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| Purpose | The purpose of this reference material is to support the requirements within HSF-PR-0015 by defining the actions and specific requirements for managing the process of avoiding risks from overhead and underground assets and services. | |
| **Scope** | All BB Power Transmission and Distribution operations including joint ventures, partners and subsidiaries within the Substations, Cabling and Overhead Line Sectors unless specific alternative arrangements are agreed and in place. | |
| **Abbreviations/ Definitions** | AWNES  SAE  AP  WS  PM  SE  OM  SA  TD  CPP | *Authorisation to Work Near Existing Services*  *Senior Authorising Engineer (AWNES)*  *Authorising Person (AWNES)*  *Works Supervisor*  *Project Manager*  *Site Engineer (or Site Lead from HSF-PR-0015)*  *Operations Contract Manager*  *Safety Health Environment & Quality Advisor*  *Training Dept.*  *Construction Phase Plan* |

**ASSOCIATED DOCUMENTS**

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| **Reference No.** | **Document Type** | **Document Title** |
| HSF-TF-0015a-PTD | Template Form | Power T&D Authorisation to Work Near Existing Services (AWNES) |
| HSF-TF-0015f-PTD | Template Form | Review of AP (AWNES) |
| HSF-TF-0015g-PTD | Template Form | Assessment of AP (AWNES) |
| HSF-TF-0015h-PTD | Template Form | Concession for Non-Compliant Panel Member Nomination (AWNES) |
| HSG 47 | HSE Guidance | Avoiding Danger from Underground Services |
| GS6 | HSE Guidance | Avoiding Danger from Overhead Power Lines (4th edition 2013) |
| ENATS 43-8 | ENA Guidance | Overhead Line Clearances |
| ENA - SHE\_DL | ENA Guidance | Working in the Vicinity of Overhead Lines |
| Look out Look up | ENA Guidance | The Safe Use of Mechanical Plant in the Vicinity of Electricity Overhead Lines |

**DOCUMENT SIGN OFF**

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| **Position** | **Name** | **Signature** | **Date** |
| Head of Engineering – Scotland & Senior Authorising Engineer (AWNES) | Richard Hutchinson | Approved by e-mail | 27.09.17 |

reference material

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| Item 2.2 of HSF-PR-0015 mandates “Each SBU must produce a specific documented process to establish the competence of the Authorising Person (AWNES) and the formal appointment to this role.”  This is achieved by the following; | | | | | |
|  | | **Training, assessment and appointment** | | | **OM** |
|  | | **The AP must have ;** | | |
|  | | * Experience of construction works that interface with underground and overhead lines | | |
|  | | * Knowledge of the Asset Owners systems and procedures | | |
|  | | * Understanding of utility drawings | | |
|  | | * Current certified technical ability to use underground utility location equipment | | |
|  | | * Knowledge of the dangers and control measures associated with underground and overhead utilities. Such as completing training in HSG47 and GS6 | | |
|  | | * Understand how to manage and apply the AWNES Authorisation Process | | |
|  | | * They must hold current competency certification in the specific use of Cable Locating Equipment | | |
|  | | **PTD Specific Requirements ;** | | |
|  | | * Must have completed training in HSG47 and GS6. (refer to 1.2 below) | | |
|  | | * They must have experience in excavation work and/or working in proximity to overhead power lines or underground services | | |
|  | | * They must have shadowed an experienced AP through the AWNES process on a minimum of 5 occasions | | |
|  | | The recommended training course for BB Power T&D is ‘Utility Excavations (Category One) – Locate Utility Services’ which is accredited through the Energy & Utility Skills Register (EUSR).  The course is delivered by the Power T&D training department, together with training on the AWNES Procedure. | | | **TD** |
|  | | To hold the position of an AP an assessment must be carried out to confirm that the candidate has a full understanding of the **role and the responsibilities** of the AP. | | |  |
|  | | Requests for a candidate to undergo an assessment can be made through the Training Department, or directly to Panel Members | | | **OM** |
|  | | **Assessment (3 Yearly)**  The assessment process will consist of a formal interview where an Assessment Panel will determine the competence of the candidate to discharge the responsibilities of the role.  This will require the candidate to demonstrate their knowledge and experience, possibly based upon a scenario, or examples, and will review their past history of service avoidance.  The results of the assessment will be recorded using HSF-TF-0015g-PTD Assessment of Authorising Person (AWNES). | | | **OM/SAE** |
|  | | Newly appointed APs must then have their first 5 AWNES documents countersigned by an experienced AP before issue. | | | **AP** |
|  | | **Review (Annual)**  The Operations Contract Manager will be required to arrange a review of the AP every 12 months in order to ensure that the AP has been actively issuing AWNES as per the procedure.  The review will be performed by a Panel member - nominated by the OM.  The results of the review will be recorded using HSF-TF-0015f-PTD Review of Authorising Person (AWNES).  If the AP does not meet the criteria of the review, authorisation to issue AWNES will expire.  All APs will be required to undergo a full Assessment Panel at a maximum every 3 years. | | | **SAE/OM/TD** |
|  | | **The Assessment Panel form or review form will be sent to Training Dept and the certificate of appointment as Authorising Person will be issued by training.** | | | **TD** |
|  | | When appointed as an AP the certification issued will hold an expiry of one year to trigger an annual review to take place. (where an expiry has lapsed then Review can be performed if the previous 3 year Assessment remains in date, otherwise a full Assessment would be required). | | | **TD** |
|  | | AP AWNES Assessment panel members | | |  |
|  | | Persons nominated to be appointed as an AP will be assessed by a panel comprising of: | | | **SAE/SA/OM** |
|  | | * Safety Advisor, nominated by the SAE, and | | |  |
|  | | * Current AP, nominated by the Operations Contract Manager | | |  |
|  | | Panel Members must meet the requirements of the AWNES Assessment Panel (Section 7), and be appointed in writing by the SAE or OM accordingly. | | | **OM / SAE** |
|  | | Where a proposed Panel Member does not meet the full requirements of the AWNES Assessment Panel (Page 6) then a concession can be requested by the OM using the Concession for Non-Compliant Panel Member Nomination (AWNES) (HSF-TF-0015h), to the SAE. | | | **OM** |
|  | | **Planning Stages for a Safe System of Work** | | |  |
|  | | **Utility Detection Surveys (HSF-PR-0015 Section 4.1)** | | |  |
|  | | “The Pre-Construction Lead must determine if any additional utility detection surveys must be undertaken and ensure the information obtained can be used to form part of the Pre-Construction Information. The types of detection survey available are detailed in Utility Detection Surveys (HSF-RM-0015c); however the minimum acceptable for the planning stage is a Desktop Survey.”  The Pre-Construction Lead, and Site Lead will be considered as the Project Manager – or a delegate, from Stage Gate 5.  Where the duties are delegated to a Pre-Construction Lead, or Site Lead, the Project Manager remains responsible for the activity.  Prior to the works commencing the relevant utility and/or asset owners will be formally contacted to advise if they have any services in the vicinity of planned works or site accesses.  This will normally be provided in the form of utility plans.  All requests for information from the relevant utility and/or asset owners should be recorded and auditable.  Composite plans must be used for reference only. | | | **PM** |
|  | | ***Section 4.1.1;*** Where the Pre-Construction Lead must perform a Desktop Study as a minimum, this should be undertaken with adequate time for responses to be obtained and checked prior to works commencing.  All requests for information from the relevant utility and/or asset owners should be recorded and auditable.  This check should be performed against all asset owners according to the Standard Utility Suppliers Schedule (Page 7-9), as well as any other assets known within the project scope (i.e. local telecoms sites) | | | **PM** |
|  | | ***Section 4.1.2;*** Where “the Site Lead must determine if a detailed composite drawing(s) / Schedule is required”, PTD requires this decision should be documented and recorded in the Construction Phase Plan. | | | **PM** |
|  | | ***Section 4.1.3;*** A desktop survey older than 90 days can be used where a Risk Assessment is performed and recorded in the CPP.  This should be site specific and ensure control measures are in place to check for the presence of new services (i.e. New cat scan, review of work area for scarring or trenching) | | | **PM** |
|  | | Substations | | |  |
|  | | Where work is to be undertaken within a live substation environment the client SAP must be consulted at the earliest opportunity to advise upon safety from the system. | | | **PM** |
|  | | **Completion of AWNES Document - HSF-TF-0015a-PTD** | | |  |
|  | | **Section 5.1.3;** PTD requirement is the Authorising Person performs the CAT and Genny scan and identifies and marks the services at time of issuing the AWNES. Ideally this is performed together with the WS or qualified CAT and Genny member of the working party. | | |  |
|  | | The AP will brief the contents and scope of the document to the WS, ensuring that it is understood - in particular the site specific, ‘Control Measures’.  A copy of the AWNES document will be issued to the WS confirming the above. | | | **AP** |
|  | | The WS will brief the contents of the AWNES document to the working party.  Any future additions to the working party, will receive the same briefing from the WS.  Verification of the briefing will be by signature of the working party members; this must be available for inspection if required. | | | **WS** |
|  | | When all trial holes have been completed and all known services have been positively located and traced, the main works can commence. | | | **WS** |
|  | | Section 6.4.1; If the work being carried out involves “rolling trench excavation” in a heavily congested area the Works Supervisor can fulfil the role of the AP for completion of Part 3a “Trial Hole”  This must be agreed with the Site Engineer prior to works starting and detailed in the Task Specific Method Statement for the work.  Conformation the WS is undertaking the role of AP must be detailed on AWNES  For all rolling trench work the WS must be present on site to oversee any excavation work involving HP utilities as indicated in Part 3a. | | | **SE/WS** |
|  | | **PTD Requirement;** AWNES documents cannot be transferred.  A new AWNES document must be issued by an AP if the original WS or AP is unavailable to carry out the works. | | | **AP/WS** |
|  | | Supervision | | |  |
|  | | All WSs who will be required to receive an AWNES document and brief a working party on its contents and controls must be briefed on the AWNES procedure (HSF-PR-0015). This can be done with the HSF-TBT-0015a-PTD which should be recorded in the CPP, with a copy to BB Training Dept. | | | **PM** |
|  | | The AP MUST withhold AWNES document if the WS does not demonstrate suitable competence in avoidance of services for the tasks proposed. | | |  |
|  | | The WS must ensure that the working party is supervised during the activities covered by the AWNES document. | | | **WS** |
|  | | The AP will check the AWNES document controls and mitigations are being followed and implemented. | | | **AP** |
|  | | If the scope of the work changes resulting in any variances from the issued document then work must cease and the AP notified so that a new AWNES can be issued. | | | **WS/AP** |
|  | | AWNES Assessment Panel | | |  |
|  | | **Operations - Panel Member** | | |  |
|  | | 1. Will be an experienced AP and will be nominated by the respective Operations Contract Manager within Balfour Beatty Power T&D | | |  |
|  | | 1. Will be independent of the contract on which the AP to be assessed is based | | |  |
|  | | 1. Will have sufficient experience of working within the utility environment to be fully aware of the hazards presented by existing services, and to be able to question and gauge the response of the AP being assessed | | |  |
|  | | 1. Will have sufficient knowledge of utility drawings and composite maps in order to question and gauge the response of the AP being assessed | | |  |
|  | | 1. Will have successfully completed ‘Utility Excavations (Category One) – Locate Utility Services’ course within last three years | | |  |
|  | | 1. Will have in depth knowledge of HS (G) 47 & GS 6 | | |  |
|  | | 1. Will have an understanding of the Avoiding Danger from Services procedure (HSF-PR-0015) | | |  |
|  | | 1. Will be a current issuer of AWNES documents | | |  |
|  | | **SHESQ – Panel Member (Nominated by the SAE)** | | |  |
|  | | 1. Will have sufficient experience of working within the utility environment to be fully aware of the hazards presented by existing services, and be able to question and gauge the response of the AP being assessed | | |  |
|  | | 1. Will have sufficient knowledge of utility drawings and composite maps in order to question and gauge the response of the AP being assessed | | |  |
|  | | 1. Will have successfully completed the ‘Utility Excavations (Category One) – Locate Utility Services’ course within last three years | | |  |
|  | | 1. Will have in depth knowledge of HS(G) 47 & GS 6, and how they are applied in relation to the work carried out by Balfour Beatty Power T&D | | |  |
|  | | 1. Will have an understanding of Avoiding Danger from Services procedure (HSF-PR-0015) | | |  |
|  | | 1. Will be able to assess the character/attitude to sufficient depth in order to gauge the AP’s responses to ensure compliance with conditions of AWNES requirements by Work Supervisor, and Works Operatives | | |  |
|  | | 1. Will be independent of the contract on which the AP to be assessed is based | | |  |
|  | | **Newly Appointed Assessment Panel Members - SAE (or delegated Representative) & Operations** | | |  |
|  | | 1. Will be nominated as a Panel Member by the SAE or Operations Contract Manager respectively | | |  |
|  | | 1. Will ‘observe’ at least three Assessments of AWNES APs | | |  |
|  | | 1. Will then ‘carry out’ at least three Assessments of AWNES APs with an experienced Panel Member | | |  |
|  | | 1. Will then be approved as a Panel Member by the SAE or operations manager | | |  |
|  | | **Standard Utility Suppliers Schedule** | | |  |
| **Linesearch - Online** | | | | | |
| **Services:** | | | | | |
| 1 | BOC Limited (A Member of the Linde Group) | | 16 | Gamma | |
| 2 | BP Midstream Pipelines | | 17 | Geo Networks Limited | |
| 3 | BPA | | 18 | Humbly Grove Energy | |
| 4 | Centrica Energy | | 19 | HV Cables | |
| 5 | CLH Pipeline System Ltd | | 20 | IGas Energy | |
| 6 | ConocoPhillips (UK) Ltd | | 21 | Ineos Enterprises Limited | |
| 7 | Coryton Energy Co Ltd (Gas Pipeline) | | 22 | INEOS Manufacturing (Scotland and TSEP) | |
| 8 | EIR Grid | | 23 | Intelligent Trench | |
| 9 | Electricity North West Limited | | 24 | Lark Enegy | |
| 10 | E-on UK Plc (Gas Pipelines Only) | | 25 | Mainline Pipelines Limited | |
| 11 | ESP Utilities Group | | 26 | Manchester Jetline Limited | |
| 12 | ESSAR | | 27 | Marchwood Power Ltd (Gas Pipeline) | |
| 13 | Esso Petroleum Company Limited | | 28 | National Grid Electricity Transmission (Overhead Line) | |
| 14 | FibreSpeed Limited | | 29 | National Grid Electricity Transmission (Gas) | |
| 15 | Fulcrum | | 30 | National Grid Electricity Transmission (Underground Cable) | |

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| 31 | Northumbrian Water Group (inc. Essex & Suffolk Water) | 3 | Scottish Power Energy Networks |
| 32 | NPower CHP Pipelines | 4 | SSE |
| 33 | Oikos Storage Limited |  | Check LV and Fibre Optic Cables at 1:1250 |
| 34 | Perenco UK Limited (Purbeck Southampton Pipeline) | 5 | SSE |
| 35 | Phillips 66 |  | Scottish Hydro - Electric |
| 36 | Premier Transmission Ltd (SNIP) | 6 | UK Power Networks |
| 37 | RWEnpower (Little Barford and South Haven) |  | (Soon to be in Linesearch) |
| 38 | SABIC UK Petrochemicals |  | No Website Available |
| 39 | Scottish Power Generation | **Water Utilities** | |
| 40 | Sea Fibre Networks | 1 | Affinity Water |
| 41 | Seabank Power Ltd |  | Covers Folkestone and Dover Water Services |
| 42 | Shell Pipelines |  | For sewerage information contact Southern Water |
| 43 | Total UK (Finaline, Colnbrook & Colwick Pipelines) | 2 | Anglian Water |
| 44 | Transmission Capital |  | (DIGDAT) |
| 45 | Western Power Distribution | 3 | Bournemouth & West Hampshire (Water Only) |
| 46 | Wingas Storage UK Ltd |  | For sewerage information contact Southern Water |
| 47 | Zayo (previously AboveNet) | 4 | Bristol Water PLC (Water Only) |
| **National Grid** | |  | For sewerage information contact Wessex Water |
| 1 | National Grid Eagles System | 5 | Cambridge Water (Water Only) |
| **Oil & Gas Pipeline Utilities** | |  | (Part of South Staffordshire Water) |
| 1 | Cirque Energy (UK) Ltd |  | Sewerage information on DIGDAT |
|  | Pipes are only in Lincolnshire | 6 | Cholderton and District Water (Water Only) |
| 2 | Energetics Electricity (Gas & Electricity) |  | For sewerage information contact Southern Water |
| 3 | GTC | 7 | Dee Valley Water |
| 4 | Northern Gas Networks (Distribution Only) | 8 | Essex and Suffolk Water (Water only) |
| 5 | SGN - Scotia Gas (Distribution Only) |  | (Part of Northumbrian Water Group) |
|  | (Linesearch for small jobs) |  | Sewerage information on DIGDAT |
| 6 | Wales & West Utilities | 9 | Hartlepool Water |
| **Electricity Utilities** | |  | (Part of Anglian Water) |
| 1 | Northern Powergrid (NEDL) | 10 | Northumbrian Water Group |
| 2 | Northern Powergrid (YEDL) |  |  |
| 11 | Portsmouth Water Ltd (Water Only) | 3 | C A Telecom UK Ltd |
|  | For sewerage information contact Southern Water | 4 | City Fibre |
| 12 | Scottish Water |  | All Areas apart from East Yorkshire |
| 13 | Severn Trent Water Ltd |  | Use KCOM to search in East Yorkshire |
| 14 | South East Water (Eastern Region) (Water Only) | 5 | Instal |
|  | For sewerage information contact Southern Water | 6 | Interoute |
| 15 | South East Water (Western Region) (Water Only) | 7 | KCOM |
|  | Sewerage information on DIGDAT |  | Networks are only in East Yorkshire |
| 16 | South Staffordshire Water (Water Only) |  | Use City Fibre to search all other areas |
|  | (Includes Cambridge Water) | 8 | MBNL (formerly Ericsson) |
|  | For sewerage information contact Seven Trent Water | 9 | McNicholas Construction Services Ltd |
| 17 | Southern Water | 10 | Redcentric |
| 18 | South West Water |  | Networks are only in Cambridge / Portsmouth / Southampton /Nottingham / Newbury / Northampton / Derby and Frimley |
| 19 | Sutton and East Surrey Water (Water Only) | 11 | Telent |
|  | For sewerage information contact Southern Water | 12 | Verizon |
| 20 | Tendring Hundred Water Services (Water Only) | 13 | Virgin Media |
|  | Sewerage information on DIGDAT |  | (DIGDAT) |
| 21 | Thames Water | 14 | Vtesse |
|  | (DIGDAT) | **Environmental** | |
| 22 | United Utilities | 1 | Magic |
| 23 | Welsh Water (Dwr Cymru Cyfyngedig) |  |  |
| 24 | Wessex Water |  |  |
| 25 | Yorkshire Water |  |  |
| **BT** | |  |  |
| 1 | British Telecom |  |  |
| 2 | NNHC |  |  |
| **Telecommunications** | |  |  |
| 1 | Atkins Telecoms (formerly Vodafone) |  |  |
| 2 | BSKYB |  |  |