## EMERGENCY PREPAREDNESS FREQUENTLY ASKED QUESTION (EPFAQ)

EPFAQ Number: 2012-006

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RELEVANT GUIDANCE:

NUREG/CR-7002, CRITERIA FOR DEVELOPMENT OF EVACUATION TIME ESTIMATE STUDIES

**STATUS** 

**FINAL** 

APPLICABLE SECTION(S) APPENDIX B TO NUREG/CR7002 SECTION 1.1 ITEM B, ETE REVIEW CHECK LIST

## QUESTION OR COMMENT:

Section 2.1.2 "Transient Population" of NUREG/CR-7002, Criteria for Development of Evacuation Time Estimate Studies, states "Large employers, defined as those with 50 or more employees working a single shift, should be listed and include the number of people per vehicle." Section 1.1, item b in Appendix B to NUREG/CR-7002 "ETE Review Criteria Checklist" reads "Sources of demographic data for schools, special facilities, large employers, and special events should be identified."

Higher population-density sites (e.g., Catawba, McGuire, Indian Point, Turkey Point, St. Lucie, Diablo Canyon) may have hundreds of large employers. Phone calls to these employers have been less than fruitful in terms or producing employment data useful for an ETE analysis.

## PROPOSED SOLUTION:

As an alternate approach to contacting the employers, the U.S. Census Bureau has an interactive tool that enables a user to draw an area on a map (using geographic information system (GIS) software), and the tool then provides how many people commute into that area to work on a daily basis. It's an excellent way to determine employment within the EPZ without double counting people who are already included as permanent residents. The tool is the Longitudinal Employer-Household Dynamics (LEHD) interactive website http://lehd.did.census.gov/led/. Reports would reference the U.S. Census Bureau's LEHD interactive website as a demographic data source for large employers.

## NRC RESPONSE:

NRC staff has discussed the use of U.S. Census Bureau interactive website http://lehd.did.census.gov/led/ for determining the number of employees that commute into a nuclear power plant (NPP) licensee's plume exposure pathway (10-mile) emergency planning zone, and observed its use. Staff has concluded that the use of this interactive website is a reasonable approach for determining the number of transient employees of large employers, defined as those employers with 50 or more employees working a single shift. Additionally, the use of this interactive website tool is not limited to only high population-density sites. However, licensees should also consider the following when utilizing this interactive website tool in their ETE analyses:

1. This interactive website tool would capture employee numbers for all employers, not just large ones. Therefore, if a licensee used methods in its ETE analysis for determining transient employees for other than large employers, the licensee should also ensure not to double count employees as a result of using the tool.

2. This tool provides a total number of transient employees and does not account for employers with multiple shifts. Therefore, licensees should account for employee numbers on each shift (e.g., dayshift, night shift, etc.) by making assumptions concerning how the total number of employees would be distributed among each shift.