|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CASE: Battery as only spinning reserve** | | | | | |
| Load Range | OpID | Req. SR cap | Operational strategy from ship owner | Assumed/proposed operational strategy | results |
| 100-1000 kW | Transit |  | Two generators | Single generator |  |
| DP | 700 kW | ? | Single generator |  |
| Standby |  | ? | Single generator |  |
| Port |  | ? | Shore connection |  |
| 1000 – 2100 kW | Transit |  | ? | Single generator |  |
| DP | 700 kW | ? | Single generator |  |
| Standby |  | ? | Single generator |  |
| 2100 – 3000 kW | Transit |  | ? | Two generators |  |
| DP | 700 kW | ? | Two generators |  |
| Standby |  | ? | Two generators |  |
| 3000 – 4200 kW | Transit | 700 kW | ? | Two generators |  |
| DP |  | ? | Two generators |  |

If a single generator is running at higher power than battery capacity, the battery might not be sufficient as Spinning Reserve

Observations: Når to generatorer møter load istedenfor 1 + batteri som spinning reserve vil forbruket være det samme fordi fuel consumption er lineær med økende effekt.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Case: No battery** | | | | | |
| Load Range | OpID | Req. SR cap | Operational strategy from ship owner | Assumed/proposed operational strategy | results |
| 100-1000 kW | Transit |  | Two generators | Single generator |  |
| DP | 700 kW | ? | Two Generators |  |
| Standby |  | ? | Single generator |  |
| Port |  | ? | Shore connection |  |
| 1000 – 2100 kW | Transit |  | ? | Single generator |  |
| DP | 700 kW | ? | Two generators |  |
| Standby |  | ? | Single generator |  |
| 2100 – 3000 kW | Transit |  | ? | Two generators |  |
| DP | 700 kW | ? | Three generators |  |
| Standby |  | ? | Two generators |  |
| 3000 – 4200 kW | Transit | 700 kW | ? | Two generators |  |
| DP |  | ? | Three generators |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Case: Spinning reserve + peakshaving w/o external charging** | | | | | |
| Load Range | OpID | Req. SR cap | Operational strategy from ship owner | Assumed/proposed operational strategy | results |
| 100-1000 kW | Transit |  | Two generators | Single generator |  |
| DP | 700 kW | ? | Single generator |  |
| Standby |  | ? | Single generator |  |
| Port |  | ? | Shore connection |  |
| 1000 – 2100 kW | Transit |  | ? | Single generator |  |
| DP | 700 kW | ? | Two generators |  |
| Standby |  | ? | Single generator |  |
| 2100 – 3000 kW | Transit |  | ? | Two generators |  |
| DP | 700 kW | ? | Three generators |  |
| Standby |  | ? | Two generators |  |
| 3000 – 4200 kW | Transit | 700 kW | ? | Two generators |  |
| DP |  | ? | Three generators |  |