Guidance on power station closure, decommissioning and handover for demolition or sale

Energy UK

energy institute

GUIDANCE ON POWER STATION CLOSURE, DECOMMISSIONING AND HANDOVER FOR DEMOLITION OR SALE

First edition

May 2020

Published by
Energy Institute, London
The Energy Institute is a professional membership body incorporated by Royal Charter 2003
Registered charity number 1097899

The Energy Institute (EI) is the chartered professional membership body for the energy industry, supporting over 23 000 individuals working in or studying energy and 200 energy companies worldwide. The EI provides learning and networking opportunities to support professional development, as well as professional recognition and technical and scientific knowledge resources on energy in all its forms and applications.

The EI's purpose is to develop and disseminate knowledge, skills and good practice towards a safe, secure and sustainable energy system. In fulfilling this mission, the EI addresses the depth and breadth of the energy sector, from fuels and fuels distribution to health and safety, sustainability and the environment. It also informs policy by providing a platform for debate and scientifically-sound information on energy issues.

The EI is licensed by:
– the Engineering Council to award Chartered, Incorporated and Engineering Technician status, and
– the Society for the Environment to award Chartered Environmentalist status.

It also offers its own Chartered Energy Engineer, Chartered Petroleum Engineer, and Chartered Energy Manager titles.

A registered charity, the EI serves society with independence, professionalism and a wealth of expertise in all energy matters.

This publication has been produced as a result of work carried out within the Technical Team of the EI, funded by the EI's Technical Partners. The EI's Technical Work Programme provides industry with cost-effective, value-adding knowledge on key current and future issues affecting those operating in the energy sector, both in the UK and internationally.

For further information, please visit **http://www.energyinst.org**

The EI gratefully acknowledges the financial contributions towards the scientific and technical programme from the following companies:

ADNOC
BP Exploration Operating Co Ltd
BP Oil UK Ltd
Chevron North Sea Ltd
Chevron Products Company
Chrysaor
CLH
ConocoPhillips Ltd
DCC Energy
Drax Group
EDF Energy
EDPR
ENI
E. ON UK
Equinor
ExxonMobil International Ltd
Innogy
Ithaca Energy
Intertek
Kuwait Petroleum International Ltd
Nexen CNOOC
Neptune Energy
Ørsted
Phillips 66
Qatar Petroleum
Repsol Sinopec
RWE npower
Saudi Aramco
Scottish Power
SGS
Shell UK Oil Products Limited
Shell U.K. Exploration and Production Ltd
Siemens Gamesa Renewables
Spirit Energy
SSE
TAQA Bratani
Total E&P UK Limited
Total UK Limited
Tullow Oil
Uniper
Valero
Vattenfall
Vitol Energy
Woodside
World Fuel Services

However, it should be noted that the above organisations have not all been directly involved in the development of this publication, nor do they necessarily endorse its content.

ISBN 978 1 78725 193 9

Published by the Energy Institute

Hard copy and electronic access to EI and IP publications is available via our website, **https://publishing.energyinst.org**.
Documents can be purchased online as downloadable pdfs or on an annual subscription for single users and companies.
For more information, contact the EI Publications Team.
e: **pubs@energyinst.org**

CONTENTS

Contents continued

Page

Contents continued

Page

LIST OF FIGURES AND TABLES

Page

Figure

Tables

FOREWORD

A number of (primarily) coal-fired power stations are expected to be decommissioned in the United Kingdom (UK) in the next 5–10 years. Upon handing over a power station to a specialist contractor for demolition, it is important that the power station is 'cold and dark' – i.e. hazards are isolated, the facility is decontaminated – and that all required information about the status of the plant (remaining hazards, etc.) are provided to the contractor.

This publication provides guidance on a typical project process to safely and economically prepare a power station for decommissioning and for its handover in a safe state for demolition. The guidance has been developed based on the experience of operators and references other guidance where appropriate.

The guidance covers the entire decommissioning life cycle, including preparation for the end of life during the plant operational lifetime, the late-life operations phase and into the actual decommissioning phase itself. General guidance on certain aspects of the demolition phase is also included to aid in planning, although this phase itself is beyond the scope of this publication.

The guidance does not provide the engineering detail required to safely carry out decommissioning or demolition. It instead focuses on planning, information gathering, contractor selection, general processes, and legislative requirements. Furthermore, whilst this publication covers some aspects of demolition, it only does so to make owner/operating companies aware of their responsibilities, and where this information is beneficial for planning prior to decommissioning.

This publication is primarily intended for station owners, station operators, decommissioning engineers, demolition engineers and project managers.

It should be noted this publication is guidance only; it is not a manual. Every power station is different, and each will have its own unique issues to manage.

The EI welcomes feedback on its publications. Feedback or suggested revisions should be submitted to:

Technical Department
Energy Institute
61 New Cavendish Street
London, W1G 7AR
e: technical@energyinst.org