

Non-Technical Project

for Mr. xx xx

Topic: Investigate the Communication Protocol Between a Substation Sensor and the Distribution System Operator

Task:

The objective of this research project is to examine the communication protocol between a substation sensor used for condition monitoring of power cables and the distribution system operator using the IEC 60870-5 standard. The analysis should include the syntax and semantics of the communication commands, the structure and content of the data exchange, and the protocols used for data transmission and error handling.

The study has to cover the following points:

- Provide a comprehensive overview of the IEC 60870-5 standard, including its structure, functions, and applications in the context of SCADA systems
- Investigate the communication protocol between the substation sensor and the distribution system operator
- Definition of the technical requirements necessary for communication
- Documentation of the results

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