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Vessel Power Plant

Performance Analysis

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“Vessel name”

Performance Analysis – Summary

1.36 % potential to increase performance

6.25 tons of fuel saved in two weeks

59 k$/year

Power Plant Performance

”Start time – End time”

Using OCTOPUS data to analyse how the vessel’s power plant has been operated

Create a simulation model of the power plant

Compare the real operation to the optimum operation from the control point of view

Total time: 14 days

Total fuel consumption: 460,4 tons

Improvement potential: 1,36 % / 6.25 tons / 59,0 k€ per year

+ Higher ME load
+ Better SG utilization
+ Running only one auxiliary DG

Power Plant Performance

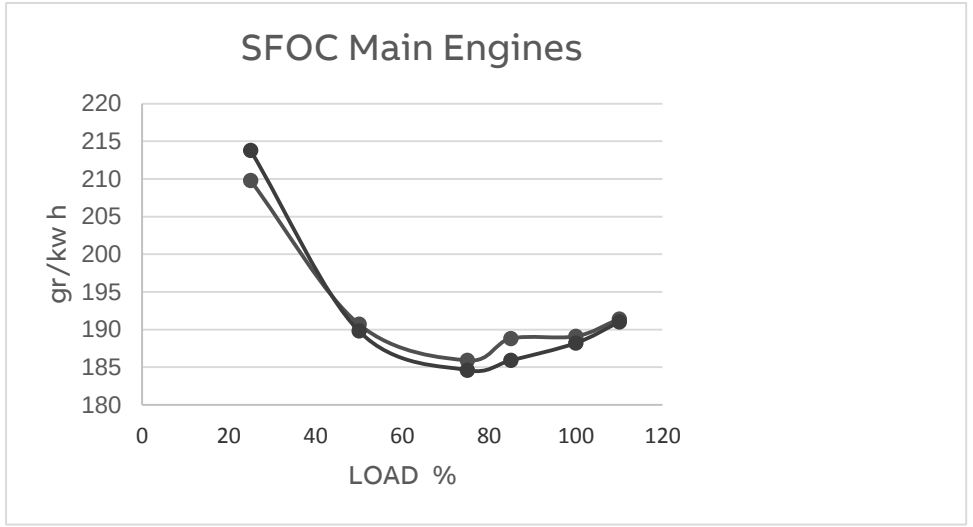
”Start time – End time”

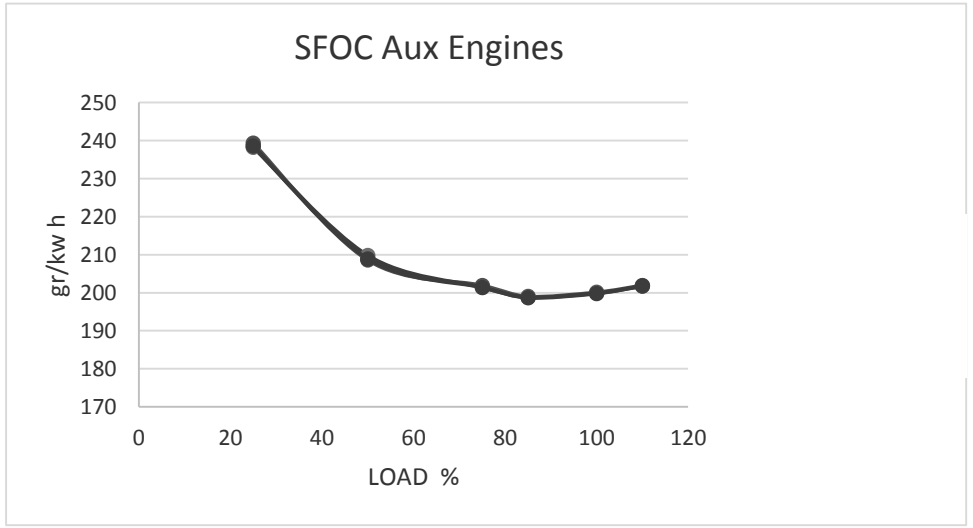
In current operation engines running loads:

- MEs ~60%
- DGs ~40%

Set up:

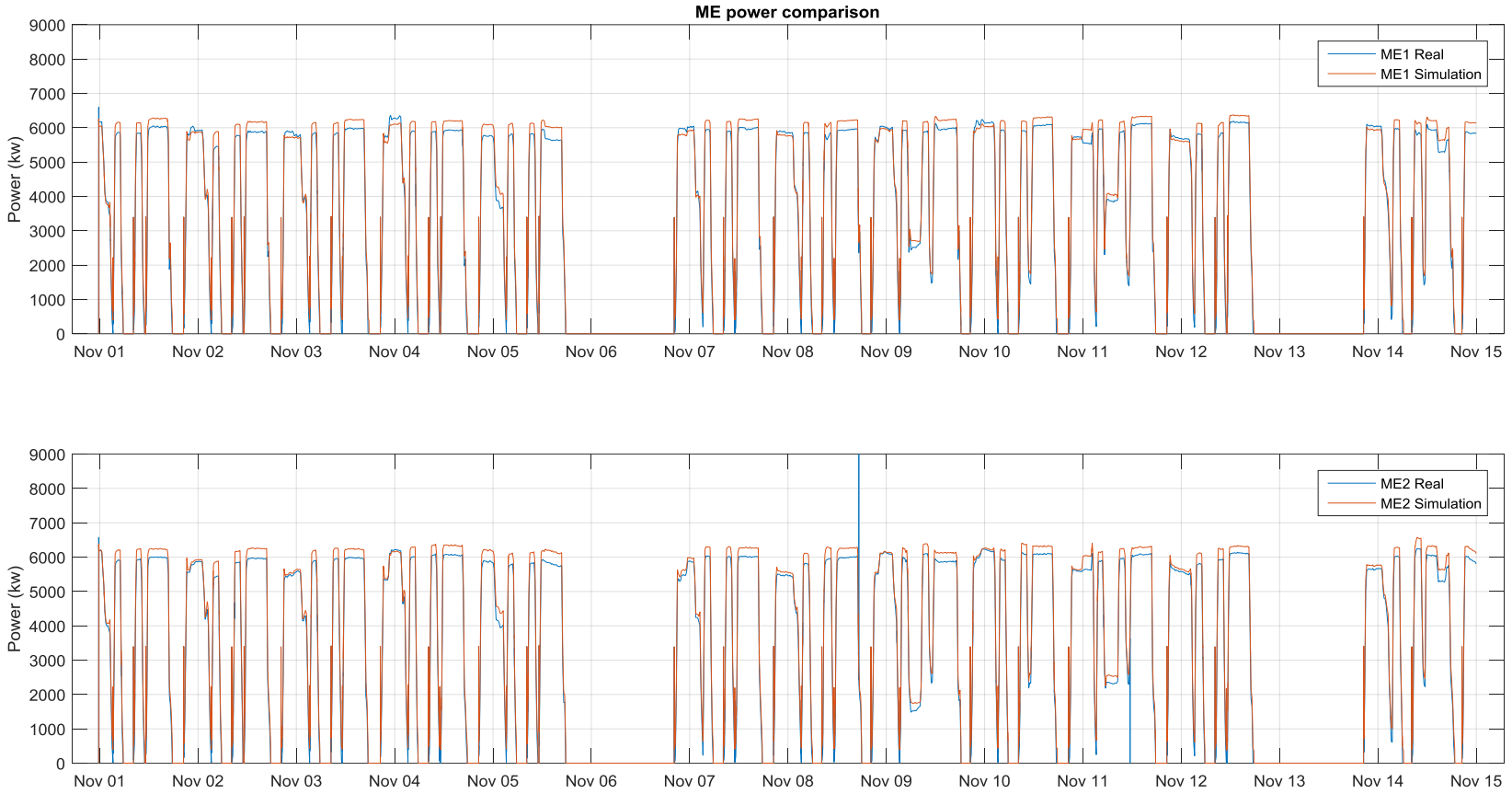
- 2 main engines (9MW)
- 2 shaft generators (1.3 MW)
- 3 auxiliary diesel generators (1.14 MW)





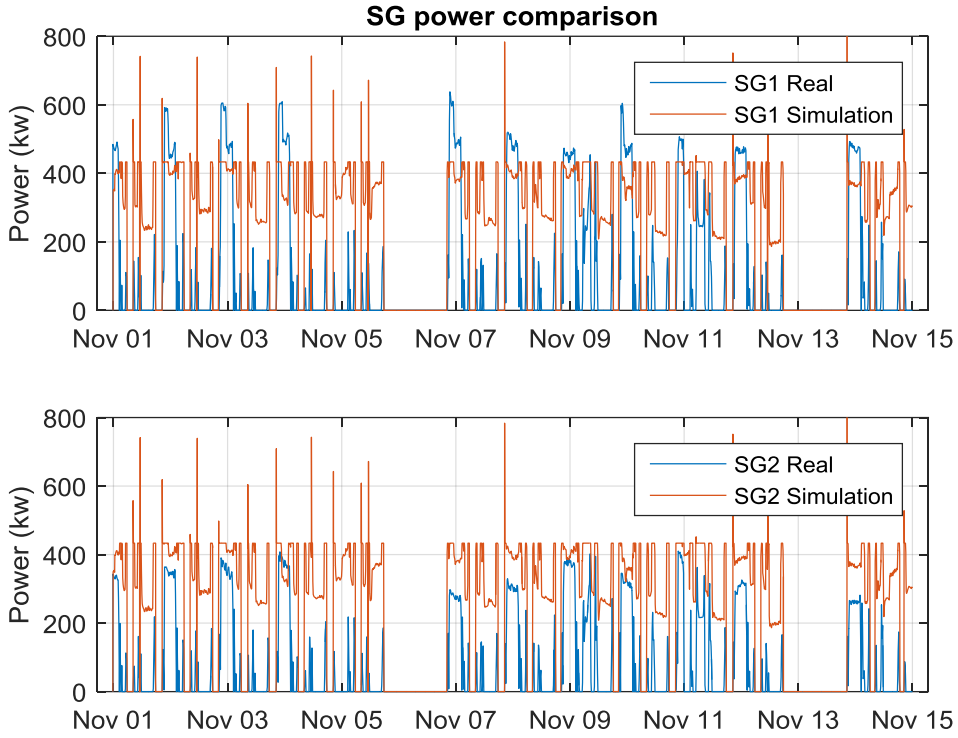
Power Plant Performance

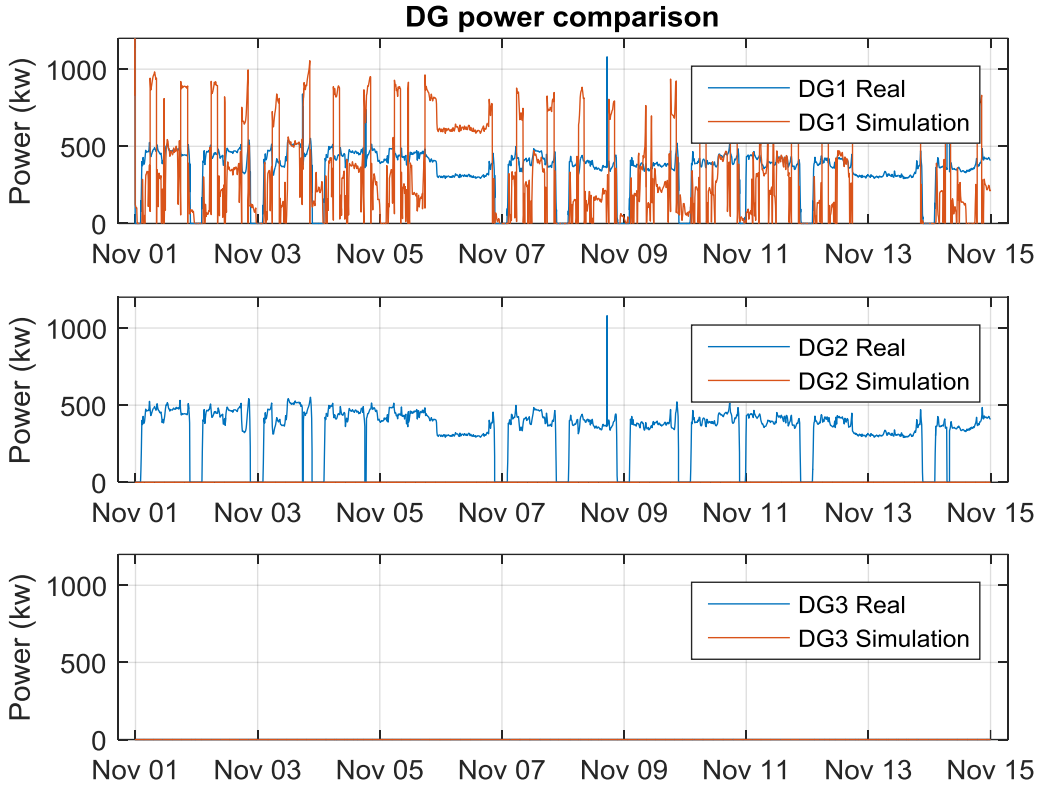
ME loads higher in simulation



Power Plant Performance

SGs utilized better, only one DG





Power Plant Performance

Fuel savings gained both at sea and in port