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TTY

DEE-23116 Introduction to Smart Grids

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Exam 5.2.2015

Own calculator is NOT allowed to use in the exam

You can answer in English or in Finnish

1. Define shortly the following terms or concepts (1.5 p/each)
 - a) Virtual Power Plant (VPP)
 - b) Day-ahead (spot) market
 - c) Point tariff
 - d) Time-of-use pricing

2.
 - a) Compare briefly a traditional electricity grid and Smart Grid (4p)
 - b) List motivations and incentives of distributed generation (DG) (4p)

3. Explain briefly
 - a) The operation and information flow in the fault management of medium voltage (MV) feeder fault (4p)
 - b) The different roles that Electric Vehicles (cover EVs and PHEVs) could have in Smart Grids (4p)
 - c) What is the main difference between "Demand Response" and "Energy saving"? (2p)