Revenue Metering Reports Importing and Reading the IESO EDI-867 Meter Data File

GDE-140

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Issue Date: October 27 2020

IESO Public

Independent Electricity System Operator

Document Change History

Issue	Reason for Issue	Date
1.0	Baseline Document	March 2, 2015
2.0	First Accepted Update	March 2, 2016
3.0	For compliance of the Accessibility for Ontarians with Disabilities Act (AODA)	October 27 2020

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1. Importing an EDI-867 File into Excel

1.1 Introduction

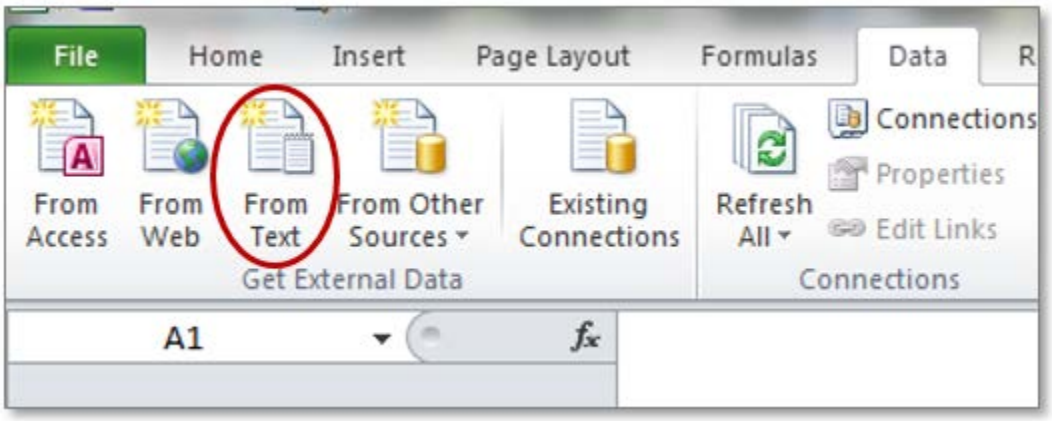
Microsoft Excel is able to import EDI-867 data into an Excel worksheet using the Text Import Wizard.

The maximum allowable worksheet size is 1 048 576 rows by 16 384 columns. Text files that exceed the row and/or column limitation cannot be loaded into Excel. Other tools (e.g., Notepad+ or Wordpad) can be used to open extremely large EDI-867 files.

1.2 How to Import an EDI-867 File into Excel

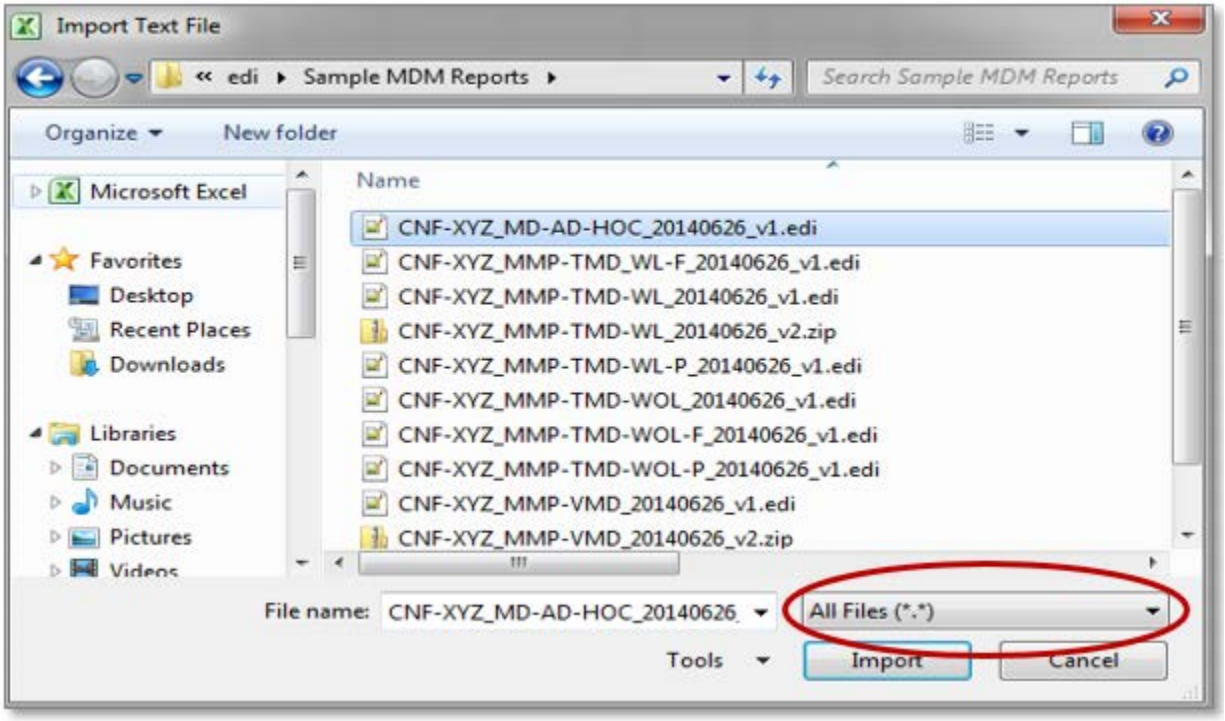
1. Open a new workbook in **Microsoft Excel**.

2. On the **Data** tab, in the **Get External Data** group, click **From Text**.



Result: The Import Text File dialogue box appears.

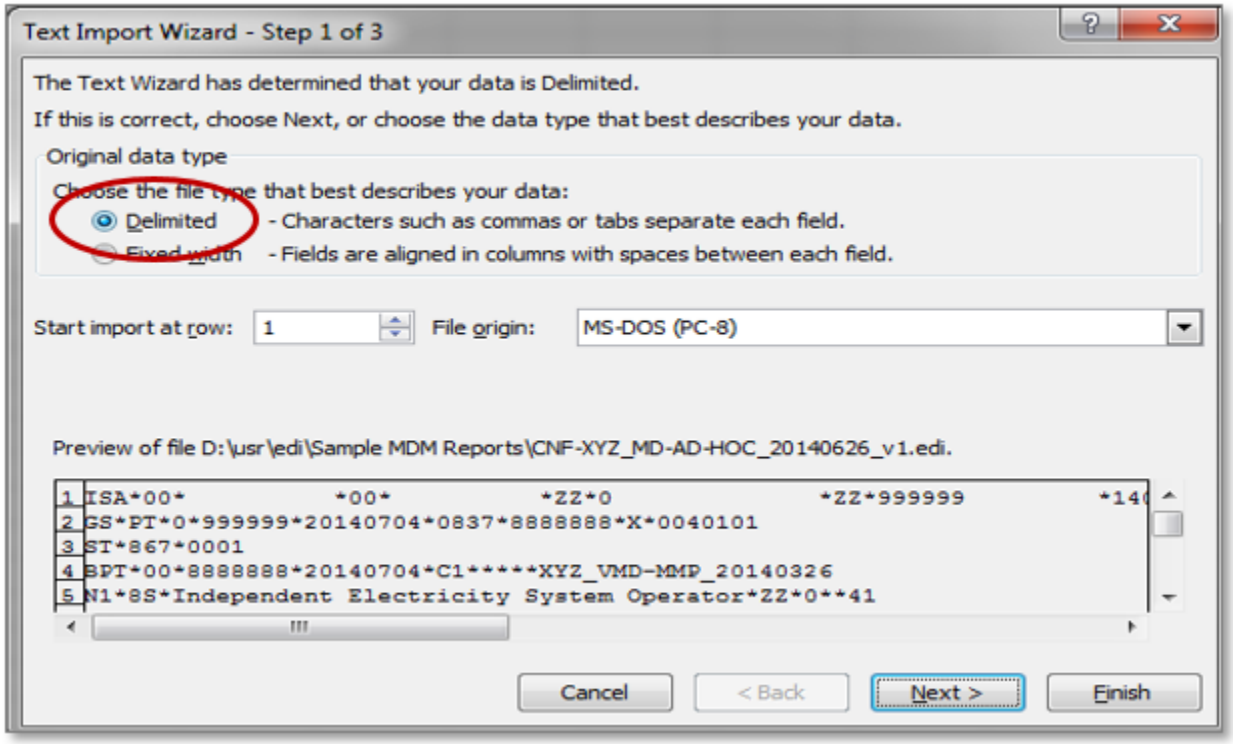
3. In the File Type dropdown box, select **All Files (*.*)**.



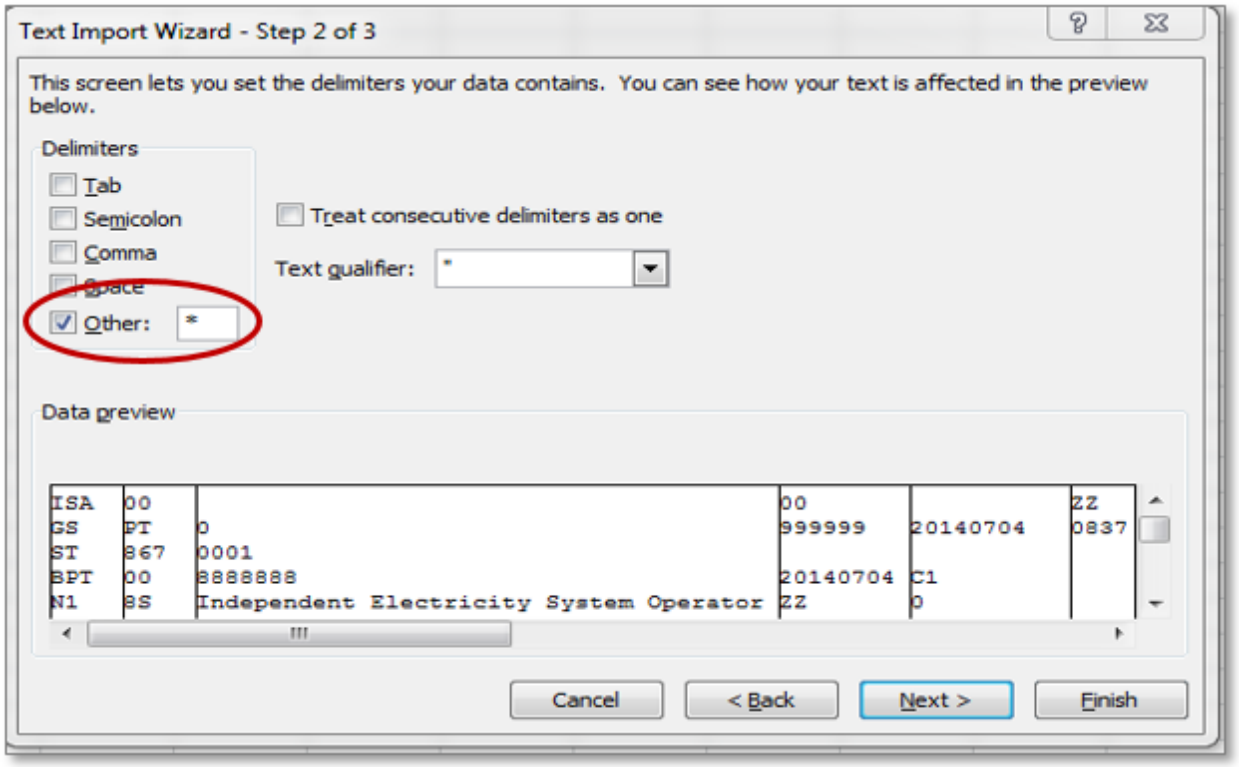
4. Select the EDI-867 file you want to import and click **Import**.

   Result: The Text Import Wizard dialogue box appears.

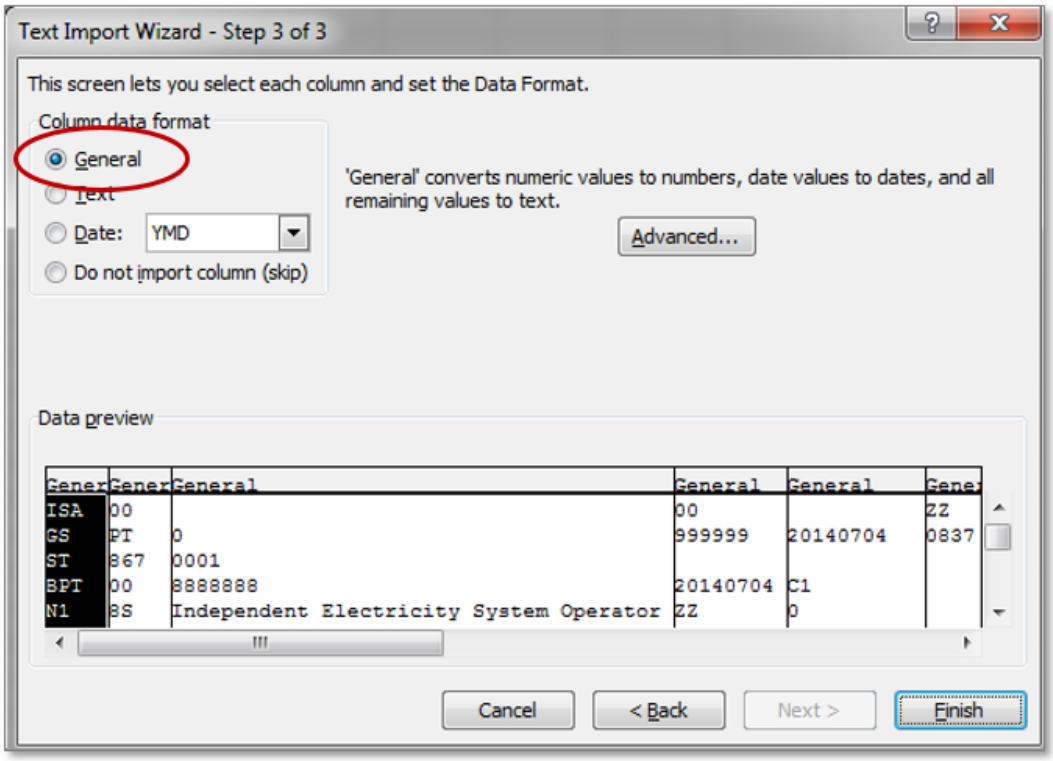
5. In the **Original data type** group, select **Delimited** then click **Next >**.



6. In the **Delimiters** group, select **Other** and enter an **asterisk (*)** in the box next to **Other** then click **Next >**.



7. In the **Column data format** group, select **General** then click **Finish**.



Result: The EDI-867 data is imported as text to the Excel worksheet. This data can be formatted using a Macro or VBA if required.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	ISA	0		0		ZZ	0	ZZ	999999	140704	837	U	401	8888888	0
2	GS	PT	0	999999	20140704	837	8888888	X	40101						
3	ST	867	1												
4	BPT	0	8888888	20140704	C1					XYZ_VMD-MMP_20140326					
5	N1	8S	Independent Electricity System Operator	ZZ	0		41								
6	N1	SJ	XYZ	ZZ	999999		40								
7	REF	LU	1000099999												
8	PTD	PM			OZ	EL									
9	REF	6W	1												
10	REF	LU	1000099999												
11	REF	MG	2												
12	REF	MT	KH005												
13	QTY	QD	490.57	KH											
14	MEA		MU	24000	KH			22							
15	DTM	150				DT	2.01406E+11								
16	DTM	151				DT	2.01406E+11								
17	QTY	QD	487.3	KH											
18	QTY	QD	485.74	KH											
19	QTY	QD	490.73	KH											
20	QTY	QD	490.49	KH											
21	QTY	QD	487.41	KH											
22	QTY	QD	486.99	KH											
23	QTY	QD	488.31	KH											
24	QTY	QD	486.19	KH											
25	QTY	QD	479.14	KH											
26	QTY	QD	482.24	KH											

– End of Section –

2. Reading the IESO EDI-867 Meter Data File

This section describes the meter data information in EDI-867 files published by the IESO for market participants.

It is limited to describing the EDI-867 files produced by the meter data management system based on market participant profiles and through ad-hoc requests.

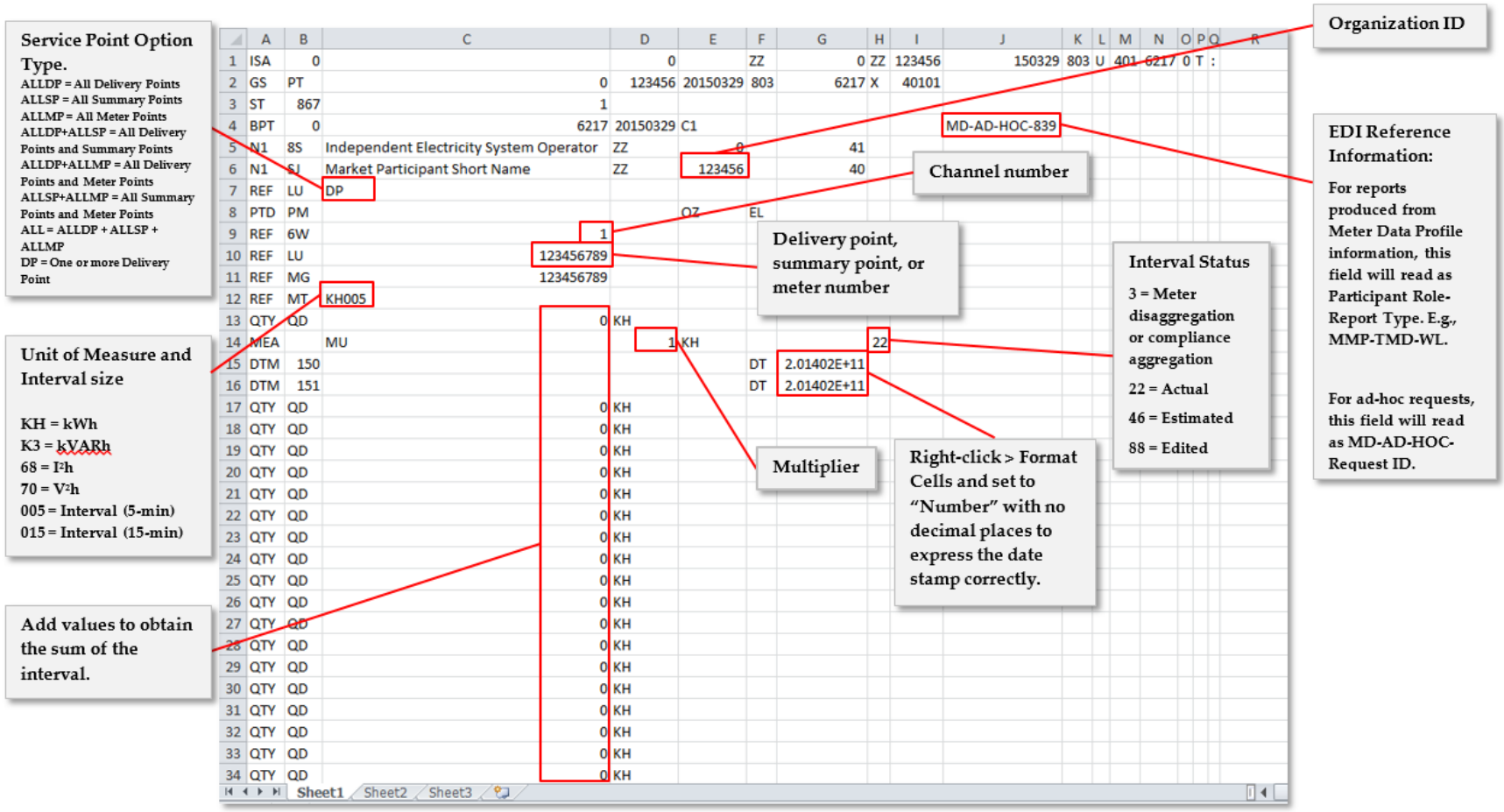
Please refer to the *IESO Implementation Guide for EDI-867 Meter Data* for additional information, including but not limited to, segment names, interval status code descriptions, service point option type descriptions.

2.1 How to Read This Section

The screenshots below are of Excel worksheets populated with sample data after an EDI-867 file import has been performed. EDI-867 data from the screenshot is highlighted and callouts provide detail about that data.

2.2 Sample EDI Files in Excel

See the *IESO Implementation Guide for EDI-867 Meter Data* for additional information.



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	ISA	0		0		ZZ	0	ZZ	123456	150329	803	U	401	6217	0	T	:	
2	GS	PT	0	123456	20150329	803	6217	X	40101									
3	ST	867	1															
4	BPT	0	6217	20150329	C1					MD-AD-HOC-839								
5	N1	8S	Independent Electricity System Operator	ZZ	0		41											
6	N1	SJ	Market Participant Short Name	ZZ	123456		40											
7	REF	LU	DP															
8	PTD	PM			OZ	EL												
9	REF	6W	1															
10	REF	LU	123456789															
11	REF	MG	123456789															
12	REF	MT	KH005															
13	QTY	QD	0	KH														
14	MEA		MU	1	KH			22										
15	DTM	150				DT	2.01402E+11											
16	DTM	151				DT	2.01402E+11											
17	QTY	QD	0	KH														
18	QTY	QD	0	KH														
19	QTY	QD	0	KH														
20	QTY	QD	0	KH														
21	QTY	QD	0	KH														
22	QTY	QD	0	KH														
23	QTY	QD	0	KH														
24	QTY	QD	0	KH														
25	QTY	QD	0	KH														
26	QTY	QD	0	KH														
27	QTY	QD	0	KH														
28	QTY	QD	0	KH														
29	QTY	QD	0	KH														
30	QTY	QD	0	KH														
31	QTY	QD	0	KH														
32	QTY	QD	0	KH														
33	QTY	QD	0	KH														
34	QTY	QD	0	KH														

Sheet1 Sheet2 Sheet3

Figure 2-1: EDI-867 Data Overview

The callouts on the image below describe the identifiers on an EDI file that has multiple channels (PTD loops).

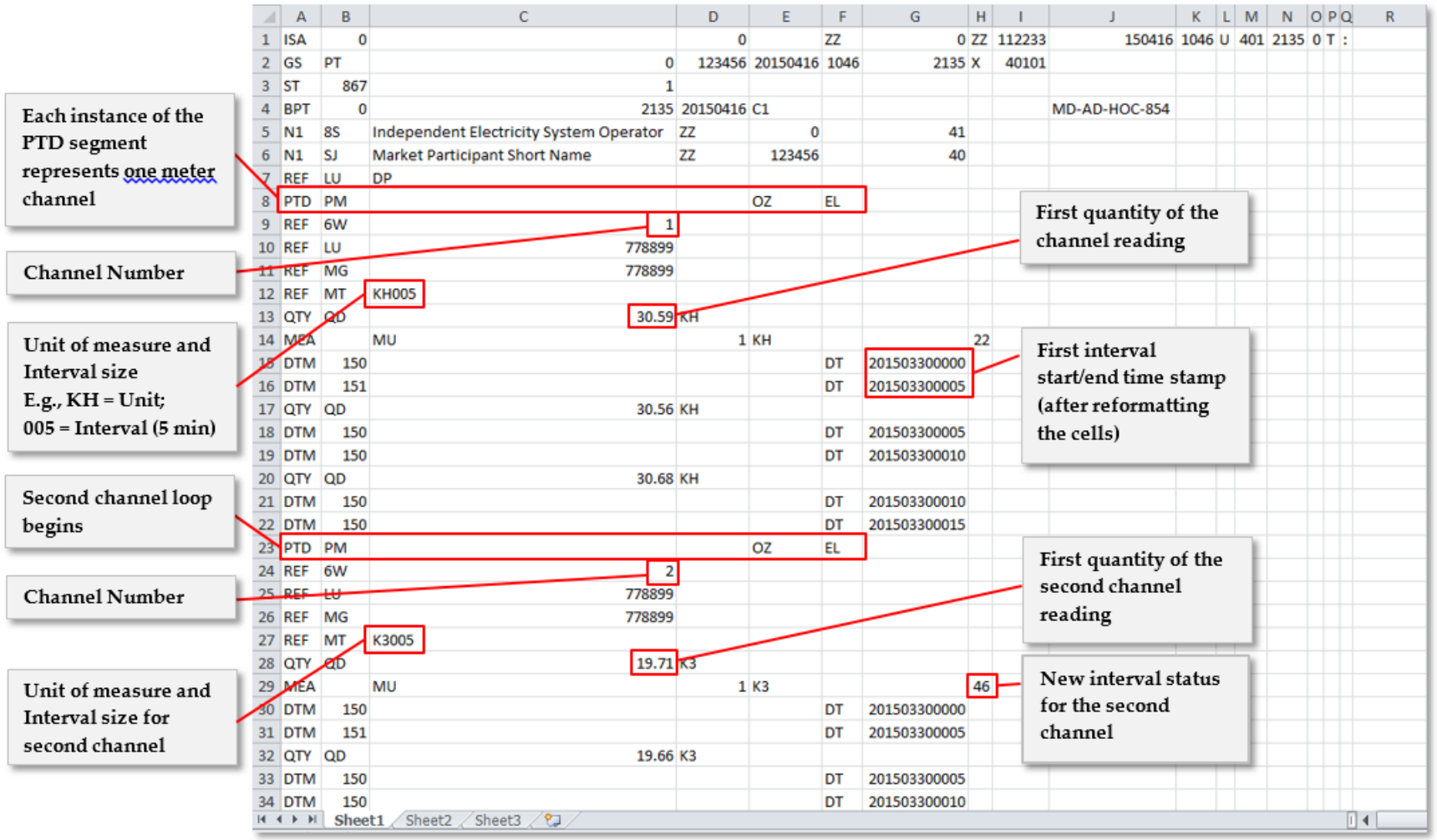
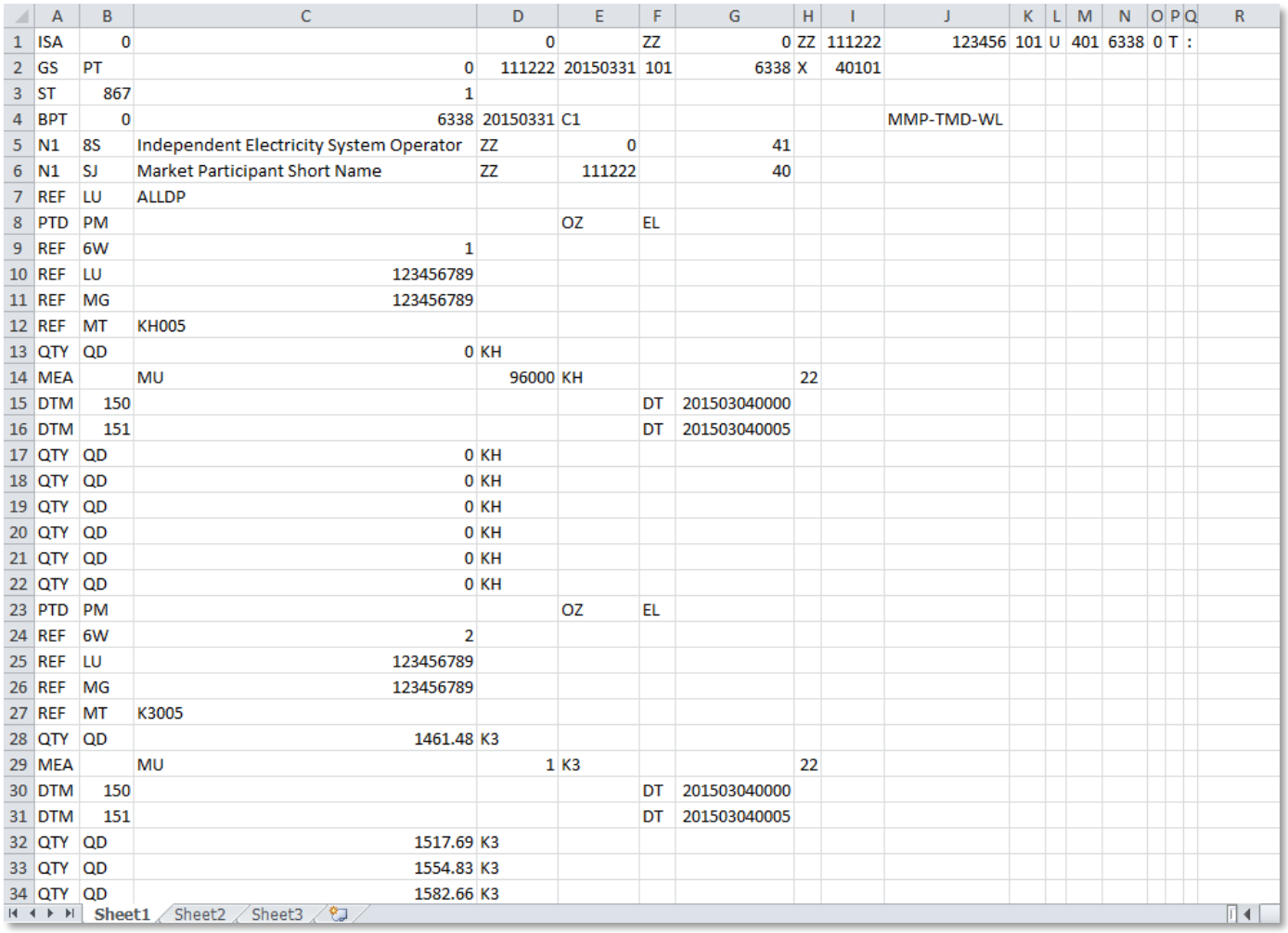


Figure 2-2: Multiple Channel EDI-867 Sample

Third Sample EDI-867 File without callouts.



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	ISA	0		0		ZZ	0	ZZ	111222	123456	101	U	401	6338	0	T	:	
2	GS	PT	0	111222	20150331	101	6338	X	40101									
3	ST	867	1															
4	BPT	0	6338	20150331	C1					MMP-TMD-WL								
5	N1	8S	Independent Electricity System Operator	ZZ	0		41											
6	N1	SJ	Market Participant Short Name	ZZ	111222		40											
7	REF	LU	ALLDP															
8	PTD	PM			OZ	EL												
9	REF	6W	1															
10	REF	LU	123456789															
11	REF	MG	123456789															
12	REF	MT	KH005															
13	QTY	QD	0	KH														
14	MEA		MU	96000	KH			22										
15	DTM	150				DT	201503040000											
16	DTM	151				DT	201503040005											
17	QTY	QD	0	KH														
18	QTY	QD	0	KH														
19	QTY	QD	0	KH														
20	QTY	QD	0	KH														
21	QTY	QD	0	KH														
22	QTY	QD	0	KH														
23	PTD	PM			OZ	EL												
24	REF	6W	2															
25	REF	LU	123456789															
26	REF	MG	123456789															
27	REF	MT	K3005															
28	QTY	QD	1461.48	K3														
29	MEA		MU	1	K3			22										
30	DTM	150				DT	201503040000											
31	DTM	151				DT	201503040005											
32	QTY	QD	1517.69	K3														
33	QTY	QD	1554.83	K3														
34	QTY	QD	1582.66	K3														

Sheet1 Sheet2 Sheet3

Figure 2-3: Sample EDI-867 File in Excel

– End of Section–

3. Sample Formulas

Unless otherwise stated, the unit of measure (UOM) of the results of the calculations will have the same UOM of the channel. E.g., The UOM will be kWh if the UOM of the channel is kWh, or will be kVARh if the UOM of the channel is kVARh.

3.1 Total Usage (Per Day)

To calculate the total usage, add all of the intervals in a given day.

Total Usage for a different period (i.e., week, month) can be found by adding the calculated total usage values from a given period.

3.2 Maximum Demand (Per Day)

To calculate the maximum demand, multiply the highest interval value by the intervals per hour (IPH).

3.3 Daily Average Demand

The daily average demand is found by performing the following calculation:

$$\frac{Total\ Usage\ \times IPH}{Total\ Number\ of\ Intervals}$$

3.4 kVA Per Interval

The kVA per interval is found by performing the following calculation:

$$\sqrt{(kWh\ \times IPH)^2 + (kVARh\ \times IPH)^2}$$

Note: The UOM in this case will be kVA.

3.5 Power Factor (Per Interval)

The power factor per interval is found by performing the following calculation:

$$\frac{kWh\ \times IPH}{kVA\ per\ interval} \times 100$$

Note: The resulting value will be expressed as a percentage (%).

3.6 Load Factor (Per Day)

The load factor per day is found by performing the following calculation:

$$\frac{Daily\ Average\ Demand}{Maximum\ Demand} \times 100$$

Note: The resulting value will be expressed as a percentage (%).

– End of Section –

References

Document Title	Document ID
Revenue Metering Reports – IESO Implementation Guide for EDI-867 Meter Data	*GDE-139*

Related Documents

Document Title	Document ID
None Yet.	None.

– End of Document –