**Data Specification Document**

**Connections Customer Invoice & Backing Sheet CSV Files**

**Version 1.0**

**18th Oct 2023**

Contents

[Usage 2](#_Toc152144650)

[1. Revision Information 3](#_Toc152144651)

[2. Control List – Redacted for Public Release 3](#_Toc152144652)

[3. Purpose 3](#_Toc152144653)

[4. Overview 4](#_Toc152144654)

[5 Assumptions/Dependencies/Risks/Issues 5](#_Toc152144655)

[5.1 Assumptions 5](#_Toc152144656)

[5.2 Dependencies 5](#_Toc152144657)

[5.3 Risks/Issues 5](#_Toc152144658)

[6 Data Specification 6](#_Toc152144659)

[6.1. Data File Format 6](#_Toc152144660)

[6.2. Data Field Format 6](#_Toc152144661)

[7 Appendix 30](#_Toc152144662)

[7.1 Sample Files 30](#_Toc152144663)

[7.2 Glossary 30](#_Toc152144664)

# Usage

# Revision Information

Classification: External Use

|  |  |  |  |
| --- | --- | --- | --- |
| **Author** | **Version** | **Date** | **Comments** |
| Data Services Team | 1.0 | 18th October 2023 | Initial Document |

**Backing File Layout Version**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Charge** | **Document Type** | **Version** | **Bill Date** | **Comments** |
| Connections | Invoice | CONNIN01 | Feb 2024 | Initial Layout |
| Connections | Backing Sheet | CONNBS01 | Feb 2024 | Initial Layout |

**Document Location**

The online version of this document will be located [in this area](https://www.nationalgrideso.com/industry-information/charging/charging-guidance) of the National Grid ESO website.

# Control List – Redacted for Public Release

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

# Purpose

This Data Specification document describes the source data and formats for the Connections invoice and backing sheet CSV files. National Grid Electricity System Operator (NGESO) publish monthly invoice and backing sheet data to Connection Customers.

This document specifies the data requirements the participating systems must meet to receive and ingest CSV data from National Grid ESO. It describes the file structure and data formats pertaining to this data.

The intended audience of this Document are all external and internal stakeholders, including the industry suppliers, senior leadership, and the NGESO internal teams associated with development and operations of the systems connected to the CSV data.

The document provides the following information:

* Data specifications including data formats, data types and sample data.
* Assumptions where appropriate.

# Overview

The Revenue billing system, STAR, processes the Connections monthly billing and produces invoice and backing sheet CSV files to be sent to the customer. The invoice and backing sheet CSV data will exist in a standard format to be ingested into target systems, if applicable.

Changes to the CSV format will require an updated version of this document and will be reflected in the header record of the CSV file. This document is located in the Charging Guidance area of the National Grid ESO website, drilling down through the Industry Information, Charging and Charging Guidance sections to STAR Billing System Guidance.

The scope of the document is the data being transferred from National Grid ESO to the customer. The source files contain the invoice and backing sheet data produced during the monthly billing process for Connections in the form of CSV files.

The invoice CSV file contains a large proportion of the information produced on the invoice PDF and the backing sheet CSV file contains supporting information for the Connections charge, including bill factors, annual and monthly charges per charge type and a monthly breakdown by site and asset.

For each customer, the invoice and backing sheet CSV files will be sent monthly from National Grid ESO. This document describes the format of the CSV files which are applicable both for viewing in Excel and ingesting into data stores.

# Assumptions/Dependencies/Risks/Issues

## Assumptions

|  |  |
| --- | --- |
| **#** | **Assumption** |
| 1 | Column titles contain no spaces |
| 2 | Company name in filename contains no spaces |
| 3 | All sample data is test data and the accuracy of calculations is not guaranteed |

## Dependencies

There are no documented dependencies.

## Risks/Issues

There are no documented risks or issues.

# Data Specification

## 6.1. Data File Format

**Connections Invoice CSV**

**Filename**: <Financial Year>\_<Month>\_<Customer Name>\_connection\_<Invoice ID>.csv

**File Format**: CSV File

**File Size**: < 1KB

**Frequency**: Monthly

The Connections Invoice CSV file is referenced using the filename <Financial Year (format YY-YY)>\_<Month (format MONTH)>\_<Customer Name (upper case and no spaces)>\_connection\_<Invoice ID>.csv e.g. 24-25\_APRIL\_ABCENERGY\_connection\_8034457.csv. Each file contains one header record, one footer record and data records, each record consisting of comma separated fields (see sample in section 7.1). The first field of each record is the record type and each record, apart from the last line, terminates with LF.

**Connections Backing Sheet CSV**

**Filename**: <Financial Year>\_<Month>\_<Customer Name>\_connection\_<Backing Sheet Type>.csv

**File Format**: CSV File

**File Size**: < 5KB

**Frequency**: Monthly

The Connections Backing Sheet CSV file is referenced using the filename <Financial Year (format YY-YY)>\_<Month (format MONTH)>\_<Customer Name (upper case and no spaces)>\_connection\_<Backing Sheet Type>.csv e.g. 24-25\_APRIL\_ABCENERGY\_connections\_monthly.csv. Each file contains one header record, one footer record and data records, each record consisting of comma separated value fields (see sample in section 7.1). The first field of each record is the record type and each record, apart from the last line, terminates with LF.

## 6.2. Data Field Format

The Data Field Format section comprises a full description and logical display in a tabular format for each of the Connections CSV files, invoice and backing sheet. Please also see the excel sheet below for the logical source tables.



**Connections Invoice CSV description – layout version 01**

The header record with record type ‘AAA’ consists of the file type and version, the message role, the creation time, the ‘from role’ and ‘from participant’, the ‘to role’ code and ‘to participant’ ID, the sequence number and the test data flag. The header record is consistent across billing streams but for Connections the applicable header record fields are file type and version, creation time and the sequence number.

The file type for the invoice CSV file consists of eight characters, the first four characters a reference for the billing stream e.g. CONN, the fifth and sixth characters a document type reference e.g. IN for invoice and the final two characters the document layout version e.g. 01.

The message role containing either ‘D’ for data or ‘R’ for response will always be ‘D’ for data.

The creation time is the system date and time in GMT and in the format YYYYMMDDHH24MISS e.g. 20240131063000.

The ‘From Role’ is ‘SO’ for National Electricity Transmission System Operator (NETSO) and ‘NG’ the participant code for National Grid. The ‘To Role’ is ‘BP’ for BSC Party and the To Participant ID blank.

The sequence number contains the version of that invoice CSV file starting at 1.

The final header record field, test data flag, contains ‘OPER’ or blank for operational data and any other value is considered test data, please see a sample header record below.

AAA,CONNIN01,D,20240131063000,SO,NG,BP,,1,OPER

The footer record consists of the record type ‘ZZZ’ and a field containing the number of records in the file, including the header and footer records, see sample below.

ZZZ,22

The data records consist of five sections, the invoice header details, invoice details, charge details, charge totals and a payment section. Each section is separated by a section separator line, see sample below.

BLANK

The invoice header section contains a standard title record and one or more header records with the record type format ‘INHD’ followed by an incremental number. The invoice CSV file header records display an invoice disclaimer and a description of the type of invoice, see sample below.

SCHDR,InvoiceDetails

INHD1,THIS IS NOT A VAT INVOICE

INHD2,CONNECTION Charge

The invoice details (header) section contains the customer account and invoice details. The type of document for the Connections Invoice CSV is ‘SALESINVOICE’. The Company Name is displayed followed by the Account ID, then the invoice number, which is up to ten characters, and the invoice date in the format DD.MM.YYYY. Your Order reference is either the customer Purchase Order number, if available, or standard text e.g. ‘Connections Monthly’. Our Reference is MSM\_CONN\_nnnnnnnnnnnn where nnnnnnnnnnnn is the internal MSM Bill reference, twelve digits, see invoice details (header) sample below.

SCTTL,Type,Company,Account,InvoiceNumber,InvoiceDate,YourOrderReference,OurBillingReference

INTTL,SALESINVOICE,ABC ENERGY,9113761008,8034457, 01.04.2024,Connection Monthly,MSM\_CONN\_123456789012

The details section contains the invoice lines and charges excluding VAT. The charge description is followed by the charge excluding VAT and the VAT amount. For Connections there are up to seven charge lines, according to which charges are applicable, see sample below.

SCDET,Description,ValueExclVAT,VATAmount

DINV1,Pre Vesting Charge Entry,330000.25,66000.05

DINV1,Pre Vesting Charge Exit,5256.00,1051.20

DINV1,Post Vesting Charge Entry,50000.42,10000.08

DINV1,Post Vesting Charge Exit,7009.00,1401.80

DINV1,Energy Metering Charge,5000.00,1000.00

DINV1,Transmission Charge,1360.00,272.00

DINV1,Miscellaneous & One-off Capital Asset Charge,1374.33,274.87

The totals section contains the invoice total excluding VAT, the VAT total and the invoice total including VAT, see sample below.

SCTOT,TotalExclVAT,TotalVATAmount,TotalIncVAT

INTOT,400000.00,80000.00,480000.00

The payment section displays the payment due date format DD.MM.YYYY, see sample below.

SCFTR,PaymentDueDate

INFTR,15.04.2024

The source data table below displays the source information in a logical format with record type, attribute, attribute description and format, excel column reference, data type and length (maximum), a sample value and whether mandatory or optional.

**Connections Invoice CSV data format table**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Record Type** | **Attribute Group** | **Attribute** | **Attribute description and format** | **Excel Column Reference** | **Data Type (max. length)** | **Sample Value** | **Mandatory/Optional** |
| Header | AAA | Record Type | Section File Header Record Type - constant 'AAA' | A | text (5) | AAA | Mandatory |
| Header |  | File Type | File Type and version of Interface. The first 4 characters is the billing stream reference (e.g. CONN), the fifth and sixth characters the document type identifier (e.g. IN - Invoice) and the final 2 characters the CSV layout version defined in this document | B | text (8) | CONNIN01 | Mandatory |
| Header |  | Message Role | Message Role, 'D' for Data or 'R' for Response - constant 'D' | C | text (1) | D | Mandatory |
| Header |  | Creation Time | System datetime in GMT - format YYYYMMDDHH24MISS | D | datetime | 20240401063000 | Mandatory |
| Header |  | From Role Code | Role Code for NETSO - constant 'SO' | E | text (2) | SO | Mandatory |
| Header |  | From Participant | Participant code for National Grid ESO - constant 'NG' | F | text(4) | NG | Mandatory |
| Header |  | To Role Code | To Role code for BSC Party - constant 'BP' | G | text (2) | BP | Mandatory |
| Header |  | To Participant ID | BSC Party Market Participant ID or blank if no BSC Party ID available, always blank for Connections | H | text (8) |  | Optional |
| Header |  | Sequence Number | Data version control for the CSV file with 1 being the first version of that invoice CSV file | I | num (9) | 1 | Mandatory |
| Header |  | Test data flag | If the field contains 'OPER' or blank this is operational data, else consider TEST data | J | text (4) | OPER | Mandatory |
| Data | SCHDR | Record Type | Section Invoice Header Record type - constant 'SCHDR' | A | text (5) | SCHDR | Mandatory |
| Data |  | Invoice Header Section Title | Invoice Header Section Title - constant 'InvoiceDetails' | B | text (64) | InvoiceDetails | Mandatory |
| Data | INHD1 | Record Type | Invoice Header 1 Record Type - constant 'INHD1' | A | text (5) | INHD1 | Mandatory |
| Data |  | Invoice VAT Disclaimer | Invoice Header 1 - constant 'THIS IS NOT A VAT INVOICE' | B | text (64) | THIS IS NOT A VAT INVOICE | Mandatory |
| Data | INHD2 | Record Type | Invoice Header 2 Record Type - constant 'INHD2' | A | text (5) | INHD2 | Mandatory |
| Data |  | Invoice Description | Invoice Header 2 Invoice Description - constant 'CONNECTION Charge' | B | text (64) | CONNECTION Charge | Mandatory |
| Data | BLANK | Record Type | Blank Line Record Type - constant 'BLANK' | A | text (5) | BLANK | Mandatory |
| Data | SCTTL | Record Type | Section Invoice Details (Header) Record Type - constant 'SCTTL' | A | text (5) | SCTTL | Mandatory |
| Data |  | Document Type Title | Column Section Title - Type of Document - constant 'Type' | B | text (64) | Type | Mandatory |
| Data |  | Company Title | Column Section Title - Company Invoiced - constant 'Company' | C | text (64) | Company | Mandatory |
| Data |  | Account ID Title | Column Section Title - Account ID Invoiced - constant 'Account' | D | text (64) | Account | Mandatory |
| Data |  | Invoice Number Title | Column Section Title - Document ID - constant 'InvoiceNumber' | E | text (64) | InvoiceNumber | Mandatory |
| Data |  | Invoice Date Title | Column Section Title - Invoice Date - constant 'InvoiceDate' | F | text (64) | InvoiceDate | Mandatory |
| Data |  | Your Order Reference Title | Column Section Title - Your Order Reference - constant 'YourOrderReference' | G | text (64) | YourOrderReference | Mandatory |
| Data |  | Our Billing Reference Title | Column Section Title - Our Billing Reference - constant 'OurBillingReference' | H | text (64) | OurBillingReference | Mandatory |
| Data | INTTL | Record Type | Section Invoice Details (Data) Record Type - constant 'INTTL' | A | text (5) | INTTL | Mandatory |
| Data |  | Type | Type of Document e.g. for invoice CSV - constant 'SALESINVOICE' | B | text (64) | SALESINVOICE | Mandatory |
| Data |  | Company | Name of Company Invoiced | C | text(64) | ABC ENERGY | Mandatory |
| Data |  | Account | Account ID of Company Invoiced - up to 10 digits | D | num (10) | 9113761008 | Mandatory |
| Data |  | Invoice Number | Invoice Number - up to 10 digits | E | num (10) | 8034457 | Mandatory |
| Data |  | Invoice Date | Invoice Generation Date - date format DD.MM.YYYY | F | date | 01.04.2024 | Mandatory |
| Data |  | Your Order Reference | PO Number if supplied, else standard text - constant 'Connections Monthly' | G | text (64) | Connections Monthly | Mandatory |
| Data |  | Our Billing Reference | National Grid ESO Billing Reference - MSM\_<Division Reference>\_<Internal Bill Reference (12 digits)> | H | text (30) | MSM\_CONN\_123456789012 | Mandatory |
| Data | BLANK | Record Type | Blank Line Record Type - constant 'BLANK' | A | text (5) | BLANK | Mandatory |
| Data | SCDET | Record Type | Section Invoice Details Record Type - constant 'SCDET' | A | text (5) | SCDET | Mandatory |
| Data |  | Description Title | Column Section Title - Description - constant 'Description' | B | text (64) | Description | Mandatory |
| Data |  | Value Excluding VAT Title | Column Section Title - Invoice Value Excluding VAT - constant 'ValueExclVAT' | C | text (64) | ValueExclVAT | Mandatory |
| Data |  | VAT Amount Title | Column Section Title - Invoice VAT Amount - constant 'VATAmount' | D | text (64) | VATAmount | Mandatory |
| Data Level 1 | DINV1 | Record Type | Section Detail (Data) Invoice Line Record Type - constant 'DINV1', if charge applicable. | A | text (5) | DINV1 | Mandatory |
| Data Level 1 |  | Description | Invoice Line Description - Pre Vesting Charge Entry | B | text (64) | Pre Vesting Charge Entry | Mandatory |
| Data Level 1 |  | Value Excluding VAT | Invoice Line Value Excluding VAT in GBP | C | decimal (15,2) | 330000.25 | Mandatory |
| Data Level 1 |  | VAT Amount | Invoice Line VAT Amount in GBP | D | decimal (15,2) | 66000.05 | Mandatory |
| Data Level 1 | DINV1 | Record Type | Section Detail (Data) Invoice Line Record Type - constant 'DINV1', if charge applicable. | A | text (5) | DINV1 | Mandatory |
| Data Level 1 |  | Description | Invoice Line Description - Pre Vesting Charge Exit | B | text (64) | Pre Vesting Charge Exit | Mandatory |
| Data Level 1 |  | Value Excluding VAT | Invoice Line Value Excluding VAT in GBP | C | decimal (15,2) | 5256.00 | Mandatory |
| Data Level 1 |  | VAT Amount | Invoice Line VAT Amount in GBP | D | decimal (15,2) | 1051.20 | Mandatory |
| Data Level 1 | DINV1 | Record Type | Section Detail (Data) Invoice Line Record Type - constant 'DINV1', if charge applicable. | A | text (5) | DINV1 | Mandatory |
| Data Level 1 |  | Description | Invoice Line Description - Post Vesting Charge Entry | B | text (64) | Post Vesting Charge Entry | Mandatory |
| Data Level 1 |  | Value Excluding VAT | Invoice Line Value Excluding VAT in GBP | C | decimal (15,2) | 50000.42 | Mandatory |
| Data Level 1 |  | VAT Amount | Invoice Line VAT Amount in GBP | D | decimal (15,2) | 10000.08 | Mandatory |
| Data Level 1 | DINV1 | Record Type | Section Detail (Data) Invoice Line Record Type - constant 'DINV1', if charge applicable. | A | text (5) | DINV1 | Mandatory |
| Data Level 1 |  | Description | Invoice Line Description - Post Vesting Charge Exit | B | text (64) | Post Vesting Charge Exit | Mandatory |
| Data Level 1 |  | Value Excluding VAT | Invoice Line Value Excluding VAT in GBP | C | decimal (15,2) | 7009.00 | Mandatory |
| Data Level 1 |  | VAT Amount | Invoice Line VAT Amount in GBP | D | decimal (15,2) | 1401.80 | Mandatory |
| Data Level 1 | DINV1 | Record Type | Section Detail (Data) Invoice Line Record Type - constant 'DINV1', if charge applicable. | A | text (5) | DINV1 | Mandatory |
| Data Level 1 |  | Description | Invoice Line Description - Energy Metering Charge | B | text (64) | Energy Metering Charge | Mandatory |
| Data Level 1 |  | Value Excluding VAT | Invoice Line Value Excluding VAT in GBP | C | decimal (15,2) | 5000.00 | Mandatory |
| Data Level 1 |  | VAT Amount | Invoice Line VAT Amount in GBP | D | decimal (15,2) | 1000.00 | Mandatory |
| Data Level 1 | DINV1 | Record Type | Section Detail (Data) Invoice Line Record Type - constant 'DINV1', if charge applicable. | A | text (5) | DINV1 | Mandatory |
| Data Level 1 |  | Description | Invoice Line Description - Transmission Charge | B | text (64) | Transmission Charge | Mandatory |
| Data Level 1 |  | Value Excluding VAT | Invoice Line Value Excluding VAT in GBP | C | decimal (15,2) | 1360.00 | Mandatory |
| Data Level 1 |  | VAT Amount | Invoice Line VAT Amount in GBP | D | decimal (15,2) | 272.00 | Mandatory |
| Data Level 1 | DINV1 | Record Type | Section Detail (Data) Invoice Line Record Type - constant 'DINV1', if charge applicable. | A | text (5) | DINV1 | Mandatory |
| Data Level 1 |  | Description | Invoice Line Description - Miscellaneous Charge | B | text (64) | Miscellaneous Charge | Mandatory |
| Data Level 1 |  | Value Excluding VAT | Invoice Line Value Excluding VAT in GBP | C | decimal (15,2) | 1374.33 | Mandatory |
| Data Level 1 |  | VAT Amount | Invoice Line VAT Amount in GBP | D | decimal (15,2) | 274.87 | Mandatory |
| Data | BLANK | Record Type | Blank Line Record Type - constant 'BLANK' | A | text (5) | BLANK | Mandatory |
| Data | SCTOT | Record Type | Section Invoice Total (Header) Record Type - constant 'SCTOT' | A | text (5) | SCTOT | Mandatory |
| Data |  | Total Excluding VAT Title | Column Section Title - Invoice Total Excluding VAT - constant 'TotalExclVAT' | B | text (64) | TotalExclVAT | Mandatory |
| Data |  | Total VAT Amount Title | Column Section Title - Invoice Total VAT - constant TotalVATAmount' | C | text (64) | TotalVATAmount | Mandatory |
| Data |  | Total Including VAT Title | Column Section Title - Invoice Total Including VAT - constant 'TotalIncVAT' | D | text (64) | TotalIncVAT | Mandatory |
| Data | INTOT | Record Type | Section Invoice Total (Data) Record Type - constant 'INTOT' | A | text (5) | INTOT | Mandatory |
| Data |  | Total Excluding VAT | Invoice Total Excluding VAT in GBP | B | decimal (15,2) | 400000.00 | Mandatory |
| Data |  | Total VAT Amount | Invoice Total VAT in GBP | C | decimal (15,2) | 80000.00 | Mandatory |
| Data |  | Total Including VAT | Invoice Total Including VAT in GBP | D | decimal (15,2) | 480000.00 | Mandatory |
| Data | BLANK | Record Type | Blank Line Record Type - constant 'BLANK' | A | text (5) | BLANK | Mandatory |
| Data | SCFTR | Record Type | Payment Section (Header) Record Type - constant 'SCFTR' | A | text (5) | SCFTR | Mandatory |
| Data |  | Payment Due Date Title | Column Section Title - Payment Due Date - constant 'PaymentDueDate' | B | text (64) | PaymentDueDate | Mandatory |
| Data | INFTR | Record Type | Payment Section (Data) Record Type - constant 'INFTR' | A | text (5) | INFTR | Mandatory |
| Data |  | Payment Due Date | Payment Due Date - date format DD.MM.YYYY | B | date | 15.04.2024 | Mandatory |
| Footer | ZZZ | Record Type | Section File Footer Record Type - constant 'ZZZ' | A | text (5) | ZZZ | Mandatory |
| Footer |  | Record Count | Count of records including header and footer | B | num (10) | 23 | Mandatory |

**Connections Backing Sheet CSV description – layout version 01**

The header record with record type ‘AAA’ consists of the file type and version, the message role, the creation time, the ‘from role’ and ‘from participant’, the ‘to role’ code and ‘to participant’ ID, the sequence number and the test data flag. The header record is consistent across billing streams but for Connections the applicable header record fields are file type and version, creation time and the sequence number.

The file type for the backing sheet CSV file consists of eight characters, the first four characters a reference for the billing stream e.g. CONN, the fifth and sixth characters a document type reference e.g. BS for backing sheet and the final two characters the document layout version e.g. 01.

The message role containing either ‘D’ for data or ‘R’ for response will always be ‘D’ for data.

The creation time is the system date and time in GMT and in the format YYYYMMDDHH24MISS e.g. 20240131063000.

The ‘From Role’ is ‘SO’ for National Electricity Transmission System Operator (NETSO) and ‘NG’ the participant code for National Grid. The ‘To Role’ is ‘BP’ for BSC Party and the To Participant ID blank.

The sequence number contains the version of that backing sheet CSV file starting at 1.

The final header record field, test data flag, contains ‘OPER’ or blank for operational data and any other value is considered test data, please see a sample header record below.

AAA,CONNBS01,D,20240131063000,SO,NG,BP,,1,OPER

The footer record consists of the record type ‘ZZZ’ and a field containing the number of records in the file, including the header and footer records, see sample below.

ZZZ,137

The data records consist of six sections, the backing sheet header, connection bill factors, annual connection charges, monthly connections charges, a monthly charges breakdown per site with sub totals and a queries section. Each section is separated by a section separator line, see sample below.

BLANK

The Backing Sheet Header section contains five records starting with a document description and a title for the backing sheet. The subsequent records display the Backing Sheet applicable date (format MONTH YYYY), the company name and job reference containing an internal reference for the document comprising MSM\_CONN\_<MSM Bill Reference> where MSM Bill Reference is a twelve-digit field, see sample below.

SCHD1,Backing Details

BSHD1,Monthly Connection Charges

BSHD2,APRIL 2024

CNAME,ABC ENERGY

JBREF,Our Job Ref,MSM\_CONN\_123456789012

The Connection Bill Factors section displays one row for each bill factor effective date. The factor values are percentage values rounded to two decimal places apart from the average CPIH percentage rounded to four decimal places, see sample below.

SCTFR,FactorEffectiveDate,Avg.CPIH(%),SSM(%),TRC(%),OAMF(%),OARC(%),ROR\_NGET\_TOPI(%),ROR\_NGET\_MEA(%),ROR\_SPT\_TOPI(%),ROR\_SHETL\_TOPI(%)

BSTRF,01.04.2024,1.0865,0.34,1.06,0.34,0.92,4.50,5.50,4.50,4.50

The Annual Connections Charges section comprises a current annual charge, previous annual charge and variance charge for each applicable charge type, followed by an annual totals row. The pre vesting charges are summed together, as are the post vesting charges. The miscellaneous charges are separated into miscellaneous and one-off asset capital cost charges. All calculated charges are rounded to two decimal places, see sample below.

SCHD2,AnnualConnectionCharges

SCCN2,ChargeType,CurrentAnnualCharge£,PreviousAnnualCharge£,AnnualChargeVariance£

BSDT2,Post Vesting,684113.00,684133.00,-20.00

BSTL1,Annual Charge Total,4800000.00,4787434.00,12566.00

The Monthly Connections Charges section comprises a current monthly charge, previous monthly charge and variance charge for each applicable charge type, followed by a monthly totals row. All calculated charges are rounded to two decimal places, see sample below.

SCHD3,MonthlyConnectionCharges

SCCN3,ChargeType,CurrentMonthlyCharge£,PreviousMonthlyCharge£,MonthlyChargeVariance£

BSDT3,Transmission Charge,1360.00,1510.00,-150.00

BSTL2,Monthly Charge Total,400000.00,396580.00,3420.00

The details section consists of the monthly connection charges breakdown, per site and asset. For each site there is a list of assets and a number of attributes and charges for those assets. For each asset an agreement reference, asset number, charge category, commissioning date (format DD-MM-YYYY), depreciation period, mid-year asset age, asset values and applied charges are listed. The asset values listed are for TOPI Gross Asset Value (GAV), Chargeable GAV and Net Asset Value (NAV), each value is rounded to six decimal places. These are followed by the charges, calculated from the Rate of Return, Depreciation, Site Specific Maintenance, Transmission Running Cost, One-off Maintenance Factor and One-off Asset Running Cost factors. The aggregated charges displayed for each asset are the annual charge, monthly charge, previous monthly charge and monthly charge variance, see sample below.

SCDET,MonthlyConnectionChargesBreakdown

SCCN4,ConnectionSite,AgreementReference,ConnectionAsset,ChargeCategory,CommissioningDate,DepreciationPeriod,MidYearAssetAge,TOPIGAV£,ChargeableGAV£,NetAssetValue(NAV)£,RateOfReturn£,Depreciation£,SiteSpecificMaintenance£,TransmissionRunningCost£,OneOffAssetMaintenanceFactor£,OneOffAssetRunningCost£,AnnualCharge£,MonthlyCharge£,PreviousMonthlyCharge£,Variance£

BSTD4,ABD Wind Farm,A/SHET/BIST05,ABD Wind1,Energy Metering Charge,20.04.1991,40,32.5,17032.595560,17032.595560,150788.992231,17777.40,33022.60,8000.00,1200.00,0.00,0.00,60000.00,5000.00,5000.00,0.00

Sub totals are calculated per site for the annual, monthly, previous monthly and monthly variance charges and the final line displays the grand totals of the sub-total charges. The total values are displayed in line with the relevant charges (annual, monthly, previous monthly and monthly variance) leaving a number of blank values in that row, see sample below.

BSTL3,Site Level Total,,,,,,,,,,,,,,,Total for ABD Wind Farm,4149790.58,345815.88,343410.00,2405.88

BSTL4,Grand Total,,,,,,,,,,,,,,,Grand Total,4800000.00,400000.00,396580.00,3420.00

The section for queries contains the queries title record and the National Grid ESO email address for Connection queries, see sample below.

SCFTR,ForQueriesPleaseContact

BSFTR, [transmissionconnectioncharging@nationalgrideso.com](mailto:transmissionconnectioncharging@nationalgrideso.com)

The source data table below displays the source information in a logical format with record type, attribute, attribute description and format, excel column reference, data type and length (maximum), a sample value and whether mandatory or optional.

**Connections Backing Sheet CSV data format table**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Record Type** | **Attribute Group** | **Attribute** | **Attribute Description and format** | **Excel Column Reference** | **Data Type (max. length)** | **Sample Value** | **Mandatory/Optional** |
| Header | AAA | Record Type | Section File Header Record Type - constant 'AAA' | A | text (5) | AAA | Mandatory |
| Header |  | File Type | File Type and version of Interface. The first 4 characters is the billing stream reference (CONN), the fifth and sixth characters the document type identifier (BS - Backing Sheet) and the final 2 characters the CSV layout version defined in this document | B | text (8) | CONNBS01 | Mandatory |
| Header |  | Message Role | Whether the file contains data or a response - 'D' for Data or 'R' for Response - constant 'D' | C | text (1) | D | Mandatory |
| Header |  | Creation Time | System datetime in GMT - format YYYYMMDDHH24MISS | D | datetime | 20240401063000 | Mandatory |
| Header |  | From Role Code | SO' is the Role Code for NETSO - constant 'SO' | E | text (2) | SO | Mandatory |
| Header |  | From Participant | NG' is the code for National Grid ESO - constant 'NG' | F | text (4) | NG | Mandatory |
| Header |  | To Role Code | For BSC Party this is 'BP' - constant 'BP' | G | text (2) | BP | Mandatory |
| Header |  | To Participant ID | BSC Party Market Participant ID or blank if no BSC Party ID available, always blank for Connections | H | text (8) |  | Optional |
| Header |  | Sequence Number | Data version control for the backing sheet with 1 being the first version of that backing sheet | I | num (9) | 1 | Mandatory |
| Header |  | Test data flag | If the field contains 'OPER' or blank this is operational data, else consider this TEST data | J | text (4) | OPER | Mandatory |
| Data | SCHD1 | Record Type | Header Section Record Type - constant 'SCHD1' | A | text (5) | SCHD1 | Mandatory |
| Data |  | Header Reference | Header Section Reference - constant 'Backing Details' | B | text (64) | Backing Details | Mandatory |
| Data | BSHD1 | Record Type | Backing Sheet Header Section Record Type - constant 'BSHD1' | A | text (5) | BSHD1 | Mandatory |
| Data |  | Header Description | Backing Sheet Header Section Description - constant 'Monthly Connection Charges' | B | text (64) | Monthly Connection Charges | Mandatory |
| Data | BSHD2 | Record Type | Backing Sheet Header Section Record Type - constant 'BSHD2' | A | text (5) | BSHD2 | Mandatory |
| Data |  | Header Date | Backing Sheet Header Section Date - 'Month Year' format 'MONTH YYYY' | B | text (14) | APRIL 2024 | Mandatory |
| Data | CNAME | Record Type | Backing Sheet Header Section Record Type - constant 'CNAME' | A | text (5) | CNAME | Mandatory |
| Data |  | Backing Sheet Customer | Backing Sheet Header Section Customer Name - Name of Company Invoiced | B | text (60) | ABC ENERGY | Mandatory |
| Data | JBREF | Record Type | Backing Sheet Header Section Record Type - constant 'JBREF' | A | text (5) | JBREF | Mandatory |
| Data |  | Job Reference Heading | Section Backing Sheet Header Job Reference - constant 'Our Job Ref' | B | text (64) | Our Job Ref | Mandatory |
| Data |  | Our Job Reference Description | National Grid ESO Billing Reference - MSM\_<Division Reference>\_<Internal Bill Reference (12 digits)> | C | text (30) | MSM\_CONN\_123456789012 | Mandatory |
| Data | BLANK | Record Type | Blank Line Record Type - constant 'BLANK' | A | text (5) | BLANK | Mandatory |
| Data | SCTRF | Record Type | Section Bill Factors Record Type - constant 'SCTFR' | A | text (5) | SCTFR | Mandatory |
| Data |  | Factor Effective Date Title | Column Section Title - Effective Date of Factor - constant 'FactorEffectiveDate' | B | text (64) | FactorEffectiveDate | Mandatory |
| Data |  | Average CPIH (%) Title | Column Section Title - Average CPIH (%) - constant 'Avg.CPIH(%)' | C | text (64) | Avg.CPIH(%) | Mandatory |
| Data |  | Site Specific Maintenance (%) Title | Column Section Title - Site Specific Maintenance (%) - constant 'SSM(%)' | D | text (64) | SSM(%) | Mandatory |
| Data |  | Transmission Running Costs (%) Title | Column Section Title - Transmission Running Costs (%) - constant 'TRC(%)' | E | text (64) | TRC(%) | Mandatory |
| Data |  | One-off Asset Maintenance Title | Column Section Title - One-off Asset Maintenance Factor (%) - constant 'OAMF(%)' | F | text (64) | OAMF(%) | Mandatory |
| Data |  | One-off Asset Running Cost Title | Column Section Title - One-off Asset Running Cost Charge (%) - constant 'OARC(%)' | G | text (64) | OARC(%) | Mandatory |
| Data |  | Rate of Return Transmission Owner Pricing Index for NGET (%) Title | Column Section Title - Rate of Return Transmission Owner Pricing Index for National Grid Electricity Transmission (%) - constant 'ROR\_NGET\_TOPI(%)' | H | text (64) | ROR\_NGET\_TOPI(%) | Mandatory |
| Data |  | Rate of Return Modern Equivalent Asset for NGET (%) Title | Column Section Title - Rate of Return Modern Equivalent Asset Charge for National Grid Electricity Transmission (%) - constant 'ROR\_NGET\_MEA(%)' | I | text (64) | ROR\_NGET\_MEA(%) | Mandatory |
| Data |  | Rate of Return Transmission Owner Pricing Index for SPTL (%) Title | Column Section Title - Rate of Return Transmission Owner Pricing Index for Scottish Power Transmission Ltd (%) - constant 'ROR\_SPT\_TOPI(%)' | J | text (64) | ROR\_SPT\_TOPI(%) | Mandatory |
| Data |  | Rate of Return Transmission Owner Pricing Index for SHETL (%) Title | Column Section Title - Rate of Return Transmission Owner Pricing Index for Scottish Hydro Electric Transmission Ltd (%) - constant 'ROR\_SHETL\_TOPI(%)' | K | text (64) | ROR\_SHETL\_TOPI(%) | Mandatory |
| Data Level 1 | BSTRF | Record Type | Section Bill Factor Lines Record Type - constant 'BSTRF'. This section is repeated for each Factor change date | A | text (5) | BSTRF | Mandatory |
| Data Level 1 |  | Factor Effective Date | Effective Date of Bill Factor - format DD.MM.YYYY | B | date | 01.04.2024 | Mandatory |
| Data Level 1 |  | Average CPIH (%) | Average Consumer Price Index with Housing (%) | C | decimal (6,4) | 1.0865 | Mandatory |
| Data Level 1 |  | Site Specific Maintenance (%) | Site Specific Maintenance Factor (%) | D | decimal (6,2) | 0.34 | Mandatory |
| Data Level 1 |  | Transmission Running Costs (%) | Transmission Running Costs Factor(%) | E | decimal (6,2) | 1.06 | Mandatory |
| Data Level 1 |  | One-off Asset Maintenance (%) | One-off Asset Maintenance Factor (%) | F | decimal (6,2) | 0.34 | Mandatory |
| Data Level 1 |  | One-off Asset Running Cost (%) | One-off Asset Running Cost Charge (%) | G | decimal (6,2) | 0.92 | Mandatory |
| Data Level 1 |  | Rate of Return Transmission Owner Pricing Index for NGET (%) | Rate of Return Transmission Owner Pricing Index for National Grid Electricity Transmission (%) | H | decimal (6,2) | 4.50 | Mandatory |
| Data Level 1 |  | Rate of Return Modern Equivalent Asset for NGET (%) | Rate of Return Modern Equivalent Asset Charge for National Grid Electricity Transmission (%) | I | decimal (6,2) | 5.50 | Mandatory |
| Data Level 1 |  | Rate of Return Transmission Owner Pricing Index for SPTL (%) | Rate of Return Transmission Owner Pricing Index for Scottish Power Transmission Ltd (%) | J | decimal (6,2) | 4.50 | Mandatory |
| Data Level 1 |  | Rate of Return Transmission Owner Pricing Index for SHETL (%) | Rate of Return Transmission Owner Pricing Index for Scottish Hydro Electric Transmission Ltd (%) | K | decimal (6,2) | 4.50 | Mandatory |
| Data | BLANK | Record Type | Blank Line Record Type - constant 'BLANK' | A | text (5) | BLANK | Mandatory |
| Data | SCHD2 | Record Type | Header Section 2 Record Type - constant 'SCHD2' | A | text (5) | SCHD2 | Mandatory |
| Data |  | Section Header Reference | Section Header Reference - Annual Connection Charges - constant 'AnnualConnectionCharges' | B | text (64) | AnnualConnectionCharges | Mandatory |
| Data | SCCN2 | Record Type | Header Section 2 Column Headings - constant 'SCCN2' | A | text (5) | SCCN2 | Mandatory |
| Data |  | Charge Type Title | Column Section Title - Charge Type - constant 'ChargeType' | B | text (64) | ChargeType | Mandatory |
| Data |  | Current Annual Charge Title | Column Section Title - Current Annual Charge - constant 'CurrentAnnualCharge£' | C | text (64) | CurrentAnnualCharge£ | Mandatory |
| Data |  | Previous Annual Charge Title | Column Section Title - Previous Annual Charge - constant 'PreviousAnnualCharge£' | D | text (64) | PreviousAnnualCharge£ | Mandatory |
| Data |  | Annual Charge Variance Title | Column Section Title – Annual Charge Variance - constant 'AnnualChargeVariance£' | E | text (64) | AnnualChargeVariance£ | Mandatory |
| Data Level 1 | BSDT2 | Record Type | Section Detail Annual Connection Charges - constant 'BSDT2'. This section is repeated for each Annual Connection Charge Type applicable | A | text (5) | BSDT2 | Mandatory |
| Data Level 1 |  | Charge Type | Annual Charge Type (Pre Vesting, Post Vesting, Energy Metering Charge, Transmission Charge, Miscellaneous, One-off Capital Asset Cost) | B | text (64) | Post Vesting | Mandatory |
| Data Level 1 |  | Current Annual Charge (£) | Current Annual Charge for that Charge Type (£) | C | decimal (15,2) | 684113.00 | Mandatory |
| Data Level 1 |  | Previous Annual Charge (£) | Previous Annual Charge for that Charge Type (£) | D | decimal (15,2) | 684133.00 | Mandatory |
| Data Level 1 |  | Annual Charge Variance (£) | Annual Charge Variance for that Charge Type (£) | E | decimal (15,2) | -20.00 | Mandatory |
| Data | BSTL1 | Record Type | Section Detail Charge Totals - constant 'BSTL1' | A | text (5) | BSTL1 | Mandatory |
| Data |  | Annual Charge Total | Annual Charge Total Title - constant 'Annual Charge Total' | B | decimal (15,2) | Annual Charge Total | Mandatory |
| Data |  | Current Annual Charge Total (£) | Current Annual Charge Total (£) | C | decimal (15,2) | 4800000.00 | Mandatory |
| Data |  | Previous Annual Charge Total (£) | Previous Annual Charge Total (£) | D | decimal (15,2) | 4787434.00 | Mandatory |
| Data |  | Annual Charge Variance Total (£) | Annual Charge Variance (£) | E | decimal (15,2) | 12566.00 | Mandatory |
| Data | BLANK | Record Type | Blank Line Record Type - constant 'BLANK' | A | text (5) | BLANK | Mandatory |
| Data | SCHD3 | Record Type | Header Section 3 Record Type - constant 'SCHD3' | A | text (5) | SCHD3 | Mandatory |
| Data |  | Section Header Reference | Section Header Reference - Monthly Connection Charges - constant 'MonthlyConnectionCharges' | B | text (64) | MonthlyConnectionCharges | Mandatory |
| Data | SCCN3 | Record Type | Header Section 3 Column Headings - constant 'SCCN3' | A | text (5) | SCCN3 | Mandatory |
| Data |  | Charge Type Title | Column Section Title - Charge Type - constant 'ChargeType' | B | text (64) | ChargeType | Mandatory |
| Data |  | Current Monthly Charge Title | Column Section Title - Current Monthly Charge - constant 'CurrentMonthlyCharge£' | C | text (64) | CurrentMonthlyCharge£ | Mandatory |
| Data |  | Previous Monthly Charge Title | Column Section Title - Previous Monthly Charge - constant 'PreviousMonthlyCharge£' | D | text (64) | PreviousMonthlyCharge£ | Mandatory |
| Data |  | Monthly Charge Variance Title | Column Section Title – Monthly Charge Variance - constant 'MonthlyChargeVariance£' | E | text (64) | MonthlyChargeVariance£ | Mandatory |
| Data Level 1 | BSDT3 | Record Type | Section Detail Monthly Connection Charges - constant 'BSDT3'. This section is repeated for each Monthly Connection Charge applicable | A | text (5) | BSDT3 | Mandatory |
| Data Level 1 |  | Charge Type | Monthly Charge Type (Pre Vesting, Post Vesting, Energy Metering Charge, Transmission Charge, Miscellaneous, One-off Capital Asset Cost) | B | text (64) | Transmission Charge | Mandatory |
| Data Level 1 |  | Current Monthly Charge (£) | Current Monthly Charge for that Charge Type (£) | C | decimal (15,2) | 1360.00 | Mandatory |
| Data Level 1 |  | Previous Monthly Charge (£) | Previous Monthly Charge for that Charge Type (£) | D | decimal (15,2) | 1510.00 | Mandatory |
| Data Level 1 |  | Monthly Charge Variance (£) | Monthly Charge Variance for that Charge Type (£) | E | decimal (15,2) | -150.00 | Mandatory |
| Data | BSTL2 | Record Type | Section Detail Charge Totals - constant 'BSTL2' | A | text (5) | BSTL2 | Mandatory |
| Data |  | Monthly Charge Total | Monthly Charge Total Title - constant 'Monthly Charge Total' | B | text (5) | Monthly Charge Total | Mandatory |
| Data |  | Current Monthly Charge Total (£) | Current Monthly Charge Total all Charge Types (£) | C | decimal (15,2) | 400000.00 | Mandatory |
| Data |  | Previous Monthly Charge Total (£) | Previous Monthly Charge Total for all Charge Types (£) | D | decimal (15,2) | 396580.00 | Mandatory |
| Data |  | Monthly Charge Variance Total (£) | Monthly Charge Variance for all Charge Types (£) | E | decimal (15,2) | 3420.00 | Mandatory |
| Data | BLANK | Record Type | Blank Line Record Type - constant 'BLANK' | A | text (5) | BLANK | Mandatory |
| Data | SCDET | Record Type | Section Details Record Type - constant 'SCDET' | A | text (5) | SCDET | Mandatory |
| Data |  | Section Details Reference | Section Details Reference - constant 'MonthlyConnectionChargesBreakdown' | B | text (64) | MonthlyConnectionChargesBreakdown | Mandatory |
| Data | SCCN4 | Record Type | Section Details Column Headings - constant 'SCCN4' | A | text (5) | SCCN4 | Mandatory |
| Data |  | Connection Site Title | Column Section Title - Connection Site - constant 'ConnectionSite' | B | text (64) | ConnectionSite | Mandatory |
| Data |  | Agreement Reference Title | Column Section Title - Agreement Reference - constant 'AgreementReference' | C | text (64) | AgreementReference | Mandatory |
| Data |  | Connection Asset Title | Column Section Title - Connection Asset - constant 'ConnectionAsset' | D | text (64) | ConnectionAsset | Mandatory |
| Data |  | Charge Category Title | Column Section Title - Charge Category - constant 'ChargeCategory' | E | text (64) | ChargeCategory | Mandatory |
| Data |  | Commissioning Date Title | Column Section Title - Commissioning Date - constant 'CommissioningDate' | F | text (64) | CommissioningDate | Mandatory |
| Data |  | Depreciation Period Title | Column Section Title - Depreciation Period - constant 'DepreciationPeriod' | G | text (64) | DepreciationPeriod | Mandatory |
| Data |  | Mid Year Asset Age Title | Column Section Title - Age of Asset Mid Year - constant 'MidYearAssetAge' | H | text (64) | MidYearAssetAge | Mandatory |
| Data |  | TOPI GAV Title | Column Section Title - Transmission Owner Pricing Index Gross Asset Value (£) - constant 'TOPIGAV£' | I | text (64) | TOPIGAV£ | Mandatory |
| Data |  | Chargeable GAV Title | Column Section Title - Chargeable Gross Asset Value (£) - constant 'ChargeableGAV£' | J | text (64) | ChargeableGAV£ | Mandatory |
| Data |  | NAV Title | Column Section Title - Net Asset Value (£) - constant 'NetAssetValue(NAV)£' | K | text (64) | NetAssetValue(NAV)£ | Mandatory |
| Data |  | ROR Title | Column Section Title - Rate of Return (£) - constant 'RateOfReturn£' | L | text (64) | RateOfReturn£ | Mandatory |
| Data |  | Depreciation Title | Column Section Title - Depreciation (£) - constant 'Depreciation£' | M | text (64) | Depreciation£ | Mandatory |
| Data |  | SSM Title | Column Section Title - Site Specific Maintenance (£) - constant 'SiteSpecificMaintenance£' | N | text (64) | SiteSpecificMaintenance£ | Mandatory |
| Data |  | TRC Title | Column Section Title - Transmission Running Cost (£) - constant 'TransmissionRunningCost£' | O | text (64) | TransmissionRunningCost£ | Mandatory |
| Data |  | OAMF Title | Column Section Title - One off Asset Maintenance Factor (£) - constant 'OneOffAssetMaintenanceFactor£' | P | text (64) | OneOffAssetMaintenanceFactor£ | Mandatory |
| Data |  | OARC Title | Column Section Title - One off Asset Running Cost (£) - constant 'OneOffAssetRunningCost£' | Q | text (64) | OneOffAssetRunningCost£ | Mandatory |
| Data |  | Annual Charge Title | Column Section Title - Annual Charge (£) - constant 'AnnualCharge£' | R | text (64) | AnnualCharge£ | Mandatory |
| Data |  | Monthly Charge Title | Column Section Title - Monthly Charge (£) - constant 'MonthlyCharge£' | S | text (64) | MonthlyCharge£ | Mandatory |
| Data |  | Previous Monthly Charge Title | Column Section Title - Previous Monthly Charge (£) - constant 'PreviousMonthlyCharge£' | T | text (64) | PreviousMonthlyCharge£ | Mandatory |
| Data |  | Variance Title | Column Section Title - Variance from Previous Month (£) - constant 'Variance£' | U | text (64) | Variance£ | Mandatory |
| Data Level 1 | BSTD4 | Record Type | Section Details - constant 'BSTD4'. This section together with BSTL3 is repeated for each Connection Site | A | text (5) | BSTD4 | Mandatory |
| Data Level 1 |  | Connection Site | Connection Site Name | B | text (64) | ABD Wind Farm | Mandatory |
| Data Level 1 |  | Agreement Reference | Agreement Reference for the Asset | C | text (64) | A/SHET/BIST05 | Mandatory |
| Data Level 1 |  | Connection Asset | Connection Asset Name | D | text (64) | ABD Wind1 | Mandatory |
| Data Level 1 |  | Charge Category | Asset Charge Category Type | E | text (64) | Energy Metering Charge | Mandatory |
| Data Level 1 |  | Commissioning Date | Asset Commissioning Date - format DD.MM.YYYY | F | date | 20.04.1991 | Mandatory |
| Data Level 1 |  | Depreciation Period | Depreciation Period for that Asset in Years | G | number (2) | 40 | Mandatory |
| Data Level 1 |  | Mid Year Asset Age | Age of Asset Mid Year | H | decimal (4,2) | 32.5 | Mandatory |
| Data Level 1 |  | TOPI GAV (£) | Inflated (Transmission Owner Pricing Index) Gross Asset Value (£) | I | decimal (15,6) | 17032.595560 | Mandatory |
| Data Level 1 |  | Chargeable GAV (£) | Inflated (Transmission Owner Pricing Index) Chargeable Gross Asset Value (£) | J | decimal (15,6) | 17032.595560 | Mandatory |
| Data Level 1 |  | NAV (£) | Net Asset Value (£) | K | decimal (15,6) | 150788.992231 | Mandatory |
| Data Level 1 |  | ROR (£) | Asset Rate of Return Charge (£) | L | decimal (15,2) | 17777.40 | Mandatory |
| Data Level 1 |  | Depreciation (£) | Asset Depreciation Charge (£) | M | decimal (15,2) | 33022.60 | Mandatory |
| Data Level 1 |  | SSM (£) | Asset Site Specific Maintenance Charge (£) | N | decimal (15,2) | 8000.00 | Mandatory |
| Data Level 1 |  | TRC (£) | Asset Transmission Running Cost Charge (£) | O | decimal (15,2) | 1200.00 | Mandatory |
| Data Level 1 |  | OAMF (£) | One off Asset Maintenance Factor Charge (£) | P | decimal (15,2) | 0.00 | Mandatory |
| Data Level 1 |  | OARC (£) | One off Asset Running Cost Charge (£) | Q | decimal (15,2) | 0.00 | Mandatory |
| Data Level 1 |  | Annual Charge (£) | Asset Annual Charge (£) | R | decimal (15,2) | 60000.00 | Mandatory |
| Data Level 1 |  | Monthly Charge (£) | Asset Monthly Charge (£) | S | decimal (15,2) | 5000.00 | Mandatory |
| Data Level 1 |  | Previous Monthly Charge (£) | Asset Previous Monthly Charge (£) | T | decimal (15,2) | 5000.00 | Mandatory |
| Data Level 1 |  | Variance (£) | Asset Charge Variance from Previous Month (£) | U | decimal (15,2) | 0.00 | Mandatory |
| Data Level 1 | BSTL3 | Record Type | Section Details Site Totals - constant 'BSTL3'. This section together with BSTD4 is repeated for each Connection Site | A | text (5) | BSTL3 | Mandatory |
| Data Level 1 |  | Record Reference | Section Details Site Totals Reference - constant 'Site Level Total' | B | text (64) | Site Level Total | Mandatory |
| Data Level 1 |  | Site Totals | Section Details Site Totals Reference - 'Total for Site <site name>' | Q | text (64) | Total for Site ABD Wind Farm | Mandatory |
| Data Level 1 |  | Annual Charge Total | Total Annual Charge for Site (£) | R | decimal (15,2) | 4149790.58 | Mandatory |
| Data Level 1 |  | Monthly Charge Total | Total Monthly Charge for Site (£) | S | decimal (15,2) | 345815.88 | Mandatory |
| Data Level 1 |  | Previous Monthly Charge Total | Total Previous Monthly Charge for Site (£) | T | decimal (15,2) | 343410.00 | Mandatory |
| Data Level 1 |  | Variance Total | Total Variance from Previous Month for Site (£) | U | decimal (15,2) | 2405.88 | Mandatory |
| Data | BSTL4 | Record Type | Section Details Grand Totals - constant 'BSTL4'. | A | text (5) | BSTL4 | Mandatory |
| Data |  | Record Reference | Section Details Grand Totals Reference - constant 'Grand Total' | B | text (64) | Grand Total | Mandatory |
| Data |  | Grand Total | Section Details Grand Totals Reference - constant 'Grand Total' | Q | text (64) | Grand Total | Mandatory |
| Data |  | Annual Charge Total | Total Sites Annual Charge (£) | R | decimal (15,2) | 4800000.00 | Mandatory |
| Data |  | Monthly Charge Total | Total Sites Monthly Charge (£) | S | decimal (15,2) | 400000.00 | Mandatory |
| Data |  | Previous Monthly Charge Total | Total Sites Previous Monthly Charge (£) | T | decimal (15,2) | 396580.00 | Mandatory |
| Data |  | Variance Total | Total Sites Variance from Previous Month (£) | U | decimal (15,2) | 3420.00 | Mandatory |
| Data | BLANK | Record Type | Blank Line Record Type - constant 'BLANK' | A | text (5) | BLANK | Mandatory |
| Data | SCFTR | Record Type | Section Header for Queries Record Type - constant 'SCFTR' | A | text (5) | SCFTR | Mandatory |
| Data |  | Queries Contact Information | Queries Contact Text - constant 'ForQueriesPleaseContact' | B | text (64) | ForQueriesPleaseContact | Mandatory |
| Data | BSFTR | Record Type | Section Header for Queries Record Type - constant 'BSFTR' | A | text (5) | BSFTR | Mandatory |
| Data |  | Contact Email | Contact Email Address for Queries | B | text (255) | transmissionconnectioncharging@nationalgrideso.com | Mandatory |
| Data | ZZZ | Record Type | Section File Footer Record Type - constant 'ZZZ' | A | text (5) | ZZZ | Mandatory |
| Data |  | Record Count | Count of records including header and footer | B | num (10) | 48 | Mandatory |

# Appendix

## Sample Files

* 24-25\_APRIL\_ABCENERGY\_connection\_8034457.csv
* 24-25\_APRIL\_ABCENERGY\_connection\_monthly.csv

The embedded zipped sample files have ANSI encoding & Windows-1252 character set.  
  
Please utilise a native app to open and save (IE: notepad.exe) to ensure files are saved with the correct character set and as .CSV



The same sample files embedded below for opening in an Excel format.



## Glossary

|  |  |
| --- | --- |
| **Abbreviation** | **Description** |
| ANSI | American National Standards Institute |
| BSC | Balancing and Settlement Code |
| CPIH | Consumer Prices Index with Housing |
| CSV | Comma Separated Value |
| ESO | Electricity System Operator |
| GAV | Gross Asset Value |
| GMT | Greenwich Mean Time |
| LF | Line Feed |
| MEA | Modern Equivalent Asset |
| NAV | Net Asset Value |
| NETSO | National Electricity Transmission System Operator |
| NGESO | National Grid Electricity System Operator |
| NGET | National Grid Electricity Transmission |
| OAMF | One-off Asset Maintenance Factor |
| OARC | One-off Asset Running Cost |
| PDF | Portable Document Format |
| ROR | Rate of Return |
| SHETL | Scottish Hydro Electric Transmission Ltd |
| SPT | SP Energy Networks |
| SSM | Site Specific Maintenance |
| STAR | Settlements and Revenue System |
| TOPI | Transmission Owner Pricing Index |
| TRC | Transmission Running Cost |
| VAT | Value Added Tax |