MICHIGAN

RADIATION ENVIRONMENTAL MONITORING

PROGRAM REPORT

1958-1996

Executive Summary

Recognizing that the peaceful use of nuclear energy to produce electricity could have an adverse impact on public health and the environment, the state of Michigan established the Michigan Radiation Environmental Monitoring Program (MREMP) in 1958 to monitor the environs near the nuclear plant sites to assure that Michigan's citizens and its environment are not adversely impacted. Environmental samples in the form of air particulates, air vapors, milk, surface water, and direct radiation are taken from various sites in Michigan and analyzed to determine if any radiological effects due to nuclear power plants can be detected.

Historically, sample results from all media have indicated elevated levels of radioactivity, but the vast majority of these elevated levels are attributable to past atmospheric testing of nuclear weapons. Analytical results that could be attributed to nuclear power plant operations have only been detected on-site at the plants and were within the allowable U. S. Nuclear Regulatory Commission (NRC) limits. No analytical results attributable to nuclear power plant operations have been detected off site at any of the plants

During the report focus years of 1995 and 1996, no samples were found to contain radioactivity attributable to nuclear power plant operations. The influence of atmospheric fallout from past testing of nuclear weapons can no longer be readily seen in environmental samples, and monitoring levels from all samples now fluctuate in the range of natural background radiation.

In conclusion, the results of the MREMP indicate that:

1. No public health or environmental radiological impact has yet been detected in the environs of Michigan's nuclear power plants due to the operation of nuclear power reactors.

2. The data provided by the MREMP form a useful baseline to compare environmental radioactivity measurements in the event of a potential nuclear reactor accident should such an unlikely event ever occur.

3. The data provided by the MREMP show a consistent sensitivity to and downward trending of the overall levels of radioactivity fallout from past atmospheric testing of nuclear weapons and from the Chernobyl nuclear reactor accident.

4. The operation of the MREMP provides assurance to the citizens of this state that the potential impact of nuclear power plant operations on public health and the environment will be continuously evaluated.