



ANNEX 11: ASSET MANAGEMENT POLICY

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Asset Management Policy

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Approved for issue by the Technical Policy Panel

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Amendment Summary

Amendment No. Date	Brief Description and Amending Action
0 14/03/96	Originally drafted as Code of Practice 201: Issue 1 Prepared by: PJW
1 24/03/98	Appendix 2 removed; superseded by EPD204 Prepared by: MK
0 13/01/05	Reconfigured as EPD215: Issue 1 Updated to take account of the Distribution Price Control Review (X _{d4}) and organisational changes. Prepared by: Peter Leather Approved by the Standards Steering Group and signed on its behalf by Paul Whittaker:
0 27/07/07	Issue 2 Updated to take account of PAS-55 requirements Prepared by: Jonathan Booth Approved by the Technical Policy Panel and signed on its behalf by Simon Rushton:

ASSET MANAGEMENT POLICY

1. INTRODUCTION

This Electricity Policy Document (EPD) applies to the assets of Electricity North West Limited, hereinafter referred to as Electricity North West. It sets down the policy for managing the assets comprising the electricity distribution network. It describes how other Electricity North West' policies, Codes of Practice (CP) and procedures are to be considered and integrated, in order to optimise the whole life management of the constituent parts of the network, to produce a holistic approach to meeting business needs.

It is also intended that the policy shall be, out of necessity, dynamic. It is to be used to construct the dynamic strategic plans required by the company in order to meet changing business needs, on a year-on-year basis.

Throughout, all the following fundamental principles should be borne in mind. The network exists to transport electrical energy from the National Grid and from generators to consumers. It shall be designed and constructed using the minimum amount of equipment necessary to ensure that electricity distribution is achieved with the appropriate level of safety, quality, security and availability. These levels are expected to change over time in accordance with our customers' increasing expectations for improved levels of service. All the associated policies shall be applied and integrated as appropriate to achieve this.

2. SCOPE

This EPD applies to the whole life approach to the management of Electricity North West' network assets. This whole life period is divided into the following stages:

- (a) Network design
- (b) Installation
- (c) In service operation
- (d) Maintenance
- (e) Refurbishment
- (f) Removal
- (g) Replacement

3. PRINCIPLES OF ASSET MANAGEMENT

The principles set out below are to be applied within the framework of the legal, regulatory and statutory obligations with which Electricity North West is required to comply.

Bearing in mind that the network exists to transport electricity, the principles of its management are:

- The network shall be operated to ensure that the risk to the network operators and to the general public is properly managed and, so far as is reasonably practicable, limited.
- The service to customers shall be modified or improved, in order to meet customers' needs and in accordance with the regulatory regime.

- Within the constraint of the above two requirements, the network shall be designed, constructed, operated, maintained and dismantled in a manner consistent with minimising its whole life cost.
- Decisions will be informed by the best available asset data held within the corporate databases, and risk assessments undertaken in line with the company's risk assessment procedures.
- Resulting intervention plans will be incorporated in the Company Business Plan (CBP) which is reviewed on an annual basis.

The application of these principles shall be undertaken at all stages of the network life cycle, but may carry different weightings to suit the point on the life cycle of individual or groups of assets, the customer needs and the business needs. Electricity North West is committed to applying a process of continual improvement to these asset management principles.

4. QUANTIFICATION OF THE PRINCIPLES

4.1 Risk to Operators and the General Public

Risk shall be assessed by using Electricity North West' standard risk assessment procedures. They shall cover all areas which generate potential risk, because activities are undertaken and products employed. The assessments shall consider those undertaking the activities and third parties, and have due regard for the environmental impact of the products and processes employed. Risk assessments describing acceptable levels of risk against which in-service changes can be benchmarked shall be produced as follows:

- Assessments covering changes to the network design policy and asset replacement policy shall be undertaken by the Network Planning Policy Manager.
- Assessments covering extensions to the network using approved network designs shall be undertaken by network designers. The Connections Compliance Manager shall be responsible for assessing the risks associated with the adoption of networks, designed and constructed by Electricity North West Networks and other Independent Connection Providers (ICP).
- Assessments covering construction work shall be undertaken by the construction project managers undertaking work on the Electricity North West' network.
- Assessments covering network operations policy shall be produced by the Operations and Safety Section.
- Assessments covering the introduction of new equipment and processes shall be undertaken, as appropriate, by the Plant Policy Manager, the Overhead Policy Manager, the Underground Policy Manager and the Protection and Control Policy Manager.
- Assessments covering the policy on the inspection and maintenance of the existing network equipment and the re-use of refurbished equipment shall be undertaken by the appropriate maintenance policy manager.
- Assessments of required medium-term asset serviceability, including asset fault rates and network capacity shall be undertaken by the Asset Performance Managers.
- Risk assessments carried out on in service assets shall be the responsibility of the Electricity North West Limited (Electricity North West).

4.2 Customer Service

4.2.1 Customer service shall be defined using the following parameters:

- The minimum standard of security to be achieved shall be the standard set by the Director General of Electricity Supply, as stipulated in Electricity North West Distribution Licence (not less than P2/6).
- The internal Company targets for CI, CML and multiple interruptions, which may be the same as the Ofgem targets or different targets set by the Company to fulfil business needs.

4.2.2 Measurement of achievement shall be by comparison of actual achievement against Company targets.

4.3 Cost

The aim is to minimise the whole life cost of the network, including where appropriate the income that assets may generate over their lifetime (eg through their contribution to incentive out-performance). The requirement of this policy is to look at the remaining life period of all of the existing assets and the whole life period of all new assets, with the aim of optimising regulatory profit over that life period.

Remaining life cost studies shall use the best estimate of actual remaining life of individual assets. The analysis shall include the cost for individual types of assets as well as for families/groups and for circuits and networks. Whole life cost studies shall use the design lives of assets which are defined in EPD204. However, the actual life of any individual item of equipment shall be determined from a condition-based assessment.

5. INVESTMENT PATTERNS

Future plans and programmes of work will be developed through the application of the asset management policy and its associated targets to the current asset base to ensure consistency between asset management objectives and the plans put in place to achieve those objectives.

Replacement activity shall be determined through the application of Condition-Based Risk Management (CBRM) techniques to assess the current and expected future risk of the assets and to design appropriate interventions consistent with achieving the overall asset management objectives.

Such plans will be formally issued in the form of the CBP and set in the context of 25-year projections.

It is the established practice, with the capital investment programme, to build and replace networks on the basis of the most economical designs and the lowest cost equipment available. The revenue investment has been made on a more regularised basis in line with, say, the ongoing maintenance of the network. However, the balance between these two budgetary areas may be altered year-on-year to meet the needs of the business. This shall be achieved by making best use of the appropriate resources available over any given time period, for example, by deferring revenue expenditure, in order to concentrate on capital investment, which may be required to remove a large number of high risk, low reliability assets from the network.

Such variations may affect the application of a whole life management policy. Therefore, the effects of such changes should be evaluated by those involved in reviewing budgetary re-alignment when developing the asset management plan.

6. FORMULATION OF POLICIES COVERING EACH OF THE PERIODS OF LIFETIME

In order that policies may be fully developed such that they provide clear direction on how to meet the business needs, make best use of the available technology and are practical and usable by the practitioners of the policy, their formulation shall be undertaken under the control and direction of the Technical Policy Panel (TPP). The process for the approval, including the review by all interested sections of the business, of all documents setting out the policies, practices and specifications to be used by Electricity North West shall be as described in EPD001.

7. ASSET MANAGEMENT SYSTEMS

Effective asset management requires the use of databases against which the assets can be registered and within which the condition information gathered during commissioning, inspections, and diagnostic tests can be lodged. The IT system shall be able to function as a tool which will assist in the processing of the condition information held and wherever possible, in the determination of the inspection and overhaul regimes. The system shall be able to produce condition reports based upon the information held and contain condition triggers, which shall prompt the review of the equipment group for consideration of refurbishment, replacement or removal. The system shall be capable of producing inspection, maintenance and refurbishment schedules.

The system shall be further developed to allow assessment of performance of the network, preferably on a per circuit basis, thus allowing reviews of the effectiveness of investment decisions.

8. DOCUMENTS REFERENCED

ENA ER P2/6 - Security of Supply

Electricity North West Distribution Licence

EPD001 - Documentation Standards and Technical Library Service

EPD204 - Distribution Network Equipment Asset Lives

9. KEYWORDS

Asset; Construction; Maintenance; Operation; Planning; Refurbishment.