

ANNOUNCEMENT

MARCH 2023 THE 100TH ANNIVERSARY OF THE OPERATIONAL REPORT

The Working Cost Report¹ is the forerunner of the IPowerE Operational Report and was first presented to a meeting of the DEUA² on Friday 2 March 1923. We are therefore celebrating the 100th Anniversary of the Institution's Operational Report.

Timeline

- 1913 Formation of the Association as DEUA
- 1923 The first report covered six power stations with heavy oil engines in the UK and two from India
- 1924 The second report included 34 UK power stations and five stations in India
- 1962 Report included 100 stations ³
- 2003 Institution's 90th Anniversary published 90 year book³
- 2006 name remained Working Cost and Operational Report
- 2007 The name changed to Operational Report with reciprocating engines, gas turbines and CCGT
- 2013 Institution's 100th Anniversary since formation
- 2020 Report Includes Engines, Gas Turbines, CCGT, Hydro and Solar
- 2021 Report Includes Engines, Gas Turbines, CCGT, Hydro, Solar, Wind and Storage

In the beginning this report was known as the Report on Working Costs. Starting in 1923 with heavy oil engines, the Working Cost report has reported annually on operational data and operational costs for engines and power plants around the World. Initially the report also compared annual data from plants using reciprocating steam engines. With the arrival of the Gas Turbine the scope of the report was extended to include gas turbines and more recently combined cycle plants were added. 2020 was the start of reporting renewables data.

¹ DEUA Report on Heavy Oil Engine Working Costs March 1923

² DEUA is Diesel Engineers Users Association formed in July 1915 and became IDGTE then IPowerE

³ IDGTE 90 year book published 2003. Reference to Working Costs Report on Page 10.

When the working cost project was initiated in 1922 the objective was that the association would be in a position to give definitive and authentic average figures of the results obtained for heavy oil working costs by all members cooperating and assisting by making a return each year for the plants under their control. The request in the first instance was made for returns for the five previous years. ⁴

Changes in Name

The Working Costs Report soon became the Working Costs and Operational report and since 2007 it has been known simply as the Operational Report. From the beginning this has provided guidance and benchmark performance indices to Users of power generation plant worldwide. The reports rely upon the contributions of Users to ensure that the data is both comprehensive and statistically valid.

The Compilation

The Annual Operational Report is a unique compilation of data considered to be of value to organisations worldwide, including owners, operators, financial bodies, manufacturers and consulting engineers. Members are invited to get involved in the preparation of the report. This is one of a number of technical papers presented and published annually.

The report is only available to Members and Contributors. All contributors submitting a valid return receive a printed copy of the report when it is published.

Since 1998 (last 22 years) there has been over 44 countries represented in these reports. During this time there has been almost 600 Recip engine data sets reported with data for a total of 2740 engines. Also in these reports there are 210 gas turbine/CCGT data sets with data for 560 gas turbines being reported. ⁵

The reports started reporting renewables data in 2020 and this area of the report is growing.

The Pioneers

The names of our Pioneers who initiated the report ³ are H.L. Alderton, W.E. Brandreth, A.E. Farrow, A.C. Gilling, Charles Gould, C.O.Milton and Percy Still. The Institution owes a great deal to the enthusiasm and work of Percy Still in relation to the early work on the report.

Over the years there has been many members who have made huge contributions to the continuation of the annual report. The success of this work over the last 100 years is credited to all members and past committees involved.

⁴ Statement in the 1923 report

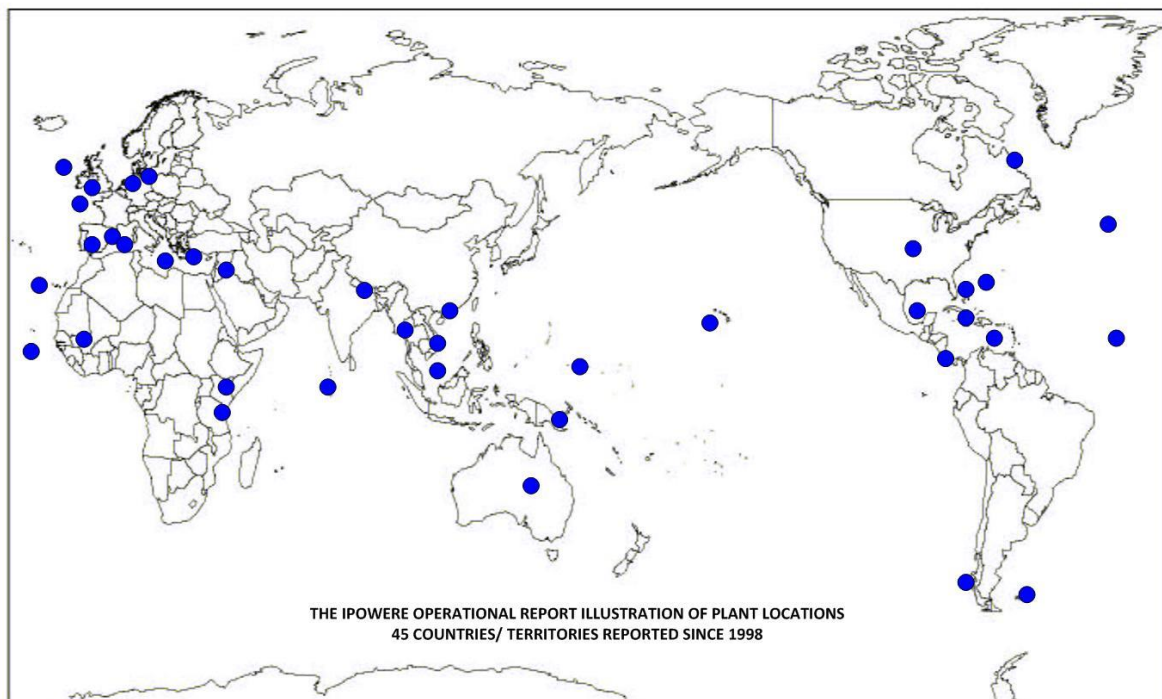
⁵ These numbers are the summation of the data sets in the reports for the 22 years (1998-2021)

The Contributors

Over the years there have been many Contributors who have generously provided data year after year.

We wish to highlight with thanks the following who have led the submissions by sending in more than 26 times consecutively:

- Guernsey Electricity
- Barbados Light and Power
- Mauritius Central Electricity



The Presentation

There is a presentation of the most recent results that is available to members on request. In recent times there have been several of these presentations made.

The Working Group Today

The IPowerE team today who members of the working group and working hard to keep the tradition of this work going are: David Robbins, George Cooper, Stan Archer, John Platt, John Blowes, Bulent Mehmetli and Ronald Hunt.

The team welcomes assistance from members and is always keen to have members join the group and give assistance.

None of this work would be possible without the returns submitted by our Contributors and a massive thank you is given to all Contributors.

Members and Owners/ Operators of plant worldwide are asked to contact IPowerE and confirm interest in supporting this valuable work.

The Institution of Power Engineers
Bedford United Kingdom
March 2023