Electricity Distribution Price Control Review

Network costs - August forecast business plan questionnaire rules:

Instructions and guidance

May 2008

1. Summary

The purpose of these Rules is to provide a framework for the collection and provision of accurate and consistent forecast business plans for Network costs up to the end of the DPCR5 period (i.e. up to and including 31st March 2015) from the electricity distribution network operators.

2. Introduction

- 2.1. The August Forecast Business Plan Questionnaire (FBPQ) uses the same definitions as those used in the Price Control Review Reporting Rules. The purpose of this document is to provide additional guidance required for the completion of the August FBPQ.
- 2.2. For all queries on completion of the cost reporting pack or if any formula errors or other such errors are discovered on completion, an email should be sent to:

Network investment team

E-mail: NetworkInvestment@Ofgem.gov.uk

3. Data Tables and Commentary

3.1. The Data Tables should be completed and submitted in electronic format as a Microsoft Excel file. The Commentary should be completed and submitted in electronic format as a Microsoft Word file. Submissions as portable document format ("PDF") files are not permissible.

4. FBPQ Purpose and Instructions

General Instructions for Completion

Overview

The FBPQ is in the form of an Excel workbook. It consists of a number of data entry sheets and summary tables allowing comparison of the forecasts to DPCR4 expenditure.

Data Entry

Table formatting and data entry is generally in line with RRP:

- All data is to be input rounded to the nearest £100,000 (i.e. one decimal place).
- All costs are to be entered as positive numbers except where indicated otherwise.
- All cells that are linked formulas are coloured white with black text.
- Cells that are not relevant for data input are coloured black.
- All cells totalling and sub-totalling other columns and rows are coloured grey.
- All data input cells will show as blue text when entered.
- Cells requiring DNO data input are coloured yellow.
- Cells linked to RRP data are coloured orange.
- Cells linked to CIR returns data are coloured lilac.
- Cells linked to QoS returns data are coloured light blue.
- Cells linked to revenue returns data are coloured light green.

• For cells in orange, lilac, light blue and light green, Ofgem undertake to develop mapping from the relevant returns and/or populate with data. Ofgem will work with the DNOs over the coming months to agree the population of the historic data.

All prices should be entered in 2007/08 prices.

Pensions

The normal level of pensions should be included in the tables. Any upfront payments that have been made should be pro rata'ed across the applicable forecast years.

Definitions

Definitions are in line with those used in RRP. Further guidance for new data entry fields and column and row headings is given in the table specific guidance below.

Worksheet Protection

Worksheets within the FBPQ are password protected to ensure no rows or columns are added or deleted and that no formulas are altered. Only the input cells coloured yellow are unprotected enabling data entry and have been set to accept only positive or negative amounts as appropriate. This is to ensure that all DNOs report data in the same manner.

Version Control

To monitor submissions and resubmissions and track changes in resubmissions.

Instructions

for Completion

Purpose

• Enter the name of the DNO and the date of the initial submission.

• Where it is necessary to resubmit for any reason, enter the details of the resubmission in subsequent rows.

Contents

Purpose

Shows all tables included in the pack and briefly describes their purpose

Instructions

for

Completion

No data input required.

Table T1 Summary

Purpose

Presents a summary cost table for Network Costs and Business Costs disaggregated by high level building blocks for DPCR4 and DPCR5 and shows the percentage change between the two price control periods.

Instructions for

Completion

• No data input required.

Table T2 Total network costs

Purpose

Presents network costs disaggregated into individual building blocks for DPCR4

and DPCR5.

Instructions for Completion

• No data input required.

Table T3 Total business costs

Purpose

Provides a high level break down of the impact on business costs of the Building Blocks reported elsewhere in the FBPQ. The table also collects data relating to any other expected changes in the business costs not directly attributable to the Building Blocks.

The table also collects data relating to actual and forecast spend on Non-Operational assets.

Instructions for Completion

For simplicity of reporting for the high level FBPQ the Business Costs have been split into four groupings. These groupings consist of the Activities as defined in the 2007-08 reporting year's Regulatory Reporting Pack (RRP). These are:

- Engineering Indirects, consisting of
 - o Network Design
 - o Project Management
 - o Engineering Management & Clerical Support
- Network/Investment Support, consisting of
 - o Control Centre
 - System Mapping
 - Network Policy
 - o Call centre
 - Stores
 - Vehicles & Transport
 - Health & Safety and Operational Training
- Business support, consisting of
 - o IT & Telecoms
 - o Property Management
 - o HR & Non-Operational Training
 - o Finance and regulation
 - o CEO etc.
- Non-operational capex, consisting of
 - o Vehicles
 - o Plant & machinery
 - o Small tools & equipment
 - o Office equipment
 - o Non-operational property
 - o IT non-operational capital expenditure
 - o Telecoms non-operational capital expenditure

For each of the years 2005-06, 2006-07 and 2007-08 the absolute costs for **Engineering Indirects** and **Network/Investment Support** that have been incurred resulting from the high level building blocks (RRP direct activities) should be included (based on best management judgement) in the middle tables on the sheet.

For those years, the remaining costs, i.e. those not incurred as a result of those high level building blocks, are to be split on a per Activity basis in the lowest

table. This will include costs in the Activities that make up Engineering Indirects and Network/Investment Support and for those included within Business Support.

For 2008-09 and subsequent reporting years, absolute costs should be reported in the middle tables, where they are incurred as a result of those high level building blocks, and the lower table, where they are not.

The total table and the DPCR4 and DPCR5 tables will be populated automatically.

Non-operational capex

The actual Non-Operational Capex costs for the years 2005-06 to 2007-08 should be linked to the latest version of the RRP for each of those years.

The forecast figures for each of those costs are to be included in total for each year. The Total rows and the DPCR4 and DPCR5 tables will populate automatically.

Table LR1 Demand

Purpose

For the collection of DNOs' demand forecasts, numbers of connections/disconnections and expenditure on customer specific demand investment to inform levels of activity on the network which may drive load related investment and to inform modelling.

Instructions for Completion

Demand trends table

Collects high level information on system demand trends and demand changes attributable to new connections, existing connection demand increases/reductions and disconnections. Engineering judgement should be used to estimate the incremental effect of connections/disconnections/changes in connection capacity on maximum demand.

Enter forecast system maximum demand in MW for the DNO's network. Data entered for "Incremental increase in max demand due to new connections" should estimate the contribution of new connections provided within each financial year to the demand at the time of system peak. Data entered for "Incremental increase in max demand due to existing connections increases" should estimate the contribution of increased demands from existing connections within each financial year to the demand at the time of system peak. Data entered for "Incremental reduction in max demand due to disconnections" should estimate the negative contribution of disconnections provided within each financial year to the demand at the time of system peak. Data entered for "Incremental reduction in max demand due to existing connections decreases" should estimate the negative contribution of reductions in demands from existing connections within each financial year to the demand at the time of system peak.

Enter the forecast units distributed in GWh during the reporting year by voltage level. "Incremental increase in units distributed attributable to new connections" should be populated with estimates of the annual MWh consumption of new connections provided within the financial year by voltage level.

Connections/disconnections table

Forecast number of new connections and number of disconnections should be entered by voltage level with connections split between IDNO connections and non IDNO connections.

Customer specific demand investment table

Customer specific demand expenditure forecasts should be entered by voltage in the same categories as required by RRP, i.e.:

- New connections (carried out by DNO/RP)
- New connections (carried out by third parties)
- Customer specific reinforcement chargeable (apportionment)
- Customer specific reinforcement non chargeable (DNO funded)

DNOs should also estimate forecast expenditure on DSM measures or other network technology for the purposes of avoiding expenditure on customer specific investment. The expenditure avoided through use of DSM measures and proliferation of DG should also be forecast.

Table LR2 Generation

Purpose

For the collection of information on the forecast of distributed generation (DG) and expenditure on its connection, for assessment of load related expenditure and to feed into modelling.

Instructions for Completion

Generation forecast by type table

Enter a forecast for number and capacity of DG connections by connection voltage and type.

Enter forecast expenditure during DPCR5 by category as defined in the DG RIGS:

- Use of system capex for DG
- Shared connection capex for DG
- Sole use connection capex for DG

Total capex for DG is automatically calculated.

Enter the range of uncertainty in the forecast of total MW connected in DPCR5 by generation type. Also enter the range of uncertainty in the forecast of total capex for DG connected in DPCR5 by generation type.

Generation expenditure table

Expenditure is split into expenditure on 'relevant' and 'non relevant' DG for the DPCR4 period. All DG is considered 'relevant' for the DPCR5 period and expenditure should therefore be entered in the 'relevant' section of the table.

Enter forecast expenditure on relevant DG by voltage and further disaggregated into the four categories detailed above. Enter expenditure on non relevant DG and associated customer contributions for the DPCR4 period.

Table LR3 Diversions

Purpose

To collect volume and forecast expenditure information for non rechargeable diversions to assess capex requirements for DPCR5.

Instructions for Completion

The first table on the sheet is automatically summed from the data entry table below.

The data entry table is split into two for the collection of diversion data due to:

- · wayleave terminations, and
- diversions for highways.

In each section, for each voltage level enter the number of diversion schemes forecast, the length of the diversion (installed km) and the forecast expenditure. Where expenditure is for highway diversions only the portion funded by the DNO should be entered (as defined in the NRSWA).

Table LR4 General reinforcement

Purpose

To collect information on forecast expenditure and projects relating to general reinforcement of the system which is not attributable to specific customers. This information is to inform capex assessment and modelling for DPCR5.

Instructions for Completion

General reinforcement expenditure table

Enter forecast expenditure for general reinforcement by voltage level. Enter expenditure on DSM measures and other network technology for the purpose of avoiding capex on general reinforcement. Enter expenditure avoided due to use of DSM and the contributions of DG as allowed under ER P2/6.

General reinforcement projects

Enter known major forecast general reinforcement projects (name of project and voltage of asset with constraint) which will require expenditure within the DPCR5 period. For schemes that span DPCR4 and DPCR5 also enter annual expenditure during the DPCR4 period. Projects at HV and LV may be grouped by work programme activity.

For each project specify the limiting factor which should be categorised as either:

- (a) Cyclic rating of a transformer
- (b) Rating of the incoming circuit(s)
- (c) Capacity of normally connected secondary interconnection
- (d) Rating of the secondary switchboard
- (e) Rating of any ancillary equipment

Also specify the forecast year in which the substation demand will reach substation firm capacity and the total cost of the project. The final column of the table should contain a description of the scheme and further details such as the work involved and assets installed/replaced.

The total costs of the projects identified is not expected to equal the total expenditure in the first table as it should only include specific and significant (generally primary and above) identifiable schemes.

Table LR5 System utilisation measures

Purpose

To provide a measure of output for expenditure in the general reinforcement building block.

Instructions for Completion

All data should be entered by voltage transformation level and forecast for both:

- 31st March 2010, and
- 31st March 2015.

The data should reflect changes in the system utilisation that would result in part

from the forecast levels of expenditure in the general reinforcement table.

Changes in general utilisation due to projected expenditure levels

This table gives a high level indication of system utilisation.

Input the forecast number of substations (operated by the DNO) by substation voltage. If a substation site has more than one substation (e.g. at different transformation voltages) then it should be reported separately and the count will be equal to 2. (This count excludes EHV connected customer substations). The total number of substations is calculated automatically.

Input the forecast sum of substation maximum demands for each voltage transformation specified. Substation maximum demand should be the gross maximum demand for the substation after:

- The load that has been met by metered distributed generation has been added back.
- High demands experienced during abnormal running conditions have been eliminated, and
- Demands have been weather corrected (if correction is applied).

Input the forecast sum of substation firm capacities for each voltage transformation specified. Substation firm capacity under single circuit outage conditions should consider the cyclic rating of the smallest remaining transformer(s), normally connected secondary interconnection following the fault, and any additional capacity made available under auto transfer schemes (i.e. the capacity that is immediately available post an n-1 incident), and excludes manual transfers.

N.B. For single transformer substations the firm capacity includes the available transfer capacity on the secondary voltage network (e.g. manual transfer).

The ratio, which refers to the overall network utilisation by taking the summation of all the substations 'maximum demand' experienced by the DNO and dividing it by summation of firm capacities at each of these substations, is calculated automatically. The overall metric includes the maximum demand/firm capacity associated with customer specific substations.

Changes in utilisation of highly loaded substations due to projected expenditure levels

For substations that are forecast to be operating at greater than or equal to 80% of their firm capacity enter:

- the number of substations.
- the sum of substation maximum demands (as above), and
- the sum of firm capacities (as above).

The percentage loading of the substations which are operating at greater than or equal to 80% of firm capacity is calculated automatically.

Enter the total number of single and multiple transformer substations loaded at or above 100% of firm capacity.

Input the forecast number of substations (by voltage) requiring reinforcement within the 5 year period from the dates specified in the column headings. These may include substations that are operating at less than 80% of firm capacity and require reinforcement due to, e.g. a large connection scheme, ensuring compliance with P2/6 or otherwise reflecting good network planning practice.

Table LR6 Fault levels expenditure

Purpose

To collect information on forecast levels of expenditure due to fault level issues and resulting impact on measures of system fault level issues.

Instructions for Completion

Fault level system measures table

Data should be entered by voltage transformation level and forecast for both:

- 31st March 2010, and
- 31st March 2015.

The data should reflect changes in the system fault level measures produced at the level of expenditure forecast. The following data are required:

- The number of switchboards (nodes) by busbar voltage. N.B. The "HV" column refers only to switchboards on the secondary side of transformers (i.e. excludes distribution substations). For the purposes of this table a switchboard is equivalent to a node for which data is reported in the LTDS.
- The total number of switchboards where fault levels are greater than 95% of switchgear rating.
- The total number of switchboards with operational restrictions due to fault level issues.

Fault level reinforcement

Enter forecast levels of expenditure by voltage. This should only reflect expenditure on fault levels due to general reinforcement (i.e. customer contributed works should not be included).

Table LR7 DNO discretionary

Purpose

To collect details of forecast schemes and associated levels of expenditure which are not captured elsewhere in the building blocks. For example, these schemes may be associated with active networks and schemes delivering capacity over and above levels normally planned for.

for

Completion

Instructions Enter the name of the scheme, a brief description of the work and levels of expenditure. A much greater level of detail and justification should be given in the commentary.

Table NL1 Condition based expenditure

Purpose

To collate the DNO's forecast expenditure for fault and non fault condition based replacement. The worksheet also includes a table that collates expenditure for overhead line refurbishment.

Instructions for

Completion

The first table on the worksheet sums data from the proactive condition based replacement and reactive condition based replacement tables - no data entry required.

Proactive condition-based replacement (non fault)

Input the forecast expenditure by the major assets categories listed for assets

replaced on condition before failure.

Reactive condition-based replacement (fault)

Input forecast expenditure by the major assets categories listed for assets replaced on failure but which constitute condition based non load related replacement as defined in RRP RIGS.

Overhead line refurbishment/replacement

Input the expenditure for the following (for condition driven only):

- Overhead line refurbishment (including both major and minor as defined in RRP RIGS),
- Refurbishment of structures (i.e. programmes of work of only refurbishing/replacing structures),
- Full rebuild (i.e. complete replacement, including converting to covered conductor),
- Undergrounding.

Table NL2 Condition based quality of service

Purpose

The purpose of this worksheet is to collate forecast baseline CIs and CMLs obtained as a result of condition based asset replacement, and to collate network parameter information to automatically populate fault rates.

Instructions for Completion

Baseline QoS

Data entered for baseline QoS should represent unplanned CIs and CMLs as a consequence of condition based non load related asset replacement. These should exclude CIs and CMLs from QoS IIS projects and CIs and CMLs arising from incidents on other systems.

Fault Rate

Fault rates per 100km (or per service) are automatically calculated from the network parameters table below and the table for number of unplanned incidents on sheet "NOC2 – Fault costs". No data entry required.

Network Parameters

Enter forecasts of network length and number of services for the asset categories listed.

Table NL3 Condition based volume

Purpose

This worksheet identifies numbers of assets forecast to be removed and installed on the network due to condition based non load related asset replacement. The worksheet also includes a table that collates the volume of overhead lines refurbished.

Instructions for

Input asset quantities and circuit lengths in kms for assets removed and installed on the network. Assets replaced for reasons other than condition

Completion

based non load related asset replacement should not be included in this table.

Asset Register Movement

Enter the volume of assets at 01 April 2008 as the opening balance. This should be equal to the closing balance of the 2007-08 RRP. Enter the volume of assets removed and installed on the network based on condition within the current period (DPCR4).

The forecast opening balance as at 01 April 2010 is automatically calculated and is the total volume of assets at the start of DPCR5 based on condition replacement only.

Input the volume of assets forecast to be removed and installed within the DPCR5 period. The total forecast volume of assets based on condition replacement only is automatically calculated.

Asset Management

Select the asset management strategy employed in condition replacement of each asset category on the network.

Volume OHL refurbishment

Input the volume of overhead lines forecast to be refurbished within the remainder of DPCR4 (2008-09 and 2009-10) and within DPCR5. Volumes should be split by voltage and further split by:

- Refurbishment
- Structures only
- Full rebuild
- Undergrounding

Also enter the refurbishment cycle period (i.e. number of years before returning to refurbish).

Table NL4 Remaining useful life

Purpose

To collect data relating to the forecast volume of major assets whose estimated remaining useful life will expire within five years of 2010 and within 5 years of 2015. This will give an indication of the impact of the forecast expenditure programme on system risk.

Instructions Asset Register for

Completion

The forecast volume of major assets on the network as at 2010 and 2015 is auto populated from the Condition based volume table (NL3).

Assets whose remaining useful life expires within 5 years

Input the volume of assets whose remaining useful life expires within five years as at 2010 and 2015. This data will give a high level measure of the change in asset age/condition profile through the period.

Percentage useful life expires within 5 years

The percentage of the asset population (at 2010 and 2015) which is forecast to

expire within 5 years of 2010 and 2015 respectively is automatically populated.

Table NL5 Quality of service (IIS)

Purpose

To collect information on potential QoS IIS projects, their associated expenditure requirements and the benefit delivered in terms of customer interruptions and customer minutes lost. The table also collects the DNO's view on the appropriate projects to implement in the forecast period to deliver the appropriate level of CIs and CMLs.

Instructions for Completion

Rows may be added to this worksheet as required.

The worksheet is split into four sections dealing with:

- total QoS (IIS) expenditure,
- unplanned CIs,
- unplanned CMLs, and
- planned outages (and associated CIs and CMLs).

Total QoS (IIS) expenditure

This table is automatically populated from the expenditure tables below it which collect forecast expenditure on individual CI and CML projects.

Unplanned CIs

CI potential projects -

This table collects information on potential CI projects by including those over and above the projects included in the company's expenditure forecast. Enter the name of the project, the type of scheme, voltage level and numbers of circuits and customers affected. For each project enter the CI improvement forecast, the consequential CML improvement forecast and the cost of the project. £m/CI is calculated automatically. For each project, where relevant, also enter the cost of the project for 50% of the CI benefit and for 150% of the CI benefit.

CI outputs delivered -

The baseline CIs are automatically populated from table N2 condition based QoS. Enter each project included in the company's forecast (in order of priority, highest priority first, selected from the projects listed in the CI potential projects table) and the incremental impact on the levels of CIs delivered. This is to capture the DNO's best view on the combination of the projects from the previous table that would deliver levels of service at a cost, as required by their customers. Also enter the related forecast expenditure by year.

Unplanned CMLs

CML potential projects -

This table collects information on potential CML projects (including potential operational expenditure for the purpose of improving CML performance). The table should include those projects over and above the projects included in the company's CML project expenditure forecast. Enter the name of the project, the type of scheme, voltage level and numbers of circuits and customers affected. For each project enter the forecast CML improvement. Enter any corresponding CI improvement if applicable. Enter the total cost of the project. The £m/CML is calculated automatically. For each project, where relevant, also enter the cost of the project for 50% of the CML benefit and for 150% of the CML benefit.

CML outputs delivered -

The baseline CMLs are automatically populated from table N2 condition based

QoS. Enter the baseline CMLs produced by the forecast CI projects. Enter each project included in the company's forecast (in order of priority, highest priority first, selected from the projects listed in the CML potential projects table) and the incremental impact on the levels of CMLs delivered. This is to capture the DNO's best view on the combination of the projects from the previous table that would deliver levels of service at a cost, as required by their customers. Also enter the related forecast expenditure by year.

Planned outage performance

Enter the levels of planned CIs and CMLs (with no weighting applied) delivered by:

- Load related expenditure
- Non load related expenditure
- Inspections and maintenance
- Tree cutting

Where companies do not report data directly against these categories engineering judgement should be used to apportion planned CIs and CMLs.

Unplanned CIs and CMLs other (incidents on other systems)

Enter the projected levels of unplanned CIs and CMLs (with no weighting applied) due to incidents arising on other connected electricity systems split by:

- National Grid Company (NGC) or transmission companies (in Scotland)
- Distributed generators
- Any other connected systems

Table NL6 Quality of service (non IIS)

Purpose

To collect details of forecast expenditure on Quality of Service projects other than those aimed at improvements incentivised under the Interruption Incentive Scheme.

Instructions for Completion

Instructions QoS (non IIS) expenditure table

Enter the forecast expenditure by year on QoS (non IIS) projects. Expenditure forecast should be on projects which are not included in any other building block and which address issues such as resilience, worst served customers, short interruptions etc.

QoS (non IIS) projects table

Enter potential projects for QoS (non IIS) improvements. Enter the type of project, cost, voltage, number of circuits and customers affected, any resultant CI and/or CML improvement (although this should not be the driver), any SI improvement, and the driver behind the project.

Table NL7 Major system risks

Purpose

To collect forecast levels of expenditure on major system risks including expenditure to mitigate risk of flooding and expenditure to mitigate High Impact Low Probability (HILP) events.

Instructions for

The first table on the worksheet is automatically populated from flood defences and HILP (CBDs) tables below it – no data entry required.

Completion Flood defences table

Enter the number of primary, BSP and SGP sites presently at flooding risk according to probability of flooding identified as part of the ENA Substation Resilience to Flooding Task Group and which are currently not defended to mitigate against the risk of flooding. For substations at risk the probability of flooding should be categorised as either 1/100 years, 1/200 years or 1/1000 years. (These categories should be mutually exclusive, e.g. substations at 1/100 years risk should not also be categorised as 1/200 years or 1/1000 years risk.) The same data should also be entered as forecast for 31st March 2015 to identify the reduction in risk achieved through completed flood defence projects over the DPCR5 period.

Enter the expenditure on flood defences by substation category.

HILP (CBDs) table

Enter forecast works and details by CBD and primary/BSP/SGP according to the criteria set out by the ENA Urban Reliability (HILP) working group, i.e. acceptable supply security achieved when 80% of the CBD demand can be restored (through switching and temporary remedial work including jointing) within 2-3 days with the balance (20% of CBD demand) subject to rota disconnection until more major remedial works can be completed.

Enter the expenditure on HILP for the listed works.

Table NL8 Operational IT and telecommunications

Purpose

For the collection of forecast expenditure for IT equipment used in the real time management of network assets and forecast expenditure for the migration of protection communication infrastructure to BT's 21st Century network.

Instructions for Completion

Instructions Operational IT and telecoms

Enter the expenditure on operational IT and telecoms according to the following categories:

- Substation RTUs, marshalling kiosks, receivers,
- Communications for switching & monitoring, and
- Control centre hardware & software.

BT 21C

Forecast expenditure due to BT 21C issues should be entered by circuit affected and corresponding voltage levels and circuit lengths. The category of service should be entered in the "Protection application Affected" and "Proposed solution" fields as defined in ENA TS48-6-7.

Where the DNO considers that operational expenditure is the most efficient mitigation measure, please indicate this in the "Non investment solution" column.

Table NL9 Legal and safety

Purpose

To collect forecast expenditure for legal and safety reasons for the assessment of capex requirements for DPCR5.

for Completion

Instructions The high level legal and safety table contains rows for entry of expenditure against specific legal and safety issues. The first row collects ESQCR 43-8 Safety Clearance expenditure from the later tables on the worksheet. Further rows give examples of expenditure categories that may be included but allow manual entry for DNOs to specify legal and safety issues against which expenditure is forecast.

ESQCR 43-8 safety clearance

The ESQCR 43-8 safety clearance table is split by horizontal and vertical clearance data. Within these sections enter actual and forecast expenditure at each voltage level and the number of sites affected, the number of spans changed and the proposed solutions.

Site affected - Is defined as the number of spans that have 1 or more low risk clearance infringements.

No of spans changed – Is defined as the actual number of spans which have work performed on them. For example, if a OHL has 1 span that has a clearance infringement but the solution requires 5 spans to be undergrounded this should be entered as 1 Site affected and 5 Spans changed.

Table NL10 Environmental

Purpose To collect forecast expenditure due to environmental drivers.

for

Completion

Instructions Enter forecast levels of expenditure by environmental driver. The input levels of expenditure should be incremental costs incurred due to the driver over and above expenditures forecast in other building blocks.

Table NOC1 Inspections and maintenance

Purpose

To collect level of expenditure on inspections and maintenance and frequency of inspections and maintenance visits to inform assessment of costs and benchmarking.

Instructions for Completion

The "Totals" and "Inspections & maintenance" tables are populated automatically from the "Inspections" and "Maintenance" tables - no data input required.

Inspections table

Enter expenditure on inspections by voltage level and asset category.

Maintenance table

Enter expenditure on maintenance by voltage level and asset category.

I&M frequency table

Enter details of inspections and maintenance visit frequencies as specified in company policy. Ranges may be entered where appropriate but should generally reflect the visit frequencies for the assets in the category that are most common on the network.

Table NOC2 Fault costs

Purpose

To collect details of number of faults (excluding exceptional events) and related expenditure and expenditure on Non-QoS faults for assessment of DPCR5

allowance and benchmarking.

Instructions Fault costs table

for

Completion

Enter forecast gross expenditure on faults (as defined in RRP) excluding exceptional events by voltage level and asset category.

Non-QoS faults table

Enter forecast expenditure on non-QoS faults by voltage level and asset category.

Number of unplanned incidents (excluding EE)

Enter the forecast number of unplanned incidents (excluding exceptional events).

Estimated annual cost of EE

It should be assumed that the current threshold for exceptional events is maintained. Enter the long run estimated average annual cost of exceptional events.

2005-06 Data

Enter Third Party Damage Cost Recoveries figures by asset category and voltage. This is to show 2005-06 data as gross, in line with reporting of later years.

Table NOC3 Tree cutting

Purpose

To collect information on forecast tree cutting expenditure and volume levels and changes in volume forecast resulting from the forecast levels of expenditure.

for

Instructions ENATS 43-8: tree cutting expenditure

Completion

Enter the levels of expenditure on tree cutting to ENATS 43-8 clearances by voltage level.

ENATS 43-8: Tree Cutting

In the "Network parameters" section of the table enter the number of spans and spans affected by trees (split by high and low density of trees) and spans not affected by trees. This table requires entries by voltage level for three years: Actuals for 2007-08, and a forecast for 2010-11 and 2014-15.

Spans should be considered to have a "Low density" of trees where tree coverage is less than or equal to 20% of the span. Spans should be considered to have a "High density" of trees where tree coverage is greater than 20% of the span.

In the "Tree Cutting Policy" section for each voltage and by year enter if there is a reactive or a proactive approach to tree cutting, the cut cycle and if tree cutting policy is to maintain clearances as specified in ENA 43-8.

In the "unit cost" section enter an estimate of the cost per span for cutting a low density and a high density span. The overall unit cost for total spans managed and cost per span cut is auto calculated.

ETR 132 tree cutting expenditure

Enter the forecast expenditure by voltage on programmes of tree cutting for increased network resilience as detailed in ETR 132.

ETR 132 tree cutting volume

For ETR 132 tree cutting for network resilience for each of, ETR 132 undertaken as a standalone programme of work, ETR 132 undertaken as an extension to 43-8 tree cutting or ETR 132 undertaken at the same time and OHL refurbishment, enter:

- the number of feeders (by voltage) cleared for greater resilience
- · the length of network cleared by voltage

Table NOC4 Other Network Costs

Purpose Provides details of the actual and forecast costs and recoveries for fault costs

that have not been included in the pack elsewhere.

Instructions for Completion

The actual Other Network costs for the years 2005-06 to 2007-08 should be linked to the latest version of the RRP for each of those years.

The forecast figures for each of those costs are to be included in total for each year and should be forecasts of the costs reported at the bottom of table 2.13 in the RRP. The Total rows and the DPCR4 and DPCR5 tables will populate automatically.

Table E1 Engineering indirect costs

Purpose To collect data on engineering indirect costs by high level driver for

benchmarking.

Instructions for Completion

This table is optional but encouraged for the August FBPQ. Engineering indirect costs include:

- · Network design and engineering,
- Project management, and
- Engineering management and clerical support costs).

For each of these categories the expenditure driven by each of three high level building blocks should be entered, i.e.

- Load related investment,
- Non load related investment, and
- Network operating costs

In all cases the Engineering indirect costs as a percentage of the direct cost that drives them is calculated automatically.

Table C1 Cost increases

Purpose To collect company forecasts relating to cost increases.

Instructions Price effects

for

Completion Enter the forecast levels of expenditure (in £m additional to other building block

forecasts) due to real price increases above RPI.

Indices

This table provides an opportunity for companies to identify the relevant indices on which their price effects table is based (if applicable). It also allows weightings of the various indices to be specified for the four high level building blocks. If the company can provide a more suitable table to justify the forecast price effects this may be included in the August FBPQ commentary.

Table C2 Unit costs

Purpose To collect data on direct unit costs for new build and replacement assets.

Completion

Instructions Unit costs should be entered for modern equivalent replacement assets, e.g. if all LV cables are replaced with plastic insulated cables then the unit cost for plastic insulated cables should be entered for all LV cable categories.