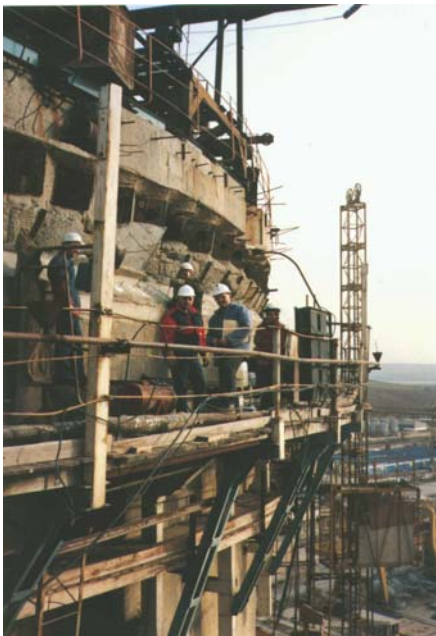


## Structural Crack Repairs of Nuclear Power Plant Unit #1 &#2

- STRUCTURE:** Reactor Building, Turbine Building, Service Building, & Pumphouse
- LOCATION:** Cernavoda, Romania
- PROJECT DATE:** Unit #1 - March 1991-1995 on a 2 month/year bases during construction, and one month during shutdown in 1998.  
Unit #2 - 1997 – 1998 2 month/year. Approximately 50% of the repairs for Unit #2 are scheduled for completion in summer of 2002 right after the post-tensioning of the reactor building.
- PRODUCT USED:** Concesive 1360, Concesive 1380, Concesive 1422
- JOB DURATION:** From 1991 - Present
- CLIENT:** Atomic Energy of Canada Limited (AECL)/Romanian Ministry of Energy
- AREA:** Various lengths and sizes of cracks and voids.
- CONTRACTOR:** CNE-sa (Nuclear Electrical Contractor) – local general contractor.



### PROJECT DESCRIPTION:



Vector Construction Group provided the following contract items: Technical Assistance, Materials, and Specialty Equipment.

Technical Assistance included training the local workers in the methods and techniques required for the labour portion of the project, helping the engineering personnel with the selection of most appropriate repair method, selection and specification of specific work methods and details for each individual repair location, quality control assistance for repair activities, and equipment troubleshooting.

Vector supplied all epoxy injection resin, paste, and other job specific consumable articles. SCB injection pumps were rented out for each sub-sequential work period.

Most of the work consisted of crack repairs, filling honeycombs and voids in concrete structures and behind embedded steel plates. Most of the repairs were of a structural nature. A significant percentage of the repairs had a leak-proofing scope as well, specifically the repairs completed on Unit #1 which is an operating reactor. These leaks had to be reduced in order to allow a longer period between maintenance shutdowns (pressure tests). At Unit #2 the repairs are required mainly for the trouble free commissioning of the reactor building and its annexes.



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