

FAULT DETECTION AND LOCATION IN DISTRIBUTION SYSTEMS

On Final Exam

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1 - 3 June 2010 @TKK

How to refer the class material (note, code, data, etc) in your future works?

• Charles Kim, *Lecture Note on Fault Detection and Location in Distribution Systems*, 2010

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Final Exam

- Take-Home Exam
 - From 4 June 2010 to 14 June 2010
 - Submission Deadline: 11:59pm, Mon. 14 June 2010 (your local time)
 - Submission Method: Email submission (following 2 emails)
 - To: **charles.kim@tkk.fi**
 - Cc: **ckim@howard.edu**
 - You have to keep acknowledgment email reply as evidence of successful submission.
 - File name convention:
 - **Pat_N_First_LastName.xmcd**
 - Over the period, question and answer can be done over email

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Exam in Brief

- A US patent or US patent publication will be emailed to each student by 4 June 2010. Send inquiry if no email by end of 4 June 2010.
- **Individual** work. No help from those who attended and are taking the exam. Help can be got from the instructor only.
- The final product must be 1 Mathcad file: Description, comments, etc must be included in the worksheet.
- Focus must be only on fault distance of single-line-to-ground fault type.

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Exam Works and (Grade Point)

- Implementation of the patented (or patent seeking) fault distance calculation method in Mathcad environment. (2.5)
- Testing the method with the ideal 2-source data which is available from NINEGEN_SEL_1.XMCD or other files which contain the same or similar data.(3)
- Testing the method with the actual fault system data that are provided from the class. (3.5)
- Discussion of the results above in terms of the performance under different conditions of fault location and fault impedance value. (4)
- Suggestion of new (inventive) idea. (4.5)
- Implementation of the new (inventive) idea and testing with the above two sets of data. (5)

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