4.7S Nonradiological Health Impacts

4.7S.1 Public Health

Members of the public can potentially be put at risk by construction of STP 3 & 4. Nonradiological air emissions and dust can transport offsite through the atmosphere to where people are living. Noise can also propagate offsite. The increase in traffic from commuting construction workers and deliveries can result in additional air emissions and traffic accidents. Subsection 4.4.1, “Physical Impacts,” addresses the impacts to the public from air emissions, noise, and traffic resulting from construction activities and concluded that the impacts would be SMALL.

4.7S.2 Occupational Health

Construction of STP 3 & 4 would involve risk to workers from accidents or occupational illnesses. These risks could result from construction accidents (e.g., falls and burns), exposure to toxic or oxygen-replacing gases, and other causes. The construction contractor would be required to adhere to Occupational Safety and Health Administration standards, practices, and procedures.

The Bureau of Labor Statistics (BLS) maintains records of a statistic known as total recordable cases (TRCs), which are a measure of work-related injuries or illnesses that include death, days away from work, restricted work activity, medical treatment beyond first aid, and other criteria. The 2005 nationwide TRC rate published by the BLS for utility system construction is 5.6 per 100 workers or 5.6% (Reference 4.7S-1). The same statistic for Texas is 3.9 per 100 workers or 3.9% (Reference 4.7S-2). STPNOC has calculated the TRC incidence for the proposed units as the national TRC rate times the number of workers. Using monthly employment numbers (see Table 3.10-2) and the national and Texas TRC rates, STPNOC estimated the annual average TRCs over the 78 months of preconstruction and construction activities for the two units and the peak number of TRCs for a 12-month period with peak employment (months 18 through 29 following preconstruction activities). The estimates are as follows:

	TRC Incidence Based on US Rate	TRC Incidence Based on Texas Rate
Average Annual	216	150
Peak 12-month period	333	232

The BLS data for fatal occupational injuries (Reference 4.7S-3) and average employment (Reference 4.7S-1) were used to calculate the nationwide annual rate of fatal occupational injuries.

STPNOC requires contractors to develop and implement safety procedures with the intent of preventing injuries, occupational illnesses, and deaths. However, even with effective safety procedures, construction work carries the risk of injury, illness, and death. STPNOC does not believe that the construction of STP 3 & 4 will result in more

potential construction fatalities, based on statistical analysis, than other similarly sized power plant or other heavy construction projects.

4.7S.3 References

4.7S-1 "Table 1. Incidence rates of nonfatal occupational injuries and illnesses by industry and case types, 2005," BLS 2006. Available at http://www.bls.gov/iif/oshwc/osh/os/ostb1619.pdf, accessed February 19, 2007.

4.7S-2 "Table 6. Incidence rates of nonfatal occupational injuries and illnesses by industry and case types, 2005, Texas," BLS 2006. Available at http://www.bls.gov/iif/ oshwc/osh/os/pr056tx.pdf, accessed February 19, 2007.

4.7S-3 "Table A-1. Fatal occupational injuries and event or exposure, All United States, 2005," BLS 2006. Available at http://www.bls.gov/iif/oshwc/cfoi/cftb0205.pdf, accessed February 19, 2007.