_2$	$3.45E + 10 \times f_2$
SST3	$4.40E + 05 \times f_3$	$1.88E + 07 \times f_3$	$3.41E + 10 \times f_3$	$3.41E + 10 \times f_3$

SKAGIT

Unit 1

Date of Operation: 1999

Power Level (MWe): 1288

NERC Region: WSCC

Scale Factor 1.150

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	50.2	372.0	497.0	6.55E+06	8.30E+08
SST2	0.0	0.4	49.1	8.76E+05	2.34E+07
SST3	0.0	0.0	0.2	4.39E+03	1.56E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	57.7	427.8	571.5	7.53E+06	9.54E+08
SST2	0.0	0.5	56.5	1.01E+06	2.69E+07
SST3	0.0	0.0	0.3	5.05E + 03	1.79E + 06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY		LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$5.84E + 08 \times f_1$	$4.32E + 08 \times f_1$	$5.78E + 08 \times f_1$	$9.65E + 09 \times f_1$
SST2	$0.00E+00\times f_2$	$4.96E + 05 \times f_2$	$5.71E + 07 \times f_2$	$2.72E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$2.82E + 05 \times f_3$	$1.81E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 1.31E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 2.03E+08 (per year, conditional on SST1,2, or 3)

\$ $3.05E+10 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 8.33E+09 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

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RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.59E + 09 \times f_1$	$9.65E + 09 \times f_1$	$3.90E + 10 \times f_1$	$5.02E + 10 \times f_1$
SST2	$5.76E + 07 \times f_2$	$2.72E + 08 \times f_2$	$3.88E + 10 \times f_2$	$3.92E + 10 \times f_2$
SST3	$2.82E + 05 \times f_3$	$1.81E + 07 \times f_3$	$3.88E + 10 \times f_3$	$3.89E + 10 \times f_3$

SHOREHAM

Unit 1

Date of Operation: 1983

Power Level (MWe): 820

NERC Region: NPCC

Scale Factor 0.732

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	138.0	867.0	3360.0	6.16E+07	3.73E+09
SST2	0.0	1.9	172.0	3.26E+06	3.36E+07
SST3	0.0	0.0	0.5	9.30E+03	4.35E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	101.0	634.8	2460.0	4.51E+07	2.73E+09
SST2	0.0	1.4	125.9	2.39E + 06	2.46E+07
SST3	0.0	0.0	0.4	6.81E+03	3.18E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.94E + 09 \times f_1$	$1.22E + 09 \times f_1$	$4.72E + 09 \times f_1$	$5.24E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$2.67E + 06 \times f_2$	$2.41E + 08 \times f_2$	$4.72E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$7.30E + 05 \times f_3$	$6.11E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

 $2.49E+08 \times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 2.93E+08 (per year, conditional on SST1,2, or 3)

\$ 8.37E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.58E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$7.87E + 09 \times f_1$	$5.24E + 10 \times f_1$	$9.97E + 10 \times f_1$	$1.60E + 11 \times f_1$
SST2	$2.44E + 08 \times f_2$	$4.72E + 08 \times f_2$	$9.95E + 10 \times f_2$	$1.00E + 11 \times f_2$
SST3	$7.30E + 05 \times f_3$	$6.11E + 07 \times f_3$	$9.95E + 10 \times f_3$	$9.95E + 10 \times f_3$

SOUTH TEXAS

Unit 1

Date of Operation: 1984

Power Level (MWe): 1250

NERC Region: ERCOT

Scale Factor 1.116

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	5.2	31.5	609.0	1.20E+07	8.66E+08
SST2 ·	0.0	0.0	42.8	7.79E+05	1.22E+07
SST3	0.0	0.0	0.2	2.83E+03	2.31E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	5.7	35.2	679.7	1.34E+07	9.67E+08
SST2	0.0	0.0	47.8	8.69E+05	1.36E+07
SST3	0.0	0.0	0.2	3.16E+03	2.58E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

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RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.06E + 08 \times f_1$	$6.48E + 07 \times f_1$	$1.25E + 09 \times f_1$	$1.78E + 10 \times f_1$
SST2	$0.00E+00\times f_2$	$0.00E + 00 \times f_2$	$8.80E + 07 \times f_2$	$2.51E + 08 \times f_2$
SST3	$0.00E+00 \times f_3$	$0.00E + 00 \times f_3$	$3.25E + 05 \times f_3$	$4.75E + 06 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.39E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 2.86E+08 (per year, conditional on SST1,2, or 3)

\$ 7.85E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.52E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.42E + 09 \times f_1$	$1.78E + 10 \times f_1$	$9.39E + 10 \times f_1$	$1.13E + 11 \times f_1$
SST2	$8.80E + 07 \times f_2$	$2.51E + 08 \times f_2$	$9.36E + 10 \times f_2$	$9.40E + 10 \times f_2$
SST3	$3.25E + 05 \times f_3$	$4.75E + 06 \times f_3$	$9.36E + 10 \times f_3$	$9.36E + 10 \times f_3$

SOUTH TEXAS

Unit 2

Date of Operation: 1986

Power Level (MWe): 1250

NERC Region: ERCOT

Scale Factor 1.116

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	5.2	31.5	609.0	1.20E+07	8.66E+08
SST2	0.0	0.0	42.8	7.79E+05	1.22E+07
SST3	0.0	0.0	0.2	2.83E+03	2.31E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	5.7	35.2	679.7	1.34E+07	9.67E+08
SST2	0.0	0.0	47.8	8.69E+05	1.36E+07
SST3	0.0	0.0	0.2	3.16E + 03	2.58E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$9.77E + 07 \times f_1$	$5.98E + 07 \times f_1$	$1.16E + 09 \times f_1$	$1.64E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$0.00E + 00 \times f_2$	$8.12E + 07 \times f_2$	$2.32E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E+00\times f_3$	$3.00E + 05 \times f_3$	$4.38E + 06 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.21E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 2.86E+08 (per year, conditional on SST1,2, or 3)

\$ 7.24E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.40E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

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RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL				
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS				
SST1	$1.31E + 09 \times f_1$	$1.64E + 10 \times f_1$	$8.67E + 10 \times f_1$	$1.04E + 11 \times f_1$				
SST2	$8.12E + 07 \times f_2$	$2.32E + 08 \times f_2$	$8.64E + 10 \times f_2$	$8.68E + 10 \times f_2$				
SST3	$3.00E + 05 \times f_3$	$4.38E + 06 \times f_3$	$8.64E + 10 \times f_3$	$8.64E + 10 \times f_3$				

SUMMER

Unit 1

Date of Operation: 1981

Power Level (MWe): 900

NERC Region: SERC

Scale Factor 0.804

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	11.9	118.0	998.0	1.94E+07	1.08E+09
SST2	0.0	0.0	62.7	1.17E+06	1.16E+07
SST3	0.0	0.0	0.2	4.15E+03	9.89E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	9.6	94.8	802.0	1.56E+07	8.68E+08
SST2	0.0	0.0	50.4	9.40E+05	9.32E+06
SST3	0.0	0.0	0.2	3.33E + 03	7.95E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.89E + 08 \times f_1$	$1.87E + 08 \times f_1$	$1.58E + 09 \times f_1$	$1.71E+10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$4.76E + 01 \times f_2$	$9.95E + 07 \times f_2$	$1.84E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$3.67E+05\times f_3$	$1.57E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.57E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$1.16E+08 (per year, conditional on SST1,2, or 3)

\$ 3.35E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.63E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL				
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS				
SST1	$1.96E + 09 \times f_1$	$1.71E + 10 \times f_1$	$5.00E + 10 \times f_1$	$6.91E + 10 \times f_1$				
SST2	$9.95E + 07 \times f_2$	$1.84E + 08 \times f_2$	$4.98E + 10 \times f_2$	$5.01E + 10 \times f_2$				
SST3	$3.67E + 05 \times f_3$	$1.57E + 07 \times f_3$	$4.98E + 10 \times f_3$	$4.98E + 10 \times f_3$				

SURRY

Unit 1

Date of Operation: 1972

Power Level (MWe): 775

NERC Region: SERC

Scale Factor 0.692

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	64.7	329.0	1730.0	3.17E+07	1.54E+09
SST2	0.0	0.0	94.5	1.77E+06	2.87E+07
SST3	0.0	0.0	0.3	5.66E+03	5.90E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	44.8	227.7	1197.1	2.19E+07	1.07E+09
SST2	0.0	0.0	65.4	1.22E+06	1.99E+07
SST3	0.0	0.0	0.2	3.92E+03	4.08E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$7.82E + 08 \times f_1$	$3.98E + 08 \times f_1$	$2.09E + 09 \times f_1$	$1.86E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$1.31E + 03 \times f_2$	$1.14E + 08 \times f_2$	$3.47E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$3.81E + 05 \times f_3$	$7.13E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.27E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 9.99E+07 (per year, conditional on SST1,2, or 3)

\$ 2.11E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.44E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$3.27E + 09 \times f_1$	$1.86E + 10 \times f_1$	$3.57E + 10 \times f_1$	$5.76E + 10 \times f_1$
SST2	$1.14E + 08 \times f_2$	$3.47E + 08 \times f_2$	$3.55E + 10 \times f_2$	$3.59E + 10 \times f_2$
SST3	$3.81E + 05 \times f_3$	$7.13E + 07 \times f_3$	$3.55E + 10 \times f_3$	$3.55E + 10 \times f_3$

SURRY

Unit 2

Date of Operation: 1973

Power Level (MWe): 775

NERC Region: SERC

Scale Factor 0.692

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	64.7	329.0	1730.0	3.17E+07	1.54E+09
SST2	0.0	0.0	94.5	1.77E+06	2.87E+07
SST3	0.0	0.0	0.3	5.66E+03	5.90E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	44.8	227.7	1197.1	2.19E+07	1.07E+09
SST2	0.0	0.0	65.4	1.22E+06	1.99E + 07
SST3	0.0	0.0	0.2	3.92E+03	4.08E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$7.95E + 08 \times f_1$	$4.04E + 08 \times f_1$	$2.13E + 09 \times f_1$	$1.89E + 10 \times f_1$
SST2	$0.00E+00\times f_2$	$1.33E + 03 \times f_2$	$1.16E + 08 \times f_2$	$3.53E + 08 \times f_2$
SST3	$0.00E+00\times f_3$	$0.00E + 00 \times f_3$	$3.87E + 05 \times f_3$	$7.25E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

 $2.31E+08 \times f_1$

(discounted over remaining plant life)

Replacement Power:

\$ 9.99E+07 (per year, conditional on SST1,2, or 3)

\$ 2.20E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.46E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$3.33E + 09 \times f_1$	$1.89E + 10 \times f_1$	$3.68E + 10 \times f_1$	$5.91E + 10 \times f_1$
SST2	$1.16E + 08 \times f_2$	$3.53E + 08 \times f_2$	$3.66E + 10 \times f_2$	$3.71E + 10 \times f_2$
SST3	$3.87E + 05 \times f_3$	$7.25E + 07 \times f_3$	$3.66E + 10 \times f_3$	$3.67E + 10 \times f_3$

SUSQUEHANNA

Unit 1 Date of Operation: 1982

Power Level (MWe): 1050

NERC Region: MAAC

Scale Factor 0.938

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	180.0	703.0	3310.0	6.24E+07	2.55E+09
SST2	0.0	0.2	145.0	2.73E + 06	2.90E + 07
SST3	0,0	0.0	0.5	8.22E+03	4.42E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	168.8	659.1	3103.1	5.85E+07	2.39E+09
SST2	0.0	0.1	135.9	2.56E + 06	2.72E+07
SST3	0.0	0.0	0.4	7.71E + 03	4.14E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$3.37E + 09 \times f_1$	$1.32E + 09 \times f_1$	$6.19E + 09 \times f_1$	$4.77E+10\times f_1$
SST2	$0.00E + 00 \times f_2$	$2.94E + 05 \times f_2$	$2.71E + 08 \times f_2$	$5.42E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$8.57E + 05 \times f_3$	$8.27E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.59E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 2.40E+08 (per year, conditional on SST1,2, or 3)

 $7.14E+10 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.64E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

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RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.09E + 10 \times f_1$	$4.77E + 10 \times f_1$	$8.81E + 10 \times f_1$	$1.47E + 11 \times f_1$
SST2	$2.72E + 08 \times f_2$	$5.42E + 08 \times f_2$	$8.78E + 10 \times f_2$	$8.87E + 10 \times f_2$
SST3	$8.57E + 05 \times f_3$	$8.27E + 07 \times f_3$	$8.78E + 10 \times f_3$	$8.79E + 10 \times f_3$

SUSQUEHANNA

Unit 2

Date of Operation: 1983

Power Level (MWe): 1050

NERC Region: MAAC

Scale Factor 0.938

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	180.0	703.0	3310.0	6.24E+07	2.55E+09
SST2	0.0	0.2	145.0	2.73E+06	2.90E+07
SST3	0.0	0.0	0.5	8.22E+03	4.42E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	168.8	659.1	3103.1	5.85E+07	2.39E+09
SST2	0.0	0.1	135.9	2.56E + 06	2.72E+07
SST3	0.0	0.0	0.4	7.71E+03	4.14E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

		•		
RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$3.23E + 09 \times f_1$	$1.26E + 09 \times f_1$	$5.95E + 09 \times f_1$	$4.58E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$2.82E + 05 \times f_2$	$2.61E + 08 \times f_2$	$5.21E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$8.23E + 05 \times f_3$	$7.94E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.49E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 2.40E+08 (per year, conditional on SST1,2, or 3)

\$ 6.86E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.58E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.04E + 10 \times f_1$	$4.58E + 10 \times f_1$	$8.46E + 10 \times f_1$	$1.41E + 11 \times f_1$
SST2	$2.61E + 08 \times f_2$	$5.21E + 08 \times f_2$	$8.44E + 10 \times f_2$	$8.52E + 10 \times f_2$
SST3	$8.23E + 05 \times f_3$	$7.94E + 07 \times f_3$	$8.44E + 10 \times f_3$	$8.45E + 10 \times f_3$

THREE MILE IS

Unit 1 Date o

Date of Operation: 1974

Power Level (MWe): 792

NERC Region: MAAC

Scale Factor 0.707

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	243.0	1200.0	3520.0	6.06E+07	3.06E+09
SST2	0.0	4.5	173.0	3.19E+06	6.04E+07
SST3	0.0	0.0	0.6	1.06E+04	1.30E+07

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	171.8	848.6	2489.1	4.29E+07	2.16E+09
SST2	0.0	3.2	122.3	2.26E+06	4.27E+07
SST3	0.0	0.0	0.4	7.50E + 03	9.19E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY		LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$3.10E + 09 \times f_1$	$1.53E + 09 \times f_1$	$4.49E + 09 \times f_1$	$3.91E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$5.79E + 06 \times f_2$	$2.21E + 08 \times f_2$	$7.71E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$7.48E + 05 \times f_3$	$1.66E + 08 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.35E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.81E+08 (per year, conditional on SST1,2, or 3)

\$ $4.15E+10 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.49E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE CATEGORY	OFFSITE HEATLH COSTS	OFFSITE PROPERTY COSTS	ONSITE COSTS	TOTAL COSTS
SST1	$9.13E + 09 \times f_1$	$3.91E + 10 \times f_1$	$5.66E + 10 \times f_1$	$1.05E + 11 \times f_1$
SST2	$2.27E + 08 \times f_2$	$7.71E + 08 \times f_2$	$5.64E + 10 \times f_2$	$5.74E + 10 \times f_2$
SST3	$7.48E + 05 \times f_3$	$1.66E + 08 \times f_3$	$5.64E + 10 \times f_3$	$5.65E + 10 \times f_3$

THREE MILE IS

Unit 2

Date of Operation: 1978

Power Level (MWe): 880

NERC Region: MAAC

Scale Factor 0.786

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	243.0	1200.0	3520.0	6.06E+07	3.06E+09
SST2	0.0	4.5	173.0	3.19E+06	6.04E+07
SST3	0.0	0.0	0.6	1.06E+04	1.30E+07

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES .	INJURIES	FATALITIES	REM	DAMAGE
SST1	190.9	942.9	2765.7	4.76E+07	2.40E+09
SST2	0.0	3.6	135.9	2.51E+06	4.75E+07
SST3	0.0	0.0	0.5	8.33E+03	1.02E+07

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$3.64E + 09 \times f_1$	$1.80E + 09 \times f_1$	$5.28E + 09 \times f_1$	$4.59E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$6.80E + 06 \times f_2$	$2.59E + 08 \times f_2$	$9.05E + 08 \times f_2$
SST3	$0.00E+00\times f_3$	$0.00E+00 \times f_3$	$8.78E + 05 \times f_3$	$1.95E + 08 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.48E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 2.02E+08 (per year, conditional on SST1,2, or 3)

\$ 5.31E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.57E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

	TO IME COSTS								
	RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL				
	CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS				
į	SST1	$1.07E + 10 \times f_1$	$4.59E + 10 \times f_1$	$6.91E + 10 \times f_1$	$1.26E + 11 \times f_1$				
	SST2	$2.66E + 08 \times f_2$	$9.05E + 08 \times f_2$	$6.89E + 10 \times f_2$	$7.00E + 10 \times f_2$				
	SST3	$8.78E + 05 \times f_3$	$1.95E + 08 \times f_3$	$6.89E + 10 \times f_3$	$6.91E + 10 \times f_3$				

TROJAN

Unit 1 Date of Operation: 1976 Power Level (MWe): 1130

NERC Region: WSCC

Scale Factor 1.009

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

ĺ	RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
	CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
	SST1	46.0	354.0	1090.0	1.53E+07	1.49E+09
	SST2	0.1	3.8	72.6	1.32E + 06	3.21E+07
	SST3	0.0	0.0	0.3	4.88E+03	5.20E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

ĺ	RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
	CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
	SST1	46.4	357.2	1099.7	1.54E+07	1.50E+09
	SST2	0.1	3.9	73.2	1.33E+06	3.24E+07
	SST3	0.0	0.0	0.3	4.92E+03	5.25E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$8.62E + 08 \times f_1$	$6.64E + 08 \times f_1$	$2.04E + 09 \times f_1$	$2.79E + 10 \times f_1$
SST2	$2.01E + 06 \times f_2$	$7.18E + 06 \times f_2$	$1.36E + 08 \times f_2$	$6.02E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$5.01E + 05 \times f_3$	$9.75E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.42E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.78E+08 (per year, conditional on SST1,2, or 3)

\$ 4.39E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.53E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$3.57E + 09 \times f_1$	$2.79E + 10 \times f_1$	$5.94E + 10 \times f_1$	$9.09E + 10 \times f_1$
SST2	$1.45E + 08 \times f_2$	$6.02E + 08 \times f_2$	$5.92E + 10 \times f_2$	$5.99E + 10 \times f_2$
SST3	$5.01E + 05 \times f_3$	$9.75E + 07 \times f_3$	$5.92E + 10 \times f_3$	$5.93E + 10 \times f_3$

TURKEY POINT

Unit 3

Date of Operation: 1972

Power Level (MWe): 666

NERC Region: SERC

Scale Factor 0.595

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	30.5	458.0	694.0	9.83E+06	1.30E+09
SST2	0.0	0.0	83.0	1.53E+06	3.64E+07
SST3	0.0	0.0	0.4	7.06E+03	3.71E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	18.1	272.3	412.7	5.85E+06	7.73E+08
SST2	0.0	0.0	49.4	9.10E+05	2.16E+07
SST3	0.0	0.0	0.2	4.20E + 03	2.21E + 06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY		LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$3.17E + 08 \times f_1$	$4.76E + 08 \times f_1$	$7.21E + 08 \times f_1$	$1.35E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$0.00E + 00 \times f_2$	$8.62E + 07 \times f_2$	$3.78E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$4.09E + 05 \times f_3$	$3.85E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.27E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 8.58E+07 (per year, conditional on SST1,2, or 3)

\$ 1.81E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.44E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.51E + 09 \times f_1$	$1.35E + 10 \times f_1$	$3.27E + 10 \times f_1$	$4.77E + 10 \times f_1$
SST2	$8.62E + 07 \times f_2$	$3.78E + 08 \times f_2$	$3.25E + 10 \times f_2$	$3.30E + 10 \times f_2$
SST3	$4.09E + 05 \times f_3$	$3.85E + 07 \times f_3$	$3.25E + 10 \times f_3$	$3.25E + 10 \times f_3$

TURKEY POINT

Unit 3

Date of Operation: 1973

Power Level (MWe): 666

NERC Region: SERC

Scale Factor 0.595

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	30.5	458.0	694.0	9.83E+06	1.30E+09
SST2	0.0	0.0	83.0	1.53E+06	3.64E+07
SST3	0.0	0.0	0.4	7.06E + 03	3.71E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	. REM	DAMAGE
SST1	18.1	272.3	412.7	5.85E+06	7.73E+08
SST2	0.0	0.0	49.4	9.10E+05	2.16E+07
SST3	0.0	0.0	0.2	4.20E+03	2.21E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$3.22E + 08 \times f_1$	$4.84E + 08 \times f_1$	$7.33E + 08 \times f_1$	$1.37E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$0.00E+00\times f_2$	$8.77E + 07 \times f_2$	$3.85E + 08 \times f_2$
SST3	$0.00E+00 \times f_3$	$0.00E + 00 \times f_3$	$4.16E + 05 \times f_3$	$3.92E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.31E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 8.58E+07 (per year, conditional on SST1,2, or 3)

\$ 1.89E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.46E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.54E + 09 \times f_1$	$1.37E + 10 \times f_1$	$3.37E + 10 \times f_1$	$4.90E + 10 \times f_1$
SST2	$8.77E + 07 \times f_2$	$3.85E + 08 \times f_2$	$3.35E + 10 \times f_2$	$3.40E + 10 \times f_2$
SST3	$4.16E + 05 \times f_3$	$3.92E + 07 \times f_3$	$3.35E + 10 \times f_3$	$3.36E + 10 \times f_3$

VERMONT YANKEE

Unit 1

Date of Operation: 1972

Power Level (MWe): 514

NERC Region: NPCC

Scale Factor 0.459

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY-	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	129.0	316.0	1770.0	3.27E+07	1.69E+09
SST2	0.0	4.4	71.5	1.30E+06	2.28E+07
SST3	0.0	0.0	0.3	4.87E+03	2.62E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	59.2	145.0	812.3	1.50E+07	7.76E+08
SST2	0.0	2.0	32.8	5.97E+05	1.05E+07
SST3	0.0	0.0	0.1	2.23E+03	1.20E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.03E + 09 \times f_1$	$2.53E + 08 \times f_1$	$1.42E + 09 \times f_1$	$1.35E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$3.51E + 06 \times f_2$	$5.73E + 07 \times f_2$	$1.83E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E+00\times f_3$	$2.16E + 05 \times f_3$	$2.10E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.27E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.84E+08 (per year, conditional on SST1,2, or 3)

\$ 3.88E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.44E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

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RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$2.71E + 09 \times f_1$	$1.35E + 10 \times f_1$	$5.34E + 10 \times f_1$	$6.97E + 10 \times f_1$
SST2	$6.08E + 07 \times f_2$	$1.83E + 08 \times f_2$	$5.32E+10\times f_2$	$5.34E + 10 \times f_2$
SST3	$2.16E + 05 \times f_3$	$2.10E + 07 \times f_3$	$5.32E + 10 \times f_3$	$5.32E + 10 \times f_3$

VOGTLE

Unit 1

Date of Operation: 1985

Power Level (MWe): 1100

NERC Region: SERC

Scale Factor 0.982

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	0.1	84.8	903.0	1.76E+07	9.98E+08
SST2	0.0	0.0	70.2	1.28E+06	1.25E+07
SST3	0.0	0.0	0.3	4.65E+03	2.09E + 05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

i	RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
	CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
	SST1	0.1	83.3	886.9	1.73E+07	9.80E+08
	SST2	0.0	0.0	68.9	1.26E+06	1.23E+07
	SST3	0.0	0.0	0.3	4.57E+03	2.05E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.29E + 06 \times f_1$	$1.47E + 08 \times f_1$	$1.57E + 09 \times f_1$	$1.73E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$0.00E + 00 \times f_2$	$1.22E + 08 \times f_2$	$2.17E + 08 \times f_2$
SST3	$0.00E+00\times f_3$	$0.00E+00\times f_3$	$4.50E + 05 \times f_3$	$3.63E + 06 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.30E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.42E+08 (per year, conditional on SST1,2, or 3)

\$ $3.73E+10 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.46E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.72E + 09 \times f_1$	$1.73E + 10 \times f_1$	$5.22E + 10 \times f_1$	$7.12E + 10 \times f_1$
SST2	$1.22E + 08 \times f_2$	$2.17E + 08 \times f_2$	$5.19E+10\times f_2$	$5.23E + 10 \times f_2$
SST3	$4.50E + 05 \times f_3$	$3.63E + 06 \times f_3$	$5.19E + 10 \times f_3$	$5.19E + 10 \times f_3$

VOGTLE

Unit 2 Date of Operation: 1988 Power Level (MWe): 1100

NERC Region: SERC

Scale Factor 0.982

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	0.1	84.8	903.0	1.76E+07	9.98E+08
SST2	0.0	0.0	70.2	1.28E+06	1.25E+07
SST3	0.0	0.0	0.3	4.65E+03	2.09E + 05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	0.1	83.3	886.9	1.73E+07	9.80E+08
SST2	0.0	0.0	68.9	1.26E+06	1.23E+07
SST3	0.0	0.0	0.3	4.57E+03	2.05E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

		•	- • • • •	
RELEASE	EARLY		LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.14E + 06 \times f_1$	$1.31E + 08 \times f_1$	$1.39E + 09 \times f_1$	$1.54E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$0.00E + 00 \times f_2$	$1.08E + 08 \times f_2$	$1.93E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$3.99E + 05 \times f_3$	$3.22E + 06 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.04E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.42E+08 (per year, conditional on SST1,2, or 3)

\$ 3.31E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.29E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.52E + 09 \times f_1$	$1.54E + 10 \times f_1$	$4.63E + 10 \times f_1$	$6.32E + 10 \times f_1$
· SST2	$1.08E + 08 \times f_2$	$1.93E + 08 \times f_2$	$4.61E + 10 \times f_2$	$4.64E + 10 \times f_2$
SST3	$3.99E + 05 \times f_3$	$3.22E + 06 \times f_3$	$4.61E + 10 \times f_3$	$4.61E+10 \times f_3$

WATERFORD

Unit 3

Date of Operation: 1982

Power Level (MWe): 1165

NERC Region: SPP

Scale Factor 1.040

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	165.0	581.0	989.0	1.33E+07	1.45E+09
SST2	0.2	8.3	93.0	1.63E+06	2.94E+07
SST3	0.0	0.0	0.4	6.73E+03	4.04E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	171.6	604.3	1028.7	1.38E+07	1.51E+09
SST2	0.2	8.7	96.7	1.70E+06	3.06E+07
SST3	0.0	0.0	0.4	7.00E+03	4.20E+06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

		`	- · · · · ·	
RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$3.42E + 09 \times f_1$	$1.21E + 09 \times f_1$	$2.05E + 09 \times f_1$	$3.01E + 10 \times f_1$
SST2	$3.84E + 06 \times f_2$	$1.73E + 07 \times f_2$	$1.93E + 08 \times f_2$	$6.10E + 08 \times f_2$
SST3	$0.00\text{E} + 00 \times f_3$	$0.00E+00\times f_3$	$7.74E + 05 \times f_3$	$8.38E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.59E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 2.33E+08 (per year, conditional on SST1,2, or 3)

\$ 6.93E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.64E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

TO MID COSTS									
RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL					
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS					
SST1	$6.68E + 09 \times f_1$	$3.01E + 10 \times f_1$	$8.60E + 10 \times f_1$	$1.23E + 11 \times f_1$					
SST2	$2.14E + 08 \times f_2$	$6.10E + 08 \times f_2$	$8.58E + 10 \times f_2$	$8.66E + 10 \times f_2$					
SST3	$7.74E + 05 \times f_3$	$8.38E + 07 \times f_3$	$8.58E + 10 \times f_3$	$8.58E + 10 \times f_3$					

WATTS BAR

Unit 1

Date of Operation: 1981

Power Level (MWe): 1177

NERC Region: SERC

Scale Factor 1.051

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

	RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
	CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
	SST1	12.9	110.0	1040.0	2.02E+07	1.20E+09
į	SST2	0.0	0.0	66.2	1.23E+06	1.38E+07
	SST3	0.0	0.0	0.3	4.51E+03	8.94E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	13.6	115.6	1092.9	2.12E+07	1.26E+09
SST2	0.0	0.0	69.6	1.29E+06	1.45E+07
SST3	0.0	0.0	0.3	4.74E+03	9.39E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

		-		
RELEASE	EARLY	EARLÝ	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$2.68E + 08 \times f_1$	$2.28E + 08 \times f_1$	$2.16E + 09 \times f_1$	$2.49E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$3.76E + 04 \times f_2$	$1.37E + 08 \times f_2$	$2.86E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$5.21E + 05 \times f_3$	$1.86E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

 $$2.57E+08 \times f_1$$ (discounted over remaining plant life)

Replacement Power:

\$ 1.52E+08 (per year, conditional on SST1,2, or 3)

\$ $4.38E+10 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.63E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$2.65E + 09 \times f_1$	$2.49E + 10 \times f_1$	$6.03E + 10 \times f_1$	$8.79E + 10 \times f_1$
SST2	$1.37E + 08 \times f_2$	$2.86E + 08 \times f_2$	$6.01E + 10 \times f_2$	$6.05E + 10 \times f_2$
SST3	$5.21E + 05 \times f_3$	$1.86E + 07 \times f_3$	$6.01E + 10 \times f_3$	$6.01E + 10 \times f_3$

WATTS BAR

Unit 2

Date of Operation: 1982

Power Level (MWe): 1177

NERC Region: SERC

Scale Factor 1.051

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	12.9	110.0	1040.0	2.02E+07	1.20E+09
SST2	0.0	0.0	66.2	1.23E+06	1.38E+07
SST3	0.0	0.0	0.3	4.51E+03	8.94E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY ·	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	13.6	115.6	1092.9	2.12E + 07	1.26E+09
SST2	0.0	0.0	69.6	1.29E+06	1.45E+07
SST3	0.0	0.0	0.3	4.74E+03	9.39E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$2.70E + 08 \times f_1$	$2.31E + 08 \times f_1$	$2.18E + 09 \times f_1$	$2.52E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$3.80E + 04 \times f_2$	$1.39E + 08 \times f_2$	$2.89E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$5.26E + 05 \times f_3$	$1.87E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.59E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.52E+08 (per year, conditional on SST1,2, or 3)

\$ $4.50E+10 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.64E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$2.68E + 09 \times f_1$	$2.52E + 10 \times f_1$	$6.18E + 10 \times f_1$	$8.96E + 10 \times f_1$
SST2	$1.39E + 08 \times f_2$	$2.89E + 08 \times f_2$	$6.15E + 10 \times f_2$	$6:19E+10 \times f_2$
SST3	$5.26E + 05 \times f_3$	$1.87E + 07 \times f_3$	$6.15E + 10 \times f_3$	$6.15E + 10 \times f_3$

Unit 1 Date of Operation: 1985

Power Level (MWe): 1250

NERC Region: WSCC

Scale Factor 1.116

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

REI	EASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CAT	EGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
S	ST1	0.1	112.0	308.0	5.33E+06	6.73E+08
S	ST2	0.0	0.0	37.0	6.72E+05	9.06E+06
S	ST3	0.0	0.0	0.2	2.88E+03	1.53E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	0.2	125.0	343.8	5.95E+06	7.51E+08
SST2	0.0	0.0	41.3	7.50E+05	1.01E+07
SST3	0.0	0.0	0.2	3.21E+03	1.71E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY		LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$2.90E + 06 \times f_1$	$2.21E + 08 \times f_1$	$6.08E + 08 \times f_1$	$1.33E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$0.00E + 00 \times f_2$	$7.31E + 07 \times f_2$	$1.79E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$3.18E + 05 \times f_3$	$3.02E + 06 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.30E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.97E+08 (per year, conditional on SST1,2, or 3)

\$ 5.18E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.46E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$8.32E + 08 \times f_1$	$1.33E+10 \times f_1$	$6.67E + 10 \times f_1$	$8.08E + 10 \times f_1$
SST2	$7.31E + 07 \times f_2$	$1.79E + 08 \times f_2$	$6.64E + 10 \times f_2$	$6.67E + 10 \times f_2$
SST3	$3.18E + 05 \times f_3$	$3.02E + 06 \times f_3$	$6.64E + 10 \times f_3$	$6.64E + 10 \times f_3$

Unit 2

Date of Operation: 1983

Power Level (MWe): 1100

NERC Region: WSCC

Scale Factor 0.982

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	0.9	124.0	723.0	1.29E+07	1.06E+09
SST2	0.0	0.0	52.9	9.74E+05	1.17E+07
SST3	0.0	0.0	0.2	3.73E+03	7.69E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	0.9	121.8	710.1	1.27E+07	1.04E+09
SST2	0.0	0.0	52.0	9.57E+05	1.15E+07
SST3	0.0	0.0	0.2	3.66E+03	7.55E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.78E + 07 \times f_1$	$2.33E + 08 \times f_1$	$1.36E + 09 \times f_1$	$2.00E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$0.00E+00\times f_2$	$9.96E + 07 \times f_2$	$2.20E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$3.92E + 05 \times f_3$	$1.45E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.49E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.73E+08 (per year, conditional on SST1,2, or 3)

 $4.94E+10 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.58E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.61E + 09 \times f_1$	$2.00E + 10 \times f_1$	$6.55E + 10 \times f_1$	$8.70E + 10 \times f_1$
SST2	$9.96E + 07 \times f_2$	$2.20E + 08 \times f_2$	$6.52E + 10 \times f_2$	$6.55E + 10 \times f_2$
SST3	$3.92E + 05 \times f_3$	$1.45E + 07 \times f_3$	$6.52E + 10 \times f_3$	$6.52E + 10 \times f_3$

Unit 3

Date of Operation: 1986

Power Level (MWe): 1240

NERC Region: WSCC

Scale Factor 1.107

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	0.1	111.0	306.0	5.34E+06	6.73E+08
SST2	0.0	0.0	37.0	6.72E + 05	9.01E+06
SST3	0.0	0.0	0.2	2.87E+03	1.53E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	0.1	122.9	338.8	5.91E+06	7.45E+08
SST2	0.0	0.0	41.0	7.44E+05	9.98E+06
SST3	0.0	0.0	0.2	3.18E+03	1.69E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY		LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$2.30E + 06 \times f_1$	$2.09E + 08 \times f_1$	$5.76E + 08 \times f_1$	$1.27E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$0.00E+00\times f_2$	$6.96E + 07 \times f_2$	$1.70E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$3.03E + 05 \times f_3$	$2.88E + 06 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.21E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$1.95E+08 (per year, conditional on SST1,2, or 3)

 $4.94E+10 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.40E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$7.87E + 08 \times f_1$	$1.27E + 10 \times f_1$	$6.36E + 10 \times f_1$	$7.71E + 10 \times f_1$
SST2	$6.96E + 07 \times f_2$	$1.70E + 08 \times f_2$	$6.34E + 10 \times f_2$	$6.37E + 10 \times f_2$
SST3	$3.03E + 05 \times f_3$	$2.88E + 06 \times f_3$	$6.34E + 10 \times f_3$	$6.34E + 10 \times f_3$

Unit 4

Date of Operation: 1986

Power Level (MWe): 1250

NERC Region: WSCC

Scale Factor 1.116

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	0.1	112.0	308.0	5.33E+06	6.73E+08
SST2	0.0	0.0	37.0	6.72E+05	9.06E+06
SST3	0.0	0.0	0.2	2.88E+03	1.53E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	0.2	125.0	343.8	5.95E+06	
SST2	0.0	0.0	41.3	7.50E+05	1.01E+07
SST3	0.0	0.0	0.2	3.21E+03	1.71E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

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RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$2.79E + 06 \times f_1$	$2.13E + 08 \times f_1$	$5.84E + 08 \times f_1$	$1.28E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$0.00E+00\times f_2$	$7.02E + 07 \times f_2$	$1.72E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$3.06E + 05 \times f_3$	$2.90E + 06 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.21E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.97E+08 (per year, conditional on SST1,2, or 3)

\$ 4.98E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.40E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

		I O XIXD O O O O O		
RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$8.00E + 08 \times f_1$	$1.28E + 10 \times f_1$	$6.40E + 10 \times f_1$	$7.76E + 10 \times f_1$
SST2	$7.02E+07 \times f_2$	$1.72E + 08 \times f_2$	$6.38E + 10 \times f_2$	$6.41E + 10 \times f_2$
SST3	$3.06E + 05 \times f_3$	$2.90E + 06 \times f_3$	$6.38E + 10 \times f_3$	$6.38E + 10 \times f_3$

Unit 5

Date of Operation: 1987

Power Level (MWe): 1240

NERC Region: WSCC

Scale Factor 1.107

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	0.1	111.0	306.0	5.34E+06	6.73E + 08
SST2	0.0	0.0	37.0	6.72E+05	9.01E+06
SST3	0.0	0.0	0.2	2.87E+03	1.53E + 05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	0.1	122.9	338.8	5.91E+06	7.45E+08
SST2	.0.0	0.0	41.0	7.44E+05	9.98E+06
SST3	0.0	0.0	0.2	3.18E+03	1.69E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$2.21E + 06 \times f_1$	$2.01E + 08 \times f_1$	$5.53E + 08 \times f_1$	$1.22E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$0.00E + 00 \times f_2$	$6.69E + 07 \times f_2$	$1.63E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$2.91E + 05 \times f_3$	$2.77E + 06 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ $2.12E + 08 \times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.95E+08 (per year, conditional on SST1,2, or 3)

\$ 4.75E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.35E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$7.56E + 08 \times f_1$	$1.22E+10 \times f_1$	$6.12E + 10 \times f_1$	$7.41E + 10 \times f_1$
SST2	$6.69E + 07 \times f_2$	$1.63E + 08 \times f_2$	$6.09E + 10 \times f_2$	$6.12E + 10 \times f_2$
SST3	$2.91E + 05 \times f_3$	$2.77E + 06 \times f_3$	$6.09E + 10 \times f_3$	$6.09E + 10 \times f_3$

WOLF CREEK

Unit 1

Date of Operation: 1983

Power Level (MWe): 1150

NERC Region: SPP

Scale Factor 1.027

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	2.4	34.2	760.0	1.46E + 07	1.15E+09
SST2	0.0	0.0	70.2	1.27E+06	1.61E+07
SST3	0.0	0.0	0.3	5.27E+03	3.55E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	2.4	35.1	780.4	1.50E+07	1.18E+09
SST2	0.0	0.0	72.1	1.30E+06	1.65E+07
SST3	0.0	0.0	0.3	5.41E+03	3.65E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

			•		
RELE	EASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATE	GORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SS	Γ1	$4.65E + 07 \times f_1$	$6.73E + 07 \times f_1$	$1.50E + 09 \times f_1$	$2.26E + 10 \times f_1$
SS	Т2	$0.00E + 00 \times f_2$	$8.21E + 04 \times f_2$	$1.38E + 08 \times f_2$	$3.17E + 08 \times f_2$
SS	Т3	$0.00E + 00 \times f_3$	$0.00E+00\times f_3$	$5.77E + 05 \times f_3$	$6.99E + 06 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07. (conditional on SST1)

\$ 2.49E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 2.30E+08 (per year, conditional on SST1,2, or 3)

\$ 6.57E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.58E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

TOTAL COSTS						
RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL		
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS		
SST1	$1.61E + 09 \times f_1$	$2.26E + 10 \times f_1$	$8.18E + 10 \times f_1$	$1.06E + 11 \times f_1$		
SST2	$1.38E + 08 \times f_2$	$3.17E + 08 \times f_2$	$8.15E + 10 \times f_2$	$8.20E + 10 \times f_2$		
SST3	$5.77E + 05 \times f_3$	$6.99E + 06 \times f_3$	$8.15E + 10 \times f_3$	$8.16E + 10 \times f_3$		

YANKEE ROWE

Unit 1

Date of Operation: 1961

Power Level (MWe): 175

NERC Region: NPCC

Scale Factor 0.156

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	17.7	182.0	2340.0	4.70E+07	1.50E+09
SST2	0.0	0.1	74.3	1.45E+06	8.17E+06
SST3	0.0	0.0	0.2	3.81E+03	2.07E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	2.8	28.4	365.6	7.34E + 06	2.34E+08
SST2	0.0	0.0	11.6	2.27E + 05	1.28 E +06
SST3	0.0	0.0	0.0	5.95E+02	3.23E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY		LATENT CANCER	
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$3.68E + 07 \times f_1$	$3.78E + 07 \times f_1$	$4.87E + 08 \times f_1$	$3.12E + 09 \times f_1$
SST2	$0.00E + 00 \times f_2$	$1.10E + 04 \times f_2$	$1.55E + 07 \times f_2$	$1.70E + 07 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$4.41E + 04 \times f_3$	$4.30E + 06 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 1.73E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 6.26E+07 (per year, conditional on SST1,2, or 3)

\$ 6.92E+09 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.10E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE HEATLH COSTS	OFFSITE PROPERTY COSTS	ONSITE COSTS	TOTAL COSTS
SST1	$5.61E + 08 \times f_1$		$1.81E + 10 \times f_1$	
SST2	$1.55E + 07 \times f_2$	$1.70E + 07 \times f_2$	$1.79E + 10 \times f_2$	$1.79E + 10 \times f_2$
SST3	$4.41E + 04 \times f_3$	$4.30E + 06 \times f_3$	$1.79E + 10 \times f_3$	$1.79E + 10 \times f_3$

YELLOW CREEK

Unit 1

Date of Operation: 1985

Power Level (MWe): 1285

NERC Region: SERC

Scale Factor 1.147

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	5.6	68.4	849.0	1.66E+07	9.85E+08
SST2	0.0	0.0	62.6	1.15E+06	1.31E+07
SST3	0.0	0.0	0.3	4.53E+03	8.55E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE CATEGORY	EARLY FATALITIES	EARLY INJURIES	LATENT CANCER FATALITIES	PERSON REM	PROPERTY DAMAGE
SST1	6.4	78.5	974.1	1.90E+07	1.13E+09
SST2	0.0	0.0	71.8	1.32E+06	1.50E+07
SST3	0.0	0.0	0.3	5.20E+03	9.81E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY		LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.13E + 08 \times f_1$	$1.39E + 08 \times f_1$	$1.72E + 09 \times f_1$	$2.00E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$1.19E + 03 \times f_2$	$1.27E + 08 \times f_2$	$2.66E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$5.10E + 05 \times f_3$	$1.74E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.30E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.66E+08 (per year, conditional on SST1,2, or 3)

 $4.36E+10 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.46E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

		TOTAL COOL	'	
RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$1.98E + 09 \times f_1$	$2.00E + 10 \times f_1$	$5.84E + 10 \times f_1$	$8.04E + 10 \times f_1$
SST2	$1.27E + 08 \times f_2$	$2.66E + 08 \times f_2$	$5.82E + 10 \times f_2$	$5.86E+10 \times f_2$
SST3	$5.10E + 05 \times f_3$	$1.74E + 07 \times f_3$	$5.82E + 10 \times f_3$	$5.82E + 10 \times f_3$

YELLOW CREEK

Unit 2 Date of Operation: 1988

Power Level (MWe): 1285

NERC Region: SERC

Scale Factor 1.147

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	5.6	68.4	849.0	1.66E+07	9.85E+08
SST2	0.0	0.0	62.6	1.15E+06	1.31E+07
SST3	0.0	0.0	0.3	4.53E+03	8.55E+05

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	6.4	78.5	974.1	1.90E + 07	1.13E+09
SST2	0.0	0.0	71.8	1.32E + 06	1.50E+07
SST3	0.0	0.0	0.3	5.20E+03	9.81E+05

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$1.00E + 08 \times f_1$	$1.23E + 08 \times f_1$	$1.53E + 09 \times f_1$	$1.77E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$1.06E + 03 \times f_2$	$1.13E + 08 \times f_2$	$2.36E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$4.52E + 05 \times f_3$	$1.54E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.04E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.66E+08 (per year, conditional on SST1,2, or 3)

\$ 3.87E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.29E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY		PROPERTY COSTS	COSTS	COSTS
SST1	$1.75E + 09 \times f_1$	$1.77E + 10 \times f_1$	$5.18E + 10 \times f_1$	$7.13E + 10 \times f_1$
SST2	$1.13E + 08 \times f_2$	$2.36E + 08 \times f_2$	$5.16E + 10 \times f_2$	$5.20E + 10 \times f_2$
SST3	$4.52E + 05 \times f_3$	$1.54E + 07 \times f_3$	$5.16E + 10 \times f_3$	$5.16E + 10 \times f_3$

ZIMMER

Unit 1

Date of Operation: 1981

Power Level (MWe): 810

NERC Region: ECAR

Scale Factor 0.723

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	46.0	667.0	2390.0	4.35E+07	2.91E+09
SST2	0.0	0.0	174.0	3.27E+06	3.03E+07
SST3	0.0	0.0	0.6	1.06E + 04	2.38E+06

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	33.3	482.4	1728.5	3.15E + 07	2.10E+09
SST2	0.0	0.0	125.8	2.36E + 06	2.19E+07
SST3	0.0	0.0	0.4	7.67E+03	1.72E + 06

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$6.57E + 08 \times f_1$	$9.53E + 08 \times f_1$	$3.41E + 09 \times f_1$	$4.16E + 10 \times f_1$
SST2	$0.00E + 00 \times f_2$	$5.38E + 04 \times f_2$	$2.48E + 08 \times f_2$	$4.33E + 08 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E + 00 \times f_3$	$8.48E + 05 \times f_3$	$3.40E + 07 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1):

\$ 2.57E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 8.12E+07 (per year, conditional on SST1,2, or 3)

\$ $2.35E+10 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.63E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS
SST1	$5.02E + 09 \times f_1$	$4.16E + 10 \times f_1$	$4.00E + 10 \times f_1$	$8.66E + 10 \times f_1$
SST2	$2.49E + 08 \times f_2$	$4.33E + 08 \times f_2$	$3.97E + 10 \times f_2$	$4.04E + 10 \times f_2$
SST3	$8.48E + 05 \times f_3$	$3.40E + 07 \times f_3$	$3.97E + 10 \times f_3$	$3.98E + 10 \times f_3$

ZION

Unit 1

Date of Operation: 1973

Power Level (MWe): 1100

NERC Region: MAIN

Scale Factor 0.982

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	521.0	1600.0	4040.0	6.20E+07	4.89E+09
SST2	4.1	32.0	327.0	5.66E+06	1.17E+08
SST3	0.0	0.0	1.2	2.24E+04	1.97E+07

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	511.7	1571.4	3967.9	6.09E+07	4.80E+09
SST2	4.0	31.4	321.2	5.56E+06	1.15E+08
SST3	0.0	0.0	1.2	2.20E+04	1.93E+07

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

		·		
RELEASE	EARLY	EARLY	LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$9.09E + 09 \times f_1$	$2.79E + 09 \times f_1$	$7.05E + 09 \times f_1$	$8.53E + 10 \times f_1$
SST2	$7.14E + 07 \times f_2$	$5.58E + 07 \times f_2$	$5.71E + 08 \times f_2$	$2.04E + 09 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E+00\times f_3$	$2.15E + 06 \times f_3$	$3.44E + 08 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

 $2.31E + 08 \times f_1$

(discounted over remaining plant life)

Replacement Power:

\$ 1.42E+08 (per year, conditional on SST1,2, or 3)

\$ 3.12E+10 $\times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

 $1.46E+10 \times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE	OFFSITE	OFFSITE	ONSITE	TOTAL			
CATEGORY	HEATLH COSTS	PROPERTY COSTS	COSTS	COSTS			
SST1	$1.89E + 10 \times f_1$	$8.53E + 10 \times f_1$	$4.60E + 10 \times f_1$	$1.50E + 11 \times f_1$			
SST2	$6.98E + 08 \times f_2$	$2.04E + 09 \times f_2$	$4.58E + 10 \times f_2$	$4.86E + 10 \times f_2$			
SST3	$2.15E + 06 \times f_3$	$3.44E + 08 \times f_3$	$4.58E + 10 \times f_3$	$4.62E + 10 \times f_3$			

ZION

Unit 2

Date of Operation: 1973

Power Level (MWe): 1100

NERC Region: MAIN

Scale Factor 0.982

CRAC2 RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	521.0	1600.0	4040.0	6.20E+07	4.89E+09
SST2	4.1	32.0	327.0	5.66E+06	1.17E+08
SST3	0.0	0.0	1.2	2.24E+04	1.97E + 07

Interpretation of this table is explained on page 3

SCALED RESULTS: Mean Offsite Effects Conditional on Release

RELEASE	EARLY	EARLY	LATENT CANCER	PERSON	PROPERTY
CATEGORY	FATALITIES	INJURIES	FATALITIES	REM	DAMAGE
SST1	511.7	1571.4	3967.9	6.09E+07	4.80E+09
SST2	4.0	31.4	321.2	5.56E+06	1.15E+08
SST3	0.0	0.0	1.2	2.20E+04	1.93E+07

Interpretation of this table is explained on page 3

OFFSITE COSTS (times frequency f_i)

RELEASE	EARLY		LATENT CANCER	PROPERTY
CATEGORY	FATALITIES (\$'s)	INJURIES (\$'s)	FATALITIES (\$'s)	DAMAGE (\$'s)
SST1	$9.09E + 09 \times f_1$	$2.79E + 09 \times f_1$	$7.05E + 09 \times f_1$	$8.53E + 10 \times f_1$
SST2	$7.14E + 07 \times f_2$	$5.58E + 07 \times f_2$	$5.71E + 08 \times f_2$	$2.04E + 09 \times f_2$
SST3	$0.00E + 00 \times f_3$	$0.00E+00\times f_3$	$2.15E + 06 \times f_3$	$3.44E + 08 \times f_3$

Interpretation of this table is explained on page 7

ONSITE COSTS

Onsite Health Effects:

\$ 1.30E+07 (conditional on SST1)

\$ 2.31E+08 $\times f_1$ (discounted over remaining plant life)

Replacement Power:

\$ 1.42E+08 (per year, conditional on SST1,2, or 3)

 $3.12E+10 \times f_i$ (discounted over remaining plant life)

Cleanup:

\$ 1.00E+08 (per year, conditional on SST1,2, or 3)

\$ 1.46E+10 $\times f_i$ (discounted over remaining plant life)

Interpretation of this table is explained on page 10

TOTAL COSTS

RELEASE CATEGORY	OFFSITE HEATLH COSTS	OFFSITE PROPERTY COSTS	ONSITE COSTS	TOTAL COSTS
SST1	$1.89E + 10 \times f_1$	$8.53E + 10 \times f_1$	$4.60E + 10 \times f_1$	$1.50E + 11 \times f_1$
SST2	$6.98E + 08 \times f_2$	$2.04E + 09 \times f_2$	$4.58E + 10 \times f_2$	$4.86E + 10 \times f_2$
SST3	$2.15E + 06 \times f_3$	$3.44E + 08 \times f_3$	$4.58E + 10 \times f_3$	$4.62E + 10 \times f_3$

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