Chapter 1: Introduction to the Study
Study Overview and Background

Effective emergency management planning in all nuclear facilities is an important measure for protecting the public (Nuclear Energy Institute [NEI], 2016). Adequate emergency preparedness planning is an indication that, an organization or an industry is ready to minimize the impact of any crisis that may arise and protect the safety and health of the population during emergency situations (Coombs, 2014). A training, drill, and exercise program is an example of emergency preparedness techniques used in nuclear facilities. A proper planning and adequate training of the emergency responders and development of an emergency response framework has been found to be an effective way of strengthening emergency preparedness and response to nuclear facility related situations (Perry & Lindell, 2003).

The Savanah River Site Nuclear plant for example, is one of the nuclear facilities which continues to offer trainings, drills, and exercises to their first responders and the community living around the site. Despite existing for many years, the effectiveness of the program in improving emergency preparedness, especially as a result of poor implementation has been in question (Office of Enterprise Assessments [OEA], 2018). This has led to inadequate emergency preparedness and inability to effectively respond to real occurring emergencies, posing a potential risk which can result into serious problems, such as loss of lives and destruction of properties (Defense Nuclear Facilities Safety Board [DNFSB], 2015; OEA, 2018).

Similarly, Turcanu et al. (2016) found that, there is a continuous need for more effective trainings, practical sessions, and discussions involving emergency preparedness, response, and recovery. By focusing on the implementation of the program, this study has a potential of providing a solution to the problem and strengthening emergency preparedness and response,