

In the Matter of System Energy Resources, Inc.

Docket No. 52-029-ESP Official Exhibit No. EA-25

GGNS

SERI Exhibit 25

OFFERED by: Applicant Sponsor: _____
 EARLY SITE PERMIT APPLICATION
 PART 2 - SITE SAFETY ANALYSIS REPORT

NRC's _____

IDENTIFIED on 1/29/86 Panel _____

Action Taken: ADMITTED REJECTED WITHDRAWN TABLE 3.2-3A

Reporter/Clerk: _____
 ANNUAL DOSE TO A MAXIMALLY EXPOSED INDIVIDUAL
 FROM GASEOUS EFFLUENTS
 (Per Unit)

Location	Pathway	Total Body	Dose Rate (mrem/yr)	
			Skin	Thyroid
Nearest Residence ^{1,3} (N-NE, 0.64 mile)	Plume Exposure	6.30E-01	2.09E+00	6.30E-01
	Inhalation			
	Adult	1.71E-01	1.69E-01	6.90E-01
	Teen	1.73E-01	1.71E-01	8.50E-01
	Child	1.53E-01	1.51E-01	9.95E-01
Nearest Garden ^{1,3} (E-NE, 0.63 miles)	Vegetable Consumption			
	Adult	3.87E-01	3.55E-01	2.87E+00
	Teen	4.90E-01	4.57E-01	3.60E+00
	Child	9.01E-01	8.55E-01	6.70E+00
Nearest Site Boundary ^{2,3} (N, 0.58 miles)	Plume Exposure	1.18E+00	3.88E+00	1.18E+00
	Inhalation			
	Adult	3.18E-01	3.14E-01	1.28E+00
	Teen	3.21E-01	3.17E-01	1.58E+00
Nearest Milk Cow ¹ (S-SW, 10.0 miles)	Cow Milk			
	Adult	5.65E-03	5.25E-03	5.50E-02
	Teen	8.33E-03	7.80E-03	8.65E-02
	Child	1.59E-02	1.52E-02	1.72E-01
Nearest Meat Cow ¹ (S, 4.0 miles)	Meat Consumption			
	Adult	6.53E-03	6.25E-03	1.44E-02
	Teen	4.72E-03	4.55E-03	1.04E-02
	Child	7.58E-03	7.40E-03	1.63E-02

NOTES:

- "Nearest" refers to the location at which the highest radiation dose to an individual from the applicable pathways has been estimated.
- "Nearest" refers to that site boundary location at which the highest radiation doses due to gaseous effluents have been estimated to occur.
- Distances are corrected for the approximate difference between GGNS Unit 1 location and the ESP facility location. For example, dose analyses were done using a distance of 0.63 miles for the nearest garden, rather than the distance of 0.67 miles given in ER Section 2.7 Reference 29 for this receptor location. The GGNS 2001 Land Use Census results show the nearest residence and garden at a distance of 0.67 miles; however, the ESP analysis conservatively considered the nearest home in the N-NE Sector at a distance of 0.64 miles since this location has the highest D/Q value.



DOCKETED
USNRC

2006 DEC 15 PM 3:17



OFFICE OF THE SECRETARY
HEARINGS AND
ADJUDICATIONS STAFF

