PARTIAL DISCHARGE REPORTING
Following one week of testing, where typically 50–60 cable segments are analyzed, a report is generated which summarizes the results. Recommendations to repair, monitor or do nothing to the problematic PD locations are based on the PDIV level and the where the PD originates.

Testing reports identify the length of the cables tested, location of splices, and identification of PDs in the cable and/or accessories. Results are given for each cable segment as shown in the simplified graph below. The length and location of the splices are shown on the horizontal axis. The PDIV level of the PDs are represented on the vertical axis. The type, location and severity of the detected PDs can be interpreted from the symbols on the graph. In Fig. 1, on a cable segment 2,055 feet long or 626 meters, there is a PD in a splice on A phase that occurred at 1.3 p.u., and a cable discharge on the same phase occurring at 2.0 p.u. Note the most severe PDIV is located higher on the graph. The report summarizes PD's by severity. In addition, to facilitate construction repairs, cables are also prioritized based upon the most severity of PDs identified.

ESTABLISHING RECOMMENDATIONS LEVELS
Recommendations for various inception voltages, based on whether they are detected in cable insulation or in accessories, are shown below in Fig. 2. The recommendations have been formulated from the testing results to date and continue to be refined with experience. Since there are an infinite number of dependencies, which may induce a PD location to fail, an exact time-to-failure recommendation is not possible. Each utility should mold the recommendations based upon system protection, reliability concerns, frequency of local transients, and other factors that accelerate PD growth.

These recommendations were initially established based upon the time-to-failure after the detection of a PD. In the past year, many cables with PDs requiring "immediate" repair, have failed at correlating PD locations if proactive measures where not taken. On the other hand, splices and terminations in the "immediate" recommendation level have been more