

GRADING AREA DISCHARGE WHITE POWDER & GRADING PAINT DAMAGED

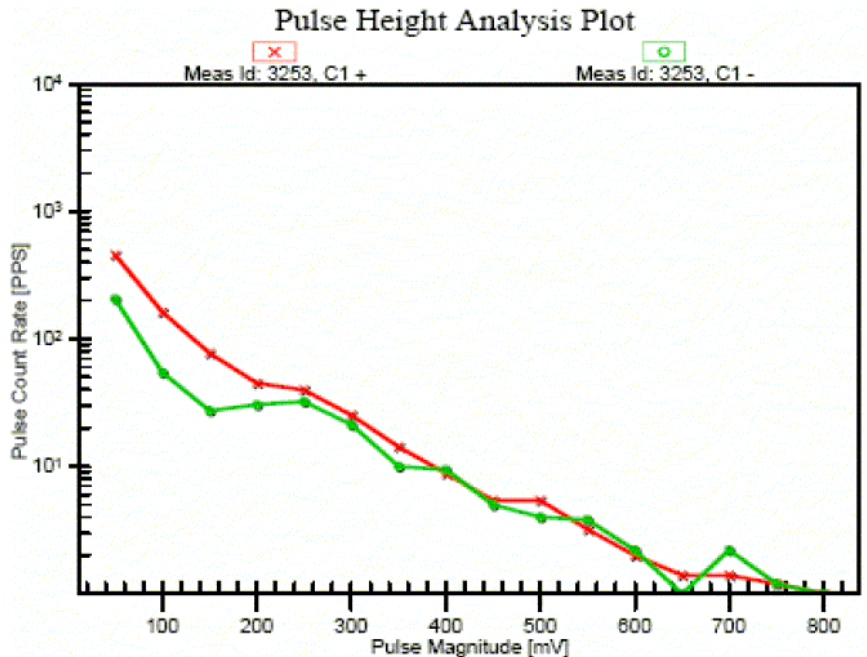


Figure 1. 2D PD Plot with No Polarity Predominance – Phase A

Company: BC Hydro
Ratings: 457 MVA, 16 kV, Air Cooled Hydro Generator
Manufacturer: Confidential
Related Info: 30 years old
PD Sensors: Four PDA Couplers per phase
Details:

“...This winding was subjected to severe discharge in the grading paint area. White powder and grading paint damaged due to PD were observed at both the top and bottom ends of the bars...These bars were at high potential...In the 2D plot, the PD pattern showed no polarity predominance between the positive and negative pulses. Also, a linear decrease in pulse density with increase in pulse magnitude was shown....”

Excerpt from paper “Partial Discharge Measurements on Hydro Generator Stator Windings Case Studies”, by S. Li and M. Chow” in IRMC June 2006



Figure 2. Grading Area Damage →