Background

The Nuclear Energy Institute (NEI) guideline, NEI 09-14, Guideline for the Management of Underground Piping and Tank Integrity, specifies that inspections must be performed on buried pipe and tanks in contact with the soil at nuclear power plants. Based on the number of materials, systems and geometries that are involved in buried pipe applications and storage tanks, a variety of inspection techniques are applicable.

Westinghouse, through its subsidiary WesDyne International, offers the Model 5080 Scanner for excavated pipe exams or empty storage tanks in contact with soil. This scanner, attached to a data acquisition system (NDE-BP-004), is designed to inspect most any type of material and terrain.

Description

The Model 5080 Scanner is WesDyne’s most customizable scanner. This remotely controlled automated scanner features:

- A variety of sensing elements (including ultrasonic transducers and eddy current probes) to accommodate different materials
- A wide array of deployments for changing height conditions
- Various outside diameter (OD) corrosion sleds to accommodate the contour of the pipe being inspected
- An assortment of different arm lengths, which allow for larger scans

Model 5080 Scanner with manual skewing collar and spring loaded gimbaling
Designed for fast installation on a wide range of flat or curved surfaces, it uses magnetic wheels to mount to any magnetic surface. For non-magnetic surfaces, scanning tracks are available and customized to the OD of the pipe. Its rugged design allows it to be used in many different climates and harsh environments.

**Benefits**
- Rugged design eliminating downtime for repairs
- Wide selection of deployments to accommodate variations in height of material
- Variety of corrosion sleds and arm lengths available for adapting to different size pipes
- Independent encoder increasing the inspection accuracy

**Experience**
The Model 5080 Scanner, with OD corrosion sleds, is routinely used to perform automated ultrasonic testing inspections in the oil and gas industry.