

2018 System Control Charges Review

Issues Paper:

Submissions due by 11 January 2019

Introduction

Power and Water Corporation (PWC) holds a System Control Licence, granted by the Utilities Commission (the Commission) in accordance with Part 3 of the *Electricity Reform Act* (the Act).

Section 39 of the Act provides that a system controller is entitled to impose and recover charges relating to the operations of system control (1), with the charges to be applied to be approved by the Utilities Commission (2).

PWC has made a submission to the Utilities Commission (the Commission) under section 39(1) of the Act proposing an increase to the system control charge, from the current \$0.001 per kWh to \$0.0057 per kWh, from 1 July 2019, and an annual review of the charge.

This paper provides an opportunity for stakeholders to provide the Commission with feedback on PWC's proposal.

About the Utilities Commission

The Commission is an independent statutory body established by the *Utilities Commission Act* with defined roles and functions for economic regulation in the electricity, water and sewerage industries and declared ports in the Northern Territory.

The Commission seeks to protect the long-term interests of consumers of services provided by regulated industries with respect to price, reliability and quality.

The Commission seeks to ensure consumer requirements are met by enhancing the economic efficiency of regulated industries through promoting competition, fair and efficient market conduct and effective independent regulation.

The Commission has functions under various Acts (and associated regulations) including the Utilities Commission Act, Electricity Reform Act, Water Supply and Sewerage Services Act and the Ports Management Act.

Submissions

This Issues Paper identifies topics that should be considered as part of the review of the system control charge and seeks feedback from all stakeholders. All interested parties are invited to make submissions on the Issues Paper by **11 January 2019**.

In the interest of transparency, the Commission strongly encourages all stakeholders to make their submissions publicly available, and to keep any confidential information to a minimum. Confidential information may include:

- information that could affect the competitive position of an entity or other person; or
- information that is commercially sensitive for some other reason.

Submissions must clearly specify the document (or part of it) that contains confidential information. A version of the submission suitable for publication (that is, with any confidential information removed) should also be submitted.

To facilitate publication, submissions should be provided electronically by email utilities.commission@nt.gov.au in Abode Acrobat or Microsoft Word format.

Any questions regarding this Issues Paper or the review should be directed to the Utilities Commission by telephone (08) 8999 5480 or email utilities.commission@nt.gov.au.

Timetable

The essential dates for the review of PWC's proposed system control charge are as follows:

Stage	Time	
Issues Paper released	November 2018	
Public consultation	November – January 2018	
Draft decision released	March 2019	
Public consultation	March 2019	
Final decision	April 2019	
Commencement of revised charge	1 July 2019	

Once completed, the Commission's final decision on the system control charge will be made available on the Commission's website www.utilicom.nt.gov.au and published on PWC's website.

Table of Contents

Introduction	2
About the Utilities Commission	2
Submissions	2
Timetable	3
Table of Contents	4
Glossary	5
Chapter 1: System Control and Market Operator	6
Background	6
Legislative requirements	6
PWC system control charge proposal	7
Chapter 2: System Control regulated services	8
System Control services	8
Market Operator services	8
Service Level Agreement	9
Chapter 3: Costs to provide regulated services	10
System Control and Market Operator costs	10
Cost allocation	11
Labour costs	11
New Administrative and Control Centre costs	11
Demand assumptions	12
Chapter 4: Excluded costs	13
Northern Territory Electricity Market consultant costs	13
Other exclusions	13
Chapter 5: Financial impact on stakeholders	14
Power and Water Corporation	14
Electricity retailers	14
Territory Generation	14
Northern Territory Government	15
Electricity consumers (small and medium)	15
Electricity consumers (large)	15
Chapter 6: Application of the system control charge	16
Alternative options to PWC's proposed system control charge	16
Price and revenue control mechanisms	16
Chapter 7: Other matters	18
Timing for commencement of revised charge	18
Review time period	18
Chapter 8: Appendices	19
Appendix A: Questions for stakeholders	19

Glossary

Term Definition

Act Electricity Reform Act

AER Australian Energy Regulator

AEMO Australian Energy Market Operator

Commission The Utilities Commission of the Northern Territory

CSO Community Service Obligation

FRC Full Retail Contestability

I-NTEM Interim Northern Territory Electricity Market

KPI Key Performance Indicator

kWh Kilowatt hour MWh Megawatt hour

NTEM Northern Territory Electricity Market

PWC Power and Water Corporation

Regulations Electricity Reform (Administration) Regulations

SCTC System Control Technical Code

SLA Service Level Agreement

TGen Territory Generation

UC Act Utilities Commission Act

Chapter 1: System Control and Market Operator

Background

Power and Water Corporation (PWC) holds a System Control Licence to conduct system control and market operator functions. An independently operated business unit within PWC, known as System Control and Market Operator provides these regulated services, as well as other services.

For the purposes of this Issues Paper, a reference to System Control and Market Operator is a reference to System Controller in accordance with its licence.

Currently PWC charges retailers for System Control's services in accordance with the current system control charge, which was approved by the Utilities Commission (the Commission) in 2000.

There has been significant change in the number and nature of System Control's functions and the cost of undertaking these functions since 2000.

Legislative requirements

The Commission is an independent statutory body established by the *Utilities Commission Act* (UC Act).

Section 6(1) of the UC Act provides the Commission with functions, including licensing under relevant industry regulation Acts and regulating prices charged by government and other businesses for providing certain monopoly services.

PWC, as the licensed system controller, carries out system control functions in accordance with section 38 of the Act and the System Control Technical Code (SCTC).

Regulation 3F of the Electricity Reform (Administration) Regulations (the Regulations) provides that for the purposes of the Act, the System Control Licence is to be a licence authorising the system controller to operate a wholesale market in relation to the Darwin-Katherine power system.

Regulation 5A(1) of the Regulations provides that the SCTC may make provision for operating protocols, system security and dispatch, disconnection and any matter relevant to the reliability, safety or security of the system or control of the operation of the system. Regulation 5A(2) provides that a code prepared by PWC for the Darwin-Katherine power system (the SCTC) may also make provision for the operation of a wholesale market in relation to that system.

Under section 39(1) of the Act, a system controller is entitled to impose and recover charges relating to the operations of system control. Section 39(2) of the Act states that the schedule of charges to be applied for the purpose of 39(1) is to be approved by the Utilities Commission.

While Section 39 of the Act provides the Commission with broad discretion on the approval process for system control charges, the Commission is cognisant of, and will accordingly have regard to, the objects of the Act as set out in section 3. These include to promote efficiency and competition in the electricity supply industry, to facilitate the maintenance of a financially viable electricity supply industry and to protect the interest of consumers of electricity.

Similarly, pursuant to section 6(2) of the UC Act, in performing its functions, the Commission must have regard to the need to, among other things, prevent misuse of monopoly power, to promote economic efficiency, to ensure consumers benefit from competition and efficiency and to facilitate maintenance of the financial viability of regulated industries.

PWC system control charge proposal

PWC states that the current system control charge of \$0.001 per kWh provides revenue of approximately \$1.8 million per annum, and is not sufficient to meet its actual operating costs for providing system control and market operator functions, with the funding shortfall estimated by PWC at approximately \$7 million in 2017-18.

Accordingly, PWC has made a submission to the Commission under section 39(2) of the Act proposing an increase to the system control charge, from the current \$0.001 per kWh to \$0.0057 per kWh, from 1 July 2019, and an annual review of the charge.

PWC states that its proposal seeks to ensure the financial sustainability of System Control and Market Operator from 1 July 2019, subject to delivering cost effective services.

Chapter 2: System Control regulated services

System Control provides a combination of regulated and unregulated system control and market operator services. The focus of the Commission's review is on the regulated services provided in accordance with PWC's System Control obligations under the Act, PWC's System Control Licence, the SCTC and other associated instruments.

Accordingly, the Commission will be seeking to understand on what basis services have been identified as regulated services, with associated efficient costs factored into PWC's proposed increased system control charge.

This Chapter discusses System Control and Market Operator regulated functions, with further detail by activity (as identified by PWC) on page 26 of its submission). Further, information is also provided below on services that System Control has been providing to Territory Generation (TGen) through a transitional Service Level Agreement (SLA).

System Control services

PWC, as the licensed system controller, is required to carry out system control functions in accordance with section 38 of the Act and the SCTC. These functions include matters that relate to monitoring and controlling the operation of the power system, to ensure it operates reliably, safely and securely, including preparation of the SCTC and issuing directions to electricity entities as appropriate.

Regulation 5A(1) of the Regulations provides that the SCTC may make provision for operating protocols, system security and dispatch, disconnection and any matter relevant to the reliability, safety or security of the system or control of the operation of the system.

PWC states that in addition to regulated services, System Control's control centre provides unregulated services, leading to synergies and benefits for both regulated and unregulated functions.

While the Commission acknowledges that this approach provides for efficiencies, it is important that the costs for unregulated services are recovered through charges outside of the regulated system control charge.

Market Operator services

In 2015, as part of the Northern Territory Government's electricity market reform program, PWC, as the licensed system controller, was allocated market operator functions. PWC has been operating the interim Northern Territory Electricity Market (I-NTEM) since 27 May 2015 in the Darwin-Katherine power system.

The SCTC provides the framework for I-NTEM operations. Attachment 6 of the SCTC sets out the duties of the Market Operator. These include:

- administering the market participant registration process
- managing the electricity market settlements arrangements that involve the calculation of virtual charges and virtual payments, provision of virtual invoices and credit notes
- calculation of ancillary services financial transactions and the issue of associated statements
- calculation of financial transactions for out of balance energy and the issue of associated statements

- daily publication of the market price, pre-dispatch schedule, actual dispatch targets, actual constraints and total system demand
- preparing and publishing plans, specifications and designs for market operation processes and systems necessary for the efficient operation of I-NTEM
- preparing and publishing procedures and guidelines where appropriate necessary for the operation of I-NTEM
- consultation with stakeholders prior to publication of documents.

PWC states that staff allocated to its wholesale market service team undertake market operator functions, Full Retail Contestability (FRC) functions and non-regulated functions.

Given the FRC functions are undertaken on behalf of PWC Networks and the unregulated services are provided at the request of relevant electricity entities, it is appropriate that these costs be excluded from the system control charge, noting FRC obligations are specified in the Electricity Retail Supply Code, which is currently under review by the Commission.

Further it is important to note that market operator functions are limited to the Darwin-Katherine system with no indication from the Territory government that a wholesale market will be implemented in Alice Springs or Tennant Creek.

Do the system control and market operator activities identified by PWC at Appendix A (page 26) to its submission accurately reflect the regulated services it is obligated to provide?

Service Level Agreement

In the interests of transparency, PWC reports that, in addition to the system control charge, it has been receiving revenue of approximately \$2.5 million per annum from TGen through a transitional SLA for providing regulated and unregulated services (\$2.2 million for regulated services and \$0.3 million for unregulated services).

PWC has provided a list of the regulated functions it has been providing to TGen. These include short term load forecasting, plant outage approval, day-ahead plant schedule, daily plant dispatch, emergency operation, development of key performance indicators (KPI), Northern Territory Electricity Market (NTEM) development, generator start and stop, post-trip management, test-run of power plants, liaison between TGen and nominated parties and reporting.

While the SLA expired in June 2017, it is understood that System Control has continued to receive some revenue from TGen to compensate for primarily unregulated services.

Given PWC has incorporated all regulated system control and market operator functions and associated costs into its calculation of the revised system control charge, if approved, it is appropriate that the next SLA be limited to unregulated services to ensure that customers, through their retailer, are not charged twice for the same service.

Chapter 3: Costs to provide regulated services

Table 1 below provides a summary of PWC System Control's 2017-18 actual and forecast revenue (2017-18 statement of corporate intent (SCI)) based on the current \$0.001 per kWh system control charge and the TGen SLA, and PWC's proposed actual and forecast allocation of costs for system control and market operator regulated services.

Table 1: Summary of System Control and Market Operator revenue and proposed costs1

	2017-18	2018-19	2019-20	2020-21
	Actual	Forecast	Forecast	Forecast
System control charge	1.742	1.894	1.943	1.991
TGen SLA	2.587	2.707	2.769	2.833
Total Revenue	4.329	4.601	4.713	4.825
Direct costs	6.980	7.901	7.903	8.033
Overhead	2.030	2.154	1.899	1.723
New facility	0.000	0.000	0.670	0.681
Total Costs	9.010	10.054	10.472	10.437
Surplus/(deficit)	(4.681)	(5.453)	(5.758)	(5.612)

¹ Table may not add due to rounding

PWC's proposed system control charge of \$0.0057 per kWh seeks to address the forecast deficit from 1 July 2019 based on its total proposed regulated costs of \$10.47 million and forecast demand of approximately 1.829 million MWh in the regulated systems in 2019-20.

For the Commission to approve the proposed system control charge, it will need to be satisfied that only forecast costs for regulated services are included, that the costs are efficient costs, rather than based on what is included in System Control's budget and that PWC's assumptions are reasonable.

System Control and Market Operator costs

PWC's submission provides its actual and forecast allocation of costs for providing system control and market operator regulated services at Appendix A to its submission (page 25), including for personnel and other direct costs, corporate overheads and a new Administrative and Control Centre.

PWC is forecasting to have 53 System Control and Market Operator full time equivalent (FTE) staff in 2019-20, with 42 FTE expected to be allocated to existing business and 11 to new business. The largest number of personnel are allocated to the Real Time Operations unit, noting PWC's submission indicates that there will be a steady reduction of one Real Time Operations FTE per annum from 2017-18 to 2020-21 which is based on its benchmarking against control centre numbers for Western Power and Horizon Energy.

Of the 11 FTE forecast to be allocated to new business, 7 are for the PWC transformation operating model to undertake unregulated functions commencing in 2018-19.

Cost allocation

PWC has used an activity based costing model and states that all actual operating expenditure for its regulated functions in 2017-18 have been allocated based on the percentage of time spent on each activity, with unregulated functions excluded, as shown at Appendix A of PWC's submission (page 27). PWC states that it has allocated corporate overheads based on the cost allocation methodology approved by the Australian Energy Regulator for PWC's networks business (Appendix B of PWC's submission, pages 35-36).

PWC states that it has used a revised Cost Allocation Methodology (CAM), rather than the CAM approved by the Commission in the 2014 Network Price Determination, with costs based on 2017-18 actuals and forecasts from the 2017-18 SCI.

Given System Control and Market Operator leverages the 24-hour manned control centre to provide FRC and unregulated services, the Commission will need to closely review PWC's cost allocation to ensure only efficient costs to deliver the regulated system control and market operator functions are incorporated into the system control charge, including for corporate overheads.

Table A7 in Appendix B of PWC's submission (page 36) provides PWC's allocation of 2017-18 actual corporate overhead costs, with approximately 63 per cent allocated to regulated activities at a total of \$2.03 million. PWC forecasts this expenditure will reduce by about 15 per cent over the forward years to \$1.7 million in 2020-21.

Labour costs

PWC's submission states that there has been a significant escalation in salary costs since 2000 and that the salaries and respective terms and conditions applicable to System Control and Market Operator staff are mandated by the Office of the Commissioner for Public Sector Employment under enterprise bargaining agreements.

While this may be the case, given personnel costs represent over 90 percent of System Control and Market Operator's total controllable costs, it is important that the Commission understand on what basis PWC has forecast labour costs for inclusion in the proposed system control charge.

New Administrative and Control Centre costs

PWC has identified several issues associated with its current control centre, including:

- lack of a suitable back-up facility in the event that the current control centre is extensively
 damaged or destroyed, noting its Disaster Recovery Plan identified a deficiency in providing
 secure accommodation to maintain electricity supply during the cyclone season
- restricted ability to renovate or extend the current building
- perception that an independent System Control will continue to be controlled/managed by PWC.

Accordingly, PWC proposes the establishment of a new Administrative and Control Centre to accommodate System Control and Market Operator staff, with the current Hudson Creek site to be retained as a back-up facility.

PWC has factored the estimated capital (\$2.275 million) and operational costs (\$0.67 million per annum) for the new Administrative and Control Centre, amortised over ten years from 2019-20, into its proposed system control charge. PWC estimates these costs translate to \$0.0002 per kWh of the proposed system control charge.

Does a new Administrative and Control Centre appear reasonable? Are there any other options that could be considered to address the issues with the current control centre?

Demand assumptions

PWC's demand assumptions for the calculation of its system control charge are based on the Australian Energy Market Operator's (AEMO) forecast energy consumption for the three regulated systems, which was developed for the purpose of PWC's regulatory proposal to the AER for the 2019-24 network price determination.

AEMO's forecast, as summarised in Table 6 of PWC's submission (page 22), is that overall consumption will decrease to 2019-20, remain flat in 2020-21 and 2021-22 and then marginally increase (between 0.1 and 0.3 per cent) over the remaining years. This is relatively consistent with the Commission's findings in its 2016-17 Power System Review (PSR), which forecast decreased consumption until 2019-20 due to increasing behind-the-meter solar uptake and gradual forecast increases for 2019-20 onwards.

Given the government has recently released its Northern Territory Renewable Energy and Electricity Market Reform Implementation Plan to achieve its target of 50 per cent renewable generation by 2030, the Commission will be revisiting its consumption forecasts as part of the 2017-18 PSR. Similarly, the Commission will need to consider whether AEMO's 2019-20 demand assumption for the purpose of calculating the associated system control charge is appropriate.

Are PWC's demand assumptions reasonable given the Territory government's 50 per cent renewables commitment?

Chapter 4: Excluded costs

Northern Territory Electricity Market consultant costs

PWC states that in order to establish the I-NTEM, it funded approximately \$2.35 million of external consultant costs between 2014-15 to 2016-17 for the provision of specialist advice and technical skills to establish the tools, processes and procedures necessary to facilitate the I-NTEM.

PWC did not receive any government funding or revenue from market participants to fund these costs. Consequently, the unfunded costs would have translated to lower PWC returns to government, as a government owned corporation. The Commission recognises that this was a government decision and agrees that PWC should not seek to recover these 'sunk' costs through the system control charge.

PWC estimates that a further \$2.65 million (excluding overheads or additional internal supervision costs) will be needed over three years from 2018-19 for further external consultancy costs as it transitions from I-NTEM to NTEM, noting on 8 October 2018 the Territory Government announced a plan to develop the NTEM within 12 months.

Given the uncertainty of government's electricity reform program at the time of PWC's submission, including of any potential resources government may approve for PWC to undertake initiatives, PWC has appropriately excluded its estimated NTEM costs from the proposed system control charge.

Other exclusions

In addition to the exclusion of external consultancy costs, PWC states that it has also excluded FRC and unregulated function costs from the calculation of its proposed system control charge.

It is noted that PWC has requested that a number of PWC Networks' functions, such as completing standing data and customer transfer requests, be transferred to System Control and Market Operator as part of a review of the Electricity Retail Supply Code. If these or any other new regulated functions are provided by System Control and Market Operator in the future as part of its regulated functions under the SCTC, PWC could submit to the Commission a proposal to increase the system control charge to fund the costs.

As System Control and Market Operator does not own any assets, depreciation, amortisation, and associated costs are not relevant for this proposal.

Chapter 5: Financial impact on stakeholders

This Chapter discusses the potential impacts to stakeholders should the current system control charge increase to cover the costs of providing system control and market operator functions.

Power and Water Corporation

The costs for providing system control and market operator regulated activities not covered by the current system control charge of \$0.001 per kWh or the SLA with TGen have likely translated to lower dividends and tax equivalent payments to the government.

Consequently, if PWC is allowed to recover its regulated system control and market operator function costs through an increased system control charge, the additional revenue will increase PWC's profitability and thus its return to government.

The Commission notes that PWC has been undertaking a targeted efficiency program. Nonetheless, the Commission will be seeking to ensure that inefficient costs and/or cross subsidies with other parts of the business are not included in the revised system control charge.

Electricity retailers

Any change to system control charges will flow through to electricity retailers, and depending on government policy, may impact the profitability of the retailers and/or the cost of electricity for consumers.

Consistent with the Territory Government's uniform tariff policy, electricity prices for small and medium-sized households and businesses (customers consuming less than 750 MWh per annum) are regulated through a pricing order issued by the Treasurer in accordance with section 44(1)(a) of the Act.

The Territory Government provides retailers with a community service obligation (CSO) payment to fund the shortfall between the regulated tariff and the cost of supply. Accordingly, any increase to the cost of supply as a result of an updated system control charge will impact retailers' profitability if the CSO payment is not increased by government or if pricing order tariffs are not increased accordingly.

Customers that consume in excess of 750 MWh per annum (generally large businesses) are not protected by the pricing order. This means that retailers may on-charge any increases to the cost of supply to the customer, rather than absorb the increased costs, subject to the terms and conditions of the associated retail supply contracts.

Territory Generation

While an increase to the system control charge will not directly impact TGen, the Commission notes that TGen has been paying PWC System Control to provide some regulated and non-regulated functions under an SLA. It is assumed that these TGen costs are incorporated in its wholesale charges to retailers.

Accordingly, as previously discussed, if the Commission approves an increased system control charge that includes the regulated services previously included in the SLA, it is appropriate that the next SLA be limited to unregulated services to ensure that customers, through their retailer, are not charged twice for the same service.

Northern Territory Government

As discussed above, the Territory government currently regulates electricity tariffs for small and medium-sized households and businesses. If the Commission approves an increase to the system control charge and government does not increase the regulated tariffs accordingly (flow the charges through to customers) or increase the CSO payment, each retailer will have to absorb the additional costs for its price regulated customers.

While government could decide to accept lower returns from Jacana Energy, rather than flow the additional costs through to customers or increase the CSO, noting the lower returns would be offset by higher returns to government from PWC, private retailers with pricing order customers may be negatively impacted should government decide not to address the potential impact on private retailers.

The Commission recognises the complexities the government faces in terms of its policies whereby any increase to the uniform tariff CSO to retailers diverts funding from other government priorities, such as health and education, and any increase to electricity prices may be seen to be inconsistent with its commitment to put downward pressure on electricity prices. Nonetheless, it is important that the costs to supply electricity, including to provide System Control and Market Operator functions, are known and transparently addressed through electricity tariffs that reflect the efficient cost of supply.

Electricity consumers (small and medium)

PWC, in its submission, has calculated the expected impact on customer bills should the proposed system control charge be approved and government decide to increase the pricing order tariffs to reflect the efficient cost of providing the System Control and Market Operator functions, as recommended by the Commission.

PWC's states that the overall annual electricity bill would increase by less than 2 per cent for consumers using less than 750MWh per annum. This equates to an approximate increase of \$21 per annum for a couple, \$50 per annum for a medium family and \$235 per annum for a small business.

Electricity consumers (large)

Large customers (customers that consume in excess of 750 MWh per annum) are not protected by the pricing order and therefore are subject to retailers increasing their prices to fund an increased system control charge, subject to any contractual terms and conditions.

PWC has estimated the impact on a large customer's bill, based on consumption of 750MWh per annum, would be a 2.7 per cent increase (\$3525 per annum), noting the actual impact would depend on the consumer's energy consumption. Given there is a level of retail competition in the Territory, particularly for large customers, retailers could choose to absorb some or all of the cost increase to retain and potentially attract customers.

Chapter 6: Application of the system control charge

Alternative options to PWC's proposed system control charge

Clause 8.6 of the SCTC states that the Power System Controller services attract charges which shall be recovered from System Participants in receipt of those services, that the charge will be recovered as a "Postage Stamp Amount" applied to all energy transfers in the relevant power system, that the charge is based on the revenue energy meters of customers and is as approved by the Commission and that the charge shall be paid monthly.

In considering the high level system control charge requirements in the SCTC, it is noted that there may be some discretion for the Commission to consider, among other things, the potential for different charges for different systems, noting market operator functions are limited to the Darwin-Katherine system.

PWC states that the market operator contribution to the overall proposed charge is relatively minor (less than \$0.5 million per annum) and the benefits of applying a flat tariff across all systems would outweigh the more complex task of removing out the market operator costs for Alice Springs and Tennant Creek customers. However, applying the same charge across all three systems reduces transparency and would see Alice Springs and Tennant Creek customers subsidising Darwin-Katherine customers. Accordingly, the Commission will need to further consider this issue.

Further, while the Commission is cognisant of the fact that administratively it is more efficient to levy the system control charge to one party (currently retailers), if the revised charge is to fund both system control and market operator functions, it may be worth considering whether charges should continue to be directed to retailers, or be redirected and/or apportioned to generators, given generators may be a more direct recipient of some regulated services.

Should the system control charge be different across the three regulated power systems, based on the level of regulated services provided for each system?

Should the system control charge be charged to retailers, generators or a combination of both?

Price and revenue control mechanisms

As previously discussed, PWC has used AEMO's energy demand forecasts for the three regulated systems to calculate its proposed system control charge.

Because demand forecasting is imperfect, the actual amount of revenue received is never equal to that forecast. Accordingly, it may be appropriate to consider a pricing or revenue control mechanism, which establishes the framework to specify how an over or under recovery of revenue is to be treated.

A price control mechanism is when the regulated entity sets prices and its revenue changes with demand, such as that proposed by PWC for its system control charge. There is no compensation to the regulated entity for any variation in demand and hence revenue. This approach encourages the regulated entity to under forecast demand to reduce the risk of low revenue outcomes. Accordingly, as part of approving the price, the Commission will need to be confident with the robustness of PWC's demand forecasts (which were modelled by AEMO).

In contrast, a revenue control mechanism enables the regulated entity to adjust the following year's charges to recover lost revenue or give back over-recovered revenue. The regulated entity has no incentive to over or under forecast demand, as it will not keep any variation. This approach could ensure that System Control and Market Operator only recovers enough revenue to cover its efficient costs as determined by the Commission over a specified period and may be useful for Territory government budgeting purposes; however, if the system control charge increase is to be funded by the CSO, it would likely increase the complexity of administering the system control charge.

Should a price or revenue control mechanism be implemented and if so what type?

Chapter 7: Other matters

Timing for commencement of revised charge

PWC has proposed that the revised system control charge commence on 1 July 2019, with the associated three year outlook to be incorporated into its 2019-20 statement of corporate intent.

The Commission is mindful that an increase to the system control charge will impact stakeholders, as discussed in Chapter 4 of this Issues Paper.

Notwithstanding the fact that System Control should be able to recover the efficient costs of providing regulated services in accordance with the Act and SCTC, the Commission notes that the proposed 1 July 2019 start date provides limited time for stakeholders to consider the implications and factor any financial impacts into their associated budgets for the 2019-20 financial year.

Is the proposed timing of 1 July 2019 for the commencement of the revised system control charge a concern? If so, why is it a concern and what is a more appropriate start date and why?

Review time period

PWC has proposed an annual review of the system control charge, with a three year outlook. While this approach would help to ensure that the charge remains as relevant as possible to the forecast costs and energy demand of the period, undertaking a review of System Control and Market Operator costs to deliver regulated services is time and resource intensive for both PWC and the Commission.

Accordingly, the Commission will need to consider the costs and benefits of this along with other options, such as less frequent reviews and simple escalation methodologies, such as CPI.

How long should the Commission approve prices for? Options could include one, three or five years?

Should the Commission provide a mechanism to allow System Control to change costs on an annual basis, such as a yearly consumer price index (CPI) adjustment?

If so, on what basis should this adjustment be based on? Options could include CPI, CPI - x, government miscellaneous fees and prices index or labour indexes.

Chapter 8: Appendices

Appendix A: Questions for stakeholders

Below provides a consolidated list of the questions posed throughout this Issues Paper.

Stakeholders are encouraged to provide the Commission with any other relevant comments relating to PWC's proposed increase to the system control charge.

Submissions are due by 28 December 2018.

Questions:

- Do the system control and market operator activities identified by PWC at Appendix A to its submission accurately reflect the regulated services System Control is obligated to provide?
- Does a new Administrative and Control Centre appear reasonable? Are there any other options that could be considered to address the issues with the current control centre?
- Are PWC's demand assumptions reasonable given the Territory government's 50 per cent renewables commitment?
- Should the system control charge be different across the three regulated power systems, based on the level of services provided for each system?
- Should the system control charge be charged to retailers, generators or a combination of both?
- Should a price or revenue control mechanism be implemented and if so what type?
- Is the proposed timing of 1 July 2019 for the commencement of the revised system control charge a concern? If so, why is it a concern and what is a more appropriate start date and why?
- How long should the Commission approve prices for? Options could include one, three or five years?
- Should the Commission provide a mechanism to allow System Control to change costs on an annual basis, such as a yearly consumer price index (CPI) adjustment?
- If so, on what basis should this adjustment be based on? Options could include CPI,
 CPI − x, government miscellaneous fees and prices index or labour indexes.