Table 1: Consultation Paper Comments

Item	Question	Participant Comment	AEMO Comment
1.	The Procedures presents the minimum summary and detailed data formats. Please comment on the proposed formats and examples in Section 2.	**AusNet Services:** **1.4 Issues in providing tariff based information** i) Need for tariff based summary? The purpose of the summary data formats is not for bill checking but rather to provide an understanding of the customer's consumption pattern. As such AusNet Services regards the provision of retail usage rate information as an unnecessary complication. This is consistent with the CUAC view of what is required by customers. ii) DNSP have no visibility of retailer billing Time of Use (TOU) information AusNet Services notes the following information specified in the strawman Metering Data Provision Procedure (MDPP) relates specifically to retail billing: • "daily time periods", • separate "energy flow types", and • peak, off-peak, controlled load and shoulder usage rate times. Although there currently is generally correlation between the usage rate times in a Network Tariff and the Retailers billing charges, there is no certainty of this. Retailers are not obligated to match usage rate times with DNSP's Network Tariff, and hence retail offers do not necessarily align with Network Tariffs. DNSPs have no visibility as to the customer's retail billing contracts. If retailer billing TOU information is required, it is unclear how DNSPs will receive the customer's retailer billing TOU information. Will it be from the Retailers through the B2B: CSDN process, or will the customers (or customer authorised representatives) provide this in the request for data? DNSPs would also need visibility of retailer billing TOU information for all the various retailers nominated for customer over a potential 2 year period. Even if the procedure required the customer (or customer authorised representatives) to provide tariff based details to DNSPs, it is likely that mismatches in these quantities with the basis of bills will result in a poor customer experience and even billing disputes. AusNet Services strongly suggests removing these quantities from both the summary and detailed data formats, or alternatively removing these quantities from the data formats DNSPs provide. AusNet Services strongly suggests removing daily time periods, separate "energy flow types", and references to peak, off-peak, and shoulder from the minimum summary	AEMO considers that time of use or flexible pricing (for example, Peak, Shoulder and Off-Peak information) is minimum information that retail customers need to understand their consumption patterns. AEMO agrees with retailers and DNSPs that retail customers may be confused by the mis-match between retail tariffs and network tariffs, and by the fact that these are defined differently among retailers. To eliminate this confusion, AEMO proposes to only require retailers to provide Peak, Off-Peak, Shoulder information and demand information. Retailers will also need to clarify how these are defined. As minimum requirements, DNSPs must provide usage, controlled load and generation. This is information that DNSPs usually have available. Time of use or flexible pricing information (for example, Peak, Shoulder and Off-Peak) must be included in summary data formats and demand must be included in the interval detailed data format. Refer to the comments above.

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		and detailed data formats. This is especially important because network businesses do not currently have this information or a reliable means to receive it. **1.5 Issue in providing tariff based information – controlled load** Firstly, AusNet Services strongly suggests controlled load can only be provided if it is separately measured. In making this suggestion, it is important to realise the distinction between a controlled load and a separately metered controlled load with control i.e. referred to in Victoria as a dedicated circuit. If a controlled load is not separately measured at the meter then registered participants have no ability to provide it in the summary or detailed data formats. Secondly, it is worth noting that controlled load usage may be allocated to a combination of peak, shoulder or off-peak usage. Showing controlled load usage could be confusing and potentially result in data that double counts controlled load usage. This is minor compared to the issue of showing peak, off-peak and shoulder usage. If separately measured controlled load is to be included the definition of it in the MDPP needs to be clear. **1.6 Issues in providing demand** "Average daily demand" and demand are not well defined in the strawman Metering Data Provision Procedures. Further "average daily demand" and demand are not appropriate in the summary format as these quantities are not relevant to customers for billing. Including these quantities is superfluous to a customer's energy information needs and potentially confusing. It is unclear what "average daily demand" means. Demand is a measure that represents the maximum power level over a period. Demand is calculated and billed based on the highest use interval (30 minute or 15 minute) measured in a given period. Defining demand needs to make reference to this measurement period. Typically, the purpose of demand billing arrangements is to reduce the maximum power usage on certain days and at certain times, when peak usage normally occurs. These days and times are specified in the terms and conditions of the electricity supply contract and/or Network Tariff. Therefore providing the maximum demand over the requested period or average daily demand will generally not relate to the billing quantities. Further, demand is a quantity that can be calculated by a detailed analysis of the interval metering data. That is taking the highest interval in a measurement period and applying it to a billing period. Where a customer is billed on demand, they should have the sophistication to calculate their demand from the interval data themselves using the	Refer to the comment above. The accumulation summary format metering data must be presented in a diagram and table.

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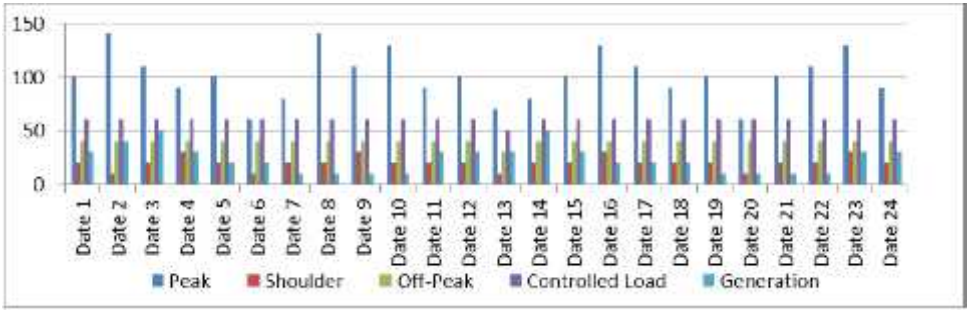
		detailed interval data. Providing demand as part of the Metering Data Provision Procedures will to add complexity and be confusing to customers. If future regulatory framework changes introduce demand tariffs to small consumers and align network tariffs and retail pricing, then AEMO could re-introduce demand information into the MDPP. These changes will not come into effect before 2017. AusNet Services suggests removing average daily demand from the minimum summary format. **1.7 Diagrams proposed not fit for purpose** AusNet Services suggests the diagrammatic representation purpose is not for bill checking, but an assessment of a customer's energy usage. Notwithstanding the issues in providing retailer billing TOU based information regarding to the provision of usage rate times, AusNet Services considers the diagrammatic representation presented in the strawman MDPP is impractical because it does not suit analysis of a reasonable amount of data, for example 2 years of monthly data shown below.  The key messages such as trends and seasonal differences get lost in the detail. One would expect the diagrammatic representations to contain succinct visual representations of the requested data, whether that is 1 week or 2 years. Alternatively, AusNet Services suggests a simplified monthly chart with only usage and generation average daily totals; and for where interval data is available extra charts can be provided, similar to the graphs provided by CUAC (circulated on 14 May 2015). Detailed comments regarding this material are provided in section 3 of AusNet Services response.	The NER clause 7.16(3) requires AEMO to specify a summary data format for accumulated meters. AEMO considers that to improve retail customer access and understandability it is appropriate to present this information graphically. Additionally, the information should also be presented in a table so retail customers can readily determine the numerical information. The Meter Data Provisioning Procedures (MDPP) will specify the Summary Interval Data is based on a representation of actual usage information rather than an average usage information.

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		AusNet Services suggests that all tabular summary data and graphical representations are provided on a single sheet of A4 paper. AusNet Services suggests the proposed diagrammatic representation is impractical to customers, and does not achieve the intended purpose of providing a succinct visual representation of the requested data. **1.8 Boundary and edge cases to consider** AusNet Services notes there are a number of request scenarios that need to be defined in the procedure. AusNet Services is less concerned about how these are defined, and more concerned about having adequate certainty in building IT systems. Each quantity, scale, assumption and business rule must be clearly defined. Certainty is required with regards to the following boundary and edge cases: How to present data on monthly or weekly diagrams when less data is requested? Do Retailers and DNSPs provide only average daily quantities to provide a consistent basis for part week and part month requests, or do we specify that Retailers and DNSPs provide only whole months and weeks of data, i.e. truncating data? How to present quarterly accumulation read data with special reads without misrepresenting the data, in terms of the representative quantity and timeline? How do Retailers and DNSPs handle situations where the meter was removed or logically converted to an interval meter within the period of data requested? Each quantity presented in the diagrammatic representation needs to be clearly defined in terms what it is and how it is calculated. For example: Average daily usage by month is the total energy exported (from the grid) for each month in the period requested of the customer's meter divided by the number of days in the month. If only a part month of meter data is available then provide the meter data only divide by the number of days in that month for which there is meter data for. Average daily generation by month is the total energy imported (from the grid) for each month in the period requested of the customer's meter divided by the number of days in the month.	Refer to comments provide above.

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		AusNet Services suggests further additions are made to sections 3.3 clarify boundary and edge cases and clearly defining each measured quantity. **1.9 Issues in providing demand in the diagrammatic representation** As raised in the earlier point 1.6, providing demand information is inappropriate in both summary information and detailed information. The question refers to large retail customers. What measure is being used to describe retail customers as large? How does this correspond to NECF or how is it defined in Victoria that has not implemented NECF? AusNet Services suggests not including demand in diagrammatic representation, even for large retail customers. Noting the use of term large retail customers is unclear and should be defined in the MDPP.	
		EnergyAustralia: EnergyAustralia supports assisting customers to effectively manage and understand their electricity consumption by outlining a minimum standard. However care is needed to ensure this is kept in alignment with the policy intent of a minimum requirement procedure to ensure retailers can continue to innovate to respond to customer needs in an ever changing market. The language of this procedure leads to mixed intent around provision of a file for the customer to utilise in a third party comparator website or for a household to use to better understand their energy consumption. If it is for both then the current ambiguity needs to be further clarified. Further details to this are provided in section 2.	AEMO supports making infomation easier for customers to access and understand in order to make better and more informed choices about energy products and services. The MDPP makes provision for the provision of innovative services.
		Energy Tailors: See Section #2	
		Ergon Energy: To be of benefit, customers must be able to understand the data provided. The standard formats proposed could be updated to provide clearer and more easily understood presentation styles, and should include a glossary of terms. Even concepts that could be considered to be commonly understood such as ‘peak’, ‘shoulder’ and ‘read date’ may not be known by all customers.	AEMO supports making infomation easier for customers to access and understand in order to make better and more informed choices about energy products and services.

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		Lumo Energy and Red Energy (Lumo): Support the provision of accurate, useful information to customers to enable them to effectively manage their electricity consumption. It is our preference that AEMO develop a standard for the provision of the customers metering data and that this should be kept as simple as possible at all times and not be overly prescriptive. There is a risk that it if the standard is overly prescriptive then it may impinge on the level of innovation in presenting this information by a retailer to their customers. Retailers may want to use their quality and type of data provision as a means of differentiation from other retailers, and as a source of competitive advantage. If the format of the data is to be prescribed, then AEMO MUST prescribe the 7 existing data formats that have been developed, agreed and implemented for Victoria. We do not believe that every retailer should tailor their systems at a cost for all consumers for the ease of use to third parties.	AEMO supports making infomation easier for customers to access and understand in order to make better and more informed choices about energy products and services. The MDPP makes provision for the provision of innovative services. The interval detailed data format, whether requested by the retail customer or customer authorised representative, is most likely to be used in a third parties comparison website to assess whether the retail customer has better pricing offers available to them. However, there may also be circumstances when a retail customer wishes to assess their own consumption patterns without the assistance of a third party. AEMO agrees that the MDPP should require a standard detailed data format to be provided to retail customers and customer authorised representatives. Further, AEMO agrees with stakeholders that an existing industry format needs to be specified as there is insufficient time to develop this further and little incremental benefit in doing so. The NEM12 file provides the necessary minimum metering data that customer authorised representatives need and retail customers could use. This is a format that is used by all retailers and DNSPs, whereas

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			the My Power Planner files are only used by those operating in Victoria. The MDPP will require one NEM12 file to be provided as the interval detailed data format in response to a retail customer's or customer authorised representative's request. Additionally, retailers and DNSPs will be required to make a customer guide available to assist retail customers to understand and interpret the data included in the NEM 12 file, retailers and DNSPs must provide a guide that, at a minimum, explains usage, generation or controlled load.
		Momentum Energy: **<u>Summary Data Format</u>** <u>Comment 1:</u> Appenidix A A.1 File Conditions File Component "File Type" of PDF and/or CSV AND; Appendix B B.1 File Conditions File Component "File Type" of PDF and/or CSV It is our oppinion that a CSV file format does not support the provision of a Summary Data Format as demonstrated in examples or in a meaniful format for typical summary purposes. We recommend that the "File Type" should be stipulated as a format that supports both graphical representation of the customers data and tabular format. We further recommend that the procedure should not include a demonstration of the how the minimum data specification is displayed as this is at the discretion of each	AEMO agrees that CSV format cannot present a graph, instead it is only appropriate for presenting raw data. The requirement for the summary data format to be presented in a CSV format is removed. AEMO considers that it is appropriate to make this format available both electronically and physically to ensure a broad range of retail customers have access to this information, for example, retail customers that do not have access to, or the ability to use a computer. Retailers and DNSPs must be able to offer the summary data format in a PDF format, or as otherwise agreed with a retail customer or customer authorised representative

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		participant and should be considered a point of retail competiton under commercial services rendered. <u>Comment 2:</u> Appenidix A A.1 File Conditions File Component “Data Quality” Parameters specified as “Estimated “ with accepted values of Y or N AND; Appendix B B.1 File Conditions File Component “File Type” of PDF and/or CSV Data Quality is often the basis of dispute and non-payment of invoice/s once a customer becomes aware that they are being invoiced on estimated or substitured data. The risk and impact to business can be quite significant if this information is not communicated appropriately and in a manner that will minimise these risks. To this end we would propose the following solution: The header sould be “Data Quality” with accepted values of “A”, “E” or “S” where; • A = Acutual [definition] • E = Estimate [definition], and; • S = Substitute [definition]. This would also require that a table of reference is provided that clearly defines what each of these values mean in terms of quality. The inclusion of this table of reference may or may not be included in the minimum deliverable specification for customer reference. <u>Comment 3:</u> Appenidix A A.2 Example: Accumulation File	Data quality indication in the interval detailed data format to refer to “substituted” or “actual”. The summary data formats must include a note identifying whether all the data presented in the formats is actual, this replaces the requirement to include a data quality indication. Refer to commets provided above.

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		Column Header: Estimated? AND; Appenidix B B.2 Example: Interval File Column Header: Estimated? Replace column header “Estimated “with “Actual”. See Comment 2. **Detailed Data Format** Comment 4: Appendix C C.1 File Conditions File Component “Data Quality” Parameters specified as “Estimated “ with accepted values of Y or N See Comment 2. Appenidix C C.2 and C.3 Example: 30’ and 15’ Interval File Examples respectively Column Header: Estimated? Replace column header “Estimated “with “Actual”. See Comment 2 Comment 5: In addition to comments at Item 1, we would only add that the file format is specified as minimum but not limited to CSV.	Refer to comments provided above. Refer to comments provided above.
		Origin: Origin has reviewed both summary and detailed formats in the context that the objective of the metering data provision procedures is to ‘establish the minimum requirements for the manner and form in which metering data should be provided to a retail customer or its customer authorised representative’ For the Detailed format we strongly recommend that the procedures adopt the existing Victorian My Power Planner (MPP) formats that are in existence and extend this out to other states, with each participant having the flexibility to choose any of the formats. These have proven to serve the needs of customers and will minimise the cost for participants who have already built processes on MPP.	Refer to comments provided above.

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		For Summary format, align the minimum requirements to the information contained within the NEM files, without the requirement to perform calculations to split energy flow, which typically is performed by a Billing engine. The provision of Energy flow such as Peak, Off-Peak. Shoulder can vary between Network and Retail products and will likely confuse the customer more so than meeting the objective of this change. Added to this are other complexities that can create confusion by sourcing Billing data eg. -Interval data provided as EST versus Billing that accounts for day-light savings -Provision of revised data beyond an out of code period that is not billed to the customer -Dealing with multiple products over a period of 2 years. Origin recommends that the summary be provided at a minimum level containing net energy flow for net metering or gross energy where streams are measured separately.	
		Simply Energy: Simply Energy generally supports the minimum formats specified. It is important to keep the specifications to an absolute minimum to support competition and allow customers the choice over what data they receive and the format in which they wish to receive it. One size will not suit all in this space and over-complicating requirements now may serve more to disenfranchise customers rather than allow them to learn and begin to engage with evolutions that are occurring in energy market. One thing we would suggest is to provide retailers with a degree of flexibility to step away from the minimum requirements where a customer has requested an even lower set of data. Customers will want different things and we envisage that there will be customers who want even less than what is specified by AEMO. We sometimes receive requests from customers on a range of matters that we cannot fulfil because the prevailing regulations do not allow for this. It would be unfortunate if customers were again disadvantaged by overly prescriptive regulations that bind retailers and prevent flexible responses to customer requests.	For either a summary or detailed metering data format, where a retail customer or customer authorised representative requests an alternative metering data format that does not meet the minimum metering data requirements specified in the MDPP, a retailer or DNSP may provide a retail customer and/or a customer authorised representative with an alternative metering data format. Retailers and DNSPs must obtain a retail customers or customer authorised representatives informed consent.

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		United Energy: The proposed minimum summary and detailed data formats do not represent the minimum and may in fact be misleading for customers. UE has provided more detail regarding our concerns in Attachment 2.	AEMO notes the respondents comments.
2.	For large retail customers, please provide your view on including demand in the diagrammatic representation for the interval metering data summary format.	**ActewAGL Distribution:** AAD doesn't believe that there will be an issue in including demand in the report for a large retail customer.	AEMO notes the respondents comments and position.
		EnergyAustralia: EnergyAustralia does not support including demand in the diagrammatic representation for interval metering data format. This is surpassing the key principle that this Procedure is to outline minimum requirements. Overprescribing this procedure adds cost and stifles competition.	AEMO notes the respondents position and refers to AEMO statement provided in item 1.
		Energy Tailors: Since demand is a key component of electricity usage for large retail customers, it would seem a requirement for it to be included in this format.	AEMO notes the respondents comments and position.
		Ergon Energy: The Procedures should stipulate information is to be provided where available. Some of Ergon Energy's existing meters for 1st tier non-market customers may not have the capability to provide this information (we estimate this at around 10-20% of these customers). Further, Ergon Energy also has sites with multiple meters at a NMI, meaning we are unable to produce an aggregated or coincident demand figure.	AEMO notes the respondents comments. The MDPP will stipulate that demand information be provide where available.
		Momentum Energy: Our interpretation is such that it is the intent of this procedure to provision Retail and DNSP obligation for the supply of meter data to customers and their authorised representatives at a minimum standard set out in this procedure. We do not believe that it was the intent that this procedure should provide minimum specification for "large" customers. The obligation to provide metering data applies to small customers and specifically precludes large customers under clause 56A of the NERR (below) and further the	AEMO acknowledges the question included in the MDPP Consultation Paper about "large retail customers" increased confusion over the intent of what size retail customer the MDPP refers to. The MDPP uses the NER definition of retail customer. AEMO agrees with the

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		scope of this document is such that "These Procedures relate to requirements in the National Energy Retail Rules (NERR) which are only relvant for jurisdictions participating the National Energy Customer Framework" making any rules set out in this procedure unenforceable for large customers: **56A Energy consumption information - supply of electricity only** (1) A retailer must, on a request by a small customer or a *customer authorised representative*, provide information about that customer's energy consumption for the previous 2 years in the manner and form required by the *metering data provision procedures*. which has been amended as a result of the AEMC Customer Access to Data Final Determination (below): **5.5.4 Analysis** The minimum requirements relating to the provision of metering data set out in 7.16 of the NER final rule and in AEMO's metering data provision procedures are designed primarily to help small customers obtain better access to their electricity consumption data. As a result, we consider that rule 56A of the NERR should be limited in its application to small customers. This is consistent with the policy settings in the NECF, which regulate the relationship between the retailer and the small customer only, including the provisions in standard and market retail contracts. Current NECF instruments do not regulate the relationship between retailers and large customers. For example, even if rule 56A of the NERR was amended to include large consumers, such a right could not be enforced through the model terms and conditions of retail contracts. Large customers should be able to obtain their data in the terms of their contractual arrangements with retailers outside of the NECF regulatory framework, reflecting their commercial agreements. Recommendations: (a) Define Retail Customer for the purpose of this procedure, and; (b) Define Small Customer, and; (c) Define Large Customer. This being said, it does not prevent the retail or DNSP business from using this document as a guide to their internal processes to meet obligations for both samll and large customers. It is worth noting that there are a number of small business customers who are on demand tariffs who may find the inclusion of such information helpful in making informed decisions and we do not have an opinion either way as to the inclusion or exclusion of this information however if it is included in the minimum specification, it should in no way be reflected as "Large" customer information and should be applied to all customers where demand is applicable.	AEMC's indicated policy intent for the MDPP to apply to "small" retail customers. The MDPP includes only the NER definition of retail customer. It is not necessary or appropriate for the MDPP to define terms under the NERR.

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		If included, we question if there should be consideration given to how this will be addressed by other retailers who bundle demand into their retail tariffs? In these scenarios, customers are often unaware that they are on a demand tariff and often are unaware of what demand actually means and therefore how it plays a role in demand side participation. For these customers, they are often unaware of the demand components in their tariff until they switch to a retailer who does not apply the same pricing and invoicing strategies.	
		Origin: Origin does not support the inclusion of demand in the diagrammatic representation and question the value this adds, given: 1) This information is contained within the customer's bill 2) Introducing a calculation component to the provision of data request and increase complexity. eg. Determining the max demand value 3) Low number of customers that are classified as Small that are on a specific retail demand tariff. 4) The objective is for the provision of a minimum standard data format that can be customised by the customer to meet their need.	AEMO notes the respondents position and refers to AEMO statement provided in item 1.
		Simply Energy: We do not see the relevance of applying this requirement to large customers. There is already active data exchange between retailers, large customers and their energy brokers to enable the development of price quotes for the customer. These are sophisticated customers and it is unlikely that they would find value in the application of this procedure to the large customer market.	AEMO acknowledges the question included in the MDPP Consultation Paper about "large retail customers" increased confusion over the intent of what size retail customer the MDPP refers to. The MDPP includes only the NER definition of retail customer. It is not necessary or appropriate for the MDPP to define terms under the NERR.
		United Energy: UE recommend that demand is not included in the diagrammatic representation for large retail customers for the following reasons:	AEMO notes the respondents position and refers to AEMO statement provided in item 2.

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		• UE has a number of demand tariffs already available on LV and HV network tariffs for business customers – c/kVA/day calculated either as a summer demand incentive charge or as a rolling peak demand. • Given that demand for large business customers could be calculated a number of ways and that the charge may be limited to seasons or 12 month rolling demands, or the large customer may have opted for a non demand tariff, UE considers that information included could be misleading. • Seasonal demand components can also vary by time of the day (eg local time or EST) and day type eg Monday to Friday (weekday) vs workday (Monday to Friday but not including public holidays) • The threshold for large business customers varies by jurisdictions, meaning that the numbers of customers on HV vs LV tariff and the applicable tariff classes is also variable across the NEM. • In view of the fact that one size won't fit all customers, it would be misleading to provide demand information that was inconsistent to the customer's retail bill. Demand should not form part of the minimum requirements, rather the retailer or distributor could provide where it may be of value to the customer.	
3.	What would a reasonable maximum timeframe to specify for retailers and DNSPs to respond to requests from customer authorised representatives?	**ActewAGL Distribution:** AAD believes that 10 business days for a single customer request is appropriate.	AEMO notes the respondents position.
		Aurora Energy: Aurora is supportive of the timeframe for response to a customer request, being no more than 10 business days for one request and by agreement between the parties for requests of more than one.	AEMO notes the respondents position. The MDPP will specify where a retail customer requests their metering data, Retailers and DNSPs must use reasonable endeavours to deliver the metering data to the retail customer within 10 business days. Where a customer authorised representative requests metering data for more than one but less that 100 retail customers, Retailers and DNSPs must use reasonable

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			endeavours to deliver the metering data to the customer authorised representative within 20 business days. This delivery timeframe commences from the date the request is received by the retailer or DNSP. Requests metering data for more than 100 retail customers, the delivery timeframe must be agreed between the retailer or DNSP and the customer authorised representative.
		AusNet Services: **1.11 maximum timeframe responding to customer authorised representatives** AusNet Services considers setting a maximum timeframe, where the number of requests exceeds the sliding timeframe, could create undue pressure on DNSPs and Retailers to prioritise the large request at the expense of other requests. Although large requests do not happen very often, initiatives like the "one big switch" can attract tens of thousands of signs up. In such a case, the timeframe should be subject to negotiation between the data provider and the customer authorised representatives to balance the cost of hiring additional contractual resources with the alternative of expanding the timeframe. AusNet Services suggests that rather than setting a maximum timeframe there should be no maximum timeframe for situations where the number of requests exceeds the sliding timeframe.	AEMO notes the respondents position and refers to the AEMO statement provided above in item 3.
		CitiPower Powercor: A timescale of 10 days through to 3 months should be catered for. The clock starts when the consumer's right to access the data is confirmed	AEMO notes the respondents position and refers to the AEMO statement provided above in item 3.
		Energex: Energex has previously suggested that a time limitation for requests should apply of up to 7 years, as AEMO requires Meter Data Providers to store data for 7 years before archiving or deleting it. Therefore, it may be difficult for DNSPs to retrieve relevant data beyond a 7 year timeframe.	AEMO initially considered provided context for retailers and DNSPs regarding the NERR requirement to provide up to two years historical metering data to the retail customer

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			or customer authorised representative. AEMO understands the reason stakeholders consider the MDPP needs to make the two year metering data requirement clear. Since these requirements are under the NERR, rather than the NER, AEMO considers that it is not necessary or appropriate for the MDPP to this. The MDPP does not include information about the two years of historical metering data requirement as the NERR deals with this. Section 3.1 of the Strawman MDPP has been removed.
		EnergyAustralia: EnergyAustralia is of the opinion that there are too many variables to provide maximum timeframes for customer authorised representatives such as: • It is unknown how many authorised representatives could approach EnergyAustralia on any given day. • If each authorised representative requested more than one customer it could become untenable for all involved EnergyAustralia believes the best outcome is for these requests to be by negotiation between the parties. By negotiation also allows discussion if there is a debt owing for past data provided to the authorised representative.	In determining an appropriate delivery timeframe, AEMO considers the following factors make it difficult to put a one size fits all solution in place. These includes the: • Uncertainty about number of customer requests that will be included in a customer authorised representatives request. • Uncertainty about the number of customer authorised representative requests that will be received in a business day. • Unknown resourcing and processing times of retailers and DNSPs.

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			• Negotiating power of customer authorised representatives. AEMO considers that it is appropriate for retailers and DNSPs and customer authorised representatives to negotiate the appropriate delivery timeframes. However, AEMO also considers that it is appropriate to place a maximum delivery timeframe in case the negotiation fails to deliver reasonable delivery outcomes. It is in the interests of retail customers for their information to be provided to their customer authorised representative in a reasonable timeframe.
		Energy Tailors: Energy Tailors believes that a key principle behind this Rule Change and indeed of the Power of Choice reforms is for customers to have easy access to their own data. We do not believe that in the 21st century, a 10-day delay could be considered easy access. The only possible reason for any delay would be manual effort involved in customer verification and processing. We believe that participants should have simple, automated processes for providing meter data, which would thereby circumvent any delay. In fact many of the Victorian distributors do have automated processes via their own smart meter data portals, which are not aligned to the AEMC PIR rule change. We believe it would be a very simple matter to enhance their portals to align to the rule change and allow customer authorised representatives to access data on their customers' behalf.	AEMO notes the respondents position and refers to the AEMO statement provided above in item 3.

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		Ergon Energy: Ergon Energy does not support maximum response or sliding scale timeframes for bulk information requests as: • the detail, volume and variety of these requests cannot be forecast; • there is an iterative nature to some customer requests. That is, it can take a period of time for the customer/requesting party to provide the information and evidence to enable the request to be satisfied; and • this verification may require manual investigation over a high volume of data requests. Ergon Energy supports the proposal in the Consultation Paper that information request timeframes should be negotiated and agreed between the parties.	AEMO notes the respondents position and refers to the AEMO statement provided above in item 3.
		Jemena Elictricity Networks (JEN): We believe 10 business days turnaround for a single data request is reasonable.	AEMO notes the respondents position.
		Momentum Energy: Recommendation: Define "response". It is Momentum's experience that often an email to acknowledge that a request has been received has been treated as a response within the agreed industry SLA and would recommend that Response is at least defined in the glossary of the document. We would argue that obtaining the appropriate authority from the customer to authorise a representative to access their data can delay the provision of data and we would recommend that 10 business days (as is the requirement for customer requests) commences from receipt of the customer authorisation. As with customer requests, this should also state that the Retailer or DNSP will make "reasonable endeavours" to provide.	AEMO notes the respondents position. To ensure these requirements are clear, AEMO proposes to include new requirements in Section 3 of the MDPP. As a minimum, retailers and DNSPs must identify and publish the information identifying: ▪ The minimum information required to meet identity verification and the relevant consents for retail customers and customer authorised representatives. ▪ The method to request the metering data. ▪ The ways the retailer and DNSP will provide the requestor with the metering data.

Item	Question	Participant Comment	AEMO Comment
		Origin: Origin supports the wording within the Strawman Procedures that allows for Retailer/DNSP to negotiate an agreed delivery timeframe with the customer authorised representative. In addition to negotiating an agreed delivery timeframe, Origin's believes it is important to cap the number of requests that a customer representative can submit per day. The suggested cap is recommended to be set at 30. It is important to note that Retailers/DNSPs may receive high volumes from multiple authorised Representatives and this provides some control to manage the peak level of work received.	AEMO notes the respondents position and refers to the AEMO statement provided above in item 3.
		SA Power Networks: Believes that a timescale of 10 days is an appropriate obligation for this transaction, noting that the clock can only start when the consumer's right to access the data is confirmed.	AEMO notes the respondents position and refers to the AEMO statement provided above in item 3.
		Simply Energy: Timeframes for data provision to retail customers Simply Energy supports the 10 business day timeframe for responding to a request from one retail customer. We would be able to comply with this requirement. The Rule requirements (particularly NERR 56A) is that the 10 business day timeframe should only apply to retailers where up to 2 years of data has been requested by the customer. While this has been specified in section 3.1 of the proposed procedure, for consistency and to avoid confusion, we believe that this should be made clear in section 4 of the proposed procedure. Timeframes for data provision to a customer authorised representative Simply Energy supports AEMO's proposal that where a customer authorised representative requests more than one customer's metering data that the delivery timeframe should be agreed between the retailer or DNSP and the customer authorised representative.	AEMO notes the respondents position and refers to the AEMO statement provided above in item 3.
		United Energy: UE consider that the timeframe of 10 business days should remain for individual customer requests for the following reasons:	AEMO notes the respondents position and refers to the AEMO statement provided above in item 3.

Item	Question	Participant Comment	AEMO Comment
		• There also needs to be a time allowance where the registered participants forms are not completed correctly or the customer (and/or customer authorised representative) cannot be verified as correct for the premise. If a distributor is unable to verify a customer then it may take an additional two business days to request and receive updated customer details from the current retailer. • Where meter type change or meter configuration changes this may necessitate several files being formed to meet an individual data request. For example a type 6 accumulation meter which is exchanged for a type 5 interval meter and then later has solar added and a new bi-directional meter installed (or remote reconfiguration to establish a generation datastream) could cause 6 data files to be generated) • In addition where IT systems or underlying meter databases are upgraded to cope with increased levels of interval data, there may be a need to access multiple IT systems in order to gain the full period of interval data requested. • UE is already receiving a number of non – retailer requests with a variable number of NMIs and meters being requested. This workload will only increase in the future as more cost reflective tariffs create a market for energy information providers. The volume of requests on an individual business may vary significantly, however this does pose challenges for internal resource management and forecasting. Where the volume of work across all requests is lower, then response timeframes may be reduced from 10 business days, however if there is a high volume of requests then these may take longer. UE has a portal available for customers with AMI meters, this enables customers to access their interval data within minutes and is available for use for the majority of customers in the UE area who consume 160kWhpa or below.	AEMO proposes to include new requirements in Section 4 of the MDPP to deal with meter configuration or meter type changes. These include: ▪ Retailers and DNSPs must only provide a single metering data file to a retail customer or customer authorised representative for the requested period unless there has been a change to the configuration of the metering installation. A metering installation configuration change includes a change of tariff and a change from accumulation metering to interval metering. ▪ Where there has been a change of metering installation configuration during the metering data request period, the retailer or DNSP may provide a separate metering data file for each metering installation configuration period.
4.	Should a sliding scale be used for delivery timeframes for requests from customer	**ActewAGL Distribution:** AAD believes a sliding scale is appropriate, as long as the defined methodology is able to be reviewed and commented on.	In determining an appropriate delivery timeframe, AEMO considers there are number of factors make it difficult to put a one size fits all solution in place. To ensure these requirements are clear, AEMO proposes to include new requirements in Section 3 of

Item	Question	Participant Comment	AEMO Comment
	authorised representatives?		the MDPP for more than one retail customers metering data: ▪ A maximum 20 business day's maximum delivery timeframe when the request is for more than one but less than 100 retail customers. ▪ Where the request is for more than 100 retail customers' metering data, the retailer and DNSP and customer authorised representative must negotiate the delivery timeframe.
		Aurora Energy: Aurora considers a sliding scale of delivery timeframes is not required.	AEMO notes the respondents position and refers to the AEMO statement provided above in item 4.
		AusNet Services: **1.10 Suggested sliding scale for delivery timeframes** AusNet Services supports the notion of a sliding scale delivery timeframe subject to reasonable endeavours, when responding to customer authorised representatives, on the basis that a sliding scale can give regard to the manual processing time of each request. However, this support is premised on the assumption that the sliding scale cannot reduce the 10 business day minimum timeframe, subject to reasonable endeavours. Even after undertaking the necessary IT work of fully automating the process of data extraction and for producing a summary, a number of manual steps remain. The most time consuming of these manual steps is validating customer information and consent. AusNet Services considers this manual step takes 6 minutes per customer, even with the above IT system automation. AusNet Services suggests the following sliding scale. 81 - 400 requests – 15 business days 401 - 800 requests – 20 business days More than 801 requests should have no maximum timeframe	AEMO notes the respondents position and refers to the AEMO statement provided above in item 4.

Item	Question	Participant Comment	AEMO Comment
		Not giving regard to the increased processing load or the 10 business day minimum timeframe could unfairly disadvantage individual customers requesting their data, because DNSPs and Retailers would have to divert resources to meet the aggressive timeframe expected by customer authorised representatives. AusNet Services supports the use of a sliding scale, subject to reasonable endeavours.	
		CitiPower Powercor: Negotiable in the event of large requests (> 100 NMIs). A daily processing limit needs to be considered	AEMO notes the respondents position and refers to the AEMO statement provided above in item 4.
		ENA: Timescales to respond Regarding responses to bulk information requests from customer agents, ENA supports the AEMO proposal that: “customer authorised representatives and retailers and DNSPs must agree on the delivery timeframe. This provides flexibility for parties to negotiate reasonable timeframes for individual circumstances” 3 ENA does not support establishment of maximum timeframe for response to bulk requests from customer authorised representatives, nor to a sliding scale, as the variability of these requests (and the individual customer requests) is too great to predict and apply to a meaningful standard ‘maximum’ timeframe.	AEMO notes the respondents position and refers to the AEMO statement provided above in item 4
		Energex: With respect to requests from authorised representatives for more than one retail customer (whether it is submitted one customer at a time or in bulk), Energex supports the proposal for both parties to agree on a suitable delivery timeframe rather than a sliding scale. The ability to negotiate a timeframe provides the necessary flexibility depending on the number and the circumstances of the requests involved.	AEMO notes the respondents position and refers to the AEMO statement provided above in item 4

Item	Question	Participant Comment	AEMO Comment
		EnergyAustralia: Sliding scale doesn't provide any benefits, given above points still apply. Where requests are for more than one customer the delivery timeframe must be agreed between the retailer or DB and the customer authorised representative.	AEMO notes the respondents position and refers to the AEMO statement provided above in item 4
		Energy Tailors: As mentioned above, with automated procedures this becomes a moot point.	AEMO notes the respondents position.
		JEN: We would prefer to have a mutual agreement with the customer authorised representatives or retailer customer for requests greater than 100 and sliding scale for the [sic] requests less than 100.	AEMO notes the respondents position and refers to the AEMO statement provided above in item 4.
		Lumo: Do not support the concept of a sliding scale timeframe for the delivery of requests from a customer authorised representative. It is our view that the timeframe to complete these requests should be by negotiation, and agree that it is up to parties to be reasonable or else third parties will simply split requests.	AEMO notes the respondents position and refers to the AEMO statement provided above in item 4.
		Momentum Energy: Given that this is a prediction of demand in an unknown market it is difficult to quantify average volumes and size of requests. Futher it is a prediction of a process that is yet to be developed for many retail businesses. We would ***not*** support a sliding scale approach for bulk requests and believe that this should be negotiated and agreed between stakeholders. Multiple interanl and external facotrs, not the least of which is the retailers system functionality, available resources and format of data requested, must be considered when negotiating a delivery time for bulk requests.	AEMO notes the respondents position and refers to the AEMO statement provided above in item 4.
		NSW DNSPS: …do not support the use of a sliding scale for delivery timeframes for requests from customer authorised representatives. Due to the large variability in the size of these requests, it is suitable for the DNSP and the customer authorised representative to agree a mutually acceptable timeframe.	AEMO notes the respondents position and refers to the AEMO statement provided above in item 4.

Item	Question	Participant Comment	AEMO Comment
		Origin: A sliding scale is not practical. By allowing the parties to agree to a delivery timeframe, it allows for influx of requests, potentially from multiple authorised representatives to be effectively managed.	AEMO notes the respondents position and refers to the AEMO statement provided above in item 4.
		SA Power Networks: Recommends that a simple approach should be adopted within the procedure which requires the customer authorised representative to negotiate delivery timeframes with the relevant participant for multiple sites.	AEMO notes the respondents position and refers to the AEMO statement provided above in item 4.
		Simply Energy: Simply Energy does not support a sliding scale approach to delivery timeframes. Our preference is to agree with the customer authorised representative to the timeframes in which the data will be delivered. Given that Simply Energy could be confronted with more than one request relating to multiple customers at a time, allowing agreement makes the task more manageable and thus promotes compliance. At this point, we do not believe we would be able to comply with a sliding scale approach given that we ourselves have to do work to produce this data.	AEMO notes the respondents position and refers to the AEMO statement provided above in item 4.
		United Energy: A sliding scale is not preferred as the scale would only represent the allowable time for an individual customer authorised representative and takes no account of the internal workload of other individual customer requests and customer authorised representatives. The NER rule recognises the variability of the workload and suggests distributors should use reasonable endeavours to respond to requests. UE suggests that reasonable endeavours within 10 business days remain as stated; where correctly completed requests for verified customers are unable to be completed within 10 business days then UE would notify the customer authorised representative and we can agree on an alternative timeframe. As noted by AEMO this provides the flexibility for parties to negotiate alternative reasonable timeframes for individual circumstances. UE supports this approach.	AEMO notes the respondents position and refers to the AEMO statement provided above in item 4.
5.	Is there a need to define what constitutes a	**ActewAGL Distribution:** This should be defined for alleviate ambiguity. A customer request should be in writing.	Instead of the MDPP defining a customer request, AEMO considers that it would be beneficial for the MDPP to clarify that a retailer or

Item	Question	Participant Comment	AEMO Comment
	customer request (for example, by phone, in writing)?		DNSP must identify and publish the accepted method the retail customer or customer authorised representative must use to submit a request. The MDPP includes a requirement on retailers and DNSPs to identify and publish the accepted method the retail customer or customer authorised representative must use to submit a request. (The communication protocol and specifying how long an authorisation is valid for is outside the MDPP's scope).
		Aurora Energy: Aurora does not consider it necessary for the procedures to define what constitutes a customer request. Retailers and Distributors will have their own principles to identify a valid request that will be in accordance with ensuring that customer privacy is protected, therefore it would be considered unnecessary for the procedures to detail how this is to be undertaken.	AEMO notes the respondents position and refers to the AEMO statement provided above in item 5.
		AusNet Services: **1.12 Defining what constitutes a customer request (e.g. by phone, or in writing)** For AusNet Services, a phone request does not adequately authorise the provision of metering data. This reflects practical difficulties in identifying customers over the phone (including voice recording requirements) and the DNSPs reliance on only a limited set of identification information. AusNet Services requires a customer (or customer authorised representative) to provide adequate information to confirm the identity of each customer, and to provide a "consent to disclose" form signed by each customer. Based on this legal requirement, AusNet Services strongly suggests a definition of what constitutes a customer request is required in the Metering Data Provision Procedures to allow DNSPs to consistently set timing expectations with the public.	AEMO notes the respondents position and refers to AEMO statement provided above in item 5. As a minimum, retailers and DNSPs must identify and publish the information identifying: The minimum information required to meet identity verification and the relevant consents. ▪ The method to request the metering data.

Item	Question	Participant Comment	AEMO Comment
		Unless all the data and forms provided matches the registered participant's records the clock does not start on the timing requirements. The procedure should also clarify that if the customer (or customer authorised representative) request is not verified that there is no obligation to provide meter data in the required timeframe. Otherwise, a customer (or customer authorised representative) may insist on delivery timeframe without providing the necessary verification details. Clearly, the obligation rests on the customer directly (or via their customer authorised representative) to authorise the provision of data before the delivery timeframe starts. Based on the experience of processing bulk data requests from Authorised Representatives received since Dec 2014, the processing of such requests is improved by receiving the information confirming customer identity in an Excel spreadsheet or Word document table. AusNet Services will not accept a customer request by phone, and suggests the MDPPs define what constitutes a request for the purpose of setting the timeframe requirements. Further, AusNet Service will require Customer Authorised Representatives to provide signed request letter, a table of customer identifying information in an easily process able electronic format (not PDF), and along with attached individually signed "consent to disclose" forms (PDF is okay).	▪ The ways the retailer and DNSP will provide the requestor with the metering data. If a retail customer or customer authorised representative has provided insufficient information, a retailer or DNSP will be required notify the retail customer or customer authorised representative within three business days. Thisn otification to the retail customer or customer authorised representative closes the initial request for metering data. When the customer or customer authorised representative returns with the complete verification information, a new metering data request is deemed to exist.
		CitiPower Powercor: A customer request can be either by phone, writing, email or on-line. The timing starts from when the consumer's right to access the data is established.	AEMO notes the respondents position and refers to the AEMO statement provided above in item 5.
		EnergyAustralia: EnergyAustralia does not support defining what constitutes a request for data for a retail customer; this is over prescriptive for a procedure that is outlining the minimum. There is also possibility that this could lead to a poor customer interaction if the customer calls only to be told they have to submit in writing. For the customer authorised representatives EnergyAustralia suggests the following need to be defined: • Ensure customer has provided authorisation (e.g. explicit informed consent); • Should clearly define who the requesting authorised party is; • Provide enough information for verification of customer by either retailer or DB; and	AEMO notes the respondents position and refers to the AEMO statement provided above in item 5.

Item	Question	Participant Comment	AEMO Comment
		• Provide a clear statement on how long the authorisation is valid with clear start and end periods defined (i.e. a single request or a month).	
		Energy Tailors: We believe that the MDPP procedures require a communications protocol (which does not need to be as sophisticated as the current Retail and Metering B2B procedures), but which are nonetheless a well-defined mechanism for customers and customer authorised representatives to interact with meter data providers. This removes the likelihood of a multitude of different procedures being developed by each participant, and allows for further standardisation as we become more advanced.	The MDPP includes a requirement on retailers and DNSPs to identify and publish the accepted method the retail customer or customer authorised representative must use to submit a request. The communication protocol and specifying how long an authorisation is valid for is outside the MDPP's scope.
		Ergon Energy: Requests should be in writing to ensure customer verification and clarity around the detail of information being requested. Specifically the request needs to satisfy statutory privacy obligations. That is, the requesting party needs to demonstrate adequate evidence they have the legal authority to request the data for the NMI, for the period being requested. Receiving adequate verification information is important as Ergon Energy not uncommonly experiences instances in which occupancy changes have occurred without retail account change. This can result in requests for data the party is not entitled to receive. Further, parent companies are known to request account information for their subsidiaries operating under a different name, without providing the necessary verification information. This results in delays and additional costs to process applications.	AEMO notes the respondents position and refers to the AEMO statement provided above in item 5.
		JEN: Our preference would be in writing (email).	AEMO notes the respondents position and refers to AEMO statement provided above in item 5.
		Lumo: For requests made by a Customers Authorised Agents, key consideration to: • ensure that the customer has provided authorisation (e.g. explicit informed consent);	AEMO notes the respondents position and refers to the AEMO statement provided above in item 5.

Item	Question	Participant Comment	AEMO Comment
		• provide suitable information to allow verification of that customer by multiple parties (i.e. retailer, distributor, ombudsman); • should clearly identify the agent; • be retained by the Customers Authorised Agent for a specific period of time; • be retrievable upon request; and • provide a period of time that the authorisation is valid (e.g. a single request or a maximum period of time of 12 months) It should also ensure that the authorisation is customer and NMI/MIRN specific. However, if AEMO is seeking clarity on what constitutes a customer request directly to a retailer then we provide the following commentary. A retailer receives many customer requests. A customers request ranges from the provision of the sale of energy to a premises to arranging for a special read to be performed. Under the existing regulations it is not necessary to define what constitutes a customer request (by phone, in writing, etc.). There is potential that if the term is defined, then this may restrict the mechanism by which the customer can complete their request. In addition, we are happy to work with industry to develop a generic authorisation form for third parties. However, fundamentally we believe that privacy is an obligation for each individual company to manage.	
		Momentum Energy: Momentum would refer to existing B2B Procedure – Customer and Site Details Notification, 2.2.4.1 (4) “Upon receipt of routine updates provided by the existing customer”. This procedure does not speicify what qualifies as customer provided update (i.e. telephone call or written notice) and is similar in nature to a customer requesting information. We do not support a minimum standard for what constitutes a request from the customer and would only refer to laws of privacy when considering and responding to customer and/or authorised representative requests. Further, it is our positon that customer requests could be considered as a point of retail competiton under commercial services rendered and does not a require procedural definition.	AEMO notes the respondents position.

Item	Question	Participant Comment	AEMO Comment
		Origin: Origin recommends that the procedures are not prescriptive in defining a customer requests or the delivery mechanism. Rather the procedure provides the flexibility that allows the Retailer/DNSP to serve the customer or the customer reps within the channels that they so desire. Consider the following wording for the procedure: "Retailers and DNSP's can agree with the customer or customer authorised representative the preferred channel for receiving metering data requests and the delivery method to be used."	AEMO notes the respondents position and refers to the AEMO statement provided above in item 5.
		SA Power Networks: A customer request can either be by phone, writing, email or on-line. The timing starts from when the customer's right to access the data is established.	AEMO notes the respondents position and refers to the AEMO statement provided above in item 5.
		Simply Energy: We would prefer that AEMO did not specify what constitutes a customer request. Customers ask for their data in different ways. Some will call and others will write to us requesting their data. It seems unnecessary to limit the methods a customer can use and will just aggravate a customer when we inform them that they have to follow the method specified in regulations.	AEMO notes the respondents position and refers to the AEMO statement provided above in item 5.
		United Energy: A customer request is not properly constituted unless it is on the appropriate UE forms with the necessary information. The meter data request cannot be fulfilled until the business is able to verify the customer for that NMI, for the requested time period. Each business should be able to assess their internal processes and how best they can meet the confidentiality requirements under the NER for all customers and the requirements under the Australian Privacy Act. UE do not consider that the new MDPP needs to cover this process other than to recognise that where the necessary verifications cannot be made then the request will not be fulfilled or lack of a timely response from a customer/customer authorised representative may impact the timeframes.	AEMO notes the respondents position and refers to the AEMO statement provided above in item 5.
6.	The Procedures presents the	**AusNet Services:** **1.13 Minimum requirement for detailed data format**	The interval detailed data format, whether requested by the retail customer or customer authorised

Item	Question	Participant Comment	AEMO Comment
	minimum requirement for the detailed data format. Please comment on these in Section 2.	AusNet Services regards Victorian obligations to provide detailed metering data to customers in one of two formats (NEM12 or myPowerPlanner format) are already inefficient. In establishing the detailed data format in the Metering Data Provision Procedures, AusNet Services strongly suggest AEMO use the existing NEM12 file format. The NEM12 file format is: A well-defined industry standard; Commonly used by third party energy services companies; Not likely to result in additional billing disputes; and Reads quiet well in a Notepad and through a number of readily available custom Excel macros It is important not to underestimate the value in using an existing, well defined meter data format. In defining a new format, experience has shown the devil is in the detail. When the Victorian government implemented myPowerPlanner, DNSPs and Retailers required extensive, iterative testing of their chosen format to enable processing through the myPowerPlanner website and a coordinated communications campaign. Similarly, a new MDPP detailed data format will require testing and validation to ensure consistency, and enable AEMO and registered participants to consistently respond to enquiries from customers or customer authorised representatives. To add another detailed format available to customer will leave Victorian DNSPs and Retailers with onerous and costly obligations to provide meter data in three different formats. If the NEM12 is not adopted, it is essential that the new format is described as compressively as the NEM12 file format is with technical description of each quantity; file and information structure; file rules re technical aspects including spaces, nulls and commas; and whether fields are mandatory, required or not required. In establishing the detailed data format in the Metering Data Provision Procedures, AusNet Services strongly suggest AEMO should utilize the existing NEM12 file format. This is important to avoid the interpretation and compatibility issues of establishing a new format that would require testing and validation.	representative, is most likely to be used in a third parties comparison website to assess whether the retail customer has better pricing offers available to them. However, there may also be circumstances when a retail customer wishes to assess their own consumption patterns without the assistance of a third party. The MDPP will require retailers and DNSPs to provide a standardised detailed data format since this promotes greater long-term market efficiencies. The NEM12 file provides the necessary minimum metering data that customer authorised representatives need and retail customers could use. This is a format that is used by all retailers and DNSPs, whereas the My Power Planner files are only used by those operating in Victoria. AEMO acknowledges that the NEM12 file is not an easy format for retail customers to understand and access. As discussed, AEMO expects a limited number of retail customers to individually use this format. The MDPP will require retailers and DNSPs provide a guide to assist retail customers to understand and use the NEM12 file. The objective of the guide is to assist retail customers and explain

Item	Question	Participant Comment	AEMO Comment
		If the NEM12 is not adopted, it is essential that diligence is taken in defining every quantity and detailed rules in terms familiar to the industry.	how usage, generation or controlled load is represented in an understandable manner.
		CitiPower Powercor: Detail data format – accumulation meters • Detail accumulation data is the same as the summary data Detail data format – interval meters • CP/PAL agree with the example 30 minute interval file layout	AEMO notes the respondents position and refers to the AEMO statement provided above in item 6. For accumulation metering data summary at a minimum, the MDPP will include: ▪ The nature and extent of energy usage. ▪ A diagrammatic and tabular representation of the usage information. Appendix A of the MDPP contains the accumulation metering data summary format, including the file conditions, and examples of an accumulation file and diagrammatic representation of energy usage
		Department Industry and Science (DIS): The department sees the standardisation of detailed data formats as being very important in enabling the development of information services which will help customers make efficient choices in relation to their energy use. In this context, we see the development of one standardised detailed data format as particularly important, rather than allowing market participants to maintain their own customised formats which would increase the cost for information service providers to integrate with. We acknowledge that this should be staged so market participants can schedule system development to align with changes required to address metering and other reforms. In most cases detailed data formats will be an input into another application. A common consistent format for the delivery of detailed data is unlikely to inhibit innovation, rather it should provide a platform for innovation to occur. However the way	AEMO notes the respondents position and refers to the AEMO statement provided above in item 6.

Item	Question	Participant Comment	AEMO Comment
		the data format is specified, including the file type as csv, should make all compliant formats easily machine readable.	
		EnergyAustralia: EnergyAustralia supports assisting customers to effectively manage and understand their electricity consumption by outlining a minimum standard. However care is needed to ensure this is kept in alignment with the policy intent of a minimum requirement procedure to ensure retailers can continue to innovate to deliver customer needs in an ever changing market. The language of this procedure leads to mixed intent around provision of a file for the customer to utilise in a third party comparator website or for a household to use to better understand their energy consumption. If it is for both then the current ambiguity needs to be further clarified. Further details to this are provided in section 2.	AEMO notes the respondents position and refers to the AEMO statement provided above in item 6.
		Ergon Energy: Ergon Energy supports these provisions as the minimum required and would not recommend any increase over this level of information. The provision of information should strike the right balance between benefit and cost. Overly detailed information with little practical use only creates additional costs for all customers.	AEMO notes the respondents position and refers to the AEMO statement provided above in item 6.
		Lumo: We agree that a minimum standard is required. However, if AEMO must prescribe the minimum format of the detailed data format, then AEMO should allow for the agreed 7 Victorian AMI formats. The minimum standard should allow retailers to compete on a customer service basis and provide flexibility for innovative new and exciting offerings to our customers.	AEMO notes the respondents position and refers to the AEMO statement provided above in item 6.
		Momentum Energy: See comments at Item 1.	Noted.
		Origin: As per Item 1 feedback.	Noted.
		SA Power Networks: Agree with the example Detail data format – interval meters and the 30 minute interval file layout (noting the comments on the Strawman Procedure).	AEMO notes the respondents position.

Item	Question	Participant Comment	AEMO Comment
		Simply Energy: Simply Energy supports the proposed data formats. There is sufficient flexibility in what is proposed to allow us to respond in the form that the customer has requested.	AEMO notes the respondents position and refers to the AEMO statement provided above in item 6.
		TasNetworks: TasNetworks would also support the adoption of the current Market NEM 12&13 file formats as the standard for detailed the detailed data format.	AEMO notes the respondents position.

Table 2: Strawman Procedure Comments

Item	Description	Participant Comments	AEMO Comment
1	**INTRODUCTION**		
1.1	Purpose and scope	**ActewAGL Distribution:** No comment at this stage	Noted.
		AusNet Services: – Item 2.1 These Procedures ~~must~~ specify the:	Noted.
		EnergyAustralia: Various terms need to be in italics though out section: • Retail customer • Customer authorised representatives • Metering data • Metering installation	Noted.
		Energy Tailors: Whilst we understand that these Procedures to not cover the retailer and DNSP processes to verify the identity of a retail customer nor its customer authorised representative, we believe that the whole intent of this procedure and rule change is neutered if in practical terms, customers are strongly discouraged from accessing their meter data. A well-defined format for meter data (i.e. the outcome of this consultation) is redundant if customers have no reasonable mechanism to request it. Therefore we strongly recommend that AEMO pursue this issue urgently, in order to comply with the intent of the AEMC Rule Change and so that these procedures become useful to customers.	AEMO notes the respondents position and refers to the AEMO statement provided above in items 5 in table 1.
		Lumo: Please amend the formatting as suggested below: These Procedures must specify the:	Noted. Also refer to the AEMO statement provided above in items 3, 4, 5 & 6 in table 1.

Item	Description	Participant Comments	AEMO Comment
		• Manner and form in which the retail customer's metering data must be provided, including: o For interval metering data, a detailed data format and summary data format~~.~~; and • For accumulation metering data, a summary data format. • Timeframes for retailers and DNSPs to respond to requests made by a: o Retail customer~~.~~; or o Customer authorised representatives. These Procedures do not cover retailer and DNSP processes to comply with the Privacy Act 1988 (Commonwealth) including processes to verify the identity of a *retail customer* or its *customer authorised representative.* Please italicise the following defined terms *'retail customer'* and *'customer authorised representative'* in the above sentence.	Suggested change accepted and update made to the MDPP.
		Origin: No comment	Noted.
		Simply Energy: The purpose and scope section appears sufficient	Noted.
		United Energy: Section 1.1 Purpose and Scope clarifies the Procedures do not cover processes to comply with the Privacy Act. This paragraph on privacy should also extend to the confidentiality requirements for metering data under the NER which applies to all customers, not just those covered by the Privacy Act. Suggest adding into this section that the retailer and DSNP are not obliged to comply with this Procedure if they are unable to verify a customer and/or the customer authorised representative for the period of time the data request covers.	AEMO notes the respondents position and refers to the the AEMO statement provided above in items 3 & 5 in table 1.

Item	Description	Participant Comments	AEMO Comment
1.2	Definitions and interpretation	**ActewAGL Distribution:** No comment at this stage	Noted.
		AusNet Services: **2.2 Issue with using the term "daily time periods"** Firstly "daily time periods" is a term not used in the draft MDPP. Secondly, it is unclear whether the usage rates referred to either Retailer billing TOU pricing or DNSP Network Tariff TOU rates. Retailers and DNSPs often have different usage rates (refer point 1.4). The MDPP needs to be clear, unambiguous as to what usage rates are, if they are used. Is it the usage rates on the retail contract or the network tariff? AusNet Services suggests removing "daily time period" as a defined term **2.3 Issue with using the term "energy flow type"** Although the Rules uses the term "energy flow", the term "energy flow type" is not used in any existing regulatory instruments. The MDPP needs to provide clear, unambiguous guidance to the industry participants. If the MDPP uses non-industry terms the definitions needs to be really clear and reference industry defined terms. Referring to separate usage rates is more problematic; as Retailers and DNSPs often have different usage rates (refer point 1.4). AusNet Services suggests using energy usage and energy generation in preference to "energy flow type". AusNet Services suggests removing "energy flow type" as a defined term and using "energy usage" and "energy generation" instead **Item 2.4**	AEMO notes the respondents position and refers to the the AEMO statement provided above in item 1 in table 1. Suggested change not accepted, the term is used consistently for the purposes of the MDPP. AEMO notes the respondents position and refers to the the AEMO statement provided above in item 1 in table 1.

Item	Description	Participant Comments	AEMO Comment
		"Extent of energy usage" defined in the glossary but is not used in the draft Procedure. Defining it is unnecessary as it should be clear what the extent of energy usage is. Suggest removing "extent of energy usage" as a defined term	AEMO notes the respondents position. The use of this term consistent with use in rule 7.16.
		Item 2.5 "Load profile" defined in the glossary but is not used in the draft Procedure. In any case, AusNet Services consider the load profile need not be provided because it doesn't relate to energy usage and is not relevant in some jurisdictions. Suggest removing "load profile" as a defined term	Suggested change not accepted, the term is used consistently for the purposes of the MDPP.
		Item 2.6 Interpretation It is unclear why the procedures reference the principles of interpretation set out in Schedule 2 of the NEL? Suggest removing legal reference	Suggested change not accepted, the reference is required for the purposes of the MDPP.
		Item 2.7 Interpretation The MDPP should reference times as Australian *Eastern Standard Time*. Consumers may not be familiar National Electricity Law definition of *Eastern Standard Time*. Even though the MDPP is not for distribution to consumers, the language should be clear. *Eastern Standard Time* could be confused with North American Eastern Standard Time. Suggest changing to Australian *Eastern Standard Time*	AEMO accepts the suggested changes and updated the MDPP.
		CitiPower Powercor Strawman for Consultation Page 2 Quarterly load profile for accumulation meters is meaningless – should be removed  	The MDPP has been updated to refering to "Quarterly for accumulated metering data".

Item	Description	Participant Comments	AEMO Comment
		Energy Tailors: We propose that Network Tariff Code be included in this glossary.	Suggested change not accepted, the Network Tariff Code is not used for the purposes of the MDPP.
		Lumo: Definition UOM - The following AEMO documents may need to be amended to italicise 'Unit of Measure': • METER DATA FILE FORMAT SPECIFICATION NEM12 & NEM13; • B2B PROCEDURE TECHNICAL GUIDELINES FOR B2B PROCEDURES; • B2B Mapping to aseXML (formally the Electricity B2B Build Pack 2013); and • METROLOGY PROCEDURE: PART B: METERING DATA VALIDATION, SUBSTITUTION AND ESTIMATION PROCEDURE FOR METERING TYPES 1 – 7. In addition, Unit of Measure is already defined in the MSATS PROCEDURES: CATS PROCEDURE PRINCIPLES AND OBLIGATIONS and MSATS PROCEDURES: PROCEDURE FOR THE MANAGEMENT OF WHOLESALE, INTERCONNECTOR, GENERATOR AND SAMPLE (WIGS) NMIS as: A code to identify the Unit of Measure (UOM) for data held in this register. Will this information need to be incorporated into the newly defined term <UOM> contain within the Metering Data Provisions Procedures?	The following documents do not require amendment, the use and reference of Unit of Measure is required for the purposes of the MDPP. Unit of Measure is not defined in the MSATS Procedures. UOM in the MSATS Proceudres is used to describe a data item. UOM is defined in the MDPP.
		Origin: • In response to Origin's feedback to the format, alter the definitions to:	Definition for Energy Flow Type has modified in the MDPP.

Item	Description	Participant Comments	AEMO Comment
		• Energy flow type - Total energy flow for which there is separate energy measurement. • Energy volume or demand – remove demand measured • Extent of energy – remove demand • Include definition for : Index Read – schedule read as per MSATS NSRD/Billing cycle. (This prevents every read such as service order reads being captured and included in diagrammatic and load profile graph) • Load Profile – Quarterly or Monthly for accumulation meters as per MSATS schedule reading cycle. • Off-Peak, Peak, Shoulder definitions- remove	Term Energy Volume or Demand removed from the MDPP. Demand removed Extent of energy. AEMO notes the respondents position and refers to the AEMO statement provided in table 1, item 1. Suggested changes to Load Profile, Peak, Off Peak & Shoulder not accepted.
		SA Power Networks: Load profile definition: quarterly load profile for accumulation meters is meaningless – should be removed.	AEMO notes the respondents position and refers to the AEMO statement provided in table 1, item 1. Suggested changes to Load Profile not accepted.
		Simply Energy: The definitions section appears sufficient	Noted.
		United Energy: Lack of clear interpretation of the defined terms will lead to varying data files being produced by retailers and distributors. Ultimately this mean that the same field may have different meanings in different files which may lead other parties to incorrect interpretation and recommendations. A number of our concerns are outlined below. Energy flow type refers to separate energy measurement or a separate usage rate. This could be interpreted as customer load or customer generation (net generation or gross generation) or controlled load. An alternative interpretation would be to focus on the separate usage rate and apply the peak, off peak, shoulder concept to both the load datastream and the (net or gross) generation datastream.	AEMO notes the respondents position and refers to the AEMO statement provided in table 1, item 1.

Item	Description	Participant Comments	AEMO Comment
		Is the separate usage rate, based on a standard for peak, off peak and shoulder by day type and time or is it as per the customers current tariff as it applies at the time of the request ie basically reinventing history for a different tariff and talking into account the application of off peak consumption on weekends, public holidays etc. Having a number of interpretations means that the customer may receive a different response from their current retailer and network businesses. This also means that energy service providers will have no strict standard by which to interpret data on behalf of customers. The term energy flow type changes meaning between summary data formats and detailed interval data formats. There may be benefit in using a different term rather than having the same term mean different things in different files. The customer receives both of the file formats so there may be benefit in a consistent meaning. Energy volume or demand – The procedure refers to demand measured over a period of time for each energy flow type. UE recognise the term demand for a load datastream however we query the value of such a term for a generation datastream in the context of this procedure. Off-peak – a time period during a day when an off peak usage rate is applied to energy consumption. For UE network tariffs off peak may be applied at certain times of day or may vary by day type. In some places in the procedure these usage rates refer to the rates based on the retailer usage timeframes eg Appendix B. The distributor does not know what retail tariff the customer is on. Are these usage rates based on the tariff the customer has at the time and these are applied going back 2 years if possible or is the off peak based on the tariff of the day/month for that months data?	

Item	Description	Participant Comments	AEMO Comment
		If retailers and distributors provide different consumptions against these usage rates, this will not instil confidence in the energy market or the new smart meters. UE strongly recommend that the data formats be limited to load and generation, the details regarding time periods that may reflect tariffs should be removed. UE also recommend that the demand components be removed.	
1.3	Related AEMO procedures	**ActewAGL Distribution:** No comment at this stage	Noted.
		Energy Tailors: No comment	Noted.
		Lumo: The following two AEMO documents should also be considered into this section: • B2B PROCEDURE TECHNICAL GUIDELINES FOR B2B PROCEDURES; and • B2B Mapping to aseXML (formally the Electricity B2B Build Pack 2013)	National B2B Procedures are not in scope of the purposes f the MDPP.
		Origin: No comment	Noted.
		Simply Energy: The related procedures section appears sufficient	Noted.
2	**OBJECTIVE**	**ActewAGL Distribution:** No comment at this stage	Noted.
		Origin: No comment	Noted.
		Simply Energy: The objective appears comprehensive and we have no Suggestions	Noted.

Item	Description	Participant Comments	AEMO Comment
3	**DATA FORMATS**	**ActewAGL Distribution:** No comment at this stage	Noted.
		Energy Tailors: In developing standardised procedures such as a meter data format, we believe that the experience of the energy industry to date shows that very structured, unambiguous definitions and sample files are required. Without these, participants can interpret formats slightly differently, inhibiting standardisation and the usage of these files by third parties. Therefore we suggest that AEMO publish an .xls file with formulas and validation in it, which can be used by participants to check that their file formats comply.	AEMO notes the respondents position and refers to the AEMO statement provided in table 1, item 1.
		United Energy: UE strongly urge AEMO to adopt the detailed data formats already available in the market, either those used in Victoria for the retail price comparator or the NEM 12 data file format. This may assist in avoiding a great deal of the ambiguity and inconsistency within the procedure and may also lead to lower implementation costs of this new procedure.	AEMO notes the respondents position and refers to the AEMO statement provided in table 1, item 1.
3.1	General National Energy Retail Rules requirements	**ActewAGL Distribution:** No comment at this stage	Noted.
		AusNet Services: **Item 2.8** AusNet Services notes the proposed drafting makes reference twice to the condition for charging when “more than four requests are made in a 12 month period”. Additionally the proposed drafting (b) does not accurately represent that data requested be within two years prior to the date of the request. AusNet Services also notes that NECF has not yet been implemented in Victoria, and recommend adding a footnote stating the Victorian basis for using the MDPP.	AEMO notes the respondents position and refers to the AEMO statement provided in table 1, item 3.

Item	Description	Participant Comments	AEMO Comment
		Please consider issues raised and redraft appropriately	
		EnergyAustralia: (b) Where a *retail customer* has been with a *retailer* for less than two years, a *retail customer* or *customer authorised representative* may request their *metering data* from a previous *retailer*. The previous *retailer* must provide the requested information and can charge a reasonable fee for providing the service. Inclusion of 'previous' to ensure clarity that this is in relation to the previous retailers obligations.	AEMO notes the respondents position and refers to AEMO statement provided in table 1, item 3. Section 3.1 General National Energy Retail Rules (NERR) Requirements has been removed from the MDPP.
		Energy Tailors: No comment	Noted.
		Lumo: 3.1 (b) Where a retail customer has been with a retailer for less than two years, a retail customer or customer authorised representative may request their metering data from a previous retailer. The previous retailer must provide the requested information and can charge a reasonable fee for providing the service Please insert 'previous' into the above sentence. It is not clear that a reasonable fee can be charged by the previous retailer if it is greater than the forth request received within a 12 month period from the retail customer or the customer authorised representative. It is our view that any ambiguity will be removed by the inclusion of 'previous'.	AEMO notes the respondents position and refers to AEMO statement provided in table 1, item 3. Section 3.1 General National Energy Retail Rules (NERR) Requirements has been removed from the MDPP.
		Origin: General NERR requirement should not sit under Data Formats. Best to create new section 1.4.	AEMO notes the respondents position and refers to AEMO statement provided in table 1, item 3. Section 3.1 General National Energy

Item	Description	Participant Comments	AEMO Comment
		Include rule that it applies to Standard Retail Contract and refers to small customers (across all states and all meter types). Further investigation should be done to review whether this is applicable to small customers as per NMI classification or by the site usage.	Retail Rules (NERR) Requirements has been removed from the MDPP.
		SA Power Networks: Summary data format – accumulation meters • The nature and extent of energy usage information SA Power Networks agree with the summary format as described in Appendix A of the Strawman Procedures with the following recommendation: That the Peak, Shoulder and Off-peak column be combined into a General Consumption category. This will provide the most common level of consumption between the different parties. Retailer tariff definitions are different from distributor definitions and will be a source of confusion for consumers if they try to compare distributor data with their retailer view. The “shoulder” category is not available for SA Power Networks. • A diagrammatic representation of energy usage information SA Power Networks agree - the data can be presented graphically. This specification as a minimum should not be prescriptive about the type of graph or any drill down capability. Summary data format – interval meters • The nature and extent of energy usage information SA Power Networks agree with the summary format as described in Appendix B of Strawman procedures with the exception the Peak, Shoulder and Off-peak should be combined as	AEMO notes the respondents position and refers to AEMO statement provided in table 1, items 1, 2 & 3.

Item	Description	Participant Comments	AEMO Comment
		Consumption. Distributors do not necessarily know the breakup of this data as presented to the customer on the bill. Please refer to recommendation above. • Usage or load over a specified period SA Power Networks would be in a position to provide up to two years in most circumstances. • A diagrammatic representation of a retail customers energy usage information SA Power Networks agree – the data can be presented graphically. This specification as a minimum should not be prescriptive about the type of graph or any drill down capability.	
		Simply Energy: The Rule requirements (particularly NERR 56A) is that the 10 business day timeframe should only apply to retailers where up to 2 years of data has been requested by the customer. While this has been specified in section 3.1 of the proposed procedure, for consistency and to avoid confusion, we believe that this should be made clear in section 4 of the proposed procedure.	AEMO notes the respondents position and refers to AEMO statement provided in table 1, item 3. Section 3.1 General National Energy Retail Rules (NERR) Requirements has been removed from the MDPP.
		United Energy: Suggest removing this section as it does not apply in Victoria. If the drafting remains then the requirements in Victoria should also be reflected. We would be happy to work with AEMO to improve the drafting in this section	AEMO notes the respondents position and refers to AEMO statement provided in table 1, item 3. Section 3.1 General National Energy Retail Rules (NERR) Requirements has been removed from the MDPP.
3.2	Field details – format and unit of measure	**ActewAGL Distribution:** No comment at this stage	Noted.
		AusNet Services: **2.9 Consolidate units of measure** For ease of automation, and in the interests of not confusing customers, the units of measure should be rationalised to just kWh. The examples in the Appendices only use kWh. If graphs show only average daily and interval usage/generation, and not monthly totals, there is no legitimate justification to provide data in	AEMO notes the respondents position and has modified the MDPP removing the requirement to provide data in MWh and MVA. AEMO believe there is value in providing data in kW, and KVA for small customers.

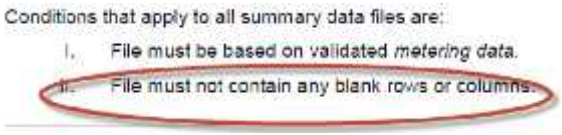
Item	Description	Participant Comments	AEMO Comment
		MWh for small customers. As pointed out in point 1.6, showing demand raises more questions than it answer. Therefore, AusNet Services recommends not including demand units of kW, kVA, MW, and MVA. AusNet Services suggests rationalizing the units of measure to just kWh to keep the Metering Data Provision Procedures (MDPP) simple.	
		EnergyAustralia: Unit of Measure is defined in various AEMO procedures. There needs to be consistency given this could have system implications. The Meter Data File Format has VarChar (5) where it appears this procedure is allowing only 3.	AEMO notes the respondents comments. The MDPP UOM values are consistent with the Meter Data File Format, therefore no changes made.
		Energy Tailors: No comment	Noted.
		Lumo: Can AEMO advise if the permitted fields for UnitOfMeasure be incorporated into the enumerated list or updated into the B2B PROCEDURE Technical Guidelines for B2B Procedures? In addition, the B2B Mapping to aseXML (formally the Electricity B2B Build Pack 2013) lists UnitOfMeasure as aseXML typsection 5.151 Type ase: MeterUnitOfMeasure as the MSATS Data Model Column – UnitOfMeasure, with <xsd:string> and aseLML node restrictions maxLength value =”5”. The introduction of an additional definition for UnitOfMeasure data field may cause some system issues for participants. In addition, Appendix A, B and C has the file condition for UOM as KWh . However, MWh an allowable UOM in 3.2? Alternatively, is it meant to state kWh or MWh in the file condition?	Required changes to the National B2B Procedures should referred to the Information Exchange Committee (IEC). The MDPP has been modified removing the requirement to provide data in MWh and MVA.
		Origin: Use existing definition of UOM as per MSATS Procedures	MSATS Procedures CATS & WIGS does not define UOM. The term and use of UOM in the MDPP is consistent.

Item	Description	Participant Comments	AEMO Comment
		Simply Energy: Simply Energy supports the proposal	Noted.
3.3	Summary data format	**ActewAGL Distribution:** No comment at this stage	Noted.
		AGL: 3.1 Summary Data – Informatio AGL agrees that the following data elements are necessary for any customer data: • National Metering Identifier Number (NMI); and • Meter Serial Number; • Unit of Measure; However, for summary data (accumulation and interval), AGL does not believe that it is sensible to provide information in the summary relating to: • Data quality; • Read date; • Energy flow type • Validated data; and • Blank rows and columns. 3.1 Data Quality Data quality generally relates to a single piece of information and is unlikely to relate to a full two years of data. As such, while we support the use of a quality flag on individual data elements, we do not believe that it would be useful or appropriate for summary data. 3.2 Read Date Again for summary data, we do not believe that individual read dates are of value. Rather this information should relate to the	AEMO notes the respondents position and refers to the AEMO statement provided in table 1, items 1, 2 & 6.

Item	Description	Participant Comments	AEMO Comment
		overall period for which the data is provided – i.e. start and end date. 3.3 Energy Flow Type Broadly, AGL has concerns about identifying data as being of a particular type, such as *Peak* or *Off-Peak*. The AEMO National Meter identifier Procedure (NMI Procedure) specifies that meters or registers be defined as Import or Export. As such, that level of information is discernible. However, while a DNSP may classify certain information (e.g. a meter register or a second meter) with constructs such as *Peak* or *Off-Peak*, this may have no relation to the way the data is treated by the retailer. Alternatively, and in particular with interval data, no parties are treating data as *Peak* or *Off-Peak*, but rather recording the time of use to the consumption data and applying their own charge to that data. 3.4 Validated Data The requirement to only provide validated meter readings may not be possible. If a site has had access problems then there may only be estimated or substituted data. It should be noted that depending on updates received from the Meter Data provider, the same report generated a day apart could have different data associated with it. AGL believes that it can only provide what data is available to it at the time that the information is generated. There should be no	

Item	Description	Participant Comments	AEMO Comment
		obligation for a party to be required to seek more updated data when a request is made and the Procedure should be clear on this matter. 3.5 Blank Rows and Columns Removal of blank columns (or Rows) may also be problematic. In the Strawman, the columns have been specified (e.g. Shoulder, Generation) in the detailed data format. Should there be a mix of data, then it is very likely that blank columns would exist in the data set. An example of this would arise if the file contained a mix of accumulation and interval data or 30 minute and 15 minutes interval data. For this reason, AGL is suggesting that each row be a date time period for each meter or register (see below)	
		AusNet Services: **2.10 Issues with summary data format** AusNet Services suggests the proposed data summary format be rationalised to the following list: I. NMI II. Meter Serial Number (provide a separate summary for meter at the site) III. Unit of measure IV. Data period requested V. Average daily usage VI. Average daily generation VII. Graphical representations as necessary In suggesting this change, AusNet Services notes the following issues with the proposed summary data format:	AEMO notes the respondents position and refers to the AEMO statement provided in table 1, items 1, 2 & 6.

Item	Description	Participant Comments	AEMO Comment
		1. As a principle, the delivery of tabulated data is a different requirement is fundamentally different to the delivery of summary diagrammatic information. Tabulated data is inherently detailed, needs to be readily analysable and as such best is suited to delivery in CSV file format. Whilst summary information should tell the story in a single glance it needs to be accurate and not confusing. As such AusNet Services suggests a data format presents on a single A4 sheet of paper, no matter how long the period of data requested is. 2. Providing data quality indication is more suited to detailed data analysis of tabulated data that can accurately indicate which interval is substituted. Providing this at the summary level will confuse customers and potentially conflict with the data quality flag on the customer's bill resulting in billing disputes. 3. Read dates or read frequency do not relate to the customer's energy usage and are too much information for customers. Also read dates/frequency is difficult for the industry to implement. Do registered participant provide the Standing Data for the scheduled dates/frequency or the actual read dates and frequency e.g. read daily on 99 out of the last 100 days? Providing actual reads/frequency would result in material IT costs for both Retailers and DNSPs, especially in the provision of interval summary data. 4. As mentioned on point 1.4 providing different energy flow types based on usage rate times is problematic due to differences between Network Tariffs and retailer billing TOU pricing. 5. The summary data format needs specify how metering data is provided where there is a meter type or meter configuration change e.g. Type 6 to Type 5. Is the summary data provided in a number of summary sheet (containing graphical representations), or is it combined into a single summary sheet? 6. If a summary data format table is provided, it is essential that the new format is described in terms of:	

Item	Description	Participant Comments	AEMO Comment
		a. technical description of each quantity; and b. information structure and other rules. AusNet Services suggests the issues with the proposed format and adapting the recommended rationalised summary data format. **Item 2.11** Condition III recommends ordering the summary date table with the most recent data at the top. AusNet Services considers that if summary data has to be provided in a table it should be ordered in a form consistent with NEM12/NEM13 files with the newest (and most relevant) data at the top. This would reduce system implementation work. If summary data is required as a table then AusNet Services suggests it should have the newest data at the top. **Item 2.12** If summary data is required as a table then AusNet Services suggests it should have the newest data at the top.	AEMO notes the respondents position and refers to AEMO statement provided in table 1, items 1 & 2. The MDPP file order is ordered by oldest date at the top of the file and the most recent date at the bottom of the file. This is consistent with the MDFF specification.
		CitiPower Powercor: Strawman for Consultation Page 3  In the event of a 3rd Party MDP, if the data has not been provided to the distributor, the data cannot be provided to the consumer through this request.	AEMO notes the respondents comment and has modified the MDPP, deleting the condition "File must not contain any blank rows or columns".

Item	Description	Participant Comments	AEMO Comment
		DIS: AEMO should focus on consumer needs and how the information will be used. The summary format should therefore reflect the basis of charging parameters of tariffs that could be expected to become more widely available and show both consumption (kWh) and demand (kW) where available. Given most distribution network businesses within the National Electricity Market (NEM), appear to be considering a move to some form of demand-based tariff, customers would need to know when they use their electricity through the provision of summary information on their load profile, if they are to effectively respond to these new tariff structures. For customers who may be considering moving to demand or capacity tariffs, the time and level of maximum demand should also be provided (where available from a smart meter). The consultation paper acknowledged the need for load profile information, but the example summary format at Appendix B did not reflect this. We believe the summary data format for interval data should be more aligned with the example developed by CUAC as circulated by AEMO at Attachment A, with the addition of information on maximum demand where available. Presenting summary data by tariff segments may create some issues, particularly where distributors may not have information on the customers' retail tariff, and where retail tariff structures may not match network tariff structures. In this context, a load profile could be provided without knowledge of the tariff the customer is on. Summary formats for interval data should include: • Average daily load profile by season and weekday/weekend (as well as by the proposed tariff segment if appropriate). • Maximum demand (where available).	AEMO notes the respondents position and refers to AEMO statement provided in table 1, items 1, 2 & 6. AEMO notes the respondents position, however supports that the interval Summary Data Format should be based on a representation of actual data related to a specific time period rather than present average usage information as this will better inform customers about their consumption patterns. (Actual data can include peak, shoulder, off-peak, etc. Maximum demand per month to be included where appropriate). The CUAC example provides a profile for an average day. This is an average over a period of up to two years, therefore the latest, and most relevant, consumption characteristics of the customer are represented less significantly through an averaging process. The profile presented in the MDPP, while less granular then an average daily profile, provides customers with the ability to understand trends in their consumption patterns on a seasonal basis.

Item	Description	Participant Comments	AEMO Comment
		EnergyAustralia: The overriding principle for this procedure should be to define a minimum requirement in line with the policy intent. EnergyAustralia believes AEMOs proposal goes further than minimum for the summary data. The summary should not include: • Energy flow types: retailers and DBs could have the customer set up on different configurations, such as peak/ off peak, dependant on customer choice. If the customer requested data from both parties this could cause considerable confusion. • EnergyAustralia does not agree with a minimum procedure outlining that diagrams are to be provided for summary accumulation. Rule clauses for interval only (7.16 (c) (2) (iii). This also removes issues of CSV not supporting diagrams. There are a number of issues around metrology changes at customer sites that result in the condition 'files must not contain any blank rows or columns" being unachievable. Consideration needs to be given to the period of two year where things can change at a home such as inclusion of solar, removal of electric hot water, batteries, meter changes to smart meters etc.	AEMO notes the respondents position and refers to AEMO statement provided in table 1, items 1, 2, 3 & 6.
		Energy Tailors: We do not have a firm view of the summary formats suggested by AEMO and by CUAC respectively. Ultimately the information should be simple, easy-to-understand and reveal the key points that consumers are interested in. We believe that in the absence of direct consumer engagement and testing, consumer groups are the best proxy for identifying what customers may want.	AEMO notes the respondents position and refers to AEMO statement provided in table 1, items 1 &2.
		Lumo: Clause 7.16(2) of the NER states that the diagrammatic representation of the nature and extent of energy usage for daily time periods.	AEMO notes the respondents position and refers to AEMO statement provided in table 1, items 1 &2.

Item	Description	Participant Comments	AEMO Comment
		The existing drafting of clause 3.3.2 of the draft MDPP expands the diagrammatic representation to include usage or load profile over a specified period. It is our view that the diagrammatic representation should not include demand. In clause 3.3.2 include the following amendment The interval metering data summary format must, at minimum, include: … III. A diagrammatic representation of the information referred to in subparagraph (i).	Suggested change not accepted, references include in the modified MDPP new section 5.3 details the requirement for interval data summary format.
		NSW DNSPs: We note that the Rules only require a 'diagrammatic representation' for interval metering data, whereas the strawman procedure requires this for both interval and accumulation data. We believe that inclusion of a graph for accumulation data will not provide additional value to customers, and that this requirement should be removed from the procedure, in line with the Rules. Many of the NNSW DNSPs interval meters are manually read interval meters. We suggest the following changes to the drafting of the 'Read Date' requirements to reflect this: "monthly, for ***remotely read*** *interval metering data* or when read for ***manually read interval*** or *accumulation metering data*".	AEMO notes the respondents position and refers to AEMO statement provided in table 1, items 1 &2. AEMO accepts the suggested changes and updated the MDPP to reflect proposed amendments.
		Origin: 3.3 IV. Data quality indication. Change the column from "Estimate" to "Actual". Data quality indicator therefore will be "Y" for actual data or "N" for Subs, Final Subs. 3.3 V. Read Date	AEMO notes the respondents suggested changes and has modified the MDPP to remove ambiguity.

Item	Description	Participant Comments	AEMO Comment
		• Interval: Clarity required between: Read date, "monthly" for interval metering data and; 1.2.1 Interval data summary definition of "daily" energy volumes for energy flow type and requirement for "From Date" and "To Date" in Appendix B Interval data summary format. Is it meant to be daily or monthly? • Basic: Input the word "scheduled" before read for accumulation meter data. This way, it aligns with the intent of providing the read as per NSRDs and not every accumulated read taken eg. check reads . VI. Energy Flow types: As per definitions feedback Item 1.2 Conditions II. File may not contain blanks. This may be practical if say an entire row is unable to contain blanks. However it may be valid for blanks to be present at a column level. For example, Generation column is likely to be blank in a lot of cases. Zero should also not be a substitute for blanks, as zero can be a valid value. 3.3.1 Diagrammatic representation Not required as per NER clause 7.16(c)(3). Refer to Appendix A feedback	AEMO notes the respondents comment and has modified the MDPP to remove ambiguity. If the word "scheduled" is included, final reads related to customer move out/move in occurring between scheduled reads would not be included. These types of reads are necessary to reflect the actual time that a particular customer is related to a connection point. Generation or controlled values only need to be provided if applicable, therefore blanks should not be present. The Draft MDPP requires summary files to be PDF, therefore this should not be an issue. AEMO notes the respondents position and refers to AEMO statement provided in table 1, items 1 & 2.
		SA Power Networks: Referring to file condition "II. File condition must not contain any blank rows or columns" In the event of a 3rd party MDP, if the data has not been provided to the distributor, the data cannot be provided to the consumer through this request. Therefore, this condition should be removed or additional words included to clarify when it would be valid.	AEMO notes the respondents comment and has modified the MDPP, deleting the condition "File must not contain any blank rows or columns".

Item	Description	Participant Comments	AEMO Comment
		Simply Energy: Simply Energy supports the proposal	Noted.
		United Energy: Whilst UE acknowledge the need for summary data format, we are concerned regarding the variability and impacts of the time based usage information. UE suggest that summary data not be based on any particular tariff structure, as these are subject to change. All tariff based information should be removed. Summary data could be provided on standardised daily time intervals and / or graphically. The MDPP should establish minimum requirements and focus on known standard data file formats already available in the market, NEM 12. Energy flow types may be more correctly specified as load or net/gross generation (where applicable) in sub clause VI. A. Sub clause B should be removed. Where the meter type/meter configuration changes part way through the requested data period it would be useful to confirm that two summary data formats would be provided. Where a meter configuration change occurs eg a generation stream is established part way through the requested data period, is the expectation to create a new set of files with the new configuration or to create a zero generation datastream before the generation was turned on? The Read Date columns may benefit from more consistency – From Read Date and To Read Date in Appendix A (or From Date and To Date to make it consistent with Appendix B) If a singular date is used in the diagrammatic representation then is this the From or To date for the consumption or will it be some other unit eg month? Having multiple date 1's to represent different measurement elements/ datastreams may create confusion. If generation is added on would this datastream be shown graphically as a negative amount?	AEMO notes the respondents position and refers to AEMO statement provided in table 1, items 1 & 2. The MDPP has been modified to clearly identify each of the applicable Energy Flow types. AEMO notes the respondents position and refers to AEMO statement provided in table 1, items 3. The Draft MDPP clarifies the use of dates in the summary files. From Date and Read Date are used in the Accumulated Data Summary to describe the period for which a usage volume is related. From Date and To Date are used in the Interval Data Summary for a manually read interval metering installation as the Read Date is the day after the last interval in the data file.

Item	Description	Participant Comments	AEMO Comment
		The Customer Data Summary provided by CUAC appears more customer friendly. It may be useful to see a few more versions of this style of summary format with hot Water load control and generation version and also two years of data rather than one. It would also be useful to clarify if the average daily usage is created for the last 1 year of data or is it the average for the last two years in the second graph? The usage patterns for week days and weekend days should be kept simple, suggest removing and ignoring public holidays as these may vary by year across the day types in the third and fourth graphs. It appears unnecessary to highlight the period of maximum demand as this is self-evident. These graphs should also make it clear that the timeframe is in Australian Eastern Standard Time, not local time.	Interval Data Summary files for remotely read interval metering insatallations would have the unit of time expressed as “Month”. Generation would be added to usage for net metered connection points, therefore potential for negative values exists. Generation values for gross metered connection points would be separately metered and values are positive. AEMO notes the respondents position and refers to AEMO statement provided in table 1, items 1, 2 & 3. AEMO accepts the suggested changes and updated the MDPP to reflect Australian Eastern Standard Time.
3.4	Detailed data format	**ActewAGL Distribution:** No comment at this stage	Noted.
		AGL: 5.1 Data Quality Column The example in Appendix A indicates that data quality is represented with the column heading *Estimated* (Y or N). This assumes that none of the other data quality flags (e.g. S-Substituted, A-Actual) are required or meaningful. AGL suggests that it wold be better to retain the data quality flag that is provided by the Meter Data Provider and provide an appropriate legend on the summary page. 5.2 Energy Flow Type	AEMO notes the commenst provided by the respondent and updated the MDPP to remove the examples in Appendix A to eliminate any ambiguity. Appropriate data quality flag information is included in the NEM12 file that is proposed in the Draft MDPP.

Item	Description	Participant Comments	AEMO Comment
		AGL believes that this information is best kept to the simplest form available – which is at the register or meter level with the energy direction and not apply constructs such as Peak or Generation to those identifiers. The information provided by the meter data provider to the retailer is specified in AEMO's NEM Meter Data File Format Specification, and there is no classification of generation. Provision of information as Import or Export is achievable as meter (or meter register) identifiers define that function per the AEMO NMI Procedure. With the rapid changes to technology, installations with storage batteries will be installed within the next 2-3 years. There are likely to be periods when the householder may be consuming less than their charged battery can provide and the customer may be exporting energy to the grid. In these circumstances calling the exported energy *Generation* (as specified in the strawman) may not be entirely appropriate, whereas specifying it as export may be. AGL believes that specifying energy consumption in forms such as *Peak, Off-Peak* and *Shoulder* etc. is not appropriate for the following reasons. First, *Peak, Off-Peak* and *Shoulder* etc. are constructs applied by a party which are overlaid on the consumption. A simple example would be a flat network tariff (or monthly Maximum Demand (MD) tariff as are about to be employed) against a retail tariff, such as AGL's free Saturday. In this case the DB would not specify any particular usage as *Peak* or *Off-Peak*, but will simply record and provide consumption	AEMO notes the respondents position and refers to AEMO statement provided in table 1, items 1 & 2. AEMO notes the respondents position and refers to AEMO statement provided in table 1, items 1 & 2. AEMO notes the respondents position and refers to AEMO statement provided in table 1, items 1 & 2.

Item	Description	Participant Comments	AEMO Comment
		against interval and look for the monthly MD. AGL on the other hand would apply a no charge tariff to any period which is a Saturday. Thus when the customer's tariff or product changes, then a different construct would have to be applied. Since these constructs are applied independently, a customer who received data from both a Retailer and DNSP may see quite different versions of the data for the same period. AGL does not believe that this is a good outcome. It may create uncertainty in the customer and limit the customer's ability to reconcile their current tariff or limit a third party application's ability to adequately analyse that customers' usage and recommend appropriate options. Second, many retailer and network databases only record the metering data and do not record how the data is treated at any time. Rather the billing systems apply a tariff to the data when the bill is produced. This is important, as tariffs may be changed retrospectively. Again, a customer whose tariff is retrospectively changed, would see changes in their data when it is produced a second time for the relevant period. 5.3 Date Time Information for Interval meter 5.3.1 Data Format AEMO is suggesting that the formats for these data elements should be column based rather than row based – that is each row has a column for the various time periods (for interval data)with	

Item	Description	Participant Comments	AEMO Comment
		the relevant consumption for that device or register. While the data can be processed to this form, AGL suggests that this could lead to complications. Present data formats have a row format with each date / time period for a device on a row. AGL believes that this format is more suitable, especially as it is very likely that over a two year period a customer's metering installation could change from an accumulation meter to an interval meter. Further, the meter data periods could change from 30 minute to 15 minute intervals in that two year period. CSV files generally use the first row as a header row, with data contained in the following rows. By requiring the consumption data to be column based, AGL believes that producing a data file for a two year period containing a mix of accumulation data to 30 minute data (or 15 minute data) would require new header rows or multiple files (and multiple summaries) for that period. By producing the data in a row based format, AGL believes that it is easier to produce a single CSV file with all versions of the data as each row would specify the relevant date time period when the data was related. This also suggests that there should be some description of each row of meter data being produced should be tagged as either accumulation or interval. Example of a mixed format file:	Data presentation would follow the requirements for the NEM12 file that is proposed in the Draft MDPP The Draft MDPP clarifies that separate data files may be provided where metering installation configuration has changed during the period for which metering data is requested.

Item	Description	Participant Comments	AEMO Comment

NMI	Meter	Register	Device	UoM	Data Quality	Start Date	End date	Consumpti
612345	123456	123456	Acc	kwH	A	1 Jan 2014	1 Mar 2014	125
612345	123456	123456	Acc	kwH	A	1 Mar 2014	1 Jun 2014	121
612345	98765	98765	Acc	kwH	A	1 Jan 2014	1 Mar 2014	45
612345	98765	98765	Acc	kwH	A	1 Mar 2014	1 Jun 2014	42
612345	65432	1234567	MRIM	kwH	A	2 Jun 2014	2 Jun 2014	4
612345	654321	1234567	MRIM	kwH	A	2 Jun 2014	2 Jun 2014	3
612345	654321	1234567	MRIM	kwH	A	2 Jun 2014	2 Jun 2014	4
612345	654321	1234567	MRIM	kwH	A	2 Jun 2014	2 Jun 2014	5

Table 1- Example of mixed metrology output

AGL believes this meets the requirements of the AEMC Rule change while providing a simple, efficient outcome which can cater to a data set made up of varied metrology information.

We would suggest that AEMO should develop a dummy file of mixed metrology data and assess that against the procedural requirements to determine what can be produced

5.3..2 Data Specification
We note that the data formats suggested section 3.2 Field Details for Units of Measure are defined as character lengths of 15.3 which inconsistent with other procedures used within industry (e.g. AEMO Metrology Procedure: Part B) where the field length is defined in aseXML as a maximum of 5 characters.

Unit of Measure characted length of 15.3 is defined in the MDFF Specification for values with the “kilo” prefix. The MDFF Secification,

Item	Description	Participant Comments	AEMO Comment
		Specific definitions (and specifications) like this one should be consistent across multiple procedures and we suggests that a review of these be taken of all these definitions and specifications to ensure they are consistent across the various procedures.	not the Metrology Procedure, defines the Unit of Measure field name as a maximum of five characters.
		AusNet Services: **2.13 Issues with detailed data format** AusNet Services strongly suggest AEMO should utilize the existing NEM12 file format (CSV), also see to comment 1.13. In suggesting this change, AusNet Services notes the following issues with the proposed data format: 1. Providing data quality indication is more suited to detailed data analysis of tabulated data that can accurately indicate which interval is substituted. Providing this as a single daily quality flag will confuse customers and potentially conflict with the data quality flag on the customer's bill which will have a different basis resulting in billing disputes. 2. Providing actual read dates and times is a deviation from the NEM12 format, resulting in material IT costs for both Retailers and DNSPs. Rather the NEM12 file format has DateTime associated with the file creation that along with the data quality flag should inform the reader as whether data has been read or whether a read is outstanding. 3. As mentioned on point 1.4 providing different energy flow types based on usage rate times is problematic due to differences between Network Tariffs and retailer contracts, and even more so with detailed data format as there is no clear linkage between	AEMO notes the respondents position and refers to AEMO statement provided in table 1, items 1 & 6.

Item	Description	Participant Comments	AEMO Comment
		NEM12 datastreams and usage time periods such as peak, off-peak and shoulder times. 4. The detailed data format needs specify how metering data is provided where there is a meter type or meter configuration change e.g. Type 6 to Type 5. Suggest it does make sense to provide multiple detailed metering data files in these situations – both in terms of producing the data and for customer analysing the data. AusNet Services strongly suggests AEMO give regard to the issues raised and consider the suggestion of utilizing the existing NEM12 file format. This is important because it promotes consistency and avoids the need for testing. **2.14 Inconsistency in detailed data format and examples** Clause 3.4 states that the interval detailed data format should have usage time information of peak, shoulder and off-peak while the Appendix C example does not. What is the AEMO proposal? Please clarify the inconsistency raised	
		CitiPower Powercor: Strawman for Consultation Page 4 Typing error – conditions should reference *detailed*, not *summary*	AEMO notes the respondents comments and refers to AEMO statement provided in table 1, items 1 & 6. The MDPP has been modified accordingly.

Item	Description	Participant Comments	AEMO Comment
		 3.4. Detailed data format The detailed data format for interval metering data must include the following information: I. NMI II. Meter Serial Number III. UOM for the Energy Flow Type IV. Data quality indication V. Read Data VI. Energy Flow Types A. Peak B. Shoulder, Off-Peak, Controlled Load and/or Generation (only if applicable). Conditions that apply to all summary data files are: I. File must be based on validated metering data II. File must not contain any blank rows or columns III. File ordered by Date – oldest date at the top of the file and most recent date at the bottom of the file. The interval metering data detailed format must be provided as a horizontal format. Appendix C contains the interval metering data detailed format, including the file conditions and example files	
		DIS: It is unclear if the existing NEM data file formats are being used as the basis for the provision of detailed data formats. In specifying the requirements for the detailed format, the use of this format needs to be considered given that market participants already have systems in place to receive and use these formats. This could minimise the level of systems development required to comply with data format requirements.	AEMO notes the respondents position and refers to AEMO statement provided in table 1, items 1 & 6.
		EnergyAustralia: EnergyAustralia has concerns having categories of Energy flow types which can cause confusion or a different outcome dependant on if the customer went to the retailers or the DBs to request data. Retailers and DBs may not have the same configuration for peak off peak, dependant on customer choice of product. If the customer requested data from both parties this could cause considerable confusion. EnergyAustralia believes the simpler form of data available at register or meter level with an energy direction would be a better outcome.	AEMO notes the respondents position and refers to AEMO statement provided in table 1, items 1 & 6.

Item	Description	Participant Comments	AEMO Comment
		There are a number of issues around metrology changes at customer sites that result in the condition 'files must not contain any blank rows or columns" being unachievable. Consideration needs to be given to the period of two years where things can change at a home such as inclusion of solar, removal of electric hot water, batteries, meter changes to smart meters etc.	
		Energy Tailors: We believe that the purpose of providing energy data is to understand the *times* at which energy is being consumed and to match those against the *times* at which prices are charged. Therefore we believe that the Network Tariff Code, which is part of the NMI standing data for a site, is known by both retailers and distributors, and is published on MSATS, should also be provided as a reference in this file. We suggest that this be included in the detailed data format after the Meter Serial Number column, and in the summary data format also after the Meter Serial Number column.	AEMO notes the respondents position and refers to AEMO statement provided in table 1, items 1 & 6. AEMO notes there are existing proceses to obtain Network Tariff Code from NMI standing data in MSATS. AEMO considers that it is not necessary for the MDPP to also provide this.
		Origin: 3.4 VI. Energy flow types As per definitions feedback Item 1.2 Change wording from "Condition that apply to all summary data files are" To "Condition that apply to all detailed data files are:"	AEMO notes the respondents comments and refers to AEMO statement provided in table 1, items 1 & 6. The MDPP has been modified accordingly.
		SA Power Networks: Typing error – conditions should reference detailed, not summary.	AEMO notes the respondents comments and refers to AEMO statement provided in table 1, items 1 & 6. The MDPP has been modified accordingly.
		Simply Energy: We suggest that AEMO provide retailers with a degree of flexibility to step away from the minimum requirements where a customer has requested an even lower set of data.	AEMO accepts the respondents suggetsion and refers to the section 5.5 of the MDPP.

Item	Description	Participant Comments	AEMO Comment
		United Energy: The detailed data format in 3.3 introduces new terms which are not in the glossary eg read date, data quality indication. Some terms would also benefit from more consistency and clarity within the procedures, preferably in the one location, the glossary. The term data quality indication is called data quality in Appendix A. The Appendix A outlines the allowable content eg Y or N. Where Y is actual and N is estimated, substituted and final substituted. As mentioned in the comments on the glossary the energy flow type should be load, generation or controlled load rather than the datastreams split into time period. In Appendix B1. The energy flow referenced to a retail tariff definition should be removed. If the slicing of load datastream into different rate periods persists then how is this communicated to the customer that this is indicative only and may not be consistent with either the underlying network or retail tariffs that the customer is on? The term actual daily demand should be defined in the glossary, including the basis of this field eg a uniform calculation method or whether this field is only populated if the NMI and meter in question has been allocated a demand tariff and then this field is completed based on the demand calculation methodology specific to that meter and network tariff.	AEMO notes the respondents comments and refers to AEMO statement provided in table 1, items 1 & 6. The MDPP has been modified accordingly.
4	**DELIVERY TIMEFRAMES**	**ActewAGL Distribution:** As above	Noted.
		AGL: AGL believes that there are three elements to this issue: 1. The 'clock' cannot start until the applicant (customer or agent) has been appropriately validated; 2. Depending on how many requests are received at any one time (i.e. single or multiple agents) will affect the time required to generate the information; and	AEMO notes the respondents comments and refers to AEMO statement provided in table 1, items 3, 4, & 5.

Item	Description	Participant Comments	AEMO Comment
		3. Time to deliver the information if the delivery is by physical means First, the 10 day obligation. AGL believes that any timeframes to deliver data to either customers or customer authorised representatives cannot start until that party has been appropriately identified by the information provider (i.e. DB or RB). The strawman specifies that: *Retailers* and *DNSPs* must use reasonable endeavours to deliver a *retail customer's* requested *metering data* within 10 *business days*. This delivery timeframe commences from the date the request is received by the *retailer* or *DNSP*. However, the amendment to the National Electricity Rules (Clause 7.7(a1)) states: *… after having first done whatever may be required or otherwise necessary, where relevant, under any applicable privacy legislation (including if appropriate making relevant disclosures or obtaining relevant consents from retail customers).* AGL understands this to clearly mean that any request must be validated (by the Retailer or DNSP) before the request becomes active. As such, the procedure should clearly state that the 10 business day timeframe does not commence until the Retailer or DNSP has verified the customer or customer representative. Similarly, if an agent or customer provides a request which does not meet the relevant criteria for validation (e.g. incorrect name,	

Item	Description	Participant Comments	AEMO Comment
		mismatched name and NMI etc.). Any requests that fail validation would be rejected and not processed. Second, in terms of responding to an agent's request. This issue is difficult to quantify as it would depend on how many requests an agent makes and how many agents are making requests at the same time. AGL would like to suggest that any agent making more than a nominal number of requests (e.g. 20), be required to provide a standardised electronic list (e.g. NMIs and customer names) so that the Retailer or DNSP could choose to automate the process if they wished. Also, given that the numbers are undefined, each block request would have to be assessed and negotiated with the agent at the time, given existing workloads. Third, if the information has to be delivered physically the NERR, AGL seeks clarification on whether the delivery time has to be included in the ten day period or the information has to be despatched by the tenth business day. Since, the general discussion has been the provision of information electronically by the tenth business day, AGL would argue that it must be able to despatch any physical information on the tenth business day for consistency. In either case, AGL would point clause 17(b) (ii) of the NERR which takes a notice or bill as having been received two business days after it is posted, and submit that this is the appropriate and consistent standard to be applied.	

Item	Description	Participant Comments	AEMO Comment
		DIS: (more than one RC request)The proposal that customer authorised representatives negotiate with retailers/distributors on the timeframe for delivery of data for multiple customers could act as a barrier to access (and a potential loophole under the reasonable endeavours obligation). Setting some limits on maximum response times would be preferable. Retailers/distributors should be able to provide a response within 10 business days, even if it is an acknowledgement and estimated timeframe for more complex requests. Twenty business days should be sufficient for all but the most complex requests, (which could be subject to negotiation). This issue needs to be considered in the context of who would be making mass requests covering multiple data – for the most part this would be small businesses who have limited negotiating power. The timeframe in the data provision procedures (and in the rules) set expectations for when consumers should receive data. Customers would form a reasonable expectation that data would be provided to their authorised representative within the same timeframe for an individual request. Any deviation from this timeframe would have to be explained to the consumer – especially if they were waiting on access to receive services from their authorised representative. Recommendation • Where multiple data requests are involved, rather than leave timeframes open to negotiation between a customer's authorised representative and the retailer or DNSP, it may be preferable to set some limits on maximum response times.	AEMO notes the respondents comments and refers to AEMO statement provided in table 1, items 3, 4, & 5.
		EnergyAustralia: *Retailers* and *DNSPs* must use reasonable endeavours to deliver a *retail customer's* requested *metering data* within 10 *business*	AEMO notes the respondents comments and refers to AEMO statement provided in table 1,

Item	Description	Participant Comments	AEMO Comment
		days. This delivery timeframe commences from the date the completed request is received by the *retailer* or *DNSP*. EnergyAustralia suggested the word 'completed' is included.	items 3, 4, & 5. The MDPP will be modified accordingly.
		Energy Tailors: Refer to our response to Question #3 in previous table. Even with procedures in their current state (i.e. with manual verification required), we do not believe that 10 days is an appropriate timeframe to provide meter data to a requestor. We note that the rule already contains the words "use reasonable endeavours", which in our view provides more than sufficient cover for participants in the event of extraordinary circumstances which might delay the provision of that data. We strongly recommend that a 24 hour maximum timeframe be included in the procedure – i.e.: "Retailers and DNSPs must use reasonable endeavours to deliver a retail customer's requested metering data within one business day. This delivery timeframe commences from the date the request is received by the retailer or DNSP."	AEMO notes the respondents position and refers to AEMO statement provided in table 1, items 3, 4, & 5.
		NSW DNSPs: We hold concerns that our ability to fulfil requests may be hampered by an inability to satisfactorily verify the identity of customers. In its final rule change determination, the AEMC noted that improving current B2B processes should "enhance DNSPs' ability to verify the identity of customers and validate the authority of customer representatives". We welcome the development of improved existing procedures to support this new procedure, through the Information Exchange Committee processes, with the support of AEMO. To ensure timely implementation of this new procedure, supporting procedures will need to be enhanced before March 2016.	AEMO notes the respondents position and refers to AEMO statement provided in table 1, items 3, 4, & 5. Any required changes to the National B2B Procedures should referred to the Information Exchange Committee (IEC).

Item	Description	Participant Comments	AEMO Comment
		Lumo: It is our view that the element of interpretation should be removed from the Procedure. The timeframe applicable to a request commences from the date that all completed information and payment (if applicable) is received from the customer authorised representative. The inclusion of this item will ensure that any ambiguity is removed from the obligation. Retailers and DNSPs must use reasonable endeavours to deliver a retail customer's requested metering data within 10 business days. This delivery timeframe commences from the date that a completed request, and if applicable, payment of a reasonable fee is received by the retailer or DNSP. Suggestion: Retailers and DNSPs must use reasonable endeavours to deliver a retail customer's requested metering data within 10 business days. This delivery timeframe commences from the date ~~the~~that a completed request is received by the retailer or DNSP. (More than one RC request) Lumo: Where a customer authorised representative requests more than one retail customer's metering data, the delivery timeframe must be agreed between the retailer or DNSP and the customer authorised representative.	AEMO notes the respondents position and refers to AEMO statement provided in table 1, items 3, 4, & 5.
		Origin: • It is imperative that the timeframe commences once the required information requested by the Retailer or DNSP is received and validated to meet their Privacy obligations. Procedures should also allow for mail delivery timeframes in the event of physical delivery. • Include a section that provides clarity for Retailers and DNSPs for charging a reasonable charge.	AEMO notes the respondents position and refers to AEMO statement provided in table 1, items 3, 4, & 5.

Item	Description	Participant Comments	AEMO Comment
		1. When the request is received by the Customers Authorised Representative, who is the charge rendered to? The Customers Authorised Representative or to the Customer. 2. Retailer and DNSPs may apply a reasonable charge to a customer's authorised representative even if they choose to send through multiple individual requests on any given day (as opposed to one request received including multiple customers).	
		Simply Energy: The Rule requirements (particularly NERR 56A) is that the 10 business day timeframe should only apply to retailers where up to 2 years of data has been requested by the customer. While this has been specified in section 3.1 of the proposed procedure, for consistency and to avoid confusion, we believe that this should be made clear in section 4 of the proposed procedure. Simply Energy believes that clarification is required regarding when the timeframe for providing the data commences. Simply Energy believes there are two options as to when the timeframe requirements should commence. **Option one**: Timeframe for providing the data commences once Simply Energy has received the necessary documentation from the customer authorised representative that assures Simply Energy that the request is legitimate and the customers data will be protected by the customer authorised representative. The Rule as it currently reads ("The delivery timeframe commences from the date the request is received by the retailer on DNSP") will not give Simply Energy adequate time to determine the legitimacy of the request or the customer's authorisation for the representative to request on their behalf. **Option two:** Leave the Rule as it is currently worded, but extend the timeframe to provide the requested data to 15 business days	AEMO notes the respondents position and refers to AEMO statement provided in table 1, items 3, 4, & 5.

Item	Description	Participant Comments	AEMO Comment
		rather than 10. This would provide Simply Energy more time to verify the authorisation of the request.	
		United Energy: There is benefit in clarifying in this section that the 10 business days is subject to the customer and the customer authorised representative being verified for the requested data period involved. If the customer has not lived at the premises for 2 years then the full data request may not be able to be filled.	AEMO notes the respondents position and refers to AEMO statement provided in table 1, items 3, 4, & 5.
5	**DELIVERY METHOD**	**ActewAGL Distribution:** No comment at this stage	Noted.
		DIS: The data provision guidelines do not appear to consider provision via retailer web portals. As most retailers (and some distributors) offer online service portals, it would be beneficial to specify that customers, or their authorised representatives, may be able to download the detailed data format from these portals.	Stakeholder feedback has highlighted that not all retailers have web portals for downloading detail data file. As noted in AEMO's response notes in table 1, item 5, retailer and DNSP's must publish the ways the requestor will be provided the metering data.
		JEN: For data delivery our preference is electronic.	AEMO notes the respondents position and refers to AEMO statement provided in table 1, items 1 & 5.
		Lumo: We note that summary information can have a physical delivery method. The NERR considers that a Notice is received on the date two business days after it is posted. Whilst we do not support this as a delivery method, if it is to remain and the delivery method is physical then the two business days should be in addition to the 10 business days. If the delivery method is physical, is the two business days in addition to the ten business days and should section 4 be adjusted accordingly?	AEMO notes the respondents position and refers to AEMO statement provided in table 1, items 3, 4, & 5.

Item	Description	Participant Comments	AEMO Comment
		NSW DNSPs: We believe that the requirement for the provision of the summary and/or detailed data should be limited to electronic distribution only. The provision of a physical format (such as paper) would be inefficient and provide little value to customers or their authorised representatives. The file types of the data provided should also be limited. Provision of the summary data should be in Portable Document Format (PDF), in order to accommodate the required graphical representation. Similarly, provision of the detailed data should be limited to Comma Separated Values (CSV) format, to accommodate the potentially large amount of data.	AEMO notes the respondents position and refers to AEMO statement provided in table 1, items 3, 4, & 5.
		Origin: • As per feedback in Item 5 of the Consultation paper questions, include in the Procedures: "Retailers and DNSP's can agree with the customer or customer authorised representative the preferred channel for receiving metering data requests and the delivery method to be used." • Include in the procedures that the Retailer and DNSP may reserve the right to refuse to provide metering data under certain circumstances and can decline the request for meter data should the customer authorised representative not meet customer validation criteria or associated commercial terms. • In addition, include that Retailers/DNSPs are not obligated to provide a format that is different to the manner the procedures specify (even though a charge can be applied).	AEMO notes the respondents position and refers to AEMO statement provided in table 1, items 3, 4, & 5.
		United Energy: The strawman notes that the summary data format may be physically delivered rather than electronic. It may be useful to confirm that the intent is that the pdf diagrammatic version may be posted to the customer, although this may take additional time.	AEMO notes the respondents position and refers to AEMO statement provided in table 1, items 1, 2 & 3.

Item	Description	Participant Comments	AEMO Comment
5.1	Summary data format	**ActewAGL Distribution:** No comment at this stage	Noted.
		AusNet Services: **1.3 Summary Data Format** AusNet Services makes a number of views regarding the types of details required in the summary data format (and the CUAC proposal seems to generally cover what is necessary), but can implement any data format as long as the format is clearly defined and the information is available. However in the detailed comments below point out the types of information which add complexity, processing difficulties and IT implementation and operations costs e.g. accounting for public holidays. • Accumulation type 6 data summary data format should be simple: probably average daily usage over monthly and quarterly periods. • The summary data format should provide the customer with an understanding of their energy usage and generation patterns over the period requested. It is not intended for bill checking. Hence retailer billing Time of Use (TOU) is not a requirement. • If retailer billing TOU information is deemed required, than only retailer tariffs have direct customer bill impacts. Network businesses do not have access to retailer billing Time of Use (TOU) and hence cannot provide the data on this basis. AusNet Services highlights the importance of establishing a summary format that minimises costs to the industry	AEMO notes the respondents position and refers to AEMO statement provided in table 1, item 1.
		ATA, CALC, CUAC: The summary format may meet other purposes. Indeed, for customers on accumulation meters, the summary format will provide all the energy data required for seeking competitive retail products. However, attempting to develop a single format that tries to be everything to everyone will not succeed. Other	AEMO notes the respondents position and refers to AEMO statement provided in table 1, item 1.

Item	Description	Participant Comments	AEMO Comment
		purposes should be able to be met through easy access to detailed data that can be further analysed as needed. **And** Where consumers have embedded generation (e.g. rooftop solar), the summary information provided will need to include both the energy imported and exported. This requires fundamentally different information that may need to be expressed in different terms to be meaningful to the consumer. Trying to provide a single summary format for solar and non-solar customers is likely to make the summary less useful for both groups of customers. We therefore recommend that AEMO investigates providing different summaries for solar and non-solar customers, where the format remains similar but the level of detail differs, and different terminology used only to the extent that it is required.	
		EnergyAustralia: The *retailer* or *DNSP* must provide the summary data format electronically and/or physically to the *retail customer* or *customer authorised representative*. EnergyAustralia suggests removing 'and/or physically', this is being over prescriptive for minimum requirements. For interval summary data this could be a considerable number of pages. If the customer doesn't have access to electronic versions the discussion about how best to meet the customers' requirements is better handled between the customer and retailer or DB. Providing physical summary formats to the customer authorised representative for multiple customers is a poor outcome for all involved. Clarity is sort on the following sentence for summary interval format: This must be able to be offered in a Portable Document Format (PDF) and/or Comma Separated Values (CSV) format, unless	AEMO notes the respondents position and refers to AEMO statement provided in table 1, item 1.

Item	Description	Participant Comments	AEMO Comment
		otherwise agreed with the *retail customer* or *customer authorised representative*. If a customer is requesting CSV to utilise in a third party comparison web site will the retailer or DB be classed as non-compliant given this won't include the diagrams? Or will the retailer/ DB have to provide both CSV and PDF for all interval summary formats even if the customer doesn't want diagrams? This section requires clarity for the intent of this procedure, if the data is to be used for a third party comparator or for customers own visual comparison and gives rise for different files to support each use.	
		Energy Tailors: No comment	Noted.
		JEN: …supportive of the proposed data formats for interval meters and the delivery timeframes.	Noted.
		NSW DNSPs: …the energy flows currently proposed may cause confusion due to the differences in definitions between network tariff components and retail tariff components. DNSPs cannot guarantee that the assigned network tariff is reflected in the customer's retail tariff, and therefore it may appear to customers that there are discrepancies or mistakes with the data. The NSW DNSPs believe that energy flow types related to 'time of use' and demand components should be removed as a requirement of both the summary and detailed formats. We are supportive of the inclusion of the following energy flow types in the summary format: 1. General supply 2. Controlled load 3. Generation	AEMO notes the respondents position and refers to AEMO statement provided in table 1, item 1.

Item	Description	Participant Comments	AEMO Comment
		An additional identifier may be required where multiple types of energy flows exist on a single NMI to differentiate them, now or in the future (for example, Controlled Load 1, Controlled Load 2).	
		Origin: Provision of summary data in a CSV format will provide the customer with options to customise reports and charts to suit their needs. This solution does not generate a diagram for the customer in the format provided.	AEMO notes the respondents position and refers to AEMO statement provided in table 1, item 1 & 2.
		Simply Energy: Simply Energy supports the proposed data formats. There is sufficient flexibility in what is proposed to allow us to respond in the form that the customer has requested.	Noted.
5.2	Detailed data format	**ActewAGL Distribution:** No comment at this stage	Noted.
		AusNet Services: **1.2 Detailed Data Format** It is AusNet Services understanding that the detailed data format should be a “machine” loadable format which can form the basis of customer (customer authorised representative) manipulation and analysis. The MDFF is a well-defined, fully detailed data format and represents the least expensive and risk free approach to the detailed data format. Unless very good reasons are determined, the MDFF should be the chosen detailed data format. If other than MDFF, AEMO should offer testing of registered participant files, and produce a format validation tool to verify as-built format before go live. AusNet Services highlights the importance of having well-defined, fully detailed data format, and recommends the MDFF.	AEMO notes the respondents position and refers to AEMO statement provided in table 1, item 1.
		ENA: File formats	AEMO notes the respondents position and refers to AEMO statement provided in table 1, item 1.

Item	Description	Participant Comments	AEMO Comment
		In addition, it is difficult to see how meaningful and clear information may be provided to customers in the standard formats, taking into account where energy flow types (peak, shoulder, off-peak, etc) may vary throughout the time period and how the format may take account of gross versus net energy use in calculation or presentation of information. The proposed interval metering data detailed format is likely to be very challenging for customers to understand.	
		Energy Tailors: No Comment	Noted.
		JEN: …supportive of the proposed data formats for interval meters and the delivery timeframes.	Noted.
		Lumo: The drafting of the following clause is potentially limiting the delivery mechanism of the detailed data format to electronically only. Not all consumers are able to receive information electronically. This is restricting the consumer's ability to request and receive the detailed information.	AEMO notes the respondents position and refers to AEMO statement provided in table 1, item 1.
		NSW DNSPs: …the energy flows currently proposed may cause confusion due to the differences in definitions between network tariff components and retail tariff components. DNSPs cannot guarantee that the assigned network tariff is reflected in the customer's retail tariff, and therefore it may appear to customers that there are discrepancies or mistakes with the data. The NSW DNSPs believe that energy flow types related to 'time of use' and demand components should be removed as a requirement of both the summary and detailed formats. We are supportive of the inclusion of the following energy flow types in the summary format: 4. General supply	AEMO notes the respondents position and refers to AEMO statement provided in table 1, item 1.

Item	Description	Participant Comments	AEMO Comment
		5. Controlled load 6. Generation An additional identifier may be required where multiple types of energy flows exist on a single NMI to differentiate them, now or in the future (for example, Controlled Load 1, Controlled Load 2). And …recommend the use of existing industry standard formats for the provision of detailed data. Use of existing industry standard formats, such as NEM12 and NEM13, for the detailed data would ensure the timely and cost effective provision of clearly defined and consistent information. Use of these standard formats will mean that both retailers and DNSPs will provide metering information in identical formats. This will be particularly helpful for the customer authorised representatives, who we believe will be the biggest users of the detailed format. It will also help achieve one of the desired policy outcomes to "reduce costs involved in building and maintaining comparative services that assess multiple data formats"[2]. Although the NSW DNSPs support 'customer-friendly' formats, such as that provided by the summary data, we believe that any format of detailed information will potentially be difficult for an individual customer to understand. To this end, we support the development of a guide that explains, in simple terms, the data contained in NEM12 and NEM13 to assist customers to understand their data.	
		Origin: Ok	Noted.
		Simply Energy: Simply Energy supports the proposed data formats. There is sufficient flexibility in what is proposed to allow us to respond in the form that the customer has requested.	Noted.

Item	Description	Participant Comments	AEMO Comment
Appendix A	**ACCUMULATION METERING DATA SUMMARY FORMAT**	**ActewAGL Distribution:** No comment at this stage	Noted.
		Aurora Energy: <u>Accumulation Summary Data Format:</u> • Terminology for Energy Flow Types needs to consider that customers may not be familiar with terms such as “peak” when meters/registers are accumulating energy on flat (all day) tariffs. • For non-time of use meters/registers it may be beneficial to use a Header Record of “Use” or similar, with values that describe the load connected, such as “light & power”, “hot water”, “heating” or the like that aligns with the Retailer’s tariff descriptions. • Header record “Read Date” should be “From Date” to be more meaningful to the customer. The “To Date” would then be considered the physical read date or estimated “To Date”. • There may be instances where accumulation meter registers record demand and therefore need to be allowed for in the format.	AEMO notes the respondents position and refers to the changes made to Appendix A, Accumulation Metering Data Summary Format.
		CitiPower Powercor: The nature and extent of energy usage information *Agree with the summary format as described in Appendix A of the Strawman Procedures with the following recommendation:* *That the Peak, Shoulder and Off-peak column be combined into a General Consumption category. This will provide the most common level of consumption between the different parties. Retailer tariff definitions are different from DB definitions and will be a source on confusion for consumers if they try to compare distributor data with their retailer view. Consumption is common between the two.*	AEMO notes the respondents position and refers to AEMO statement provided in table 1, item 1 & 2.

Item	Description	Participant Comments	AEMO Comment
		The "shoulder" category is not available for CitiPower or Powercor. A diagrammatic representation of energy usage information *Agree – the data can be presented graphically. This specification as a minimum should not be prescriptive about the type of graph or any drill down capability.*	
		Energex: Energex also notes that the proposed format for accumulation metering data is the same as for interval metering data, which is inappropriate due to data limitations for accumulation meters.	AEMO notes the respondents position and refers to AEMO statement provided in table 1, item 1 & 2.
A.1	File conditions	**CitiPower Powercor:** A1 and B1 File Conditions This is a little confusing as to whether it is field definitions or layout. For example, the file component Header Record describes the field names within the file, whereas typically a header record provides a summary of the contents of the file for validation purposes e.g. number of records, checksums etc. It is now understood, but took some time to work out.	Noted.
		EnergyAustralia: UOM only lists kWh. Please clarify if this is should include all the permitted values in 3.2 Data Quality: suggest this is Actual Y or N, not estimated.	AEMO notes the respondents suggested changes and has modified the MDPP to remove ambiguity in Appendix A of the MDPP.
		Energy Tailors: Network Tariff Code should be included in this list	AEMO notes there are existing proceses to obtain Network Tariff Code from NMI standing data in MSATS. AEMO considers that it is not necessary for the MDPP to also provide this.
		Lumo: Appendix A, B and C has the file condition for UOM as KWh . However, MWh an allowable UOM in 3.2? Alternatively, is it meant to state kWh or MWh in the file condition?	The MDPP has been modified removing the requirement to provide data in MWh and MVA.

Item	Description	Participant Comments	AEMO Comment
		Origin: -Header Record: Change “estimate” to “actual”. Remove time periods. -Meter Serial Number: Define Read Date as Scheduled Read Date. -Energy Flow Type: As per definitions feedback Item 1.2 -UOM: file condition for UOM as only KWh but MWh is an allowable UOM in 3.2? -Read Date: Refer to it as the date the meter were read, not when the reading event should have happened. Remove mention of Estimate. -To Date: unclear what this refers to, given Read date definition -Data Quality: Change to meter data actual? Y or N. Data quality indicator therefore will be “Y” for actual data or “N” for Subs, Final Subs.	AEMO accepts the suggested changes to remove the header record from the MDPP Read Date may not be the same as scheduled read date, therefore no change to MDPP Energy Flow Type has been modified. MWh and MVA have been removed from the MDPP. Refernce to Estimate has been removed. To Date has been modified to remove ambiguity. Data Quality parameters have been removed to eliminate ambiguity.
		SA Power Networks: Some reformatting of this information could assist in the ease of understanding and provide a more logical display. We make this comment as it is a little confusing as to whether it is field definitions or layout. For example, the file component Header Record describes the field names within the file, whereas typically a header record provides a summary of the contents of the file for validation purposes e.g. number of records, checksums etc.	AEMO accepts the suggested changes and AEMO has removed the header record from the MDPP.
		Simply Energy: Simply Energy supports the proposal	Noted.
A.2	Example: accumulation file	**CitiPower Powercor:** A2 and B2 Example: accumulation file It is recommended that the Peak, Shoulder and Off-peak column be combined into a General Consumption category. Total consumption is the only common level between the different parties. Retailer tariff definitions are different from DB definitions	AEMO notes the respondents position and refers to AEMO statement provided in table 1, item 1 & 2.

Item	Description	Participant Comments	AEMO Comment
		and will be a source of confusion for consumers if they try to compare distributor data with their retailer view.	
		Energy Tailors: Network Tariff Code should be included in this example	AEMO notes there are existing proceses to obtain Network Tariff Code from NMI standing data in MSATS. AEMO considers that it is not necessary for the MDPP to also provide this.
		Origin: File to represent File condition feedback as per A.1	Noted.
		SA Power Networks: It is recommended that the Peak, Shoulder, and Off-peak column be combined into a General Consumption category. Total consumption is the only common level between the different parties. Retail tariff definitions are different from distributor definitions and will be a source of confusion for consumers if they try to compare distributor data with their retailer view.	AEMO notes the respondents position and refers to AEMO statement provided in table 1, item 1 & 2.
		Simply Energy: Simply Energy supports the proposal	Noted.
A.3	Example: diagrammatic representation of energy usage	**EnergyAustralia:** EnergyAustralia does not agree with a minimum procedure outlining that diagrams are to be provided for summary accumulation format. Rule clauses outline this is for interval only 7.16 (c) (2) (iii). This also removes issues of CSV not supporting diagrams.	AEMO notes the respondents position and refers to AEMO statement provided in table 1, item 1 & 2.
		Energy Tailors: No Comment	Noted.
		Origin: Provision of summary data in a CSV format will provide the customer with options to customise reports and charts to suit their needs.	Noted.
		Simply Energy: Simply Energy supports the proposal	Noted.

Item	Description	Participant Comments	AEMO Comment
Appendix B	**INTERVAL METERING DATA SUMMARY FORMAT**	**ActewAGL Distribution:** No comment at this stage	Noted.
		Aurora Energy: <u>Interval Summary Data Format:</u> • There may be instances where interval meters are installed, however customers are billed on "flat" tariffs rather than TOU, as such the format needs to cater for this (i.e. peak may not be understood or relevant to the customer). • "Actual Daily Demand" may be bette r named "Maximum Demand for Period" or similar. Period would then need to be defined as the "From Date to To Date". • Demand should be optional for inclusion in the format as it may not be required by the customer or relevant, depending on the tariff applicable at the site. • There may be a variation between the Network Tariff and the Retail Tariff time of use parameters, therefore clarification needs to be made on what TOU components the energy values represent (Network or Retail) • Aurora is not opposed to providing a diagrammatic representation of large customer demand in the interval summary report, however demand itself should be considered as optional, and if included may also be better represented on a separate graph.	AEMO notes the respondents position and refers to AEMO statement provided in table 1, item 1 & 2.
		CitiPower Powercor: The nature and extent of energy usage information *Agree with the summary format as described in the Appendix B of Strawman procedures with the exception that Peak, Shoulder and Off-peak should be combined as Consumption. Distributors do not necessarily know the breakup of this data as presented to the customer on their bill. Please refer to recommendation above.*	AEMO notes the respondents position and refers to AEMO statement provided in table 1, item 1 & 2.

Item	Description	Participant Comments	AEMO Comment
		Usage or load profile over a specified period *Yes, can be provided up to two years.* A diagrammatic representation of a retail customers energy usage information *Agree – the data can be presented graphically. This specification as a minimum should not be prescriptive about the type of graph or any drill down capability.*	Noted. Noted.
		ENA: Tariff rates In the AEMO strawman, Appendix B Interval Metering Data Summary Format, the file format requires information to be provided on "Energy Flow Type: Peak, shoulder, off-peak, controlled load, generation energy flows and Demand". It further specifies that "Time of use (peak, shoulder, off-peak) are as per the *retail tariff definition" (*emphasis added*)*. ENA considers that it is highly unlikely that distribution businesses would be aware of the retail tariff assignment for customers, as this is the responsibility of a retailer and is likely to be commercial in confidence. There would be no way for distribution businesses to verify this information and ENA considers that this requirement cannot apply to distribution businesses. ENA consider that these new procedures are the minimum data requirements and should focus on clear, unambiguous provision of raw data.	AEMO notes the respondents position and refers to AEMO statement provided in table 1, item 1 & 2.
		Energex: In the Procedure's strawman, Appendix B Interval Metering Data Summary Format, the file format requires information to be provided on "Energy Flow Type: Peak, shoulder, off-peak, controlled load, generation energy flows and Demand". It further	AEMO notes the respondents position and refers to AEMO statement provided in table 1, item 1 & 2.

Item	Description	Participant Comments	AEMO Comment
		specifies that “Time of use (peak, shoulder, off-peak) are as per the retail tariff definition”. Based on the current drafting it is highly unlikely that DNSPs would be aware of the retail tariff assignment and would have difficulty in providing this information. An alternative may be that if the customer requests data from the network then the data is to be presented in the appropriate network tariff components and if requested from the retailer in the retail tariff components.	
B.1	File conditions	**EnergyAustralia:** UoM: Please clarify if this is should include all the permitted values in 3.2	The MDPP has been modified removing the requirement to include in MWh and MVA.
		Energy Tailors: No Comment	Noted.
		Lumo: Appendix A, B and C has the file condition for UOM as KWh . However, MWh an allowable UOM in 3.2? Alternatively, is it meant to state kWh or MWh in the file condition?	The MDPP has been modified removing the requirement to include MWh and MVA.
		Origin: -Header Record: Remove time period, demand -Energy Flow Type: As per definitions feedback Item 1.2 Energy Values: remove kW or KVa -Data Quality: Change to meter data actual? Y or N. Data quality indicator therefore will be “Y” for actual data or “N” for Subs, Final Subs.	File conditions in the MDPP have been modified.
		SA Power Networks: Some reformatting of this information could assist in the ease of understanding and provide a more logical display. We make this comment as it is a little confusing as to whether it is field definitions or layout. For example, the file component Header Record describes the field names within the file, whereas typically a header record provides a summary of the contents of the file for validation purposes e.g. number of records, checksums etc.	File conditions in the MDPP have been modified.

Item	Description	Participant Comments	AEMO Comment
		Simply Energy: Simply Energy supports the proposal	Noted.
B.2	Example: interval file	**Energy Tailors:** No Comment	Noted.
		NSW DNSPs: Similarly [sic] to the energy flow type comments above, demand is a component of the tariff, and calculation methods vary. The NSW DNSPs suggest that this field be removed as a requirement to avoid confusion.	AEMO notes the respondents position and refers to AEMO statement provided in table 1, item 1.
		Origin: File to represent File condition feedback as per B.1	File conditions in the MDPP have been modified.
		SA Power Networks: It is recommended that the Peak, Shoulder, and Off-peak column be combined into a General Consumption category. Total consumption is the only common level between the different parties. Retail tariff definitions are different from distributor definitions and will be a source of confusion for consumers if they try to compare distributor data with their retailer view.	AEMO notes the respondents position and refers to AEMO statement provided in table 1, item 1.
		Simply Energy: Simply Energy supports the proposal	Noted.
B.3	Example: diagrammatic representation of energy usage	**Energy Tailors:** No Comment	Noted.
		Origin: Provision of summary data in a CSV format will provide the customer with options to customise reports and charts to suit their needs. Provision of the diagrammatic representation of consumption can be made through an agreed method, such as on-line portal.	Retailers and DNSPs must be able to offer the summary data format in a PDF format, or as otherwise agreed with a retail customer or customer authorised representative.
		Simply Energy: Simply Energy supports the proposal	Noted.

Item	Description	Participant Comments	AEMO Comment
Appendix C	**INTERVAL METERING DATA SUMMARY FORMAT**	**ActewAGL Distribution:** No comment at this stage	Noted.
		Aurora Energy: Aurora Energy Interval Detailed Data Format: Consideration should be given to providing the detailed interval data in a vertical format rather than horizontal. Data can then be provided for each register, for multiple meters if necessary, in a separate column which enables easy facilitation for calculation of net energy, demand, power factor etc. on an interval by interval basis. This also allows for filtering and sorting on an interval by interval basis. In this format customers are also able to identify individual intervals within the period where data quality is not defined as actual.	The MDPP will require one NEM12 file to be provided as the interval detailed data format in response to a retail customer's or customer authorised representative's request.
C.1	File conditions	**EnergyAustralia:** UoM only lists kWh. Please clarify if this is should include all the permitted values in 3.2 The Header Record has a 'read date' and a 'consumption date' what is the difference between these dates? Which one is the date as outlined by C.1 File Conditions? Data Quality: suggest this is Actual Y or N, not estimated. Is there a duplication of the following line: Metering data estimated? Y or N. Note this is the plain English use of the term estimate.	The MDPP will require one NEM12 file to be provided as the interval detailed data format in response to a retail customer's or customer authorised representative's request.
		Energy Tailors: Network Tariff Code should be included in this list	AEMO notes there are existing proceses to obtain Network Tariff Code from NMI standing data in MSATS. AEMO considers that it is not necessary for the MDPP to also provide this.
		Energy and Water Ombudsman Victoria (EWOV): Estimated reads	The MDPP will require one NEM12 file to be provided as the interval detailed data format in

Item	Description	Participant Comments	AEMO Comment
		AEMO's proposed interval metering data detailed format identifies estimated readings in the data quality component, but only by date. Instead, files should identify the specific intervals that were estimated. This is useful and important information for customers attempting to reconcile billing with their metering data. Index reads The interval metering detailed format should also include a list of index reads. These start and end meter reads are what customers see on bills; listing them helps customers to understand their usage and adds legitimacy to billing.	response to a retail customer's or customer authorised representative's request.
		Lumo: The File condition for Data Quality seems to contain a superfluous Note. Data Quality: Metering data estimated? Y or N. ~~Note this is the plain English use of the term estimate Metering data estimated? Y or N.~~ Note this is the plain English use of the term estimate. Field value is Y if any of the elements on the associated row have been estimated Generally, the metering data is not obtained and the energy consumed is estimated. Does the plain English use of the term estimate include 'substituted data'? It may be an easier and clearer option to have this Data Quality field as 'Actual Read? Y or N C.2 and C.3 has a 'Data Quality field' of 'Consumption Date'. This is not defined in C1. Appendix A, B and C has the file condition for UOM as KWh . However, MWh an allowable UOM in 3.2? Alternatively, is it meant to state kWh or MWh in the file condition?	The MDPP will require one NEM12 file to be provided as the interval detailed data format in response to a retail customer's or customer authorised representative's request.

Item	Description	Participant Comments	AEMO Comment
		Origin: Victorian My Power Planner (MPP) formats that are in existence and extend this out to other states, with each participant having the flexibility to choose any of the formats. These have proven to serve the needs of customers and will minimise the cost for participants who have already built processes on MPP.	The MDPP will require one NEM12 file to be provided as the interval detailed data format in response to a retail customer's or customer authorised representative's request. The MDPP makes provision for the provision of innovative services.
		Simply Energy: Simply Energy supports the proposal	Noted.
C.2	Example: 30-minute interval file	**Energy Tailors:** Network Tariff Code should be included in this example	AEMO notes there are existing proceses to obtain Network Tariff Code from NMI standing data in MSATS. AEMO considers that it is not necessary for the MDPP to also provide this.
		Lumo: C.2 and C.3 has a 'Data Quality field' of 'Consumption Date'. This is not defined in C1.	The MDPP will require one NEM12 file to be provided as the interval detailed data format in response to a retail customer's or customer authorised representative's request.
		Origin: Change Estimate to Actual. Remove Read Date, as consumption date is really only relevant to the customer.	The MDPP will require one NEM12 file to be provided as the interval detailed data format in response to a retail customer's or customer authorised representative's request.
		Simply Energy: Simply Energy supports the proposal	Noted.
C.3	Example: 15-minute interval file	**Energy Tailors:** Network Tariff Code should be included in this example	AEMO notes there are existing proceses to obtain Network Tariff Code from NMI standing data in MSATS. AEMO considers that it is not necessary for the MDPP to also provide this.
		Lumo:	The MDPP will require one NEM12 file to be provided as the interval detailed data format in

Item	Description	Participant Comments	AEMO Comment
		C.2 and C.3 has a 'Data Quality field' of 'Consumption Date'. This is not defined in C1.	response to a retail customer's or customer authorised representative's request.
		Origin: In Origin's view the detailed energy data format (for interval data) forms the basis for analysis of data. We do not believe that the intention of the rule change was for the summary data format to set out analysis of meter data. Applying sophisticated analysis to interval (or basic) consumption data (for example setting out consumption by tariff type) will add significantly to the cost of summary data delivery and runs the risk of creating inconsistent reporting between distributors and retailers, without improving customer's understanding of their pattern of consumption. We believe the objective of the summary data format was to provide an easily digestible, clearly presented snapshot of key data, rather than replicate or expand upon information provided through existing industry portals and the retail bill. Furthermore, Origin considers that the provision of detailed data will support the development of the market for such information as consumer preferences evolve over time- in our view, the role of procedures should not overlap the evolution of new products and service.	The MDPP will require one NEM12 file to be provided as the interval detailed data format in response to a retail customer's or customer authorised representative's request. The MDPP makes provision for the provision of innovative services.
		Simply Energy: Simply Energy supports the proposal	Noted.
A, B	Summarised meters	**ATA, CALC, CUAC:** To be meaningful for consumers, data should be summarised across a whole home, rather than separate meters or elements. For example, data from two consumption elements, with one for general light and power and one for controlled load, should be included in a single summary report. (Consumers who wish to break their data down further should be able to disaggregate separate meters/elements using the detailed data format.)	AEMO proposes to only require retailers to provide Peak, Off-Peak, Shoulder information and demand information. Retailers will also need to clarify how these are defined. As minimum requirements, DNSPs must provide usage, controlled load and generation. This is information that DNSPs usually have available.

Item	Description	Participant Comments	AEMO Comment
			Time of use or flexible pricing information (for example, Peak, Shoulder and Off-Peak) must be included in summary data formats and demand must be included in the interval detailed data format.
1.2.2 A, B, C	Time	**ATA, CALC, CUAC:** Information should always be presented in local time, not NEM time. This means adjusting for daylight savings outside of Queensland and for the time zone difference in South Australia.	Due to the use of both local time and Eastern Standard Time by retailers and DNSPs, the MDPP will express time as (Australian) Eastern Standard Time.
		United Energy: The reference to Eastern Standard Time should refer to Australian Eastern Standard Time.	The MDPP clarifies EST to mean Australian EST.
A, B	Billed Quantities	**ATA, CALC, CUAC:** Summary data should be based on all the billed quantities that affect how a consumer pays for energy.	AEMO notes the respondents position and refers to AEMO statement provided in table 1, item 1.
B, C	Demand Tariffs	**ATA, CALC, CUAC:** Noting the above, peak demand or capacity based charging will be increasingly commonplace in coming years, and the representation of such charge will need to reflect the structure of the charges relevant to that specific consumers. For example, the monthly peak tariff that Jemena are proposing might require: • numerically, a table indicating the date, time, and consumed volume for each of the monthly peaks; and • graphically, a bar chart showing the above. Tariffs in other networks may be different, and a different data structure will need to reflect this.	AEMO notes the respondents position and refers to AEMO statement provided in table 1, item 1.

Table 3: General Comments

Key Theme	Stakeholder Comment	AEMO Comment
Fundamental objective and focus	**AGL** AGL believes that there are some fundamental principles which should be considered in this process to meet the stated goals of these Rule Changes: • First, the provision of this data should be kept as simple as possible at all times; • Second, the data provided by either any Retailer or the DistributionNetwork Service Provider (DNSP) should look the same for a common period; and • Third, given that data can be amended and updated, the party providing the data can only provide the most appropriate data that it has at that time. AGL believes that in finalising this Procedure some consideration should be given to stating these fundamental principles within the Procedure as general guidance.	AEMO notes the respondents position and refers to AEMO statement provided in table 1, item 1.
	ATA, CALC, CUAC: Our organisations support the policy intent of the MDPP of providing information to retail customers that enables them to better assess their energy consumption information. Development of the Procedures, in particular the data formats, requires clear understanding of the goal(s) being pursued. These should be aligned with the policy intent as closely as possible. For example: a summary of metering data can be used for several purposes, including seeking a better electricity plan, resolving billing disputes, or obtaining a general understanding of a customer's energy usage. We believe the most appropriate purpose of the summary should be to give consumers a general understanding of their energy usage.	AEMO notes the respondents comments.
	AusNet Services: **1.1 General MDPP Outcomes** The Metering Data Provision Procedure (MDPP) is no different in intent to the MDFF and MDM Procedures. The MDPP is an IT build document which needs to specify all those aspects of the two formats which are to be mandated as the minimums. The Procedure should be drafted such that the businesses' IT departments have all the necessary definition to produce the files/documents.	The MDPP will require one NEM12 file to be provided as the interval detailed data format in response to a retail customer's or customer authorised representative's request.

Key Theme	Stakeholder Comment	AEMO Comment
	It is not a customer document, rather AusNet Services suggests the establishment separate explanatory material and FAQs for customers (and customer authorised representatives). AusNet Services highlights the importance of clearly defining the MDPP with the necessary level detail to enable consistent IT implementations.	
	AusNet Services: **Item 2.15** Rather than attempting to produce the MDPP for both the industry and consumers, AusNet Services recommends AEMO produce the MDPP primarily for registered participants, and separate explanatory material and FAQs for customers (and customer authorised representatives).	AEMO notes the respondents position and refers to AEMO statement provided in table 1, item 1.
	TasNetworks: TasNetworks supports the concept of a simple approach to meeting the data delivery and content requirements that are the subject of this procedure. TasNetworks notes, however, that the absence of a functional competitive Retail market in the Tasmanian Jurisdiction is unlikely to create significant consumer interest in complex data analysis and modelling. TasNetworks suggests that such may be better offered as a "value-added service" driven by market competition, where the additional system development costs may be borne by those creating the demand and receiving the benefit.	AEMO notes the respondents comments.
Clarity of Obligations	**AGL** In general, AGL believes that the Procedure needs to ensure that supporting obligations (e.g. customer validation requirements, agent requests) are clearly identified and stated in the procedure to minimise any ambiguity. AGL believes that issues such as this should be clarified so that the industry applies these processes in a consistent manner and seeks clarification on how this clause is intended to operate.	The Draft MDPP includes a requirement for retailers and DNSPs to provide and publish verification information.
Customer authorised representatives	**AGL** Clause 56A of the NERR indicates that a customer representative can only be charged when a request is *part of a request for information about more than one small customer.*	Since these requirements are under the NERR, rather than the NER, AEMO considers that it is not necessary or appropriate for the MDPP to include this.

Key Theme	Stakeholder Comment	AEMO Comment
	So, for instance, if an Authorised Representatives makes a submission for a single customer every 5 minutes, is that to be considered a single request? AGL believes that the receiving party should consider all requests made by an Authorised Representatives by close of business each day, and if there is more than one request per business day, can charge the agent if it chooses to do so.	
	AGL AGL seeks clarification on whether there are circumstances where it is permissible for a data provider to reject a request from an authorised representative. The types of circum~~stances which can be considered~~, for instance, are: • an agent is refusing to pay the charge for data previously delivered; or • the data provider genuinely believes that the agent has not received consent from the customer. Authorised agents may not be industry participants and therefore not subject to privacy requirements or licence obligations, which RBs and DBs are subject to. Therefore, RBs and DBs must consider the issue of legitimacy and veracity when responding to requests.	AEMO considers that it is not necessary or appropriate for the MDPP to include this.
	EnerNOC: One of the clear intended outcomes of this process is that third-party service providers should be able to compete with both retailers and DNSPs for the provision of advanced services. Standardising the most appropriate data sets and terms of access from the outset will limit the ability of incumbents to frustrate access by third parties, and will foster the development of a competitive ecosystem of tools – delivering a positive outcome for consumers.	AEMO notes the respondents comments.
Definition of Customer request	**AGL** The consultation paper (section 4.2 Customer Authorised Representatives) asks whether there is a need to define a customer request. AGL takes this question to be related to customer requests made by authorised representatives, rather than direct customer requests.	The Draft MDPP includes a requirement for retailers and DNSPs to provide and publish verification information.

Key Theme	Stakeholder Comment	AEMO Comment
	For requests made by agents on behalf of customers, the key issues will be to 1. ensure that the customer has provided authorisation (e.g. explicit informed consent); 2. provide suitable information to allow verification of that customer (i.e. DBs and RBs); 3. clearly identify the agent; 4. preferably provide a clear statement on how long the authorisation is valid for (e.g. a single request, a month, a quarter); authorisations should not be indefinite.	
Formats	**CitiPower Powercor:** CP/PAL has reviewed the Metering Data Procedures Consultation Paper and provides the following feedback. We recognise that these Strawman procedures are addressing a minimum requirement whilst allowing for participants to develop their own level of presentation and competitive products. Within Victoria there is a requirement to provide a data file in "My Power Planner" format compatible with the Victorian Government "Switch on" website. As a result, a maximum of two formats should be specified. 1. National format common to all jurisdictions 2. State format such as My Power Planner in Victoria	The MDPP makes provision for the provision of innovative services.
	DIS: If the industry is unable to agree on a common consistent data format, this may be an indication that a more centralised data platform is needed, to facilitate competition and innovation in energy information services.	The MDPP will require one NEM12 file to be provided as the interval detailed data format in response to a retail customer's or customer authorised representative's request. The MDPP also makes provision for the provision of innovative services.
	Energex: Energex strongly believes that the format must be simple and easy to understand for the audience but the DNSP must be capable of providing the requested information.	AEMO notes the respondent's position and refers to AEMO statement provided in table 1, item 1.
	EWOV: PDF files are widely used and accessible with free software, but cannot easily be exported or converted into other file formats for analysis and graphing. CSV files, on the other hand, can be opened in Excel (and other data analysis programs) for manipulation. EWOV's experience is that customers sometimes specify their preferred file type when seeking metering data.	Summary data files are to be in PDF format and the detailed interval data file will be in CSV format

Key Theme	Stakeholder Comment	AEMO Comment
	The “and/or” wording in the Procedures may leave open to interpretation whether a provider has met its obligation if it provides data in (any) one of the specified file types – even if this is not what the customer prefers or has requested. EWOV believes that metering data should be made available either in both file types or in the customer’s preferred file type.	
Verification and Validation	**CitiPower Powercor:** A point to note is that validation of Consumer and Customer Authorised Parties remains a concern and will cause difficulties in dealing with multiple parties across different jurisdictions.	The Draft MDPP includes a requirement for retailers and DNSPs to provide and publish verification information.
	DIS: Customers and their authorised third parties need to know how to access their data and what will be accepted as consent for an authorised representative to access data. It would assist businesses by reducing the number of incorrectly specified or incomplete data requests if this was clear and businesses were required, through the procedure, to inform customers of how to request access or authorise their representative to receive the data on their behalf. This would include what information is needed to verify the request. This would streamline the process, facilitate data access and be consistent with the reasonable endeavours obligation to provide the data. A more proactive step could be to develop common methods for establishing identity or consent, as has been done in other industries, which would greatly reduce the time and simplify the process based on common, industry-wide requirements. **Recommendation** • The procedure should require retailers and distributors to publish information on how customers request access or authorise their representative to receive the data on their behalf, including what information is needed to verify the request.	The Draft MDPP includes a requirement for retailers and DNSPs to provide and publish verification information.
	ENA: ENA notes that the direction for these procedures arose from the Australian Energy Market Commission (AEMC) determination on customer access to their energy consumption data. ENA strongly supports the importance of customers having the ability to access information to enable them to make informed choices about their energy use. The implementation of major reforms underway in the energy sector, including tariff reform and expanding competition in metering, are vitally dependent on strong customer engagement and support for informed-decision making.	The Draft MDPP includes a requirement for retailers and DNSPs to provide and publish verification information.

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	In this context, ENA has recently released two publications related to the support available for customers during the transformation of the energy system currently underway. ENA's proposed Industry Standard for Network Tariff Reform is designed to support tariff development, co-operative approaches for retailer pass through of network tariffs assistance to vulnerable customers during the transition to cost-reflective network tariffs, and the development of information and decision making tools for customers. Additionally, ENA has outlined a series of options to enhance support for vulnerable energy customers. ENA recognises the importance of establishing clear guidelines and procedures to support the manner in which information is presented to customers and their authorised representatives. An important prerequisite before information is released, is to ensure privacy and confidentiality requirements are met, including companies meeting their obligation under legislation and regulation. The first step should be ensuring that the applicant for access to this information is verified as the authorised recipient. Unless the verification is successfully undertaken, energy businesses would be unable to supply this important information. ENA understands that resolution of this matter is outside the scope of the AEMO procedures, and ENA agrees with AEMO's view that, if not addressed, this issue could impact the effectiveness of the Procedures in meeting the policy objective.	
	Energex: Energex has two key concerns with respect to the effectiveness of these Procedures. Firstly, the limited ability for distribution network service providers (DNSPs) to accurately verify the identity of a retail customer due to insufficient customer details. Secondly, the likelihood that the industry will develop an inconsistent approach to data requests. With respect to the first concern, the Procedures should state that unless the DNSP can satisfy existing legal requirements and confidently verify the customer then they are not required to provide meter data. And whilst DNSPs must meet existing privacy and confidentiality obligations, Energex suggests that to address the second concern, the Procedure should include a standard data request format that would simplify the process and ensure a consistent outcome for customers. This standard data request format would suggest that requests for metering data should be in writing but this decision may be deferred to the individual DNSP or retailer depending on their record keeping and business practices.	The Draft MDPP includes a requirement for retailers and DNSPs to provide and publish verification information.

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	JEN: Our issue is with verification of retail customers which will have a huge impact in [sic] the effectiveness of the Procedures. DNSPs do not have sufficient customer details through CDN updates. In our view, this needs to be resolved prior to any implementation of this procedure. We need to have at least 4 months' time to develop the system and process.	The Draft MDPP includes a requirement for retailers and DNSPs to provide and publish verification information.
Degree of prescription	**Aurora Energy:** General comments on format: To overcome the variability in the way that Retail or Distribution tariffs define the billable components presented to a customer, Aurora Energy requests that consideration be given for the procedures to not be too prescriptive in how the relative information is presented. The procedures should focus more on the core factors of the data that need to be provided upon a request being received. That is, core factors include, but may not be limited to, NMI, Meter ID, Period (e.g. from/to date), value (this may be energy or demand), UOM, Read Quality, Type (this could be information that describes either the tariff or energy flow type relevant to the particular meter, tariff or site). In this manner, the principles then could set the mandatory and optional information that would be provided to the customer, and it then provides the flexibility for the retailer and distributor to provide the information in line with their own unique formats whilst still meeting the obligations of the procedures.	The MDPP makes provision for the provision of innovative services.
Meter Changes	**ENA:** Where there have been changes to meters within the period for which information is requested, this may necessitate several files being formed to meet an individual data request. Scenarios where this may occur include, for example: a type 6 accumulation meter which is exchanged for a type 5 interval meter; or a type 4 advanced meter which later has solar added. In these circumstances, this could require multiple file constructions which will impact both on the timeframe and presentation of data. This should be acknowledged in the procedures.	The Draft MDPP clarifies that separate data files may be provided where metering installation configuration has changed during the period for which metering data is requested.
Community Consultation	**ATA, CALC, CUAC:** In preparing the data formats and considering the process for customers to gain access to their data, it is critical that AEMO engage not just with consumer advocates, but with a range	The Draft MDPP requires retailers and DNSPs to meet the minimum requirements for accumulation and

Key Theme	Stakeholder Comment	AEMO Comment
	of consumers from different backgrounds that are representative of the broader population. This is best done through deliberative focus groups. Consumers engaged by AEMO should include, without limitation: • People of different levels of energy literacy and engagement; • The aged; • CALD and indigenous communities; • People with disabilities, learning difficulties or low levels of education; and • People with sight impairment (including with colour blindness). As part of this consultation, we suggest that AEMO consider relevant literature on related studies here and abroad.	interval summary data formats, and this allows them the flexibility to decide on the presentation to their customers, it is not relevant for AEMO to test these summary data formats with retail customers.
Language Consistency	**ATA, CALC, CUAC:** As well as considering the options for layout and type of graphical tools to be used, the consumer consultation should consider the language in the summary with a view to it being in plain English and accessible to a broad audience, while still being accurate. The summary format should be designed to be of maximum use to most consumers and therefore use simple and clear terms that would ideally be consistent with those used across the retail market (as the consumer's primary point of contact with the NEM). We point to the AER's recent draft Retail Pricing Information Guideline for consultation, which we believe includes helpful analysis of simplified and consistent terminology. Examples of language that we believe need consistency are: • *Usage* versus *consumption*, noting that the AER is now recommending *usage* as more meaningful to consumers than *consumption*; • *kWh*, which is increasingly expressed as *units of energy*; and • *Import and export*, which are accurate for solar customers where *usage* and *consumption* are not – though *energy from the grid* and *energy sent to the grid* are possibly more widely understood. These and other terms should be tested with real consumers as a priority to ensure they are meaningful and understood by the least sophisticated of energy consumers.	The Draft MDPP uses the term "Usage" to mean energy consumption and "Generation" is defined as energy sent to the grid.
Leveraging best practices for data provision	**EnerNOC:**	AEMO notes the respondent's position.

Key Theme	Stakeholder Comment	AEMO Comment
	We appreciate that implementing the Green Button standard within the time-frame allocated to this process would be challenging. However, it would be remiss not to learn from its principles, and, where appropriate, incorporate them into this procedure. One of the key principles supported by EnerNOC is the requirement for the data to be provided in a standardised format.1 This is a good outcome for consumers because it will help foster an ecosystem of tools and services that will assist consumers in making informed decisions about their consumption behaviour, their energy contracting, and potential investments in emerging technologies. When describing the Green Button initiative, the United States' Energy Department notes as follows: *"The Green Button initiative is an industry-led effort … to provide utility customers with easy and secure access to their energy usage information in a consumer-friendly and computer-friendly format."* In our opinion, the Department's distinct use of the terms 'consumer' and 'computer' is telling. 'Consumer-friendly' means that the data should aid consumer choice, and ensure the consumer can make informed decisions based on the information provided. 'Computer-friendly' means that the format should be amenable to access, interpretation, and analysis of the energy data using automated tools. This is only achievable if the format of the input data is fully standardised. To expect the same file to be both consumer-friendly and computer-friendly is a tall order. The Green Button initiative achieves this through a carefully-specified XML schema that allows web browsers to render the detailed data into a consumer-friendly form. If we are not going to adopt this Green Button approach, then the specified summary format should be optimised for consumer-friendliness and the detailed data format should be geared towards enabling the consumer's use of applications and software. Importantly, it is the consumer who is the beneficiary of both the 'consumer-friendly' and 'computer-friendly' formats. EnerNOC strongly believes that a flourishing ecosystem and set of tools will develop if the correct foundations of data standardisation are set in place. This process being led by AEMO therefore presents an excellent opportunity to achieve exactly this outcome.	

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Objectives and recommendations for the summary format	**EnerNOC:**In our opinion, the primary objective of the summary format is to provide understandable energy information that consumers can use to modify or optimise their energy consumption and purchasing behaviour. It is worth noting that this procedure change proposal is a result of the Power of Choice review, the purpose of which was to promote consumer choice. If we apply this principle to this procedure, then it is the consumer who should drive the content of the summary format. Accordingly, we suggest that consumer representatives should work together with data visualisation professionals to design the most appropriate format. EnerNOC recommends that the representatives listed above form the basis of a working group with the aim of delivering a standard reference tool that takes the 'detailed data' format as input and produces a summary report as output. We suggest that this reference tool be made available free of charge to retailers and DNSPs, and that it be maintained by either AEMO or the AER. Importantly, this approach means that the details of the format – e.g. what graphs are drawn, or what averages are presented – should make no difference to retailers' or DNSPs' implementation costs. This will minimise the costs associated with delivering this service. The major implementation task required of retailers and DNSPs would then relate to the development of a process to feed data in the detailed data format (e.g. NEM12) into the supplied tool, and provide the output to the consumer. The provision of this standard summary should not be viewed as stifling innovation or competition. Retailers and DNSPs will still be able to offer value-added services that deliver value and advice beyond the basic summary format. However, this standardised approach means that all consumers can benefit from access to a clear and easy to understand summary.	Noted. The MDPP makes provision for the provision of innovative services.
Objectives and recommendations for the detailed format	**EnerNOC:** The purpose of the detailed data format is also to support consumers in making informed decisions about their consumption patterns, procurement choices, and potential investments in new and emerging technologies (solar PV, battery storage, etc.). By providing full details, it allows consumers to learn more about their behaviour and weigh up more unusual possibilities than can be achieved through a standard summary format that has to be simple so as to be widely accessible.	The Draft MDPP proposes the use of NEM12 files for detailed interval metering data files.

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	Unlike the summary format, the detailed data format will not be looked at directly by the vast majority of consumers (energy geeks excepted). No format that includes full interval metering data is simple enough for that. Rather, consumers will use tools to interpret the data. The Green Button initiative shows what is possible: an ecosystem has developed including comparator websites, hosted tools, and open source software. Being 'consumer-friendly' does not mean that the file format has to be dumbed down. It means that the consumer should be able to use it to do whatever they need. This will only happen if the detailed interval data format is completely standardised. If the files come in multiple variants, the ecosystem development will be undermined. If the file format has to be revised over time (due to omissions or ambiguities in the initial specification), each change will largely wipe out the ecosystem. As such, it does not make sense to compromise the usefulness of the detailed format for tools in an attempt to make it superficially more 'consumer-friendly'. Attempting to do so will run counter to the objective, and severely limit the success of this initiative.	
Creating a new detailed data format would be inefficient	**EnerNOC:** Fully specifying a new detailed format is a very big job: it probably can't be done from scratch in the time available. Even creating a variant of the existing standard NEM12 format, with the intention of being somehow more "consumer-friendly", introduces the risk of the standard features not working correctly. Accordingly, EnerNOC suggests that the existing NEM12 format is the obvious candidate for the single standardised detailed format: it is completely standardised, including all the awkward corner cases. It was suggested in the workshop that the Victorian Government's My Power Planner team were not able to handle NEM12. However, further discussion with the My Power Planner team revealed that this was based on a misunderstanding: in fact, My Power Planner already supports two formats that contain no information beyond that in NEM12. If it is desired to include some additional information in the detailed format beyond that supported by NEM12, it could be included as a header or wrapper to the standard NEM12 file. If for some reason the NEM12 format is deemed unacceptable, then it is highly desirable that every piece of information that is present in a NEM12 file should be represented losslessly in the standard format – i.e. it should be possible to transform this new standard format into the corresponding NEM12 file.	The Draft MDPP proposes the use of NEM12 files for detailed interval metering data files.

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	The NEM already has two standard formats for interval data: NEM12 and the aseXML format used for submission of meter data to MSATS. Creating a third interval data format for the NEM would create an unnecessary burden on industry. The risk of not managing this properly is that even a minor change to the data structure will wipe out the ecosystem of tools developed for the initial standard.	
Comment on CUAC proposal	**AusNet Services:** **3.1 Average daily usage** AusNet Services recommends that "average daily usage over period the requested" should be provided in the Data Summary. However, this is the only non-diagrammatic information appropriate to be provided in the summary. AusNet Services supports providing average daily usage in the Data Summary **3.2 Removing textual information from CUAC summary format** AusNet Services notes the CUAC provided additional textual information e.g. "highest average usage month" included in the Summary Format raises more questions than it answers and makes the process of providing Summary Format information unreasonably difficult to automate. Further this information should be evident by looking at the graphs presented. As such, AusNet Services suggests not providing as part of the minimum Summary Format: • Highest average usage month; • Lowest average usage month; • Highest average usage day; • Lowest average usage day; and • The time of day during which you use the most electricity is usually 9:30pm - 11:30pm (shaded) **3.3 Support the first graph with suggested change** AusNet Services support the suggestion of providing the average daily usage by month graph as indicated. Noting the title should be the Average Daily Usage by Month. Where generation is present the title should be Average Daily Usage and Generation by Month. **Item 3.4** **Support the second graph with suggested change**	AEMO notes the respondent's position. AEMO notes the respondent's position. AEMO notes the respondent's position. The CUAC example provides a profile for an average day. This is an

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	AusNet Services support the suggestion of providing the average daily usage by day graph as indicated. Noting the title should be the Average Daily Usage by Day. Where generation is present the title should be Average Daily Usage and Generation by Day. **3.5 General comment applicable to the first and second graphs** Only show whole days and whole months in the graphs, where applicable. **3.6 Third, fourth and fifth graphs** Although AusNet Services supports the concept of providing average interval usage and generation graphs, the following reservations in relation to the CUAC proposal need to be considered. Public holidays have minimum impact on the average usage over a period but make automating the provision of Data Summary requests unduly difficult (given public holidays are different each year and can also be regional e.g. Melbourne Cup). This will make system calculations more complex, and require yearly updating of numerous different look up tables at state or locational level. Providing the shading indicating the most electricity also makes automation difficult. This should be obvious from the graph. Without automating just process of shading the graph would add at least 10 minutes per request – that is adding an additional 2 days when processing 100 requests. AusNet Services supports the concept of providing average interval usage and generation graphs, but not including public holidays in that analysis. Nor does AusNet Services support the provision of shading to indicate high usage periods. **3.7 General comments to third, fourth and fifth graphs** All times should be (Australian) *Eastern Standard Time* rather than Australian Eastern Daylight Time (day light savings) or wall clock time to avoid billing disputes and confusion. **AGL:** AGL has reviewed the proposed summary information that the Customer Utilities Advocacy Centre (CUAC) has suggested be incorporated in this process. AGL supports better	average over a period of up to two years, therefore the latest, and most relevant, consumption characteristics of the customer are represented less significantly through an averaging process. The profile presented in the MDPP, while less granular then an average daily profile, provides customers with the ability to understand trends in their consumption patterns on a seasonal basis. AEMO notes the respondent's position related to public holidays. AEMO notes the respondent's position. AEMO notes the respondent's position.

Key Theme	Stakeholder Comment	AEMO Comment
	understanding by consumers of their usage and demand patterns and provides information in various formats, such as AGL IQ, which is attached. Moreover, as discussed above, AGL expects many consumers will have mixed metrology for some years. As such, it would be difficult to provide the type of information CUAC is seeking for the two year period and generally can only be provided for the periods where interval metering is available. In many of these cases, any information provided would only represent part of the consumer's history, which could be considered misleading. Further, consumption usage is dependent on many things. For example, if the previous year's summer was mild, then the highest period may be the winter period if reverse cycle heating is used. Producing this information would require substantially greater logic and processing, particularly if it is from a partial data set. Each retailer is providing various forms of this information in consumer bills and most with secondary services, such as the AGL IQ service. As previously stated, AGL believes that the core goal of this Rule Change is to ensure that any consumer could get a standard data set to provide them with a basic understanding of their consumption, but more importantly be analysed by other third party applications. As such, AGL believes that the data analysis requirements for this report should be kept as simple as possible to enable efficient operation of these third applications.	