

# Annual Notice - Power and Water Corporation

## Appendix A – Data workbooks instructions

April 2024

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AER reference: AER23006849

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# 1 General instructions

## 1.1 Data requirements

- 1.1.1 General instructions relevant to the completion of the *data workbooks* are contained in each of the *data workbooks* attached at *Appendix A*.
- 1.1.2 Data requirements are identified by reference to table headings, row descriptors and column headings. They are represented as input cells - shaded green in the *data workbooks*.
- 1.1.3 Reported data (inputs) must meet validation rules and consistency cross checks, as set out in the *data workbooks*.
- 1.1.4 Where a NULL response is specified as valid a response to the data requirement is not mandatory.
- 1.1.5 *Power and Water Corporation* must identify and explain each NULL response in its *basis of preparation*.
- 1.1.6 Where a NULL response is specified as not valid (that is, a response to the data requirement is mandatory) and the data requirement is not relevant to *Power and Water Corporation* in the *reporting period*, it must report '0'.

## 1.2 General

- 1.2.1 *Power and Water Corporation* must report the data in the *data workbooks* in accordance with:
  - (a) the service classifications that apply or applied in the *reporting period*; and
  - (b) the *cost allocation method* approved by the AER for the *reporting period*.
- 1.2.2 *Where the AER has made a determination to classify legacy metering services as standard control services, Power and Water must:*
  - (a) report the data in the data workbooks 06-09 exclusive of the expenditures, revenues or asset base values related to SCS - legacy metering services
  - (b) report the expenditures, revenues and asset base values related to standard control legacy metering services as set out in *data workbook 11 - SCS Legacy metering*.
- 1.2.3 *Power and Water Corporation* must report *financial information* in the *data workbooks* that:
  - (a) is derived from the *audited statutory accounts*;
  - (b) is verifiable by reference to the *audited statutory accounts*;
  - (c) is generally prepared using the accrual basis of accounting;
  - (d) is presented on a fair and consistent basis, from the *accounting records* that underlie the costs, revenue, assets and liabilities that may be reasonably attributed to *the Power and Water Corporation*;

- (e) in so far as is reasonably practicable, is prepared in accordance with the general rules and format of the *audited statutory accounts*, and use the accounting principles and policies applicable to the *audited statutory accounts* except as otherwise required by this *Notice*;
- (f) is presented in an understandable manner, without sacrificing relevance or reliability; and
- (g) states fairly the financial performance of *Power and Water Corporation*.

## 1.3 Cost allocation

1.3.1 *Power and Water Corporation* must allocate all costs that relate to or are incurred in the provision of *distribution services* in the *audited statutory accounts*, to *Power and Water Corporation* in accordance with section 1.3.3.

1.3.2 All costs allocated to *Power and Water Corporation* in the response to section 1.3.1 must in turn be allocated in accordance with section 1.3.3 to:

- (a) a *standard control service*;
- (b) an *alternative control service*;
- (c) a *negotiated service*; or
- (d) an *unclassified or unregulated service*.

1.3.3 A cost allocated to *Power and Water Corporation* that is:

- (a) *directly attributable to Power and Water Corporation*, must be allocated to *Power and Water Corporation*;
- (b) not *directly attributable* to the *Power and Water Corporation* must be allocated to the *Power and Water Corporation* on a causation basis, using an appropriate allocator, determined in accordance with section 4.5 of the *Notice*, unless the *item* is not *material*;
- (c) *directly attributable* to the *Power and Water Corporation* but not *directly attributable* to a *standard control service*, an *alternative control service*, a *negotiated service* or an *unclassified or unregulated service*, must be allocated across *distribution services* in accordance with the approved *cost allocation method*;
- (d) *capital expenditure* must be allocated to an *asset class* on a *directly attributable* basis or a causation basis using an appropriate allocator; and
- (e) *operating expenditure* must be allocated to an *opex category* on a *directly attributable* basis or a causation basis using an appropriate allocator.

**Note:** See sections 4.5 and 4.6 of the *Notice*.

## 1.4 Customer and government contributions

- 1.4.1 *Power and Water Corporation* must not carry forward into the asset base, *capital contributions* treated as revenues in *audited statutory accounts* and included in the value of assets.
- 1.4.2 *Power and Water Corporation* must report *capital contributions* in accordance with the method approved in *Power and Water Corporation's* current *distribution determination*.

## 1.5 Asset base

- 1.5.1 *Power and Water Corporation* must not revalue assets or adjust asset values for impairment unless expressly permitted in writing or required by the *AER*.
- 1.5.2 *Power and Water Corporation* must report revaluations or adjustments for impairment made in the *audited statutory accounts* in the *adjustments* column in *Workbook 09 – Revenue and financial information*.
- 1.5.3 *Power and Water Corporation* must report *capital expenditure* against an *asset class* and not under a work in progress heading.
- 1.5.4 *Power and Water Corporation* must not report *financial information* that includes goodwill or related impairments.

## 1.6 Regulatory accounting principles and policies

- 1.6.1 The *regulatory accounting principles and policies* applied by *Power and Water Corporation* must:
- (a) be based on a recognisable and rational economic basis;
  - (b) ensure that the resultant *financial information* satisfies the concepts of relevance and reliability;
  - (c) ensure that the substance of the underlying transactions and events is reported in the *financial information*;
  - (d) ensure that the *financial information* can be understood;
  - (e) allow for comparisons to be made over time; and
  - (f) conform to the recognition and measurement principles of the Australian Accounting Standards.
- 1.6.2 Unless otherwise required by this *Notice*, *Power and Water Corporation* must report *capital expenditure* and associated data (such as asset volumes) in the *data workbooks* against the *reporting period* on an as-incurred basis.

## 2 Workbook 02 - Operational outputs

### 2.1 Energy delivered by cost reflective tariff and Energy delivered by non-cost reflective tariff

#### Customers (tariff) by meter type

#### Customers (tariff) by tariff

- 2.1.1 Data requirements are identified by reference to table headings, row descriptors and column headings. They are represented as input cells - shaded green in the *data workbook 02 – Operational outputs*. *There are no further instructions.*
- 2.1.2 *Power and Water Corporation* must report total energy delivered, where energy delivered to a customer on a secondary tariff is to be reported against the customer's primary tariff.
- 2.1.3 *Power and Water Corporation* must report energy delivered information disaggregated by meter type where possible. If actual information is not readily available estimates can be provided. Alternatively, *Power and Water Corporation* may aggregate data to a specific meter type for example, type 4 meters for all smart meters. In this case, meter types 1-3 would have '0' reported against them.
- 2.1.4 If meter type data has been aggregated, report '0' for component meters.
- 2.1.5 Where *Power and Water Corporation* uses estimates of meter type aggregation, it must explain, in the basis of preparation, why actual information cannot be provided or why aggregate data is appropriate, given *Power and Water Corporation's* circumstances.

### 2.2 Energy delivered | received

- 2.2.1 *Power and Water Corporation* must report *energy delivered* in a *reporting period* as the energy metered or estimated at the customer charging location rather than the import location.
- 2.2.2 *Power and Water Corporation* must report *energy delivered* as the actual energy delivered, unless actual data is not available. Where actual data is not available for the most recent *reporting period*, *Power and Water Corporation* may report energy delivered data for that period on an accrual basis.
- 2.2.3 *Power and Water Corporation* may report *energy delivered* as on-peak, shoulder and off-peak times according to its own charging periods.

#### Energy delivery by time of delivery

- 2.2.4 *Power and Water Corporation* must report *energy delivered* as 'Energy Delivery where time of use is not a determinant' (EB RIN reference: DOPED0201) only where that *energy delivered* was not charged as on-peak, shoulder or off-peak.

#### Energy received by time of receipt

- 2.2.5 *Power and Water Corporation* must report energy received as measured at supply points.



2.2.6 *Power and Water Corporation* must report energy received against ‘Energy received not included in the above categories’ (EB RIN reference: DOPED0304) only where it is not accurate to report the energy received as on-peak, shoulder or off-peak.

### **Energy received from embedded generation by time of receipt**

2.2.7 ‘Energy received from embedded generation not included in above categories’ (EB RIN reference: DOPED0404 and DOPED0408) includes energy received from embedded generation on an accumulation basis and not measured by the time of receipt. *Power and Water Corporation* must report energy received in ‘not included in above categories’ only where it is not possible to report the energy received as on-peak, shoulder or off-peak,

where ‘not included in above categories’ refers to:

- (i) non-residential – EB RIN reference: DOPED0401–DOPED0403; and
- (ii) residential – EB RIN reference DOPED0405–DOPED0407.

### **Energy delivered by customer (benchmarking)**

2.2.8 Data requirements are identified by reference to table headings, row descriptors and column headings. They are represented as input cells - shaded green in the *data workbook 02 – Operational outputs*. *There are no further instructions*.

## **2.3 Maximum Demand**

### **Annual system Maximum Demand characteristics at the zone substation level (Alice Springs; Darwin to Katherine; Tennant Creek)**

2.3.1 Where *Power and Water Corporation* has calculated and maintained data for historical Weather Adjusted Maximum Demand it must report that data.

### **Annual system Maximum Demand characteristics at the transmission connection point level (Alice Springs; Darwin to Katherine; Tennant Creek)**

2.3.2 *Power and Water Corporation* must report ‘Embedded generation’ where it has kept and maintained historical data for embedded generation downstream of connection points and where it accounts for such embedded generation in its maximum demand forecast.

- (a) *Power and Water Corporation* must describe the type of embedded generation data it has reported. For example, *Power and Water Corporation* may state it has included scheduled, semi-scheduled and non-scheduled embedded generation. In this example, we may calculate native demand by adding these figures to raw maximum demand.

#### *Maximum demand characteristics*

2.3.3 For the ‘Winter/Summer peaking’ line item, *Power and Water Corporation* must identify the season in which the raw maximum demand occurred by entering ‘Winter’ or ‘Summer’ as appropriate.

2.3.4 Where the seasonality of the *Power and Water Corporation’s* maximum demand (MD) does not correspond with the form of its regulatory years, *Power and Water Corporation* must explain its basis of reporting MD in the *basis of preparation*. For

example, if *Power and Water Corporation* forecasts expenditure on a financial year basis but forecasts MD on a calendar year basis because MD occurs in winter, *Power and Water Corporation* would state that it reports MD on a calendar year basis and describe, for example, the months that it includes in any given *reporting period*.

2.3.5 Where *Power and Water Corporation* has kept and maintained historical and forecast weather corrected maximum demand, it must report that data.

- (a) *Power and Water Corporation* must describe its weather correction process in the *basis of preparation*, including whether the reported weather corrected maximum demand data is based on raw adjusted maximum demand or raw unadjusted maximum demand or another type of maximum demand figure.
- (b) *Power and Water Corporation* must report weather corrected maximum demand in accordance with best regulatory practice weather correction methodologies.

### **Coincident and non-coincident maximum demand by sub-transmission substation and zone substation**

2.3.6 *Power and Water Corporation* must report maximum demand information for all network segments (sub-transmission substation or zone substation).

- (a) *Power and Water Corporation* must report data for each substation separately. *Power and Water Corporation* must identify in the *basis of preparation* instances where it has decommissioned substations.

2.3.7 *Power and Water Corporation* must report the normal cyclic rating for all substations in each network segment.

- (a) *Power and Water Corporation* must report the seasonal rating that corresponds to the time of the raw adjusted maximum demand. For example, *Power and Water Corporation* must report the summer normal cyclic rating of the substation if the raw adjusted maximum demand for that substation occurred in summer.
- (b) Where *Power and Water Corporation* does not keep and maintain rating information it may estimate this information or report a NULL response.

2.3.8 Where maximum demand in MVA and maximum demand in MW occurred at different times, *Power and Water Corporation* must report maximum demand figures for both measures at the time maximum demand in MW occurred. In such instances, *Power and Water Corporation* must identify in the *basis of preparation* the date the maximum demand in MVA occurred.

2.3.9 If either the MW or MVA measure is unavailable, *Power and Water Corporation* must approximate the power factor conversion based on best engineering estimates.

2.3.10 If *Power and Water Corporation* has not used raw unadjusted maximum demand as the basis for coincident and non-coincident maximum demand by substation, it must describe the methods it employs to calculate the reported data in the *basis of preparation*.

2.3.11 *Power and Water Corporation* must report 'Adjustments - Embedded generation' where it has kept and maintained historical data for embedded generation downstream of the specified network segment and/or where it accounts for such embedded generation in its maximum demand forecast.

- (a) *Power and Water Corporation* must allocate embedded generation data to the appropriate substation under system normal conditions (consistent with the definition of raw adjusted maximum demand).
- (b) *Power and Water Corporation* must describe the type of embedded generation data it has reported in the *basis of preparation*. For example, *Power and Water Corporation* may state it has included scheduled, semi-scheduled and non-scheduled embedded generation. In this example, we can calculate native demand by adding these figures to the raw adjusted maximum demand figures.

2.3.12 Where *Power and Water Corporation* has calculated historical weather corrected maximum demand it must report that data.

- (a) *Power and Water Corporation* must describe its weather correction process in the *basis of preparation*. *Power and Water Corporation* must identify whether the reported weather corrected maximum demand data is based on raw adjusted maximum demand or raw unadjusted maximum demand or another type of maximum demand figure.
- (b) *Power and Water Corporation* must report weather corrected maximum demand in accordance with best regulatory practice weather correction methodologies.

2.3.13 *Power and Water Corporation* must report System coincident data which is demand at that point on the network (e.g. zone substations) at the time of system (or network) peak.

2.3.14 *Power and Water Corporation* must report Non coincident maximum demand data for each zone substation in each year. Such data may not necessarily coincide demand at the time of system peak.

2.3.15 Where *Power and Water Corporation* does not record and/or maintain spatial maximum demand coincident to the system maximum demand it must report spatial maximum demand coincident to a higher network segment. *Power and Water Corporation* must identify in the *basis of preparation* the higher network segment. For example, if *Power and Water Corporation* does not maintain maximum demand data for zone substations coincident to the system maximum demand, it must report maximum demand data coincident to the connection point. In this example, *Power and Water Corporation* would identify the relevant connection point in the *basis of preparation*.

#### **Maximum demand (DRMG) by feeder**

2.3.16 Data requirements are identified by reference to table headings, row descriptors and column headings. They are represented as input cells - shaded green in the *data workbook 02 – Operational outputs*. *There are no further instructions*.

## **2.4 Connections**

### **New connections – standard control services**

### **New connections – excluding standard control services**

2.4.1 *Power and Water Corporation* must report data for connection services that reconciles to internal planning models used by *Power and Water Corporation*.

2.4.2 *Power and Water Corporation* must report data only for non-contestable, regulated connection services, including such services performed by third parties on its behalf.

### **Other connections activities**

2.4.3 For augmentation data, 'km added' refers to the net addition of circuit line length resulting from the augmentation work of complex connections.

2.4.4 The definitions of complex connections provide guidance on the types of augmentation works which must be reported as connection services.

2.4.5 *Power and Water Corporation* must report augmentation for connections relating to customer connection requests. *Power and Water Corporation* must not double count augmentation work. Augmentation work must be reported by its primary purpose as either augmentation or connections works.

2.4.6 *Power and Water Corporation* must report the MVA added for distribution substations installed for connection services. *Power and Water Corporation* must report MVA added as the sum of the nameplate rating for all distribution substations installed for the reporting period.

## **2.5 Asset replacement and maintenance activities**

2.5.1 *Power and Water Corporation* must report data on asset replacement and maintenance by asset class, disaggregated into asset sub-categories.

2.5.2 Where *Power and Water Corporation* considers the prescribed asset group categories do not account for an asset on the *Power and Water Corporation's* distribution system, *Power and Water Corporation* must report the asset in the 'Other by business specified category' and must report an appropriate high-level description for that asset.

2.5.3 Where *Power and Water Corporation* considers the prescribed asset class subcategories do not account for an asset on its network, *Power and Water Corporation* must report the asset in the row 'other' under the relevant asset class. For each asset class, *Power and Water Corporation* must describe the assets included as 'other' in the *basis of preparation*.

2.5.4 Where *Power and Water Corporation* reports replacements associated with asset refurbishments/ life extensions, it must report against the asset class 'Other by business specified category'. Each asset sub-category in this asset class must be described by the equivalent asset sub-category followed by the word 'refurbished'.

2.5.5 For each asset reported as 'other' in either a subcategory or in 'Other by business specified category', *Power and Water Corporation* must report corresponding age profile data in workbook 03.

2.5.6 For each asset category the *Power and Water Corporation* must report:

- (a) For assets maintained – the number of maintenance activities in the reporting period
- (b) For assets inspected – the number of inspection activities in the reporting period.

2.5.7 For the asset category 'poles' the *Power and Water Corporation* must report:

- (c) For asset maintained – the number of pole maintenance activities in the reporting period, including maintenance of a staked pole
- (d) For assets inspected – the number of pole inspection activities in the reporting period, including inspection of a staked wooden pole.

2.5.8 For the asset category ‘Staking of / staked wooden poles’, the *Power and Water Corporation* must report:

- (a) For asset replacements – the number of wooden poles staked in the reporting period, including where an existing staked pole is re-staked

For asset failures – the number of staked wooden poles that failed in the reporting period.

## 2.6 Other outputs

### Metering activities

- 2.6.1 Metering services reported by *Power and Water Corporation* must reconcile to internal planning models used by *Power and Water Corporation*.
- 2.6.2 *Power and Water Corporation* must report data only for non-contestable, regulated metering services, including such services performed by third parties on its behalf.
- 2.6.3 *Power and Water Corporation* must not report metering services data classified as contestable by the AER.

### Fee based and quoted services

- 2.6.4 *Power and Water Corporation* must report fee-based and quoted services data that reconciles to internal planning models used by *Power and Water Corporation*.
- 2.6.5 *Power and Water Corporation* must list all the fee-based and quoted services that were listed in the annual tariff proposal for the *reporting period*.
- 2.6.6 *Power and Water Corporation* must report a description of each fee-based and quoted service listed. *Power and Water Corporation* must explain the purpose of each service and detail the activities which comprise each service. If that information has previously been submitted to the AER, *Power and Water Corporation* may note and reference the earlier submission and does not have to resubmit the material.

### Asset augmentation activities

- 2.6.7 *Power and Water Corporation* must include only projects and expenditure related to augmentation of the network – defined with reference to the primary purpose of the project or expenditure. Augmentation work related to connection must be reported as a connection activity.
- 2.6.8 *Power and Water Corporation* must not include information for gifted assets.
- 2.6.9 For projects that span across *reporting periods*, input figures for the units added or units upgraded according to the final year in which expenditure was incurred for the project.

### Motor vehicles

- 2.6.10 The *Power and Water Corporation* must report the number of vehicles purchased in the reporting year, scaled for use in delivering *standard control services*. For example,

a vehicle purchased that is only used in the delivery of *standard control services* for 50% of the time, would be recorded as 0.5 vehicles.

2.6.11 The *Power and Water Corporation* must report the number of vehicles leased in the reporting year, scaled for use in delivering *standard control services*. For example, a vehicle purchased that is only used in the delivery of *standard control services* for 50% of the time, would be recorded as 0.5 vehicles.

2.6.12 The *Power and Water Corporation* must report the total number of vehicles in the fleet in the reporting year, scaled for use in delivering *standard control services*. For example, a vehicle that is only used in the delivery of *standard control services* for 50% of the time, would be recorded as 0.5 vehicles. Similarly, to calculate the number of vehicles, a vehicle that is only in the fleet for 6 months of the year (whether leased or purchased) would be recorded as 0.5 vehicles.

## 2.7 Export services

### Export volumes - net metered volume of energy exported by customers with smart meters

2.7.1 The *Power and Water Corporation* must report measured net metered volumes of energy exported by *customers (export services)* with smart meters. Net metered volumes refer to metered energy net of load – that is energy exported. Do not include estimated export volumes for customers that do not have smart meters.



## 3 Workbook – Network metrics

### 3.1 Network assets – volume

3.1.1 All asset volumes are to be reported as at the end of the *reporting period*.

#### Meter population

3.1.2 The reported *metering services* data must reconcile with internal planning models used by the *Power and Water Corporation*.

3.1.3 *Power and Water Corporation* must report data only for non-contestable, regulated metering services, including such services performed by third parties on its behalf.

3.1.4 *Power and Water Corporation* must not report data for *metering services* that have been classified as contestable by the AER.

#### Total poles by feeder type

3.1.5 *Power and Water Corporation* must report total volume of assets currently in commission for Poles by feeder type. Where this data is estimated *Power and Water Corporation* must explain in the *basis of preparation* how it has determined the volumes.

### 3.2 Non-network assets – volume

#### IT & Communications

3.2.1 The electricity distributor must report the total number of devices, scaled for use in delivering standard control services. For example, a device that is only used in the delivery of standard control services for 50% of the time, would be recorded as 0.5 devices.

#### Motor Vehicles

3.2.2 The *electricity distributor* must report the total number of vehicles in the fleet in the reporting year, scaled for use in delivering *standard control services*. For example, a vehicle that is only used in the delivery of *standard control services* for 50% of the time, would be recorded as 0.5 vehicles. Similarly, to calculate the number of vehicles, a vehicle that is only in the fleet for 6 months of the year (whether leased or purchased) would be recorded as 0.5 vehicles.

### 3.3 Length

#### Circuit length

*Overhead network length of circuit at each voltage*

*Underground network length of circuit at each voltage*

3.3.1 *Power and Water Corporation* must report capacity data for its *distribution network*. The network includes overhead power lines and towers, underground cables and pilot cables that transfer electricity from the regional bulk supply points supplying areas of consumption to individual zone substations, to distribution substations and to customers. The network also includes distribution feeders and the low voltage

distribution system but excludes the final connection from the mains to the customer and excludes wires or cables for communication, protection or control and connection to unmetered loads.

3.3.2 *Power and Water Corporation* must report voltages for 'Other overhead voltages' and 'Other underground voltages' as the aggregate circuit length for all voltages that comprise 'other'. *Power and Water Corporation* must identify the 'other' voltages in its *basis of preparation*.

3.3.3 *Power and Water Corporation* must report *circuit length* calculated from the *route line length* (measured in kilometres) of lines in service (that is, the total length of feeders including all spurs), where each SWER line, single-phase line, and three-phase line counts as one line. A double circuit line counts as two lines. The circuit length must not include vertical components such as sag.

### Service area factors

3.3.4 *Power and Water Corporation* must report the *route line length* of its network. The route line length may not equal the circuit length as the circuit length may include multiple circuits.

### Maintenance spans

#### High voltage distribution lines

3.3.5 Data requirements are identified by reference to table headings, row descriptors and column headings. They are represented as input cells - shaded green in the *data workbook 03 – Network metrics*. *There are no further instructions*.

#### Length data – selected asset characteristics

*Overhead conductors by: conductor length by feeder type*

*Overhead conductors by: conductor length by material type*

*Underground cables by: cable length by feeder type*

3.3.6 For each disaggregated asset type, *Power and Water Corporation* must report the total volume of assets in commission at the end of the *reporting period*, and the number of assets replaced in the *reporting period*.

## 3.4 Capacity

### Circuit capacity MVA

*Estimated overhead network weighted average MVA capacity by voltage class*

*Estimated underground network weighted average MVA capacity by voltage class*

3.4.1 For each of the listed voltage classes *Power and Water Corporation* must report estimated typical or weighted average capacities under normal circumstances taking account of limits imposed by thermal or by voltage drop considerations as relevant. This information will be used to calculate an overall MVA x km 'carrying capacity' for each voltage class under normal circumstances.

3.4.2 *Power and Water Corporation* must report summer Maximum Demands for summer peaking assets and winter Maximum Demands for winter peaking assets. Where *Power and Water Corporation's* peak has changed from winter to summer (or vice



versa) during the *regulatory period*, winter ratings should be applied for those years where there was a winter peak and summer ratings for those years where there was a summer peak.

- 3.4.3 Where circuits travel both overhead and underground and the capacity of the overhead and underground components is not available separately, *Power and Water Corporation* may split the known circuit capacity by the ratio of its overhead network to its underground network and report estimate values for the overhead capacity and underground capacity components.

### **Transformer capacities**

#### *Distribution transformer total installed capacity*

- 3.4.4 The total installed distribution transformer capacity is the transformer capacity involved in the final level of transformation, stepping down the voltage used in the distribution lines to the level used by the customer. It does not include intermediate transformation capacity (e.g. 132 kV or 66 kV to the 22 kV or 11 kV distribution level). The capacity measure is the normal nameplate continuous capacity / rating (including forced cooling and other factors used to improve capacity).
- 3.4.5 Total installed distribution transformer capacity includes cold spare capacity of distribution transformers and excludes the capacity of all zone substation transformers, voltage transformers (potential transformers) and current transformers.
- 3.4.6 When reporting 'Distribution other - transformer capacity owned by utility' *Power and Water Corporation* must report the transformer capacity owned by it and report in its *basis of preparation* the nameplate continuous rating including forced cooling.
- 3.4.7 For 'Cold spare capacity included in distribution transformer capacity owned by utility' (EB RIN reference: DPA0501) *Power and Water Corporation* must report the total capacity of spare transformers owned by *Power and Water Corporation* but not used in the *reporting period*.

#### *Zone substation transformer capacity*

- 3.4.8 *Power and Water Corporation* must report transformer capacity used for intermediate level transformation capacity in either one or two steps. For example, high voltages such as 132 kV, 66 kV or 33kV at the zone substation level to the distribution level of 22 kV, 11 kV or 6kV.
- 3.4.9 *Power and Water Corporation* must report zone substation transformer capacities as the summation of normal assigned continuous capacity / rating (with forced cooling or other capacity improving factors included) and include both energised transformers and cold spare capacity. *Power and Water Corporation* must report the assigned rating determined from results of temperature rise calculations from testing. If the assigned rating is not available, *Power and Water Corporation* must report the nameplate rating. For zone substations where the thermal capacity of exit feeders is a constraint, the *Power and Water Corporation* must report thermal capacity of exit feeders instead of transformer capacity.
- 3.4.10 *Power and Water Corporation* must report total installed capacity for first step transformation where there are two steps to reach distribution voltage, as:

- (a) "Total installed capacity for first step transformation where there are two steps to reach distribution voltage" (EB RIN reference: DPA0601) includes, for example, 66 kV or 33 kV to 22 kV or 11 kV where there will be a second step transformation before reaching the distribution voltage. This variable is only relevant where *Power and Water Corporation* has more than one step of transformation, if this is not the case *Power and Water Corporation* must enter '0' for this variable.

3.4.11 *Power and Water Corporation* must report total installed capacity for second step transformation where there are two steps to reach distribution voltage as:

- (a) "Total installed capacity for second step transformation where there are two steps to reach distribution voltage" (EB RIN reference: DPA0602) report total installed capacity where a second step transformation is applied before reaching the distribution voltage. For example 66 kV or 33 kV to 22 kV or 11 kV where there has already been a step of transformation above this at higher voltages within *Power and Water Corporation's* system. This variable is only relevant where *Power and Water Corporation* has more than one step of transformation, if this is not the case it must enter '0' for this variable.

3.4.12 *Power and Water Corporation* must report total zone substation transformer capacity where there is only a single transformation to reach distribution voltage as:

- (a) "Total zone substation transformer capacity where there is only a single transformation to reach distribution voltage" (EB RIN reference: DPA0603) report total installed capacity where only a single step of transformation is applied before reaching the distribution voltage. This variable is only relevant where there is only a single step of transformation to reach distribution voltage. If there is more than one step of transformation to reach distribution voltage, the relevant capacities must be reported in EB RIN reference: DPA0601 and EB RIN reference: DPA0602.

3.4.13 *Power and Water Corporation* must report total zone substation transformer capacity as:

- (a) 'Total zone substation transformer capacity' (EB RIN reference: DPA0604) the overall total zone substation capacity regardless of whether one or two steps are used to reach the distribution voltage (for example EB RIN reference: DPA0604 will be the sum of EB RIN reference: DPA0601, DPA0602, DPA0603 and DPA0605.)

3.4.14 Cold Spare Capacity of zone substation transformers included in total zone substation transformer capacity:

- (a) For 'Cold Spare Capacity of zone substation transformers included in EB RIN reference: DPA0604' (EB RIN reference: DPA0605), report total Cold Spare Capacity included in total zone substation transformer capacity.

### *Distribution – other transformer capacity*

3.4.15 When reporting 'Distribution other - transformer capacity owned by utility' the *Power and Water Corporation* must report the transformer capacity owned by it and report in its *basis of preparation* the nameplate continuous rating including forced cooling.

### **Selected asset characteristics – capacity data**

3.4.16 Data requirements are identified by reference to table headings, row descriptors and column headings. They are represented as input cells - shaded green in the *data workbook 03 – Network metrics*. *There are no further instructions.*

## **3.5 Asset age profile**

3.5.1 *Power and Water Corporation* must report asset volumes by year commissioned, such that the asset classes and subcategories exactly match the asset classes and subcategories used to report asset replacement activities.

3.5.2 *Power and Water Corporation* must report asset volumes by year commissioned for all years back to 1935. Assets installed prior to 1935 do not need to be reported.

3.5.3 For the asset category 'Poles' *Power and Water Corporation* must not include staked wooden poles in the asset volumes reported.

3.5.4 For the asset category 'staking of / staked wooden poles' the year of commissioning refers to the year in which the pole was staked.

## **3.6 Asset metrics**

### **Asset lives**

3.6.1 *Power and Water Corporation* must report asset lives for all asset categories.

#### *Asset life estimation method*

3.6.2 Where the categories comprise of several assets, *Power and Water Corporation* must report asset lives for the whole category by weighting the lives of individual assets within that category. Weightings must be calculated as follows, in order of preference:

1. On the basis of the asset's share of the asset base for the category and expected asset lives;
2. If 1 is not available, on the basis of replacement costs and expected asset lives;
3. If 1 and 2 cannot be applied, in accordance with the asset's contribution to the category's capacity (i.e. MVA-kms for lines and for cables and MVA for transformers).
4. The weighted average asset life of each category is as set out in Equation 1.

#### *Equation 1 Weighted average asset life calculation*

Weighted average asset life for assets in category  $j = \sum_{i=1}^n \frac{x_{i,j}}{RC_j} \cdot EL_{i,j}$

Where:

$n$  is the number of assets in category  $j$

$x_{i,j}$  is the value of asset  $i$  in category  $j$

$EL_{i,j}$  is the expected life of asset  $i$  in category  $j$

$RC_j$  is the sum of the value of all assets in category  $j$

For example, where the weightings are based on asset base shares or replacement costs, the weighted average asset life of each category must be calculated according to the following formula: If Category 1 contains 2 assets; Asset 1 has an expected life of 50 years and a value of \$3 million; and Asset 2 has an expected life of 20 years and a value of \$2 million, then the weighted average asset life of assets in this category is 38 years:  $[(3/5) \times 50] + [(2/5) \times 20] = 38$ .

#### *Estimated service life of new assets*

3.6.3 *Power and Water Corporation* must report the *estimated service life of new assets*.

New assets are assets installed in the *reporting period*. The expected service life of new assets is the period after installation of a new asset during which the asset is expected to be capable of delivering the same effective service as at its installation date.

3.6.4 The estimated service life may not align with the asset's financial or tax life.

#### *Estimated residual service life*

3.6.5 *Power and Water Corporation* must report the weighted average remaining time an asset class is expected to deliver the same effective service as at its installation date.

The remaining time is to be calculated from the end of the *reporting period*.

#### **Inspection and maintenance cycles**

3.6.6 The *Power and Water Corporation* should report a weighted average inspection and maintenance cycles for asset groups. The methodology to derive the weighted average should be set out in the *basis of preparation*.

## **3.7 Terrain factors**

### **Terrain factors**

3.7.1 Number of maintenance spans: Where *Power and Water Corporation* records poles rather than spans, the number of spans is the number of poles less one.

3.7.2 *Power and Water Corporation* may calculate the 'average frequency of cutting cycle' as a simple average of all cutting cycles.

#### *Total urban and CBD / Total rural*

3.7.3 *Power and Water Corporation* must report the average number of trees per vegetation maintenance span. If *Power and Water Corporation* does not have *actual information* for the 'average number of trees per vegetation maintenance span' it must, estimate this data using one or a combination of the following data sources:

- Encroachment Defects (e.g. ground or aerial Inspections, LiDAR) and/or records of vegetation works scoping, or GIS vegetation density data;
- Field surveys using a sample of maintenance spans within each vegetation management zone to assess the number of mature trees within the maintenance corridor. Sampling must provide a reasonable estimate and consider the nature of maintenance spans in urban versus rural environments in determining reasonable sample sizes.

- Vegetation data such as:
  - the Normalised Difference Vegetation Index (NDVI) grids and maps available from the Bureau of Meteorology (BOM);
  - data from the National Vegetation Information System (VIS data) overlaid on network GIS data to assess the density of vegetation in the direct vicinity of the Maintenance Spans; or
  - similar data from other sources such as Geoscience Australia or commercial suppliers of satellite imagery overlaid on network GIS data records.
- Any other data source based on expert advice.

3.7.4 *Power and Water Corporation* must explain its estimation method in its *basis of preparation*.

3.7.5 *Power and Water Corporation* must report the average number of defects per maintenance span for the *reporting period* and identify in its *basis of preparation* whether it records the total number of defects on each vegetation maintenance span, or whether it records defects on a vegetation maintenance span as one defect, regardless of the number of defects on the span.

#### *Other*

3.7.6 The tropical proportion is the approximate total number of urban and rural maintenance spans in the Hot Humid Summer and Warm Humid Summer regions as defined by the Australian Bureau of Meteorology Australian Climatic Zones map (based on temperature and humidity).

3.7.7 The bushfire risk variable is the number of maintenance spans in high bushfire risk areas as classified by a person or organisation with appropriate expertise on fire risk. This includes but is not limited to:

- *Power and Water Corporation's* jurisdictional fire authority
- local councils
- insurance companies
- the *Power and Water Corporation's* consultants
- local fire experts

## **3.8 Export services**

### **Export capacity requested**

#### **Export service – approved capacity**

3.8.1 When reporting on export capacity requested and approved *Power and Water Corporation* must:

- (a) include both customers on static export limits and on flexible export limits. Where flexible exports limits have been requested or approved *Power and Water Corporation* must report the upper bound of the export limit
- (b) exclude connection agreements that accept the default limit
- (c) exclude connection enquiries that did not result in a connection.
- (d) identify any differences in the customer base used to report capacity and customer data relating to export capacity requests and approvals.

### **Average non-zero static export limit at year end**

3.8.2 *Power and Water Corporation* must only include information on customers with static non zero export limits to derive the average non-zero static export limit.

### **Metrics related to utilised and curtailed energy**

3.8.3 *Power and Water Corporation* must estimate customer generation and curtailment for the entire network.

3.8.4 Unless a 'NULL' response is provided in one of the disaggregated potential customer generation categories under potential energy generation, the sum of these categories should equal the value provided under total potential customer generation.

3.8.5 Unless a 'NULL' response is provided in one or more of the disaggregated curtailment categories under CER curtailment, the sum of the disaggregated curtailment categories should equal the value provided under total curtailment.

### **Exporting customer capacity by customer (export services) type**

#### **Export customer capacity by feeder classification**

3.8.6 *Power and Water Corporation* must report export capacity in units of kVA. Where *Power and Water Corporation* only records exporting customer capacity in units of kW, a conversion method must be used to estimate export capacity in kVA. The conversion method must be disclosed in the *basis of preparation*. *Power and Water Corporation* may apply a 1:1 conversion method, or define an alternative conversion method.

## 4 Workbook - Customer numbers

### 4.1 Total customers

#### Customers (distribution services)

#### Customers (distribution services) by meter status

4.1.1 *Power and Water Corporation* must report total *customer (distribution services)* numbers disaggregated by NMI status; meter classification and energisation. *Power and Water Corporation* must report the disaggregated total *customer (distribution services)* to enable reconciliation and cross checking of customer number data.

### 4.2 Customers (benchmarking)

4.2.1 *Power and Water Corporation* must report *Customers (benchmarking)* for a reporting period calculated as:

- (i) the number of metered customers with active NMIs *Power and Water Corporation's* network in the *reporting period*, where each NMI is counted as a separate customer; both energised and de-energised NMIs must be counted; but extinct NMIs are not to be counted.

plus

- (ii) unmetered customers in *Power and Water Corporation's* network, whose energy usage for billing purposes is calculated using an assumed load profile (examples include bus shelters, security lighting and traffic signals where not metered).

#### Customer numbers by customer type or class

4.2.2 *Power and Water Corporation* must report Customer Numbers in accordance with the category definitions.

4.2.3 *Power and Water Corporation* must report customers against 'Other Customer Numbers' (EB RIN reference: DOPCN0106) only when customers cannot be allocated to the prescribed customer classes.

#### Customer numbers by feeder type

4.2.4 *Power and Water Corporation* must report Customer Numbers in accordance with the category definitions.

### 4.3 Customers (STPIS) by feeder

4.3.1 *Power and Water Corporation* must report customers (STPIS) for a reporting period in accordance with the definition of *customer (STPIS)*

4.3.2 Data requirements are identified by reference to table headings, row descriptors and column headings. They are represented as input cells - shaded green in the *data workbook 04 – Customer numbers*. *There are no further instructions.*



## 4.4 Customers (tariff) on cost reflective tariffs, Customers (tariff) on non-cost reflective tariffs, and Customers (tariff) with secondary tariffs

### Customers by meter

### Customers by tariff

- 4.4.1 *Power and Water Corporation* must report customers (tariffs) for a *reporting period* as the number of energised connection points.
- 4.4.2 For Cost reflective tariff customer numbers – *Power and Water Corporation* must only report customers assigned to cost reflective primary tariffs in this table. Data relating to secondary tariffs should only be included in the ‘secondary tariff customer numbers’ table.
- 4.4.3 For Non cost reflective tariff customer numbers - *Power and Water Corporation* must only report customers assigned to non-cost reflective primary tariffs in this table. Data relating to secondary tariffs should only be included in the ‘secondary tariff customer numbers’ table
- 4.4.4 Secondary tariff customer numbers – *Power and Water Corporation* must only report customers with a secondary tariff in this table. They must be recorded against the secondary tariff only, and not their primary tariff.

## 4.5 Export services

- 4.5.1 *Power and Water Corporation* must not include ‘Customers on isolated networks’ in the disaggregated information reported under customer numbers by feeder classification.

### Export customers with smart meters

### Export customers without smart meters

### Export customers with static zero export limits

### Export customers with static non-zero export limits

- 4.5.2 Data requirements are identified by reference to table headings, row descriptors and column headings. They are represented as input cells - shaded green in the *data workbook 04 – Customer numbers*. *There are no further instructions*.

### Customers (export services) requesting export capacity

- 4.5.3 Requested export capacity measures the maximum amount of export capacity a customer requested when requesting export services from the DNSP. When reporting on export capacity requested and approved *Power and Water Corporation* must:
- (a) include both customers on static export limits and on flexible export limits. Where flexible exports limits have been requested or approved *Power and Water Corporation* must report the upper bound of the export limit
  - (b) exclude connection agreement that accept the default limit
  - (c) exclude connection enquiries that did not result in a connection.



- (d) identify any differences in the customer base used to report capacity and customer data relating to export capacity requests and approvals.

#### **Customers with flexible export limits**

4.5.4 Data requirements are identified by reference to table headings, row descriptors and column headings. They are represented as input cells - shaded green in the *data workbook 04 – Customer numbers*. There are no further instructions.

#### **Customers (export services) with measured voltage data**

4.5.5 Customers with measured voltage data includes customers with voltage data that *Power and Water Corporation* has measured, collected or procured, whether that be through power quality data obtained through smart meters or other voltage measurement approaches. To the extent customers would have voltage data held by third parties that *Power and Water Corporation* has not acquired, please include this detail in the basis of preparation.

#### **Customers (export services) measured as experiencing overvoltage**

4.5.6 *Power and Water Corporation* must report overvoltage where an inverter begins volt-watt curtailment. This is typically expected to occur at 253V.

4.5.7 *Power and Water Corporation* must report the number of customers that experience overvoltage events. That is, if one customer is measured to have experienced overvoltage multiple times over the year, this would be recorded as one observation.

Note this measure applies to all *customers (export services)*, and not just to *export customers*.

#### **Customers (export services) estimated to have experienced overvoltage**

4.5.8 *Power and Water Corporation* must report overvoltage where an inverter begins volt-watt curtailment. This is typically expected to occur at 253V.

4.5.9 *Power and Water Corporation* must report the number of customers that experience overvoltage events. That is, if one customer is estimated to have experienced overvoltage multiple times over the year, this would be recorded as one observation.

Note this measure applies to all *customers (export services)*, and not just to *export customers*.

#### **Measures relating to AS4777.2(202) compliant inverters**

4.5.10 Export customers are required to be compliant had inverters installed after AS4777.2 (2020) standards were in place. *Power and Water Corporation* should report total number of inverters required to be compliant each year, not just new inverters required to be compliant.

## 5 Workbook – Service performance

### 5.1 Interruptions to supply

- 5.1.1 *Power and Water Corporation* must report reliability data in Table: *Interruptions to supply* in accordance with the definitions in the AER's Distribution Service Target Performance Incentive Scheme (STPIS) that applies to *Power and Water Corporation* in the reporting year or if no STPIS applies - STPIS V2.
- 5.1.2 An interruption is any loss of electricity supply to a customer associated with an outage of any part of the electricity supply network, including generation facilities and transmission networks, of more than 0.5 seconds, including outages affecting a single premises. The customer interruption starts when recorded by equipment such as SCADA or, where such equipment does not exist, at the time of the first customer call relating to the network outage. An interruption may be planned or unplanned, momentary or sustained. Subsequent interruptions caused by network switching during fault finding are not to be included. An interruption ends when supply is again generally available to the customer.
- 5.1.3 An unplanned interruption is an interruption due to an unplanned event. An unplanned event is an event that causes an interruption where the customer has not been given the required notice for the interruption or where the customer has not requested the outage.
- 5.1.4 Interruptions to supply reported in Table: *Interruptions to supply* must be sustained interruptions, as defined in the STPIS that applies in the reporting year or if no STPIS applies - STPIS V2.
- 5.1.5 The *electricity distributor* must report unrounded data for the total customer minutes off supply and the average duration of sustained customer interruptions.
- 5.1.6 The *electricity distributor* must report both planned and unplanned interruptions to supply.
- 5.1.7 The electricity distributor must *customer numbers* as whole numbers.
- 5.1.8 The *electricity distributor* should report an incident reference number where the interruption impacts multiple feeders or has multiple restoration stages.
- 5.1.9 For interruptions that impact multiple feeders, the *electricity distributor* should report each feeder impacted on a separate row.
- 5.1.10 For interruptions that are restored in multiple stages we require at least two restoration stages to be reported.
- Restoration stage 1 will be used to derive a SAIDI Impact and a SAIFI impact for each feeder impacted by the interruption.
  - Restoration stage 2 will be used to derive a SAIDI impact but will not be used to derive a SAIFI impact.
  - Data for restoration stage 2 may be aggregate data for all restoration stages, excluding restoration stage 1. The *electricity distributor* may also report subsequent restoration stages (stage 2 or higher) as individual rows.

- Where 2 or more restoration stages are reported, the incident reference number must match the incident reference number for restoration stage 1.

## 5.2 Call centre

### Daily performance data - unplanned

5.2.1 *Power and Water Corporation* must report customer service information in accordance with the definitions of the *STPIS*.

5.2.2 *Power and Water Corporation* must report the total number of calls received excluding:

- (a) Calls to payment lines and automated interactive services; and
- (b) *Calls abandoned* by the *customer* within 30 seconds of the call being queued for response by a human operator (where the time in which a telephone call is abandoned is not measured, then an estimate of the number of *calls abandoned* within 30 seconds will be determined by taking 20% of all *calls abandoned*).

## 5.3 Momentary interruptions

5.3.1 *Power and Water Corporation* must report MAIFI or MAIFle daily outcomes if the AER has included a MAIFI or MAIFle parameter in the *STPIS* that applies in the reporting period.

5.3.2 *Power and Water Corporation* must report MAIFI or MAIFle in accordance with the definitions of the *STPIS*.

## 5.4 Other service measures

### Guaranteed service levels

5.4.1 *Power and Water Corporation* must identify the GSL scheme or schemes that it must apply, and the administrator/s of the scheme/s. A GSL scheme is any scheme, standard or other arrangement that imposes services obligations on *Power and Water Corporation* and includes a regime for compensating customers for sub-standard performance.

### Instances where GSL not met

5.4.2 *Power and Water Corporation* must report all jurisdiction GSL scheme parameters relevant to it. For each GSL scheme parameter, *Power and Water Corporation* must identify the parameter and any sub-parameters.

5.4.3 *Power and Water Corporation* must only include prescribed payments under the jurisdictional GSL scheme.

### Fire starts

5.4.4 Data requirements are identified by reference to table headings, row descriptors and column headings. They are represented as input cells - shaded green in the *data workbook 05 – Service performance*. *There are no further instructions*.

### Inadequately served customers (STPIS)

5.4.5 *Power and Water Corporation* must report reliability data in Table: *Inadequately served customers (STPIS)* in accordance with the definitions in the AER's Distribution Service

Target Performance Incentive Scheme (STPIS) that applies to the *electricity distributor* in the reporting year or if no STPIS applies - STPIS V2.

5.4.6 *Power and Water Corporation* must report data for the ‘Highest unplanned SAIDI of inadequately served customers’ and ‘Highest unplanned SAIFI of inadequately served customers’ for a single customer only (i.e. to report the highest SAIDI and SAIFI experienced by the worst affected single customer).

#### **Top 5 feeders with most inadequately served customers (STPIS)**

5.4.7 *Power and Water Corporation* must report reliability data in Table: *Top 5 feeders with most inadequately served customers* in accordance with the definitions in the AER’s Distribution Service Target Performance Incentive Scheme (STPIS) that applies to the *electricity distributor* in the reporting year or if no STPIS applies - STPIS V2.

5.4.8 For each feeder type, *Power and Water Corporation* must report the network average *unplanned SAIDI* of a network average customer as the *unplanned SAIDI* of the feeder type including excluded events.

#### **Top 5 zone substations with most inadequately served customers (STPIS)**

5.4.9 *Power and Water Corporation* must report reliability data in Table: *Top 5 zone substations with most inadequately served customers* in accordance with the definitions in the AER’s Distribution Service Target Performance Incentive Scheme (STPIS) that applies to the *electricity distributor* in the reporting year or if no STPIS applies - STPIS V2.

5.4.10 *Power and Water Corporation* is required to report information on the *Top five zone substations with most inadequately served customers* only if it is unable to report *Top five feeder with most inadequately served customers*.

## **5.5 Service outcomes**

5.5.1 *Power and Water Corporation* must report service outcomes in accordance with the thresholds and parameters set out in the AER’s distribution Service Target Performance Incentive Scheme V1 (STPIS V1).

### **Reliability**

5.5.2 Reliability data must be calculated consistent with STPIS V1, including the threshold for sustained interruptions. Data requirements are identified by reference to table headings, row descriptors and column headings. They are represented as input cells - shaded green in the *data workbook 05 – Service performance*. *There are no further instructions.*

### **Energy not supplied**

5.5.3 *Power and Water Corporation* must report the estimated raw (not normalized) energy not supplied due to planned and unplanned customer interruptions based on average customer demand (multiplied by the number of customers interrupted and the duration of the interruption). Average customer demand must be determined from (in order of preference):

1. average consumption of the customers interrupted based on their billing history;
2. feeder demand at the time of the interruption divided by the number of customers on the feeder;

3. average consumption of customers on the feeder based on their billing history;
4. average feeder demand derived from feeder Maximum Demand and estimated load factor, divided by the number of customers on the feeder.

5.5.4 *Power and Water Corporation* must report Energy not supplied excluding the effect of excluded outages set out in the STPIS V1. *Power and Water Corporation* must not exclude Major events.

5.5.5 *Power and Water Corporation* must calculate Energy not supplied (planned) as Total energy not supplied (measured in MWh) minus energy not supplied - unplanned.

5.5.6 *Power and Water Corporation* must estimate Energy not supplied (unplanned) based on average customer demand (multiplied by number of customers interrupted and the duration of the interruption). Average customer demand is to be determined from (in order of preference):

- (a) average consumption of the customers interrupted based on their billing history;
- (b) feeder demand at the time of the interruption divided by the number of customers on the feeder;
- (c) average consumption of customers on the feeder based on their billing history; and
- (d) average feeder demand derived from feeder maximum demand and estimated load factor, divided by the number of customers on the feeder.

This is to be exclusive of the effect of exclusions. *Power and Water Corporation* must not exclude Major events days.

### **System losses, capacity utilisation**

5.5.7 Data requirements are identified by reference to table headings, row descriptors and column headings. They are represented as input cells - shaded green in the *data workbook 05 – Service performance*. *There are no further instructions*.

## **5.6 Export services**

### **Average duration of full export access against the agreed limit**

5.6.1 The duration of full export access against the agreed limit is the time customers experience unconstrained access up to the maximum export limit set in their connection agreement.

5.6.2 Constraints arising due to outages classified as excluded events under the AER's DRMG should not be included in the derivation of duration of constrained access.

### **Average duration of no export access**

5.6.3 The duration of no export access against the agreed limit = the time customers are unable to export energy.

5.6.4 Constraints arising due to outages classified as excluded events under the AER's DRMG should not be included in the derivation of duration of constrained access.

### **Average upper limit - customers with flexible export limits**

### **Average time upper limit unavailable - customers with flexible export limits**

5.6.5 Data requirements are identified by reference to table headings, row descriptors and column headings. They are represented as input cells - shaded green in the *data workbook 05 – Service performance*. *There are no further instructions.*

#### **Export limit compliance**

5.6.6 Export limit compliance is an estimate of the extent that export limits in connect agreements are complied with, recognising for instance that inverters can be installed with non-compliant settings. If a site is found to be non-compliant at all during the year, it should be included in this measure. NULL responses are permitted with no justification required in the basis of preparation. If *Power and Water Corporation* provides this information, it must describe its estimation approach in the basis of preparation.

#### **Complaints relating to export services**

5.6.7 *Power and Water Corporation* must only report complaints relating to export services, where its complaints management system identifies complaints relating to export services. Complaints relating to over-voltage that are not specifically identified as relating to export services must not be included.

5.6.8 The complaints data must include complaints relating to excluded events defined in the AER's DRMG.

5.6.9 A complaint must be recorded even where it has been resolved.

#### **Complaints relating to overvoltage**

5.6.10 *Power and Water Corporation* must only report complaints relating to overvoltage, where its complaints management system identifies complaints relating to overvoltage.

5.6.11 *Power and Water Corporation* must report overvoltage where an inverter begins volt-watt curtailment. This is typically expected to occur at 253V.

5.6.12 The complaints data must include complaints relating to excluded events defined in the AER's DRMG.

5.6.13 A complaint must be recorded even where it has been resolved.

5.6.14 Complaints made by customers that are not *export customers* must be included.

#### **Average time to provide an offer**

5.6.15 Data requirements are identified by reference to table headings, row descriptors and column headings. They are represented as input cells - shaded green in the *data workbook 05 – Service performance*. *There are no further instructions.*

## 6 Workbook – Operating expenditure

### 6.1 Distribution business

#### Opex category

6.1.1 *Power and Water Corporation* must identify any category and report expenditure in that category where the expense in that category is more than five per cent of the total *standard control services operating expenditure*. Categories reported should be relevant to the Distribution Business service classification. The categories reported by Distribution Business will be the same categories that apply to the disaggregated services of Distribution Business, that is, Standard Control Services, Alternative Control Service, and Other Services. *Power and Water Corporation* must report debt raising expenditure as a separate category regardless of the amount.

6.1.2 Expenditure reported by *Power and Water Corporation* must include all profit margins or management fees paid directly or indirectly to *related party* contractors in the *reporting period*.

#### *Related party margins*

6.1.3 *Related party* margin expenditure reported by *Power and Water Corporation* must comprise only profit margins or management fees paid directly or indirectly to *related party* contractors in the *reporting period*.

#### Guaranteed service levels - payments

6.1.4 *Power and Water Corporation* must report only prescribed payments under the jurisdictional GSL scheme.

6.1.5 *Power and Water Corporation* must report all jurisdiction GSL scheme parameters which are relevant to it. The reported GSL scheme parameters must match those identified in *Data workbook 05 - service performance – Other service measures – instances where GSL not met*.

#### Demand management

6.1.6 Data requirements are identified by reference to table headings, row descriptors and column headings. They are represented as input cells - shaded green in the *data workbook 06 – Operating expenditure*. *There are no further instructions*.

### 6.2 Standard control

6.2.1 All information reported relating to standard control services must exclude operating expenditures associated with legacy metering services that have been classified as standard control services by the AER.

#### Opex category

6.2.2 Where expenditure in a category of expense is more than five per cent of the total *standard control services operating expenditure* *Power and Water Corporation* must identify the category and report the expenditure. *Power and Water Corporation* must report debt raising expenditure as a separate category regardless of the amount.



6.2.3 Expenditure reported by *Power and Water Corporation* must include any profit margins or management fees paid directly or indirectly to *related party* contractors in the *reporting period*.

#### *Related party margins*

6.2.4 *Related party* margin expenditure reported by *Power and Water Corporation* must comprise only profit margins or management fees paid directly or indirectly to a *related party* in the *reporting period*.

#### **Opex by purpose**

6.2.5 *Power and Water Corporation* must report expenditure against a prescribed purpose on a mutually exclusive and collectively exhaustive basis. Where expenditures could be reported against multiple purposes *Power and Water Corporation* must report the expenditure once – based on its primary purpose.

6.2.6 *Power and Water Corporation* must provide, in its *basis of preparation*, a reconciliation of the total operating expenditure by purpose with the operating expenditure recorded in its Audited Statutory Accounts.

#### **Vegetation management**

##### *Total vegetation management*

6.2.7 *Power and Water Corporation* must report vegetation management expenditure for all categories and zones as the total vegetation management expenditure for the *reporting period*.

6.2.8 *Power and Water Corporation* must report expenditure on inspections only where *Power and Water Corporation* inspects solely for the purpose of assessing vegetation. Inspection expenditure for inspections assessing both *Power and Water Corporation's* assets and vegetation should be reported as maintenance expenditure.

#### **Maintenance**

##### *Routine maintenance*

##### *Non-routine maintenance*

6.2.9 Data requirements are identified by reference to table headings, row descriptors and column headings. They are represented as input cells - shaded green in the *data workbook 06 – Operating expenditure*. *There are no further instructions*.

#### **Emergency response**

6.2.10 Data requirements are identified by reference to table headings, row descriptors and column headings. They are represented as input cells - shaded green in the *data workbook 06 – Operating expenditure*. *There are no further instructions*.

#### **Non-network**

##### *Information & communications technology*

6.2.11 Where *Power and Water Corporation* can report recurrent expenditure disaggregated by category it must do so. The categories reported are to be mutually exclusive and combine to report total recurrent expenditure.



- 6.2.12 Where *Power and Water Corporation* can report non-recurrent expenditures disaggregated by category it must do so. The categories reported are to be mutually exclusive and combine to report total non-recurrent expenditures.
- 6.2.13 *Power and Water Corporation* should use categories consistent with the AER's 2019 ICT expenditure review.
- 6.2.14 If *Power and Water Corporation* cannot report recurrent expenditures disaggregated by category, it must report total recurrent expenditure.
- 6.2.15 If *Power and Water Corporation* cannot report non-recurrent expenditures disaggregated by category, it must report total non-recurrent expenditure.

#### *Motor vehicles*

- 6.2.16 All Motor Vehicle Expenditure, irrespective of whether it is Network Motor Vehicle Expenditure or Non-network Motor Vehicle Expenditure must be recorded in the non-network regulatory template.

#### *Buildings and property expenditure*

#### *Other non-network expenditure*

- 6.2.17 *Power and Water Corporation* must report non-network operating expenditure as a direct cost, irrespective of whether such expenditure is also classified to corporate overheads, network overheads or other *operating expenditure* categories. To the extent this results in multiple reporting of expenditures, *Power and Water Corporation* must identify this in its *basis of preparation*, and the reconciliation report required under section 4.18 of this Notice.

#### **Labour/non-labour expenditure split**

- 6.2.18 *Power and Water Corporation* must not report expenditure for labour incurred under contracts for both goods and services as labour expenditure, other than contracts for the provision of labour (i.e. labour hire contracts).

#### **Economic benchmarking categories**

#### *Current opex categories and cost allocation approach*

- 6.2.19 *Power and Water Corporation* must report *operating expenditure* consistent with its statement in *Data workbook 09 – revenue and financial statements*. As a consequence, for years where the Cost Allocation Approach and *Audited statutory accounts* are consistent with those that applied in the most recent completed reporting Year, the total *operating expenditure* reported here must equal the total *operating expenditure* reported in *Data workbook 09 – Revenue and financial statements – income statement*.

#### *Current cost allocation approach*

- 6.2.20 The prescribed *operating expenditure* categories are not intended to be mutually exclusive or collectively exhaustive. This means reported totals of *operating expenditure* may be more or less than *Power and Water Corporation's* actual *operating expenditure*. Further, *operating expenditure* may be reported against more than one category.

6.2.21 Where *Power and Water Corporation* reports *operating expenditure* against more than one category, *Power and Water Corporation* must identify this in its *basis of preparation*, and in the reconciliation report required under section 4.18 of this Notice.

### **Input expenditure category**

6.2.22 Data requirements are identified by reference to table headings, row descriptors and column headings. They are represented as input cells - shaded green in the *data workbook 06 – Operating expenditure*. There are no further instructions.

## **6.3 Alternative Control**

### **Opex category**

6.3.1 Where expenditure in a category of expense is more than five per cent of the total *alternative control services operating expenditure* *Power and Water Corporation* must identify the category and report the expense.

6.3.2 The expenditure reported by *Power and Water Corporation* must include any profit margins or management fees paid directly or indirectly to *related party* contractors in the *reporting period*.

#### *Related party margins*

6.3.3 *Related party* margin expenditure reported by *Power and Water Corporation* must comprise only profit margins or management fees paid directly or indirectly to a *related party* in the *reporting period*.

### **Opex by purpose**

6.3.4 *Power and Water Corporation* must report expenditure against a prescribed purpose on a mutually exclusive and collectively exhaustive basis. Where expenditures could be reported against multiple purposes *Power and Water Corporation* must report the expenditure once – based on its primary purpose.

6.3.5 *Power and Water Corporation* must provide in its *basis of preparation*, a reconciliation of the total operating expenditure by purpose with the operating expenditure reported in *Data workbook 09 – Revenue and financial statements – income statement*.

### **Economic benchmarking categories**

#### *Current opex categories and cost allocation approach*

6.3.6 *Power and Water Corporation* must report *operating expenditure* consistent with its income statement in *Data workbook 09 – revenue and financial statements*. As a consequence, for years where the Cost Allocation Approach and *Audited statutory accounts* are consistent with those that applied in the reporting Year, the total *operating expenditure* reported here must equal the total *operating expenditure* reported in *Data workbook 09 – Revenue and financial statements – income statement*.

### **Metering activities**

6.3.7 The reported *metering services* data must reconcile with internal planning models used by *Power and Water Corporation*.

6.3.8 *Power and Water Corporation* must not report expenditures for metering services that have been classified as contestable by the AER.

- 6.3.9 *Power and Water Corporation* must report data only for non-contestable, regulated metering services, including such services performed by third parties on its behalf.
- 6.3.10 Where *Power and Water Corporation* can report expenditures for metering services disaggregated into *legacy metering* and *smart metering* services it must do so. These two categories of service are mutually exclusive and combine to report total metering expenditures.
- 6.3.11 If *Power and Water Corporation* cannot provide metering expenditures in the categories of *legacy metering* and *smart metering* services it must report total metering services expenditure.

#### *Meter replacement*

- 6.3.12 Where *Power and Water Corporation* can report expenditures for meter replacement disaggregated into whole meter replacement and component / software replacement it must do so. These two categories are mutually exclusive and combine to report total meter replacement expenditure.
- 6.3.13 If *Power and Water Corporation* cannot report meter replacement expenditure into whole meter replacement expenditure and component / software replacement expenditure it must report total meter replacement expenditure.

#### **Fee based services / Quoted services**

- 6.3.14 The reported fee-based and quoted services data must reconcile with internal planning models used by *Power and Water Corporation*.
- 6.3.15 *Power and Water Corporation* must report against all fee-based and quoted services identified in the annual tariff proposal of each *reporting period*.

## **6.4 Other services**

#### **Opex category**

- 6.4.1 Where expenditure in a category of expense is more than five per cent of the total *negotiated services operating expenditure* the *electricity distributor* must identify the category and report the expense.
- 6.4.2 The expenditure reported by the *electricity distributor* must include any profit margins or management fees paid directly or indirectly to *related party* contractors in the *reporting period*.

#### *Related party margins*

- 6.4.3 *Related party* margin expenditure reported by the *electricity distributor* must comprise only profit margins or management fees paid directly or indirectly to a *related party* in the *reporting period*.

## **6.5 Large projects**

#### **Large project expenditure**

- 6.5.1 Data requirements are identified by reference to table headings, row descriptors and column headings. They are represented as input cells - shaded green in the *data workbook 06 – Operating expenditure*. *There are no further instructions*.

## 6.6 Export services

### Opex for provision of export services

6.6.1 Data requirements are identified by reference to table headings, row descriptors and column headings. They are represented as input cells - shaded green in the *data workbook 06 – Operating expenditure*. *There are no further instructions.*

## 7 Workbook – Capital expenditure

7.1.1 *Power and Water Corporation* must report *capital expenditure* on an “as-incurred” basis.

7.1.2 *Power and Water Corporation* must provide in its *basis of preparation* a reconciliation of the total capital expenditure reported in *Data workbook 07 – capital expenditure* with capital expenditure reported in its *Data workbook 09 – revenue and financial statements*.

### 7.2 Distribution business

#### Demand management

7.2.1 *Power and Water Corporation* must report expenditures incurred in a *reporting period* on all projects submitted for approval by the AER.

7.2.2 *Power and Water Corporation* must identify in its *basis of preparation* projects submitted to the AER but not approved by the AER.

### 7.3 Standard control services

#### Capex by purpose

*Capex by purpose (including Type 1 and Type 2 capital contributions)*

7.3.1 *Power and Water Corporation* must report *capital expenditure* for each *capital expenditure purpose* and must include *capital expenditure* funded via *capital contributions* (i.e. the *capital contributions* must be included as a positive value).

7.3.2 The reported *capital expenditure purpose* categories must match the categories used in *Power and Water Corporation’s* regulatory proposal (set out in the Reset RIN response) for the *reporting period*.

7.3.3 *Power and Water Corporation* must include in reported *capital expenditure* any profit margins or management fees paid directly or indirectly to *related parties* in the *reporting period*.

#### *Related party margin*

7.3.4 *Related party margin expenditure* reported by *Power and Water Corporation* must comprise only profit margins or management fees paid directly or indirectly to a *related party* in a *reporting period*.

*Capex by purpose (including total capital contributions) - AER defined*

*Capital contributions by purpose – Type 1*

*Capital contributions by purpose – Type 2*

*Capital contributions by purpose – PWC undergrounding capex*

7.3.5 The *capital expenditure* reported for the prescribed purposes must be mutually exclusive and collectively exhaustive. Capital expenditure must be reported on an “as-incurred” basis.

7.3.6 *Power and Water Corporation* must provide in its *basis of preparation* a reconciliation of the total *capital expenditure* reported by purpose with the *capital expenditure* reported in *Power and Water Corporation's Data workbook 08 – asset base values, Standard control services, indicative regulatory asset base roll forward (within period)*.

### **Replacement expenditure**

*Poles / Staking of / staked wooden poles / Pole top structures / Overhead conductors / Underground cables / Service lines / Transformers / Switchgear / SCADA, network control and protection systems / Other business specified categories*

7.3.7 *Power and Water Corporation* must report data on asset replacement *capital expenditure* by asset class disaggregated into asset sub-categories.

7.3.8 Where *Power and Water Corporation* considers a prescribed asset class does not account for an asset on *Power and Water Corporation's* distribution network, *Power and Water Corporation* must report the asset in the class “Other by business specified category” and must describe the asset in its *basis of preparation*.

7.3.9 Where *Power and Water Corporation* considers a prescribed sub-category does not account for an asset on *Power and Water Corporation's* distribution network, *Power and Water Corporation* must report the asset as “other” under the appropriate asset class and must describe the asset in its *basis of preparation*.

7.3.10 Where *Power and Water Corporation* reports replacement *capital expenditure* associated with asset refurbishments/ life extensions, *Power and Water Corporation* must report the expenditure under the asset class “Other by business specified category” using an equivalent prescribed asset subcategory description followed by the word “refurbished”.

7.3.11 For each row descriptor added in the ‘Other by business specified categories’, *Power and Water Corporation* must report corresponding operational outputs and asset volumes, as per the requirements in Data workbook 02 – Operational outputs and 03 – Network metrics”.

### **Connections**

*Connections expenditure excluding capital contributions*

*Connections expenditure including capital contributions*

7.3.12 The reported connection services data must reconcile with internal planning models used by *Power and Water Corporation*.

7.3.13 *Power and Water Corporation* must report expenditure data as a gross amount and must not subtract customer contributions from expenditure data.

7.3.14 *Power and Water Corporation* must report data only for non-contestable, regulated connection services, including such services performed by third parties on its behalf.

7.3.15 *Power and Water Corporation* must report augmentation for connections relating to customer connection requests only. *Power and Water Corporation* must not double count augmentation work; it must be classified by primary purpose as either augmentation or connections works.

## **New Connections - Type 1 Capital Contributions**

7.3.16 The reported connection services data must reconcile with internal planning models used by *Power and Water Corporation*.

7.3.17 *Power and Water Corporation* must report data only for non-contestable, regulated connection services, including such services performed by third parties on its behalf.

### **Augmentation expenditure**

7.3.18 *Power and Water Corporation* must report all expenditure data on an ‘as incurred’ basis.

7.3.19 *Power and Water Corporation* must not include *augmentation* expenditure relating to *connections*.

### **Non-network**

#### *Information and communications technology*

7.3.20 *Power and Water Corporation* must include *non-network* expenditure relating to all information and communication technology for standard control services which may include information and communication technology expenditure for export services.

#### *Motor vehicles / Building and property expenditure / Other non-network expenditure*

7.3.21 *Power and Water Corporation* must report non-network capital expenditure as a direct cost, irrespective of whether that expenditure is also classified as corporate overheads, network overheads or other *capital expenditure* categories. To the extent this results in multiple reporting of expenditures, *Power and Water Corporation* must identify this in its *basis of preparation* and in the reconciliation report required under section 4.18 of this Notice.

7.3.22 When reporting ‘Non-network Other expenditure’, if *Power and Water Corporation* has incurred \$1 million or more (nominal) in *capital expenditure* over the last five regulatory years for a given type or class of asset (e.g. mobile cranes), *Power and Water Corporation* must report that item separately.

### **Labour/non-labour expenditure split**

7.3.23 *Power and Water Corporation* must not report labour used in the provision of contracts for both goods and services as labour expenditure, other than contracts for the provision of labour (i.e. labour hire contracts).

### **Capex by asset class**

#### *Expenditure by asset class / Movement in provisions allocated to as incurred capex*

7.3.24 *Power and Water Corporation* must report against each *asset class* specified in its current determination as listed in the *AER’s final decision post-tax revenue model*.

7.3.25 Where allocations are based on assumptions *Power and Water Corporation* must explain the allocation method in its *basis of preparation*.

7.3.26 *Power and Water Corporation* must explain in its *basis of preparation* the basis upon which it has reported *movements in capitalised provisions*.

7.3.27 Reported provisions are those that have been included in the associated *capital expenditure*.



7.3.28 *Power and Water Corporation* must report *capital expenditure* funded by *capital contributions* for each asset class and must include the *capital contributions* as a positive value where relevant.

*Immediate expensing of capex (as incurred)*

7.3.29 *Power and Water Corporation* must report *immediate expensing capital expenditure* against each *asset class* specified in its current determination as listed in the AER's final decision *post-tax revenue model*.

7.3.30 Where allocations are based on assumptions *Power and Water Corporation* must explain the allocation method in its *basis of preparation*.

7.3.31 The reported values of *Power and Water Corporation's immediate expensing capital expenditure by asset class* incurred within the *reporting period* must be consistent with the value of *immediate expensing capital expenditure* that has been or will be included in the income tax returns lodged by *Power and Water Corporation*, whether Federal or NTER, for the *reporting period*. Where, as a result of the ATO's decision-making process these values change, *Power and Water Corporation* must report the updated values to the AER through a RIN resubmission.

*Disposals by asset class*

7.3.32 *Power and Water Corporation* must report *disposal by asset class* against each *asset class* specified in its current determination as listed in the AER's final decision *post-tax revenue model*.

**Capital contributions by asset class**

*Type 1 capital contribution by asset class*

7.3.33 *Power and Water Corporation* must report each *Type 1 capital contribution* against each *asset class* specified in its current determination as listed in the AER's final decision *post-tax revenue model*.

*Type 2 capital contribution by asset class*

7.3.34 Data requirements are identified by reference to table headings, row descriptors and column headings. They are represented as input cells - shaded green in the *data workbook 07 – Capital expenditure*. *There are no further instructions*.

## 7.4 Alternative control

**Capex by purpose (including capital contributions)**

7.4.1 *Power and Water Corporation* must report *capital expenditure* for each *capital expenditure purpose* including expenditure funded via *capital contributions* and must include *capital contributions* as a positive value where relevant.

7.4.2 The reported *capital expenditure purpose* categories must match the categories used by *Power and Water Corporation* in its regulatory proposal (set out in the Reset RIN response) for the *reporting period*.

7.4.3 *Power and Water Corporation* must include any profit margins or management fees paid directly or indirectly to *related party* for the *reporting period*.



### *Related party margin*

7.4.4 Reported '*related party margin expenditure*' must comprise only profit margins or management fees paid directly or indirectly to *related parties* for the *reporting period*.

### **Overheads expenditure**

7.4.5 *Power and Water Corporation* must report Overheads expenditure allocated to *capital expenditure* disaggregated into alternative control services.

### **Capex by asset class**

#### *Capital contributions by type*

7.4.6 Where reported gross *capital expenditure* by purpose includes capital contributions, *Power and Water Corporation* must report type 1 and type 2 capital contributions included in amount.

#### *Metering activities*

7.4.7 The reported metering services data must reconcile with internal planning models used by *Power and Water Corporation*.

7.4.8 *Power and Water Corporation* must report data only for non-contestable, regulated metering services, including such services performed by third parties on its behalf.

7.4.9 *Power and Water Corporation* must not report data for metering services classified as contestable by the AER.

#### *Meter replacement*

7.4.10 Where *Power and Water Corporation* can report expenditures for meter replacement disaggregated into whole meter replacement and component / software replacement it must do so. These two categories are mutually exclusive and combine to report total meter replacement expenditure.

7.4.11 If *Power and Water Corporation* cannot report meter replacement expenditure into whole meter replacement expenditure and component / software replacement expenditure it must report total meter replacement expenditure.

#### *Fee based services / Quoted services*

7.4.12 The reported fee-based and quoted services data must reconcile with internal planning models used by *Power and Water Corporation*.

7.4.13 *Power and Water Corporation* must report fee-based and quoted services data as listed in the annual tariff proposal of each relevant year.

## **7.5 Other services**

### **Capex by purpose**

7.5.1 Where expenditure in a category of expense is more than five per cent of the total *negotiated services capital expenditure* the *electricity distributor* must identify the category and report the expense.

7.5.2 The expenditure reported by the *electricity distributor* must include any profit margins or management fees paid directly or indirectly to *related party* contractors in the *reporting period*.

### *Related party margins*

7.5.3 *Related party* margin expenditure reported by the *electricity distributor* must comprise only profit margins or management fees paid directly or indirectly to a *related party* in the *reporting period*.

## **7.6 Large projects**

### **Large project expenditure**

7.6.1 Data requirements are identified by reference to table headings, row descriptors and column headings. They are represented as input cells - shaded green in the *data workbook 07 – Capital expenditure*. *There are no further instructions*.

## **7.7 Export services**

7.7.1 Data requirements are identified by reference to table headings, row descriptors and column headings. They are represented as input cells - shaded green in the *data workbook 07 – Capital expenditure*. *There are no further instructions*.

## 8 Workbook – Asset base values

### 8.1 Standard control

#### Asset base values

##### *Benchmarking asset base*

8.1.1 *Power and Water Corporation* must report benchmarking asset base values in accordance with the standard approach and the Assets (RAB) Financial Reporting Framework set out in sections 8.1.2 – 8.1.6.

#### 8.1.2 Standard approach

- a) Direct attribution to the AER's economic benchmarking RAB Asset classes
  - Where RAB Financial Information can be directly allocated to the RAB Assets (as per the definitions in Data Category 08: Asset base values) it should be directly allocated to those RAB Assets. Financial Information can be directly allocated to RAB Asset class where that Financial Information relates to assets that wholly fall within the definition of that RAB Asset class.
- b) Where direct attribution to the economic benchmarking asset classes is not possible
  - RAB Financial Information that cannot be directly allocated to a single RAB Asset category should be allocated in accordance with the RAB allocation approach in section 8.1.3.

#### 8.1.3 RAB allocation approach

- a) RAB Financial Information that can be directly allocated to a group of RAB Assets, but cannot be directly allocated to an individual RAB Asset category, should be directly allocated to that group of RAB Assets, and then allocated across the individual categories in the group in accordance with this RAB allocation approach.
- b) To allocate RAB Financial Information across RAB Assets, the RAB Financial Information must be allocated in direct proportion to the relevant RAB Asset's share of the total estimated depreciated replacement cost for that year (estimated in accordance with sections 8.1.3 (c) and (d)).
  - In the event that the sum of the estimated disaggregated asset values for the RAB Assets for each year that are formed using sections 8.1.3(c) and (d) do not equal the total value of the RAB for that year, the disaggregated RAB series must be calculated by multiplying the total value of the RAB by each RAB Asset's share of the sum of all asset values for that year formed using section 8.1.3 (c) and (d).
- c) *Power and Water Corporation* must estimate the depreciated replacement cost of their assets for each RAB Asset for which RAB Financial Information cannot be directly allocated. This estimation must be made for the most recent year for which the RAB Financial Information cannot be directly allocated.
  - This depreciated replacement cost estimate should be based on the data requirements for length and capacity data provided for lines, cables and

transformers as outlined in Data Category 03: Network Metrics (for the relevant RAB Asset category); unit rate replacement costs applicable to *Power and Water Corporation* for each of the physical asset categories and the weighted average asset age relative to the corresponding weighted average service life.

- Estimation of the depreciated replacement costs can be undertaken for aggregate asset categories using best endeavours rather than a very detailed exercise. All assumptions, however, should be made clear.
  - Book values may be used for Easements, other long-life assets and other short life assets.
- d) To estimate the depreciated replacement cost for years prior to the estimated depreciated replacement cost developed under section 8.1.3(c), the depreciated replacement cost estimate developed under section 8.1.3 (c) must be rolled back to 2006 using disaggregated capex data and depreciation in accordance with the RAB Framework.
- 8.1.4 The allocated values for the 2013 Regulatory Year are to be used as the basis for rolling forward the RAB for Regulatory Years subsequent to the 2013 Regulatory Year.
- 8.1.5 Optional additional approach
- a) Where *electricity distributor* believes it has sufficient information to provide a consistent RAB disaggregation into the categories in the 'Data Workbook 08: Asset base values' that better reflects the values of those assets in addition to the specified standard approach, this must be provided in a separate Excel worksheet, together with details of the calculations undertaken. For clarity, *Power and Water Corporation* must still provide disaggregated RAB values using the standard approach if it chooses to also provide optional additional approach values.
  - b) The optional approach must be prepared in accordance with Assets (RAB) Financial Reporting Framework. Further, the *Power and Water Corporation* must have the optional approach audited.
- 8.1.6 Benchmarking asset base financial information must reconcile with:
- For years where the *AER* has decided on values for the RAB, the values in that decision, unless that decision incorporates forecasts (for example, additions for the last year of the previous regulatory period).
  - For years where the *AER* has decided on values for the RAB that incorporates forecasts, the forecast values must be replaced with actual values where possible. Actual values must reconcile with amounts reported in the *Indicative asset base roll forward* information; or
  - For years where the *AER* has not decided on values for the RAB, RAB values must be prepared in accordance with the Assets (RAB) Financial Reporting Framework. In this circumstance, actual additions (recognised in the RAB) and disposals must reconcile with amounts reported in the *Indicative asset base roll forward* information.

8.1.7 Standard Control Services benchmarking asset base values must reconcile with:

- For years where the AER has decided on values for the RAB, the RAB values in that decision, unless that decision incorporates forecasts (for example, additions for the last year of the previous regulatory period).
- For years where the AER has decided on values for the RAB that incorporates forecasts, the forecast values should be replaced with actual values where possible. Actual values must reconcile to amounts reported in the *Indicative asset base roll forward* information; or
- For years where the AER has not decided on values for the RAB, RAB values must be prepared in accordance with the Assets (RAB) Financial Reporting Framework. In this circumstance, actual additions (recognised in the RAB) and disposals must reconcile to amounts reported in the *Indicative asset base roll forward* information.

*Indicative total regulatory asset base roll forward (within period)*

*Indicative total tax asset base roll forward (within period)*

8.1.8 *Power and Water Corporation* must report the required data in accordance with the AER's Roll Forward Model and the requirements and definitions in *Data workbook 08 - Asset base values*.

### **SCS Benchmarking asset base by asset group**

8.1.9 *Power and Water Corporation* must disaggregate benchmarking asset base data consistent with the instructions for the benchmarking asset base in sections 8.1.2 to 8.1.8, and the definitions of each asset group.

## **8.2 Alternative control**

### **Asset base values**

#### *Benchmarking asset base*

8.2.1 *Power and Water Corporation* must report benchmarking asset base values in accordance with the standard approach and the Assets (RAB) Financial Reporting Framework set out in sections 8.1.2 to 8.1.6.

8.2.2 Alternative Control Services benchmarking asset base financial information must reconcile with:

- For years where the AER has decided on values for a RAB for assets that report alternative control services, the RAB values in that decision, unless that decision incorporates forecasts (for example, additions for the last year of the previous regulatory period).
- For years where the AER has decided on values for a RAB for assets that report alternative control services that incorporates forecasts, the forecast values should be replaced with actual values where possible. Actual values must reconcile to amounts reported in the *Indicative asset base roll forward* information; or
- For years where the AER has not decided on values for a RAB for assets that report alternative control services, RAB values must be prepared in accordance with the Assets (RAB) Financial Reporting Framework. In this circumstance,

actual additions (recognised in the RAB) and disposals must reconcile to amounts reported in the *Indicative asset base roll forward* information.

*Indicative metering asset base roll forward (within period)*

8.2.3 *Power and Water Corporation* must report the required information in accordance with the AER's Roll Forward Model, and the definitions in *Data workbook 08 - Asset base values*.

### **ACS Benchmarking asset base by asset group**

8.2.4 *Power and Water Corporation* must report the disaggregated benchmarking asset base consistent with the instructions for the benchmarking asset base in sections 8.2.1 to 8.2.2, and the definitions of each asset group.

## **8.3 Network services**

### **Asset base values**

#### *Benchmarking asset base*

8.3.1 *Power and Water Corporation* must report benchmarking asset base values in accordance with the standard approach and the Assets (RAB) Financial Reporting Framework set out in sections 8.1.2 to 8.1.6.

8.3.2 Network Services benchmarking asset base financial information must reconcile with:

- For years where the AER has decided on values for a RAB for assets that report network services, the values in that decision, unless that decision incorporates forecasts (for example, additions for the last year of the previous regulatory period).
- For years where the AER has decided on values for a RAB for assets that report network services that incorporates forecasts, the forecast values should be replaced with actual values where possible. Actual values must reconcile to amounts reported for standard control services or alternative control services; or
- For years where the AER has not decided on values for a RAB for assets that report network services, RAB values must be prepared in accordance with the Assets (RAB) Financial Reporting Framework. In this circumstance, actual additions (recognised in the RAB) and disposals must reconcile to amounts reported for standard control services or alternative control services.

### **Network services benchmarking asset base by asset group**

8.3.3 *Power and Water Corporation* must report disaggregated benchmarking asset base values consistent with the instructions for the benchmarking asset base in sections 8.3.1 to 8.3.2 and the definitions of each asset group.

## 9 Workbook – Revenue and financial statements

### 9.1 Distribution business

#### Income statement

#### Jurisdictional scheme payments

#### Demand management - relevant net benefit

9.1.1 The data requirements are set out in *Data workbook 09 – Revenue and financial statements*, with additional context provided by the general instructions in this document. There are no additional instructions.

### 9.2 Standard control

9.2.1 All information reported relating to standard control services must exclude revenues and expenditures associated with legacy metering services that have been classified as standard control services by the AER.

#### Income statement

9.2.2 The data requirements are set out in *Data workbook 09 – Revenue and financial statements*, with additional context provided by the general instructions in this document. There are no additional instructions.

#### Profitability – Tax data

#### Ownership structure

9.2.3 *Power and Water Corporation* must identify its ownership structure as a:

- a) Private sector entity which is taxed as a company; or
- b) NTER entity; or
- c) government owned entity not reporting under the NTER; or
- d) flow-through entity.

9.2.4 *Power and Water Corporation* must identify itself as a flow-through entity where *Power and Water Corporation* is a flow-through entity in which an NTER entity or a government entity not reporting under the NTER holds an interest in *Power and Water Corporation's* assets.

Note: If the ownership structure of *Power and Water Corporation* has changed during the *reporting period* (due to a privatisation, acquisition or restructure), *Power and Water Corporation* should identify the structure that was applicable for the majority of the reporting period. *Power and Water Corporation* must note the change of ownership structure in its *basis of preparation*.

9.2.5 Where *Power and Water Corporation* is a flow-through entity for the *reporting period*, *Power and Water Corporation* must report a blended tax rate.

Note: To determine the appropriate tax rate for *Power and Water Corporation* as a flow-through entity, we request the determination of a blended tax rate that represents the applicable Australian income tax rates for the initial recipients of *Power and Water Corporation's* profits. The blended tax rate calculation must not include any foreign taxes which may apply to distributions received by *Power and Water Corporation's*



investors (e.g. dividends, return on tax equity instruments, partnership distributions and trust distributions).

9.2.6 *Power and Water Corporation's* tax rate must be determined by *Power and Water Corporation's* ownership structure. The applicable tax rate/s are:

- a) for privately owned corporate structures – 30%;
- b) for NTER entities – 0% and 30%;
- c) for government entities not reporting under the NTER – 0% and 30%;
- d) for flow-through entities – the blended tax rate reported in section 9.2.6(b);
- e) for flow-through entities in which a NTER entity or a government entity not reporting under the NTER hold an interest in the network service provider's assets – the blended tax rate calculated in accordance with section 9.2.4.

#### *Tax related information*

9.2.7 *Power and Water Corporation* must report the tax depreciation of *Power and Water Corporation's* TAB. This must reconcile with:

- a) the applicable final decision that the AER has made in relation to the historical tax depreciation of *Power and Water Corporation's* TAB; or
- b) where the AER has not made a final decision in relation to the historical tax depreciation of *Power and Water Corporation's* TAB:
  - i. any historical depreciation of *Power and Water Corporation's* TAB provided by the *Power and Water Corporation* in a revised regulatory proposal for a regulatory determination; or if not available
  - ii. any draft decision that the AER has made in relation to the historical tax depreciation of *Power and Water Corporation's* TAB; or if not available
  - iii. any historical depreciation of *Power and Water Corporation's* TAB provided by *Power and Water Corporation* in an initial regulatory proposal for a regulatory determination; or if not available
  - iv. an estimate of *Power and Water Corporation's* actual TAB depreciation based on a TAB from the most recent applicable final decision PTRM updated for actual *capital expenditure* and CPI.

#### *Taxable income adjustments*

9.2.8 *Power and Water Corporation* must report any cumulative carried forward tax losses from the provision of core regulated services from the prior *reporting period*.

9.2.9 Where *Power and Water Corporation* has recognised any cumulative carried forward tax losses from the provision of core regulated services from the prior *reporting period* it must explain in its *basis of preparation* the factors that have resulted in the generation of the carried forward tax losses.

9.2.10 *Power and Water Corporation* must report the total taxable revenue and/or income for customer contributions and/or gifted assets.

9.2.11 *Power and Water Corporation* must report any permanent differences from disallowed interest expenditure – these are self-assessed. This is interest expenditure, that is non-deductible for tax purposes pursuant to the Income Tax Assessment Act 1997.

9.2.12 *Power and Water Corporation* must report any permanent differences from adjustments to prior year returns. This can occur when:

- a) a prior year's income tax assessments for the network service provider are amended following dispute with the Australian Tax Office or a change in legislation (such as court judgement);
- b) the revenues or expenditure relating to the amendment is within the regulatory ring-fence; and
- c) the adjustment resulting from the amendment is permanent in nature.

*Interest expense (Debt and equity)*

9.2.13 *Power and Water Corporation* must report the interest-bearing liabilities held by *Power and Water Corporation* at the beginning of the *reporting period* and used to fund the operation of, and investment into, its core regulated services;

9.2.14 *Power and Water Corporation* must report the total interest expense incurred during the *reporting period*. *Power and Water Corporation* must calculate its actual interest expenditure arising from interest bearing liabilities used to fund the operation of, and investment into its core regulated services.

9.2.15 *Power and Water Corporation* must report the interest expense paid to a *related party* of *Power and Water Corporation* during the *reporting period*.

**Disaggregated Revenue**

9.2.16 *Power and Water Corporation* must report revenues against the categories prescribed in the *data workbooks*.

9.2.17 *Power and Water Corporation* must report revenues by chargeable quantity and by customer class. The reported revenues by chargeable quantity must equal the total of revenues by customer class. *Power and Water Corporation* must also report separately revenues received or deducted as a result of incentive schemes.

9.2.18 *Power and Water Corporation* must report '0' values against categories that have no effect on the revenues of *Power and Water Corporation*. For instance, if *Power and Water Corporation* does not use a shoulder period for Energy Delivery charges then the amount of revenue reported must be '0'.

9.2.19 The reported revenues must reconcile with and be in accordance with the requirements of revenues reported in the Income statement.

*Revenue grouping by chargeable quantity*

9.2.20 *Power and Water Corporation* must report revenues against the chargeable quantity that most closely reflects the basis upon which the revenue was charged by *Power and Water Corporation* to customers.

9.2.21 Where *Power and Water Corporation* cannot report revenue against a prescribed category it must report that revenue against 'Revenue from other Sources' (EB RIN reference: DREV0113).

### *Revenue grouping by customer type or class*

9.2.22 *Power and Water Corporation* must report revenues against the customer types that most closely reflect the customers from which *Power and Water Corporation* received its revenue.

9.2.23 Where *Power and Water Corporation* cannot report revenue against the prescribed customer types it must report that revenue against ‘Revenue from other Customers’ (EB RIN reference: DREV0206).

### *Revenue rewards and penalties – Incentive schemes*

9.2.24 *Power and Water Corporation* must report the penalties or rewards from incentive schemes. *Power and Water Corporation* must report any penalties or rewards from the schemes applied by previous jurisdictional regulators that are equivalent to the service target performance incentive scheme (STPIS) or efficiency benefit sharing scheme (EBSS) against ‘STPIS’ or ‘EBSS’ as appropriate.

9.2.25 Revenues reported must reflect the effect on revenues of incentive schemes in the year that the penalty or reward is applied (as opposed to when it was earned which depending on the scheme may be in earlier years). For instance, if *Power and Water Corporation* is rewarded extra revenues for performance in 2019 and gains these revenues in 2021 these revenues must be reported in the 2021 year only.

## **9.3 Alternative control**

### **Income statement**

9.3.1 The data requirements are set out in *Data workbook 09 – Revenue and financial statements*, with additional context provided by the general instructions in this document. There are no additional instructions.

### **Revenue grouping by chargeable quantity**

9.3.2 *Power and Water Corporation* must report revenues against the chargeable quantity that most closely reflects the basis upon which the revenue was charged by *Power and Water Corporation* to customers. Reported revenues are to be mutually exclusive, and should reconcile to total revenue reported in the income statement.

9.3.3 Where *Power and Water Corporation* cannot report revenue against a prescribed it must report that revenue against ‘Revenue from other Sources’ (EB RIN reference: DREV0113).

### **Revenue grouping by customer type or class**

9.3.4 *Power and Water Corporation* must report revenues against the customer types that most closely reflect the customers from which *Power and Water Corporation* received its revenue.

9.3.5 Where *Power and Water Corporation* cannot report revenue against the prescribed customer types it must report that revenue against ‘other Customers’ (EB RIN reference: DREV0206).

## 9.4 Other services

### Income statement

### Overheads expenditure

### Unregulated service revenue earned with shared assets

9.4.1 The data requirements are set out in *Data workbook 09 – Revenue and financial statements*, with additional context provided by the general instructions in this document. There are no additional instructions.

## 9.5 Provisions

9.5.1 *Power and Water Corporation* must report total provisions for Standard Control Services in accordance with the requirements of the Cost Allocation Approach and the Regulatory Accounting Statements that were in effect for the *reporting period*.

9.5.2 *Power and Water Corporation* must report data for each of its individual provisions. A provision is an account which records a specific present liability of an entity to another entity. Examples of provision accounts include employee entitlements, doubtful debts and uninsured losses.

9.5.3 *Power and Water Corporation* must report provisions for the *reporting period* in accordance with the principles and policies of the Annual Reporting Requirements, and apply the following presentation standards:

- a) if the opening balance has a credit balance and represents a liability associated with the provision, it should be reported as a positive number
- b) if the opening balance has a debit balance and represents a 'negative' liability associated with the provision it should be reported as a negative number
- c) a movement in provisions that increases the liability should be reported as a positive number
- d) a movement in provisions that decreases the liability should be reported as a negative number.

## 10 Workbook – Prices

### 10.1 Connections

#### Connections

- 10.1.1 *Power and Water Corporation* must report connection services data that reconciles to internal planning models used by *Power and Water Corporation*.
- 10.1.2 *Power and Water Corporation* is not required to disaggregate expenditure for connection services into standard or alternative control services.
- 10.1.3 *Power and Water Corporation* is not required to disaggregate expenditure for connection services into either *capital expenditure* or *operating expenditure*.
- 10.1.4 *Power and Water Corporation* must report expenditure data as a gross amount and must not subtract customer contributions from expenditure data.
- 10.1.5 *Power and Water Corporation* must report data only for non-contestable, regulated connection services, including such services performed by third parties on its behalf.

## 11 Workbook – SCS Legacy meters

### 11.1 Operating expenditure

#### *Operating expenditure*

11.1.1 Where expenditure in a category of expense is more than five per cent of the total *standard control services – legacy metering operating expenditure Power and Water Corporation* must identify the category and report the expenditure. *Power and Water Corporation* must report debt raising expenditure as a separate category regardless of the amount.

11.1.2 Expenditure reported by *Power and Water Corporation* must include any profit margins or management fees paid directly or indirectly to *related party* contractors in the *reporting period*.

#### *Related party margins*

11.1.3 *Related party* margin expenditure reported by *Power and Water Corporation* must comprise only profit margins or management fees paid directly or indirectly to a *related party* in the *reporting period*.

#### *Maintenance, Labour / non-labour expenditure split, Overheads expenditure*

11.1.4 Data requirements are identified by reference to table headings, row descriptors and column headings. They are represented as input cells - shaded green in the *data workbook 11 – SCS Legacy meters*. *There are no further instructions*.

### 11.2 Asset base values

#### *Indicative total regulatory asset base roll forward (within period) – legacy meter regulatory asset base*

#### *Indicative total tax asset base roll forward (within period) – legacy meter tax asset base*

11.2.1 Data requirements are identified by reference to table headings, row descriptors and column headings. They are represented as input cells - shaded green in the *data workbook 11 – SCS Legacy meters*. *There are no further instructions*.

### 11.3 Revenues

#### *Income statement*

11.3.1 Data requirements are identified by reference to table headings, row descriptors and column headings. They are represented as input cells - shaded green in the *data workbook 11 – SCS Legacy meters*. *There are no further instructions*.

#### *Disaggregated revenue*

11.3.2 *Power and Water Corporation* must report revenues against the customer types that most closely reflect the customers from which *Power and Water Corporation* received its revenue.

11.3.3 Where *Power and Water Corporation* cannot report revenue against the prescribed customer types it must report that revenue against 'Revenue from other Customers'.