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Technical Domain / Task Number 2 …………………………………

Author(s) / Submitter(s) ……Peter Dobson……………

Draft example of a battery sizing calculator

# Summary

This paper includes a battery sizing calculator, that needs to be reviewed, modified, enhanced and considered where useful as an engineering tool for IALA members

## Purpose of the document

Forward to WG2 for further work to be done and consideration as an IALA engineering tool.

## Related documents

ENG2 Working Paper 11.2.4

# Background

As part of the task register item 5.1.2 – review of IALA documents, the sub group dealing with a review of power systems started a review of the documentation and determining a plan of what need to be updated, merged or discontinued. As part of this, consideration was given to how the IALA solar sizing program could be updated and identification of any additional tools that would be useful.

# Discution

The information provided by battery manufacturers can be confusing to understand and unclear when trying to determine performance at different load or temperatures. To aid in achieving such calculations, a calculator has been produced (see Table 1) for review, modification and adaption before consideration as a suitable tool that IALA could offer its members.

# Further actions

This tool is generally based around gel battery technology, but with additional research, it may be possible to adapt for other battery type. In addition, further work is required to adapt this calculator for varying loads such as night hours and the impact this has around the globe.

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| --- | --- |
| Battery sizing calculator |  |

1. Battery sizing calculator

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2. Leave open if uncertain [↑](#footnote-ref-2)