

pcPRAISE 4.2 Information

Enclosed in this package are the following files:

- 1) Praise42info.wpd; this file.
- 2) Praise42.exe; the executable file for pcPRAISE 4.2.
- 3) Wn5twc.dat; an example input file.
- 4) Wn5twc.out; the output file for the above sample input file.

As of July 2000, pcPRAISE version 4.2 is the most recent update to the pcPRAISE probabilistic fracture mechanics code. This update includes the modeling of fatigue crack initiation occurring probabilistically over the life of the component. It models multiple crack initiation, crack growth, and crack linking. There is an option for either an air or water environment. Also, additional information about crack length and crack depth is provided in the output file.

This version of pcPRAISE has been used in the development of "Fatigue Analysis of Components for 60-Year Plant Life," NUREG/CR-6674. Detailed information about pcPRAISE version 4.2 input and output files can be found in NUREG/CR-6674.

The Fortran code for pcPRAISE version 4.2 is available upon request. To receive a copy, contact Douglas Kalinousky at dnk@nrc.gov or (301)415-6788.