



Proudly invites you to the Virtual Professional Development Seminar 2021

ProDev 3.0: Understanding Landslides: Runout Velocity, Travel Distance, and Deposition Depth



1. Overview

This presentation provides an overview of runout analysis to predict the motion of rainfall-induced and earthquake-induced landslides. Runout analysis determines landslide velocity, travel distance, deposition depth, and impact forces on structures along the path. These information are key in landside risk assessment and mitigation design, especially in cases involving extremely rapid, flowlike landslides, such as debris flow and avalanche. The goal of landslide risk assessment and mitigation is to minimize, if not avoid, numerous deaths and significant damages to infrastructure and environment. A method of runout analysis developed in Canada is applied to a notable landslide in the Philippines.

2. Our Speaker

Dr. Marolo Alfaro is a professor in the Department of Civil Engineering at the University of Manitoba. His research interests include geosynthetics for civil engineering applications, ground improvement techniques, hydroelectric earth fill dams, reinforced soil structures, pile foundations, stabilization of natural and engineered slopes, and frozen ground engineering. He has published widely in technical journals and in conference proceedings, receiving awards for his research work. He received the 2019 Geosynthetics Award given by the Canadian Geotechnical Society in recognition for outstanding technical contribution to the applications of geosynthetics in civil, geotechnical and geoenvironmental engineering in Canada and internationally. He has coauthored a book and published two book chapters. Marolo worked as a geotechnical engineering consultant on a broad variety of infrastructure projects. He has been appointed as Vice-Chair of the Canadian Geotechnical Research Board for 2020-2022 and as Chair for 2023-2025. He served as Vice-President of the International Geosynthetics Society - North American Chapter, Member of the Executive Board of the Canadian Geotechnical Society, and Canadian representative to the Committee on Ground Improvement of the International Society of Soil Mechanics and Geotechnical Engineering. He is a member of the Canadian Society for Civil Engineering and the American Society of Civil Engineers.

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ProDev 4.0: Power Transformers



1. Overview

In a nutshell, Power transformers play a vital role in power system delivery every part of the world. Its primary function is to either step-up or to step-down voltage levels.

Electric utilities have done creative ways to generate power (remote locations), then transmit over long distances (800km and up) and finally distribute to different cities and municipalities.

These also paved the way to maintain power system stability, provide reliability and export surplus power to neighboring utilities and country.

The presentation will be mainly focused in 4 areas:

Specifications
Tendering/procurement
Manufacturing
Shipping

2. Our Speaker

(1988) Received BSs EE degree from (NEUST) Nueva Ecija University of Science and Technology
(1990) Passed the EE board exams (Philippines)
(1988 – 1995) Employed with LRT1 (Metro Inc), American Wire and Cable, BCPI (Philippines)
(1995) Emigrated to Canada
(1999 – 2001) Received Electrical Engineering Technology diploma from RRC (Winnipeg)
(2001) Began Employment with Manitoba Hydro (Electrical Technologist/Technician)
(2009 – 2013) Completed APEGM special or “in-lieu” courses thru University of Manitoba while working FT at MH
(2014) Passed PPE, Received P.Eng.
(Present) Professional Engineer at Manitoba Hydro:
Previous rotations within MH as an Engineer includes System Planning Engineer, Capital Planning Engineer, Power Quality Engineer and Apparatus Quality Engineer (present).

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