

Parameter	Value	
reactor power	1155 MWe	
assemblies in reactor	193	
spent fuel rack geometry	high density	
cell-to-cell pitch of spent fuel rack	10.40 inches	
orifice at bottom of each cell	5 inches	
capacity of spent fuel rack	1460 assemblies	
fraction of capacity used	1.0	
burnup in each refueling discharge	first discharge - 20 GWd/t last discharge (entire core) - 60 GWd/t intermediate discharges increased linearly in burnup from 20 to 60 GWd/t	
Exclusion Area Boundary	.4 miles	
beginning of release	12 days following final shutdown	
representative meteorology (mean weather attributes, mean wind rose, mean mixing height)	developed based on NUREG/CR-2239 (SNL siting study) and NUREG/CR-6295 (BNL siting study)	
population distribution	0 - 30 miles	1000 persons/mile <sup>2</sup>
	30 - 50 miles	a city of 10 million and a uniform population of 280 persons/mile <sup>2</sup> for the remaining land in this region
	50 - 500 miles	200 persons/mile <sup>2</sup>
nuclide inventory	developed based on DOE Spent Fuel Database and default reactor core inventories in MACCS	
MACCS version used	1.5.11.1	

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set of nuclides used	default list in MACCS
release fractions	NUREG/CR-4982 values, except Ce and La which were increased from $1 \times 10^{-6}$ to $6 \times 10^{-6}$ to reflect the release of fuel fines from high burnup fuel
short-term emergency response	no planned evacuation, followed by relocation at one day if projected doses are unacceptable (default values in MACCS)
long-term emergency response	permanent relocation, crop interdiction, and land decontamination or condemnation (default values in MACCS)
value of farmland	\$2094/hectare
non-farm wealth	\$73,750/person
agricultural data block	Omaha, Nebraska, region