

# Reduce onboard electricity costs

As fuel prices continue to rise, so too does the cost of electricity on board your ship.

If you are using distillates for the generators and fuel is costing you \$1300 per tonne then the electricity on your ship could be costing you in the region of \$0.30 per kWh. If running on residual fuels then the cost is in the region of \$0.17 per kWh.

Taking the distillate example then this means that a 20kW motor running 90% of the time is costing you \$47,000 a year to operate. Multiply this across the electrical consumers across the ship and the individual costs can be surprising, and even a 5% reduction in electrical consumption of the largest regular consumers can result in real gains to your bottom line.

To start making savings you first need to review your fuel consumption and generator hours, and determine which of the loads are costing you the most. It isn't necessarily the largest motor that is costing you the most, as it might be running intermittently. Small continuously running motors can be costing you the most. Another hidden culprit can be lighting which is likely to be on 24/7 365 days a year.

If you aren't counting it you can't manage it, and you won't realise the benefits.



## Typical large consumers of electricity are:

- Seawater cooling pumps
- Machinery space ventilation fans
- Cargo pumps

## Tips for reducing your electricity usage on board are:

- Revise the scheduling for machinery on board.
- Train the crew to switch off machinery that isn't required.
- Repair compressed air system leaks.
- Ensure that you are using high efficiency motors for your large consumers.
- Speed control is much better than throttle valves, by-passes or dampers for flow control. Consider fitting variable speed drives.
- Replace the fluorescent and incandescent lighting with LED based technology. Check whether the lighting levels are too high for the task areas.
- Don't allow compartments to be cooled to below 24°C and don't condition compartments that aren't occupied.

## For further information on reducing electricity consumption contact:

*Ian Bonnar*

*SeaTec Safety, Risk & Environmental Services*

*Tel: +44 (0)141 305 1300*

*Fax: +44 (0)141 305 1301*

*Mob: +44 (0)7920 500 234*

*ian.bonnar@seatec-services.com*

## For further information contact

SeaTec UK Ltd, 1<sup>st</sup> Floor, Skypark, 8 Elliot Place, Glasgow, G3 8EP, Scotland (UK)

Tel: +44 141 305 1300, Fax: +44 141 305 1301, E-Mail: [info@seatec-services.com](mailto:info@seatec-services.com), Website: [www.seatec-services.com](http://www.seatec-services.com)