

## **B2B Technical Specification**

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Process Name: **DELIVERING NSW NETWORK BILLING  
TRANSACTIONS**

Jurisdiction: **NSW & ACT**

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## Document History

Version	Date	Author	Comments
0.1	15/7/2017	Steve Wise	Initial Draft based on v1.7 of the B2B Technical Specification: Delivering NEM B2B Transactions via e-mail document.

# 1 INTRODUCTION

## 1.1 Purpose

This specification details the business and technical requirements for the delivery of NSW network billing B2B transactions as specified in the NSW Network Billing B2B Process Specification.

## 1.2 Scope

This specification defines both business rules and technical requirements for:

- The naming of emails and attachments;
- Formatting email content;
- Formatting CSV attachments.

## 1.3 Precedence

### 1.3.1 Relative to Process Specifications

Where the NSW Network Billing B2B Process Specification defines requirements in variance with this technical specification, the B2B Process Specification takes precedence.

### 1.3.2 Relative to Bilateral Agreements

In accordance with regulatory and contractual provisions, participants may agree to bilateral agreements for the exchange of network billing B2B transactions. Any such bilateral agreements should be interpreted as taking precedence over this technical specification. However, where bilateral agreements have not been formalised, this technical specification should apply.

## 1.4 Related Documents

B2B Process Specification: NSW Network Billing

## 2 PROCESS-RELATED BUSINESS RULES

### 2.1 General

All messages are to be sent via Mail Transfer Agent (MTA) to the e-mail addresses prescribed by the recipient.

### 2.2 Network Billing

The following rules relate to the transmission of network billing data via email:

- a) Distributors will send and receive all Network Billing transactions via a CSV formatted text file sent as an attachment to an email message.
- b) In general data exchanges should involve e-mailing a larger file sent daily (or other bilaterally agreed time periods) rather than real time (e.g. one per NMI) sent throughout the day.
- c) Distributors should endeavour to batch all invoices and dispatch them in one logical file exchange (e.g. overnight) to minimise Retailer reconciliation overhead.
- d) Retailers should endeavour to batch dispute and remittance notifications and dispatch them in one logical file exchange (e.g. overnight) to minimise risk of invoices not being paid or disputed (i.e. forgotten) before becoming overdue.
- e) Network billing emails and attachments will not be considered as being successfully sent until a confirmed receipt is received. In NSW, the receipt will be an auto-reply, ideally within 5 minutes of receipt. If not received, the sender must contact the receiving party to ensure that any technical issues are mutually resolved.
- f) Parties should ensure files are technically correct. This may involve technical validation of the file by the sender prior to issuance.
- g) If a file does not pass the error conditions for technical acknowledgment, the receiving party should advise the sending party of such an occurrence by 5pm (local time) of the next working day. If no such response is received, the file is assumed as technically valid.

#### 2.2.1 Error conditions for the technical acknowledgment

On receipt of an e-mail, the receiver should confirm:

- a) The name of the email and attachment are both consistent, valid and understood;
- b) The email and attachment have been sent to the correct party;
- c) The CSV attachment has not already been successfully processed;

- d) The CSV file format has been validated and is deemed to be correct (i.e. fields correct length, content valid according to file definition, all mandatory fields populated);
- e) The control totals and retailer name and network name in header and trailer records are correct and appropriate;
- f) The CSV attachment contains no incomplete record structures e.g. NUOS charge records without Invoice summary records; and that
- g) There are no calculation errors such as charge records not adding up to the invoice total.

If there is a failure of any of these checks, the receiving party must notify the sender, by email, that the file has been rejected (providing details of the validation errors) on the basis of failing technical validation and must be corrected and resent.

The negative technical acknowledgement e-mail should have the following attributes:

- h) The Title/Subject should reference the originating transaction name, plus a suffix if so desired. E.g. Re:  
NEM#NBCHARGES#ENRGYAUS#EASTERN#20020826V1. For NSW the suffix is mandatory and MUST reflect status of the file. For example  
“NEM#NBCHARGES#ENRGYAUS#EASTERN#20020826180500V1–  
Rejected.”
- i) The message should provide full details on the nature of the problem. E.g. File corrupt, please resend.
- j) Confidentiality statements and further contact details may also be appended to the message.
- k) The receiving party may also return the file that failed validation as an attachment, to assist in correcting the problem.
- l) The party that originally sent the file should use best endeavours to promptly rectify the nature of the problem, and resend the corrected file with a new version number.

In the case of extra-ordinary technical events or excessive delays in resending files, bilateral arrangements may be made between parties. E.g. Waiving interest charges or revised payment processing dates.

### 3 TECHNICAL DELIVERY DETAILS

#### 3.1 E-mail Subject

To assist in tracking and processing Network email B2B transactions, a standard e-mail message subject should be used:

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**NEM#Transaction\_Name#Sending\_Participant\_ID#Receiving\_Participant\_ID#Reference\_ID**

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Email subject naming rules:

- a) As shown above, the "#" (hash symbol) must be inserted as a separator between fields (and may be used by recipients to facilitate system parsing and sorting of messages).
- b) The subject name must not include spaces.
- c) The fields Transaction\_Name, Sending\_Participant\_ID, Receiving\_Participant\_ID and Reference\_ID must not contain "#" (the hash symbol).
- d) The literal "NEM" must be included and denotes that the transaction relates to the national electricity market.
- e) The Transaction\_Name field must be included to identify the (unique) B2B transaction type. The following table lists the allowable transaction names:

Process Area	Transaction Name	Description
Network Billing	NBCHARGES	Network Charges/Adjustments/ Recharge Sent to Retailer
	NBCREDIT	Credit Balance Invoice Advice
	NBDISPUTES	Network Charge Dispute Notification Sent to Distributor
	NBDISRESOL	Dispute Status Change Advice
	NBREMIND	Outstanding Invoice Advice
	NBREMITT	Remittance to Distributor
	NBTAXINVREQ	Excluded Service Charge Tax Invoice Request
	MISC	Miscellaneous

- f) The Sending\_Participant\_ID field must be included to identify the participant that has sent the message.

- g) The Sending\_Participant\_ID field must only contain a valid NEM participant ID, as published by AEMO.
- h) The Receiving\_Participant\_ID field should be included to identify the participant who is intended to receive the message.
- i) Where provided, the Receiving\_Participant\_ID field must only contain a valid NEM participant ID, as published by AEMO.
- j) The Reference\_ID field must be included to provide both sender and recipient with a consistent and unique reference for the transaction, to assist in identifying duplicate messages.
- k) For Network Billing transactions, the Reference\_ID field must comprise the concatenation of the file creation date and time (formatted as “CCYYMMDDHHMMSS”), the literal “V” followed by the version number of the file (1, 2, and so on) and for NSW the status (blank or ‘Rejected’) as illustrated on in 2.5.1 (h). The version number will be incremented only where files are created and resent due to negative technical acknowledgment.
- l) The full subject name, including all required fields and separators, must not exceed a maximum length of 255 characters.

## **3.2 Email Content**

### **3.2.1 Confidentiality Notice**

All e-mails should contain a confidentiality notice. Where a business does not have an approved, corporate confidentiality notice, the following is to be included:

*“This email and any files transmitted with it may be confidential and is intended solely for the use of the individual or entity to whom it is addressed. If you have received this email in error, please notify the sender by return email, and delete this email from your in-box. Do not copy it to anybody else.”*

For operational convenience, the notice can be added as an automatic signature and may also include contact details for issue resolution and escalation.

### **3.2.2 Format of Email Content transactions**

Where a transaction is sent in the body of the email message:

- a) The message is to be structured as a list of the relevant fields, as described in the relevant process specification.
- b) Field names and field sizes are to be consistent with the relevant Transaction data requirements.
- c) Fields are to be in the same order as listed in the Transaction data tables.
- d) All relevant fields are to be included (i.e. the field names for optional or required fields with no data should be included);
- e) Field names and values are to be separated by a colon, as illustrated below. Colons are not to be used within field values, to assist some parties with processing these emails automatically.”

Example

The example uses generic participant IDs (LNSP123456,FRMP123456)

<p>Subject: NEM# NBCHARGES#LNSP123456#FRMP123456#000000001012320</p> <p>10,LNSP123456,FRMP123456,20020520031000</p> <p>20,123456787,NEEE000112,6,20020519,20020530,LNSP ABC,11 222 333 444,FRMP ABC,11 222 333 555,Tax Invoice,3300,330,3630,Y</p> <p>100,123456787,1,,20020519,N,,NEEE000112,6,N19,1,20020331,20020430,NCCL1,A,Network Access Charge,30,Day,10,300,30,Y</p> <p>100,123456787,2,,20020519,N,,NEEE000112,6,N19,1,20020331,20020430,MAX,A,Gen Bus Demand,1000,KVA,1,1000,100,Y</p> <p>100,123456787,3,,20020519,N,,NEEE000112,6,N19,1,20020331,20020430,OFFPEAK,A,Gen Bus Off Peak,10000,KWH,0.1,1000,100,Y</p> <p>100,123456787,4,,20020519,N,,NEEE000112,6,N19,1,20020331,20020430,PEAK,A,Gen Bus Peak,10000,KWH,0.1,1000,100,Y</p> <p>100,123456787,5,,20020519,N,,NEEE000112,6,N19,1,20020331,20020430,SHOULDER,A,Gen Bus Peak,10000,KWH,0.1,1000,100,Y</p> <p>20,123456788,NEEE000113,7,20020519,20020530,LNSP ABC,11 222 333 444,FRMP ABC,11 222 333 555,Tax Invoice,2160,216,2376,Y</p> <p>100,123456788,1,,20020519,N,,NEEE000113,7,N70,1,20020128,20020430,NCCL1,A,Network Access Charge,91,Day,10,1160,116,Y</p> <p>100,123456788,5,,20020519,N,,NEEE000113,7,N70,1,20020128,20020430,ALLDAY,A,Domestic,10000,KWH,0.1,1000,100,Y</p> <p>11,4,1,5460,546,6006</p> <p>This email and any files transmitted with it may be confidential and are intended solely for the use of the individual or entity to whom they are addressed. If you have received this email in error, please notify the sender by return email, and delete this email from your in-box. Do not copy it to anybody else.</p>
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**3.3 File Attachments**

**3.3.1 Number of Attachments**

Rules governing the number of email attachments:

- a) Each email must have no more than one attachment.
- b) Where a B2B transaction is included in an email as body content, rather than as an attachment, the email should not have an attachment (unless bilaterally agreed by participants).

**3.3.2 Naming Attachments**

Email attachment naming rules:

- a) The attachment must share the name of the email (as included in the subject line) and must also include an appended filetype extension of “.zip”:  

**NEM#Transaction\_Name#Sending\_Participant\_ID#Receiving\_Participant\_ID#Reference\_ID.zip**
- b) The zip file content will be consistent with the e-mail subject header, using an extension type suffix as illustrated below:

*NEM#Transaction\_Name#Sending\_Participant\_ID#Receiving\_Participant\_ID#Reference\_ID.csv*

- c) The supported file extension and associated data format is listed below:

<b>Extension suffix</b>	<b>Data format</b>
.csv	CSV format
.xml	AseXML instance document

**3.3.3 Maximum Size of Attachments**

- a) In NSW, attachments must not exceed a compressed file size of ten megabytes.

**3.3.4 Compression of Attachments**

- a) All attachments must be zipped using the 'zlib' standard (using software such as PKZIP), as used by MSATS at the time.

**3.3.5 Security/Encryption of Attachments**

- a) Network Billing Data attachments must not be password protected.

**3.3.6 Use of Header row on CSV data files**

- a) NSW Network Billing CSV files will contain field header and footer records as described within this process specification. Files will not contain any field headings.

## APPENDIX A - Summary of NSW Network Billing Exchange Procedures

No.	Description	Document Content & Field Formats	Document Delivery Format (e.g. CSV)	Data Delivery Method	Frequency	Acknowledgments	Notes
1	<b>LNSP to FRMP</b> Network invoice	B2B Network Billing Spec	CSV	CSV File attached to e-mail	Various – from daily to monthly	Immediate e-mail plus additional negative technical acknowledgment	Only one attachment per e-mail Can have multiple NMIs per file. negative technical acknowledgment by 5pm (local time) of next working day
2	<b>FRMP to LNSP</b> Dispute Notification	B2B Network Billing Spec	CSV	CSV File attached to e-mail	Before date due	Immediate e-mail	Date due determined by Invoice Due Date in Network Invoice less three days as specified in MOR/UOS agreements.
3	<b>FRMP to LNSP</b> Remittance Advice	B2B Network Billing Spec	CSV	CSV File attached to e-mail	Before date due	Immediate e-mail	Associated EFT/ Payment also occurs at same time. Date due determined by Invoice Due Date in Network Invoice.
4	<b>LNSP to FRMP</b> Dispute Status Change advice	B2B Network Billing Spec	CSV	CSV File attached to e-mail	Daily	Immediate e-mail	
5	<b>LNSP to FRMP</b> Overdue Invoice advice	B2B Network Billing Spec	CSV	CSV File attached to e-mail	Daily	Immediate e-mail	
6	<b>LNSP to FRMP</b> Credit Balance Invoice advice	B2B Network Billing Spec	CSV	CSV File attached to e-mail	Monthly	Immediate e-mail	