

Attachment 4.1

Stakeholder Engagement Report

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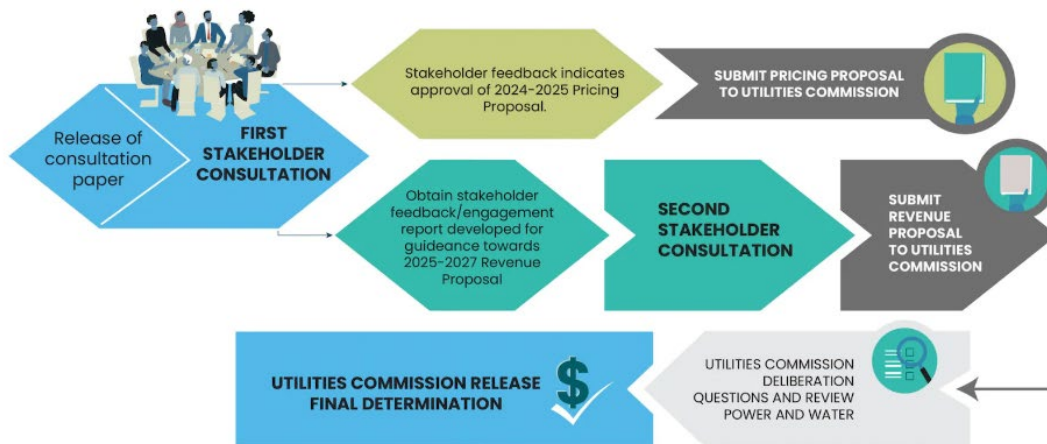
1. Consultation process

The purpose of this Stakeholder Engagement Report is to provide an overview of engagement on NTESMO's 2024-25 to 2026-27 regulatory proposal. This section provides a summary of the stakeholder consultation undertaken which included two formal rounds of consultation, stakeholder workshops and 'one on one' sessions

1.1 Consultation papers

We sought feedback from market participants and major customers on key issues for the 2024-25 to 2026-27 NTESMO Regulatory Proposal (Regulatory Proposal). The consultation approach was robust and included two rounds of consultation including two consultation papers and stakeholder feedback provided through written submissions. This approach provided opportunities to explain our key challenges and potential approaches, while encouraging and facilitating stakeholder understanding and engagement. **Figure 1** illustrates the stakeholder engagement approach.

Figure 1: Submission workflow for the two pathways to allow robust consultation



First round consultation

On 23 May 2023, NTESMO published [Consultation Paper - NTESMO Revenue Proposal 2024-2027](#) (Consultation Paper 1) which:

- Outlined key issues experienced by NTESMO in undertaking the System Control and Market Operator functions, identified available options to address these issues, and sought stakeholder feedback to assist in the development of the Regulatory Proposal, which will set charges from FY25.
- Specifically sought stakeholder feedback on the framework and approach for the NTESMO Regulatory Proposal including arrangements for the first year of the period and the length of the regulatory period.

As part of the first round of consultation, we held a full-day workshop on 30 May 2023 (May workshop) in Darwin, further detail is provided in section 1.2. On 21 June 2023 written submissions on Consultation Paper 1 closed. Two written submissions were received, including from Rimfire and the Chamber of Commerce. Key feedback from these submissions is discussed in section 2 and copies of these submissions are published on the [NTESMO website](#).

Second round consultation

On 23 August 2023, NTESMO published [Consultation Paper 2 – NTESMO regulated charges for period commencing 1 July 2024](#) (Consultation Paper 2) which:

- Sought stakeholder feedback on detailed elements of the Regulatory Proposal, including the initial calculation of charges for the next regulatory period and options to mitigate customer bill impacts.
- Identified and sought feedback on our preferred position on the framework and approach for the Regulatory Proposal.

As part of the second round of consultation, we held a full-day workshop on 22 August 2023 (August workshop) in Darwin, further detail is provided in section 1.2. On 29 September 2023 written submissions on Consultation Paper 2 closed. Four written submissions were received, including EDL Energy, Jacana Energy, Territory Generation and NT Manufacturing Council. Key feedback from these submissions is discussed in section 3 and published on the [NTESMO website](#).

1.2 Stakeholder workshops and ‘one-on-one’ sessions

The stakeholder workshops and one-on-one sessions were well attended by a broad range of NTESMO stakeholders, including industry bodies, generators, retailers, developers, new project proponents and major customers. Interested stakeholders were also able to nominate to attend via the NTESMO consultation page at www.NTESMO.com.au

- The workshop used a range of tools to ensure sessions were informative, thought-provoking and produced meaningful feedback: The live polling tool Mentimeter was used to capture individual views, allowing results to be shared in real-time and for discussion to be tailored.
- Free standing banners were used to discuss and confirm concepts.
- Information placemats outlining benefits, risks and solutions were provided to encourage table discussion on potential investment options.
- A ‘parking lot’ was established to capture issues for future discussion.

Each table typically comprised three to four stakeholders and a NTESMO facilitator who guided the conversations. Representatives from NTESMO were present to answer questions and support discussions, together with members of Power and Water’s Executive Management team.



We complemented the stakeholder workshops with ‘one on one’ sessions targeted at stakeholder who could not attend the workshop or requested further information. The ‘one on one’ sessions closely followed the format of the stakeholder workshops, and we have reflected the input accordingly.

The workshops were attended by a cross-section of stakeholders, representing industries and sectoral interests.

The workshops were also attended by observers from the Commission and the Department of Industry, Tourism and Trade.

2. First round consultation – key themes

The first round of consultation was structured to discuss and test stakeholder views on the following:

- NTESMO’s role in the NT electricity system in the regulated regions.
- The challenges NTESMO is facing as the power system becomes increasingly complex from the increased penetration of renewables, increasing data complexity for the settlement function, and operating in an environment where NTEM reform is still being progressed.
- Investment options to meet these challenges.
- Potential options to manage NTEM reform uncertainty in the Regulatory Proposal.
- Options for changes in regulated charging structures.
- How we should undertake future stakeholder engagement.

Figure 2 summarises the key themes from stakeholder discussion and feedback.

Figure 2 – Summary of key themes

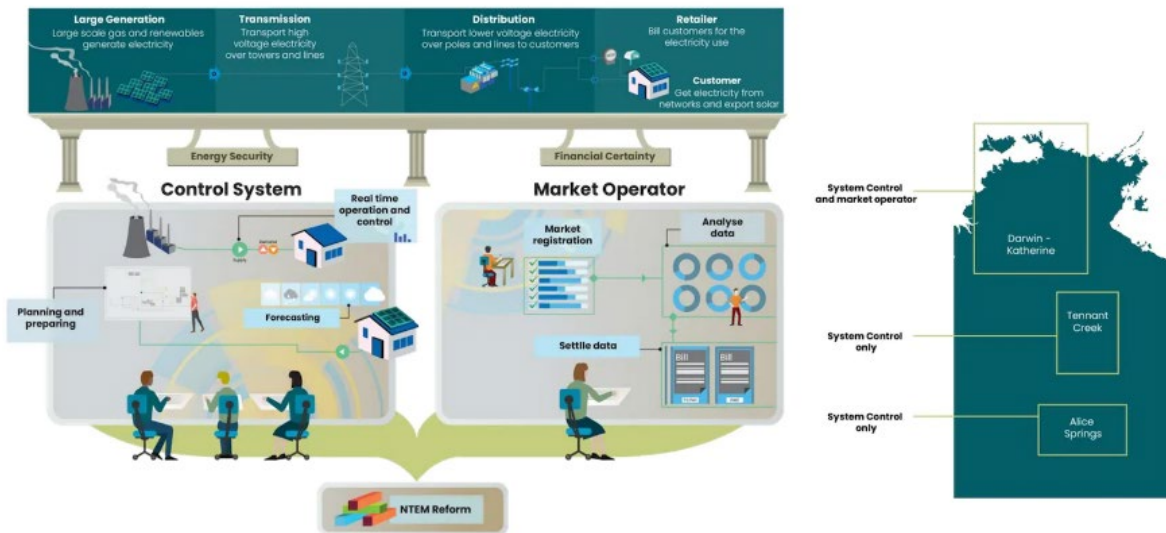


2.1 NTESMO's role

At the May workshop we discussed NTESMO's critical System Control functions including ensuring electricity supply and security in our three regulated power systems, and providing a Market Operator service in Darwin-Katherine. **Figure 3** was presented to provide a visual the respective functions:

- System Control in ensuring the reliability, stability, and security of the power systems, with reliability focusing on uninterrupted power supply; stability to ensure balanced and steady operation; and security safeguarding the power system from physical and cyber threats.
- Market Operator in facilitating the efficient operation of the electricity market.

Figure 3: NTESMO's role in the Northern Territory



Stakeholders discussed and acknowledged NTESMO's role in maintaining system security and providing the Market Operator function.

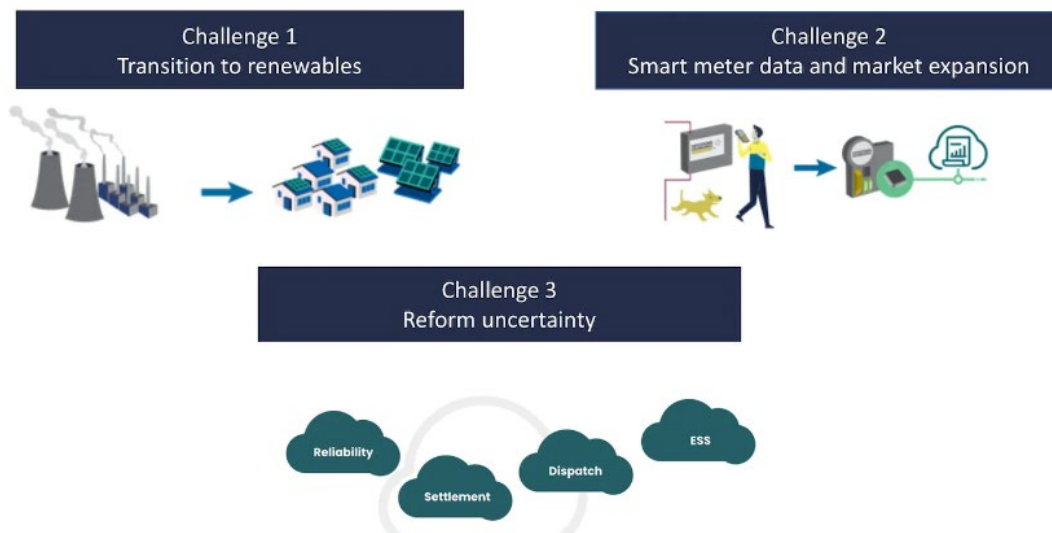
Stakeholders were also informed that NTESMO services make up about 2% of the current electricity bill for large customers who will be exposed to the full price impact. Noting smaller customers are currently subject to the protections of the NT Government's Electricity Pricing Order.

The economic consequences of outages were noted by a number of stakeholders as providing a new perspective on the 'cost' of not maintaining or developing capability and stakeholders referred to these later in the day when considering the options for investing in priority reforms.

2.2 Changing landscape for NTESMO

We discussed the changing landscape and key challenges for NTESMO as the power system operator. The key challenges are illustrated in **Figure 4**.

Figure 4: Key challenges facing NTESMO



Transition to renewables

Renewables have increased markedly on the system, and the trend will accelerate to 2030 with more synchronous thermal generating plant reaching end of life.

System Control will need to control an increasingly diverse mix of generating plant over each 24-hour period, to ensure electricity supply meets demand. Solar generation capacity is significantly impacted by cloud cover, which is very difficult to predict.

Complexity of data to settle the market

The Market Operator current uses Excel to undertake 'virtual settlement'. Existing settlement systems are unsustainable, and this will continue to be compounded with the increased penetration of smart meters which communicate data in short intervals and on which the market needs to be settled.

NTEM reform uncertainty

Renewable technologies connecting to, and seeking connection to, our power systems have grown significantly since the interim NTEM was established in 2015. The NTEM reform agenda is complex, and the regulatory framework has not kept pace with technological changes.

While elements of the NTEM regulatory arrangements remain unclear, the scope of new functions and activities planned means that NTESMO will need to make important decisions about how to plan and forecast the cost of implementing systems, processes, and staff to support the Government's final NTEM design.

Stakeholders workshopped a 2030 vision for the Northern Territory market which is represented by **Figure 5** below.

Figure 5: The Northern Territory electricity market in 2030



Elements identified by stakeholders as critical to realisation of the 2030 vision included:

- Increased recognition of the role of consumers and distributed energy resources. This included consideration of the ability to control behind-the-meter appliances
- Management of cyber security risks
- Clarity on the role of energy efficiency
- Clarity on the role of grid-scale storage
- Overcoming the existing one-way design of the system and its physical constraints.

Stakeholders acknowledged the pace of change that the NT electricity market, and NTESMO, are facing and the resulting need for reform and investment to ensure electricity security. The expectation that NTEM reform would deliver secure essential services was tempered by the importance of understanding how much the cost of transition would impact customers.

Views expressed at the May workshop included:

- *“Get on with it”*, acknowledging the need for response and action
- *“Be mindful of costs”*, emphasising the need for robust cost benefit analysis to support investment options
- *“Be conscious of impacts”*, in working through who and how transition costs are recovered.

Written submissions

The **Chamber of Commerce** expressed appreciation that NTESMO was seeking to be proactive in managing the complex challenges presented by the transition to renewables, data complexity and uncertainty of reform.

It also noted however that a probable network charge increase in the order of 10 per cent, combined with a likely generation cost increase of a similar order, will have a significant impact on high energy users and while smaller consumers will be protected via the Electricity Pricing Order and Community Service Obligation payments, ultimately it is the taxpayer who funds these subsidies. One of the Chamber of Commerce’s key focus areas is managing increasing business costs and the impact on competitiveness of Northern Territory business when compared to interstate counterparts.

2.3 Testing direction on key investments

The May workshop tested stakeholder preferences on two key investments to meet the challenges discussed:

Investment 1 – Improving the efficiency of dispatch

Key issue: System Control currently has poor visibility, manual systems and unsophisticated tools to make dispatch decision

Proposed direction: Invest in a new system called 'Territory Dispatch Engine' (TDE) which is a scheduling and dispatch tool, together with associated forecasting and constraint models. Scalable and flexible to upgrade to NTEM requirements, without second-guessing the final requirements.

Investment 2 – Settlement system

Key issue: Current market settlement system is an Excel based system that is at end of life. Unable to support current volumes of contestable meters, and volumes are expected to increase even further. Also out of vendor support. Will not be able to read meter files once the Meter to Cash system comes into effect

Proposed direction: New settlement system using software rather than Excel that can meet volumes and is supported by the vendor. Capable of updating to meet specific requirements of NTEM.

Practical examples of how these challenges impact NTESMO's operating environment and associated risks were presented through interviews with NTESMO personnel from the System Control and Market Operator perspective.

A placemat was used to discuss investment options and the differences between the options:

- **Option 1 – Hold off.** Delay investing in new systems until NTEM reforms. Keep using and expanding on current work-around tools to 'keep up' with growing renewables and settlement complexity.
- **Option 2 – Minimum.** Invest in new systems before NTEM. New dispatch and settlement systems that meet the growing market complexity. Limit functionality to meet core needs, with the ability to upscale to meet more rigorous reform requirements.
- **Option 3 – Regs ready.** Invest in systems that pre-empt full NTEM requirements. New dispatch and settlement systems that anticipate the likely direction of regulatory reform.



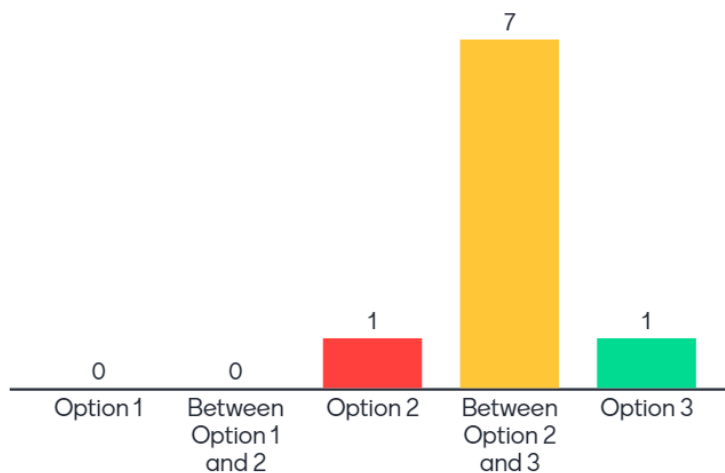
Figure 6: Investment options



Options were discussed at each table and individual stakeholder feedback was sought on which option was preferred directionally, and what, if any, additional information may be required to validate the initial view. An opportunity was provided to identify an option between options 1 – 3 as set out in **Figure 6**.

The majority of stakeholders identified a preference for an investment profile between Option 2 (Minimum) and Option 3 (Regs ready) as shown in **Figure 7**.

Figure 7: May workshop – What is your preferred investment option?



Written submissions

The **Chamber of Commerce** noted that, given the potential exposure to the high cost of system failure, the proposed investment into the TDE, probably at Option 2, seemed sensible and timely.

When queried as to why a particular option was chosen, stakeholders noted factors such as:

- The need to future-proof and prepare for changes to the NTEM regulatory arrangements.
- Recognition of the implications of the pace of change in system conditions.
- Ability to configure for the future.
- Lead time implications of system design, development, testing, training and certification.
- Holding off not being an option, given the increase in risk with time.
- Option 2 allowing for transition to Option 3 functionality as the direction of NTEM reform becomes clearer.

Importantly, several stakeholders at the workshop noted the need for further information to allow them to better understand the return on investment and for more transparency on the business cases and associated costs, benefits and risks, and the impact of interim solutions on other market participants.

Written submissions

The **Chamber of Commerce** queried whether the forward projections accounted for load from increased consumption, noting that in its view, projects such as data centers, manufacturing precincts and mining activities will contribute to future stability of the network by lifting the threshold of solar energy impacts.

NTESMO acknowledged the need for stakeholders to be provided with more detailed information on the proposed expenditure associated with these investments, including options assessed and associated costs, benefits and risks, and presented this information where available to stakeholders at the August workshop.

2.4 Managing uncertainty

Some of the costs that will be incurred to support replacing legacy systems are tied to NTESMO's existing regulatory obligations or functions. However, there will be other types of expenditures that may not meet this criterion. These include expenditure related to NTEM reform functionalities where there are no specific obligations that NTESMO is responsible to meet.

These types of costs are inherently uncertain in a revenue determination process and can most appropriately be managed through either a contingent project mechanism, or a cost pass through mechanism as outlined in **Figure 8**. There is no set framework that specifies what mechanism the Commission should apply, nor how it should apply it. A possible pathway forward for these issues was tested with stakeholders.

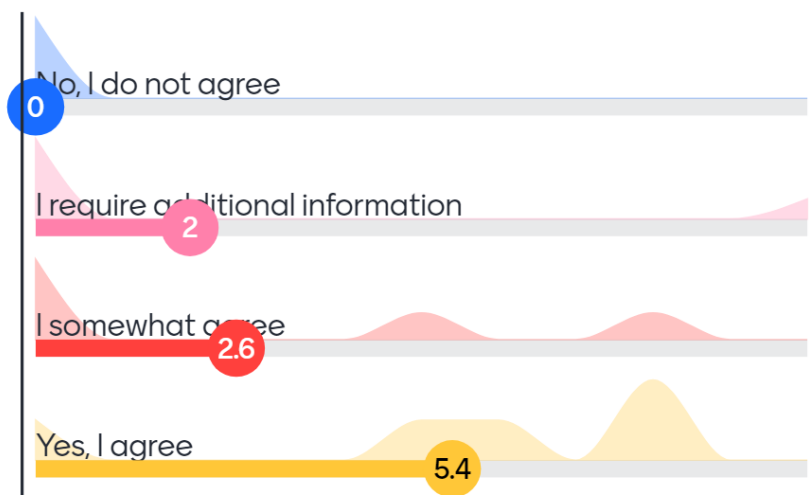
Figure 8: Options for in-period adjustments



It was proposed that where possible and not detrimental to power system security and reliability, we will defer expenditure and seek recovery through contingent project and cost pass through mechanisms, with appropriate triggers and thresholds to be proposed to the Commission and incorporated in the regulatory determination.

Stakeholders were asked whether they believed it was fair for the costs of new obligations to be recovered within the regulatory period. **Figure 9** illustrates stakeholder’s feedback.

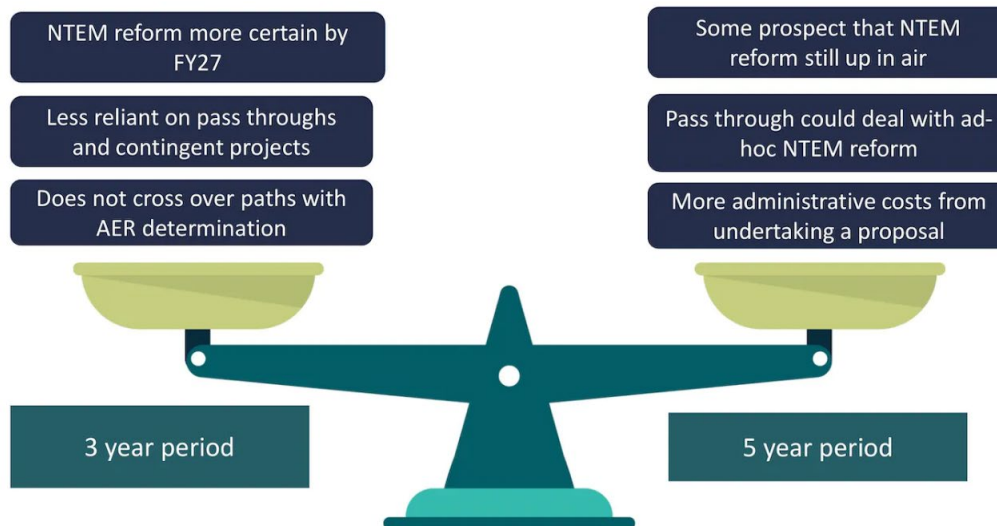
Figure 9: May workshop – Do you think it is fair that Power and Water recover costs for new obligations?



While the majority of stakeholders agreed that cost recovery in these circumstances is appropriate, NTESMO acknowledged and agreed that practical examples of how any mechanism applied would be useful to validate with stakeholders at the August workshop to improve their understanding of the potential price impacts.

Discussion also occurred on whether it would be appropriate for the Regulatory Proposal to propose that the regulatory period be reduced from 5 years to 3 years. Potential benefits and risks were discussed, for example, while a shorter regulatory period may be appropriate to deal with regulatory reform uncertainty, it does lead to higher administrative costs. **Figure 10** sets out the benefits and risk associated with alternative regulatory periods.

Figure 10: The benefits and risks of alternative regulatory periods



While several stakeholders preferred a 3-year period as this allows more flexibility in responding to regulatory reform and broader market uncertainties, there was some support from stakeholders for retaining the current 5-year period, with the use of adjustment mechanisms such as cost pass throughs and contingent projects to manage the uncertainty risk.

Written submissions

Rimfire suggested that a longer regulatory period may be preferable as it provides greater certainty of charges for all parties (i.e. retailers, customers and NTESMO).

2.5 How charges should be levied

The current process of revenue recovery provides that all our charges are invoice to the retailer, who in turn recovers this revenue from customers and pays us. An alternative model (such as that applying in the National Electricity Market) would be for a portion of the charges (and therefore revenue to be recovered) to other market participant, i.e., generators.

These options were discussed at a high-level, including through a role play exercise involving the exchange of money to represent each option.

Stakeholders had mixed views on whether we should continue with the current arrangement or seek to implement alternative arrangements.

Written submissions

Rimfire was supportive of separating the Market Operator function charge that only applies to the Darwin-Katherine areas. Rimfire was also supportive of NTESMO's need for adequate cost recovery and retaining the current approach of cost recovery on a usage (kWh) basis and recoverable through retailers.

2.6 Ongoing engagement

As noted under the engagement themes above, there were several issues where stakeholders requested additional information to inform their views on the material discussed and options presented, including the distribution of impact.

It was agreed that the August workshop would expand on the concepts from the May workshop through practical examples which take the concepts discussed through to customer bill impacts.

3. Second round consultation – key themes

Consultation Paper 2 and the August workshop were structured to discuss and test stakeholder views on the following issues:

- Framework and approach – preferred positions on the length of the regulatory period, mechanisms to recover costs in the period, and our charging structures.
- Regulated charges - an initial calculation of regulated charges for the next regulatory period, the drivers of higher charges, views on how we could mitigate bill impacts.

The agenda for the day was informed by the initial round of written submissions and feedback received at the May workshop.

Summarised below are the key themes to emerge from stakeholder discussion and feedback.



Stakeholders continued to recognise the impact of the pace of change in the NTEM, on NTESMO, however noted that we should ‘be mindful of costs’ and ‘be conscious of impacts’.



Stakeholders acknowledged uncertainties on the timing and scope of NTEM reform and supported the preference for a shorter regulatory period, mechanisms to cater for cost uncertainty, and no material changes to levy methods or charging structures.



Stakeholders queried how and if the material increase in our regulated charges for both System Control and Market Operator functions can be justified.



There was broad support for the proposed cost recovery principles, with particularly strong support for the principle of no double counting.



Stakeholders acknowledged the drivers of higher prices. Support for investment and recovery across the drivers was mixed. There was stronger support for investment to support the transition to renewable technologies and to manage settlement complexity.



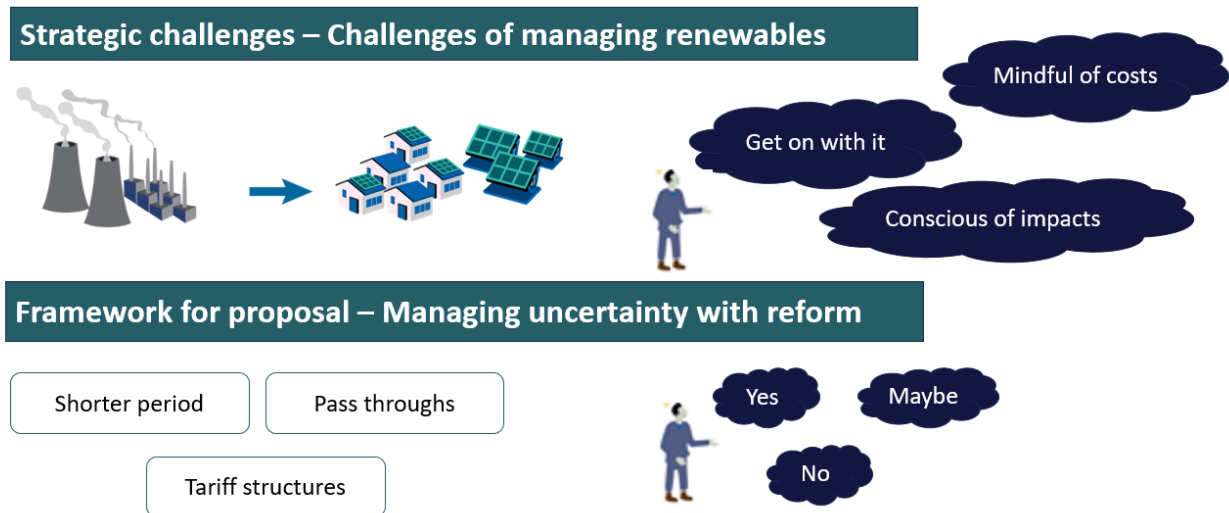
Deferring revenue is another way to reduce bill impacts. Although a number of stakeholders supported the concept of revenue deferral, there was no clear consensus between Option 2 (50% deferral) and Option 3 (75% deferral).

3.1 Recap of last workshop and consultation approach

At the August workshop we provided a recap of NTESMO’s critical System Control critical functions including ensuring electricity supply and security in our three regulated power systems, and in providing a Market Operator service in Darwin-Katherine.

Stakeholders were provided with an overview of the scope and outcomes of the first round consultation outlined in **Figure 11**. This focused on NTESMO’s strategic response to challenges such as managing the growth in renewable technologies and regulatory framework issues for our Regulatory Proposal, including the options for managing uncertainty with the NTEM reform process.

Figure 11: Feedback from first consultation round



We also summarized our understanding of stakeholder feedback from the May workshop and from written submissions to Consultation Paper 1. We understood that stakeholders:

- Recognised the pace of change in the Northern Territory market and its impact on NTESMO
- Expressed a sentiment to ‘get on with it’ acknowledging the need for response and action, but noted that we should ‘be mindful of costs’, emphasising the need for robust cost benefit analysis to support investment options
- Considered we should ‘be conscious of impacts’ in working through who and how transition costs are recovered.

While there was broad agreement with this summary, some stakeholders noted the need for additional clarity on the costs associated with business-as-usual regulatory requirements and there may be implementation options that sit between a ‘Minimum’ and ‘Regs ready’ investment approach to market challenges and reforms.

Written submissions

The following was noted regarding NTESMO’s approach on stakeholder engagement and the consultation papers:

- **EDL Energy** found the level of background information provided in the consultation to be sufficient and considered the consultation by NTESMO had been of a high standard. It was noted that having in-person workshops is beneficial and the lack of online attendance options may encourage greater in-person attendance. However, for EDL Energy, attendance in-person is often impractical and it would like to see online attendance supported in future
- **Jacana Energy**, while broadly supportive of the consultation approach, suggested improvement opportunities for:
 - Consultation material, including: providing information on how the charges compare to other jurisdictions; explaining why the loss in value of an 8-hour outage was used, particularly in the absence of a legislated reliability standard, and providing further relevant context; providing details of the longer-term vision for NTESMO; and providing greater detail about the basis for the previous determination period’s assumptions, which were ultimately incorrect and led to additional costs
 - Engagement including: holding individual meetings with key stakeholders; providing more granular cost recovery data (for example, apportioning the amounts across the various cost drivers); providing options for individuals to attend the workshops virtually; and performing engagement throughout the determination period.

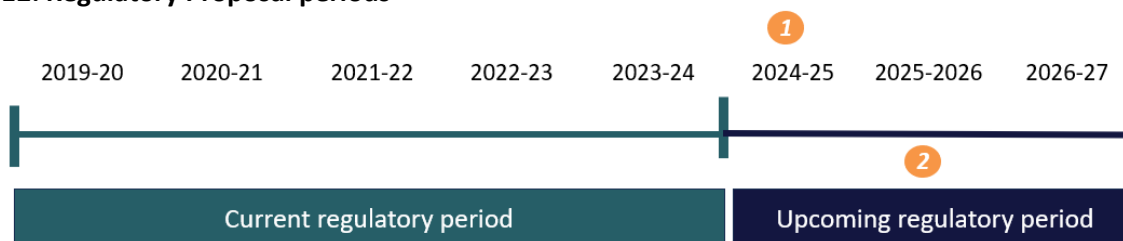
3.2 Preferred framework and approach

We noted that NTESMO is operating at a time of significant change in the Northern Territory market and when there is considerable uncertainty regarding the scope and timing of NTEM reform. We outlined our proposed response to these regulatory framework issues:

- **Positions 1 and 2 – Regulatory Proposal period**

Due to time constraints and with the agreement of the Commission, we intend to roll forward prices by CPI for 2024-25 (refer to 1 in **Figure 12**). We will then submit a full Regulatory Proposal for a three-year period from 2024-25 to 2026-27 (refer to 2 in **Figure 12**).

Figure 12: Regulatory Proposal periods



- **Position 3 – Mechanisms for uncertainty**

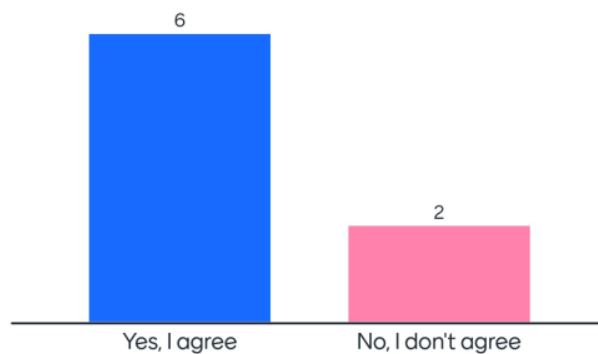
Our preferred approach is to apply the two mechanisms available under the National Electricity Rules (including in the NT) which allows for inclusion of uncertain events which occur in a regulatory control period – cost pass throughs and contingent projects. Our Regulatory Proposal provide detail of what is proposed to be covered.

- **Position 4 – No change in charging structures**

Stakeholders have noted the complexities in changing the way we bill and the charging structures. We are therefore not proposing any changes and consider that a shorter regulatory period provides an opportunity to revisit these issues in the future.

The majority of stakeholders agreed with our preferred positions reflecting this was a practical approach given the degree of uncertainty and need to keep the regulatory framework simple. It was noted that too frequent changes in charging structures may impact market certainty and the impacts for end use customers should be considered.

Figure 13: August workshop - Do you agree with our preferred positions?



Written submissions

Jacana Energy's preferred approach was to maintain the current approach to charging structures as it provides transparency to customers. Jacana Energy noted that alternative arrangements where a portion of recovery is sought from generators is unlikely to serve any benefit to customers, as generators would ultimately pass on these costs. For customers, this would likely reduce the transparency of charges they are incurring.

3.3 Initial calculation of regulated charges

This session contextualised the impact of our drivers for cost recovery and forward prices. Our initial analysis indicated a material increase in our regulated charges for both System Control and Market Operator functions.

The key driver relates to significantly higher costs than provided for in the Commission's regulated allowances for the 2019-24 regulatory period and subsequent 2024-25 year. We have sought to recover six years of revenue shortfall in the remaining two years of the next regulatory period.

Figure 14: Presenting the initial calculation of regulated charges to stakeholders



We discussed our proposed application of the regulatory ‘building blocks’ approach to calculate revenue, which is consistent with the economic regulatory approach under the national energy framework. This is different to the approach used in the last Revenue Proposal which only sought the recovery of operating costs.

At the time of our 2019-24 Regulatory Proposal, we had also not predicted the rapid increase in renewable technologies. Further, we were expecting that NTEM reforms would be finalised and provide a means of recovering our costs on new systems and tools to meet changes in the market.

Dynamics at play

- **Under-recovery in FY20-24 period** - The Commission provided an allowance of \$57.2 million. Based on full cost recovery, our revenue would have been \$85.7m. The revenue shortfall is recovered in FY25 and FY26 **(+\$30.4m)**
- **Under-recovery in FY25** - The roll forward of prices by CPI results in an under-recovery compared to forecast costs, which is also recovered in FY25 and FY26 **(+\$10.2m)**
- **Increase in allowance between FY25 and FY26** - The regulated allowance increases as we transition to full cost recovery **(+\$9.6m)**.



Our initial calculation of charges indicates a significant increase in charges in FY26 and FY27, the year after our roll forward of prices, and are outlined in **Figure 15**.

Figure 15: Regulated charges – initial calculation



Written submissions

Territory Generation:

- Expressed the view that such a steep increase retrospectively cannot be justified by regulatory means, especially considering the basis for such a move and would impose an unfair burden on current market participant.
- Queried the legal basis for the proposed retrospective recovery of the revenue shortfall from market participants and customers in FY27 and FY28 as they may not necessarily be the same market participants and customers from the years FY20 to FY25.

In relation to the factors contributing to NTESMO’s stated drivers for retrospective recovery:

- **Territory Generation** suggested that is not clear why the increase in solar penetration was not anticipated given the known Government policy target of 50 per cent renewables by 2030.
- **Jacana Energy:**
 - Did not consider the shortfall recovery to be either fair for customers or reasonable for a range of reasons, including that: NTESMO provides an annual pricing proposal to the Commission and therefore should have reflected on and adjusted (if required) pricing in a more proactive manner; NTESMO should have been more proactive in sending signals to the market regarding future price increases if recovery in the prior period was not possible; the timing of the cost recovery and period of recovery being sought is inconsistent with other jurisdictions; the proposal does not provide adequate information to support the successful application of the principles put forward by NTESMO for seeking recovery of a shortfall in costs
 - Believed it is prudent that NTESMO undertake a longer term forecast beyond 2027 so that a normalised cost can be determined, so that it is clear to market participants what portion of the cost could not be deferred and the related benefit for the customers resulting from the new investments.

3.4 Options to mitigate bill impacts

NTESMO charges comprises about 1.5% of a customer’s electricity bill, noting that major customers may not be protected under the Electricity Pricing Order. It was discussed that this would rise to about 6% if options to mitigate electricity bill impacts are not explored. **Figure 16** provides provide the customer bill impact discussed during consultation.

Figure 16: Bill impacts from initial calculation of revenue charges

Customer Type	FY24 (Current approved)	FY25 (Roll forward)	FY26	FY27
Small residential customer (8.5 MWh/pa)	\$49	\$53	\$211	\$222
Large residential customers (15MWh)	\$86	\$93	\$372	\$392
Small medium business (30MWh/pa)	\$173	\$187	\$744	\$783
Medium business (150MWh/pa)	\$865	\$933	\$3,720	\$3,916
Large commercial and industrial (500MWh/pa)	\$2,883	\$3,109	\$12,402	\$13,052
Industrial (1000MWh/pa)	\$5,766	\$6,218	\$24,803	\$26,104
Large industrial (6000MWh)	\$34,596	\$37,305	\$148,819	\$156,622

Major customers consuming more than 750MWh/pa are not under the NTG Pricing Order

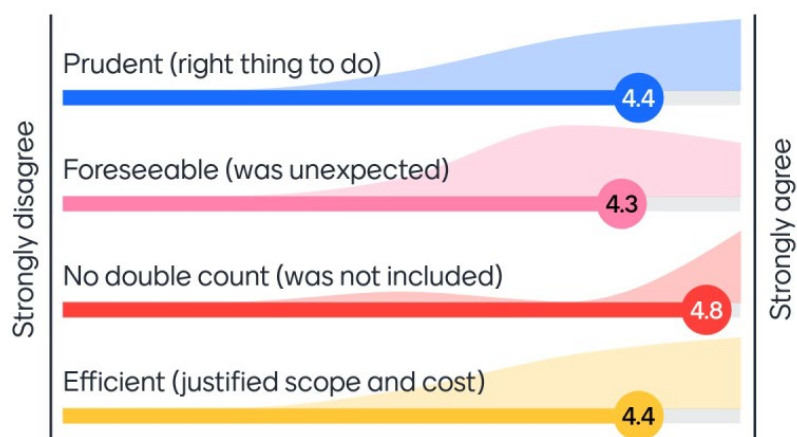
Two broad mitigation mechanisms were discussed – only seeking partial recovery of costs and deferring the recovery of costs to a future period.

A series of proposed principles were outlined to govern consideration of the recovery of costs:

- **No double counting** – We consider an important principle is to show that costs were not already provided for in the Commission’s determination. For example, we should consider whether the Commission included higher costs for staff to manage renewable technologies.
- **Reasonably not foreseeable or certain** – We should demonstrate that the activity or investment was not reasonably certain at the time of the previous regulatory determination.
- **Prudent** – We should demonstrate that the activity was prudent to undertake in our circumstances.
- **Efficient** – We should show that the costs were efficient in our circumstances.

Stakeholders were asked whether they agreed with these cost recovery principles. **Figure 17** illustrates the broad support at the workshop for all principles and particularly strong support for the principle of no double counting.

Figure 17: August workshop – Do you agree with our principles?



Written submissions

- **EDL Energy** supported the principles.
- **Jacana Energy** stated that while it broadly agreed with the principles used for seeking recovery of shortfall costs (noting that it disagreed that the cost drivers provided meet the recovery principles), there is a need for transparency over how these principles are applied to derive the amounts being sought..
- **Territory Generation** was of the view that, as various arms of Power and Water are independently seeking revisions of charges, the Commission would benefit by having a full picture (i.e., presenting as a combined amount with breakdowns), to determine whether corporate and administrative costs are properly distributed among various business units and that there is not in fact no double counting.

Stakeholders were asked if anything was missing from the principles or additional principles should be considered. Stakeholder suggestions at the workshop included frugality, expanding the efficient principle to include effective and economic, and cost benefit.

Written submissions

Jacana Energy suggested an additional principle of community service obligation (i.e., whether the expenditure was incurred implementing government social policy).

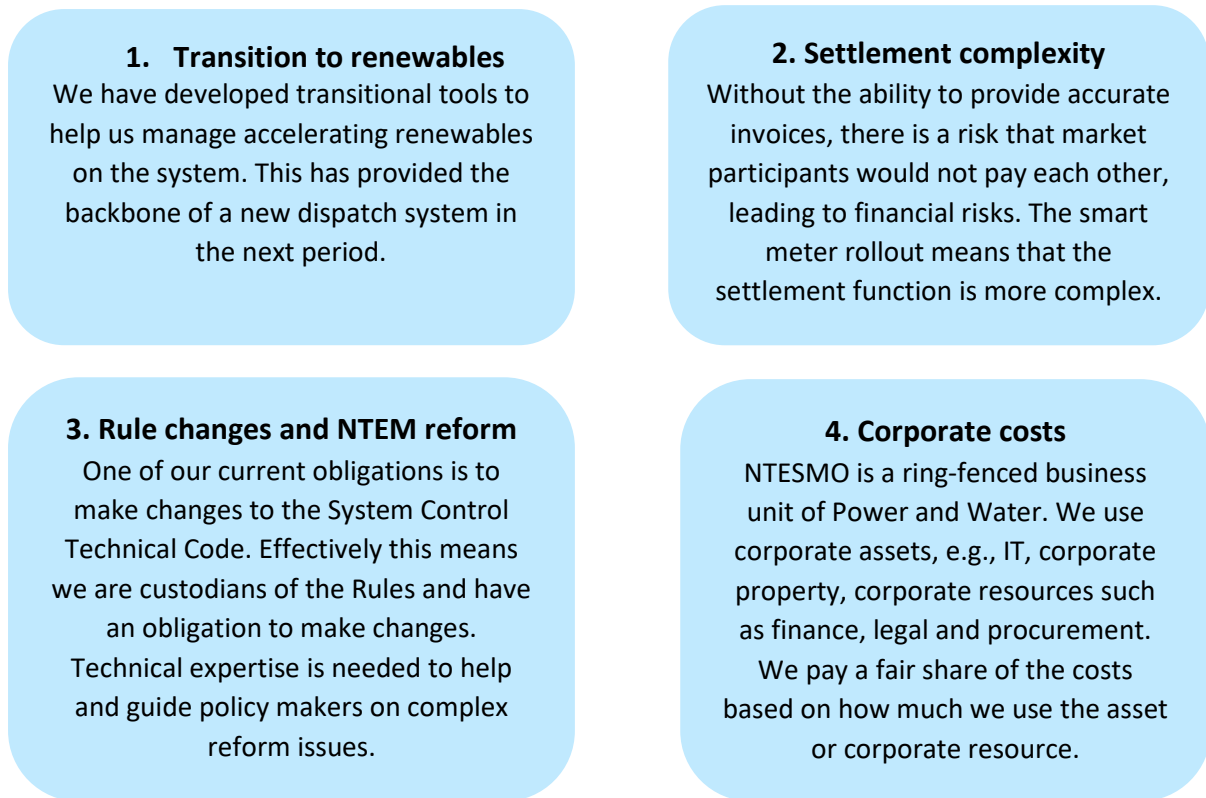
3.5 Drivers of higher prices

The initial calculation of charges contemplates recovery of a shortfall of revenue compared to the allowances set by the Commission.

We noted that the uptake of renewable technologies was faster than anticipated and preceded the implementation of NTEM reforms. This led to considerable challenges in managing the power systems. We anticipated the NTEM reforms would be made and this would have triggered a cost pass through to allow NTESMO to recover the costs of managing a more complex power system. NTEM or other regulatory reform has yet to be finalised.

These drivers also impacted our personnel and corporate costs.

Figure 18: Cost drivers

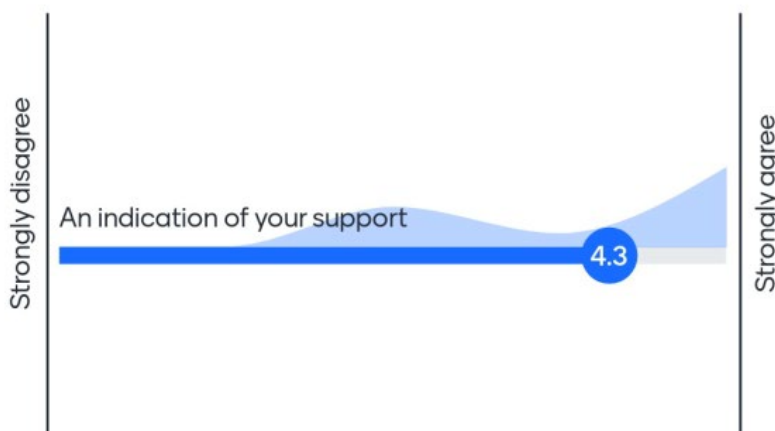


3.5.1 Transition to renewables

An animation was shown of the ‘Life of System Controller’, focusing on the acceleration of renewables on the system. We discussed the transitional tools that we have developed to help us manage these changes and how they will underpin the new dispatch system in the next period.

Figure 19 illustrates stakeholders broadly supported NTESMO acting on renewables. The general view was that there is ‘no option to not prepare for the future of renewables’.

Figure 19: August workshop - Do you support NTESMO acting on renewables?



Written submissions

Chamber of Commerce expressed the view that facilitating the integration of renewables is essential for stabilisation of the grid, but is a political (society) decision, not user demand, and therefore should not be charged to customers.

When queried on what additional information stakeholders would like to see in our Revenue Proposal, factors such as the following were noted:

- Demonstration of efficiencies
- Demonstration that there is an appropriate allocation of costs
- Increased clarity on the planning criteria being applied
- Development of tools in consultation with market participants
- Increased clarity on the prioritisation framework for resource allocation and expenditure
- Transparency of cost benefit analysis
- Transparency on benefits to end use customers.

3.5.2 Settlement complexity

A 'fit for purpose' settlements system is critical. Without the ability to provide accurate invoices, there is a risk that market participants would not pay each other, leading to financial risks. The smart meter rollout means that the settlement function is more complex. It has become apparent that the existing Excel system is not able to meet the increased demand on settlement, despite customisations.

The benefits of a new settlements system were discussed including reduced operational risk, addressing performance constraints, configurability to NTEM requirements, supporting additional market entrants and general efficiencies.

Figure 20 illustrates that stakeholders strongly supported NTESMO investing in a new settlements system. It was considered that that the 'risk of not being able to settle is too great'.

Figure 20: August workshop - Do you support NTESMO investing in a new settlements system?



Written submissions

Chamber of Commerce expressed the view that, while it is not in a position to comment on value for money, it feels that it is a foregone conclusion that a better management software should be purchased due to increased client base, seeing this as a business growth item that must be implemented.

When we queried the additional information stakeholders would like to see in our Regulatory Proposal stakeholders noted the following factors:

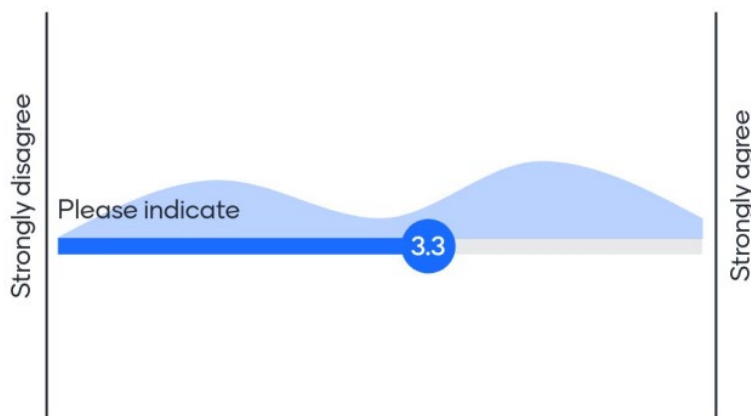
- Demonstration of efficiencies.
- Ensuring the specifications are not excessive.
- Consider whether the system should be recovered over a longer period.
- The critical choices that need to be made and whether the costs have been justified relative to these choices.

3.5.3 Rule changes and NTEM Reform

We have a current obligation to make changes to the System Control Technical Code. Effectively, this means we are custodians of the Rules and have an obligation to make changes. We also provide expertise to help and guide policy makers on complex reform issues.

Figure 21 illustrates stakeholders at the workshop indicated moderate support for NTESMO incurring costs related to these activities. The general view appeared to be that NTESMO is appropriate for this role as ‘the electricity system is very complex’ and ‘NTESMO has the subject matter expertise’.

Figure 21: August workshop - Do you support NTESMO incurring costs on Rule development and advice on reform?



Written submissions

EDL Energy stated that it is appropriate that NTESMO expect the NTEM reform to facilitate a pass through of costs, where those costs were increased by reasonably unforeseeable changes in the electricity system. Considering that the NTEM reform has not provided certainty within the period, EDL Energy considered it fair that certain costs be recoverable. However, EDL Energy was not able to consider the fairness of any proposed recovery amounts, or shortfall in approved revenue, without independent review of the necessity of the spend.

When queried on what additional information stakeholders would like to see in our Regulatory Proposal, the following factors were noted at the workshop:

- Demonstration of ring-fencing arrangements.
- Demonstration that there is an appropriate allocation of costs.
- Increased on which areas of Power and Water are doing the work.
- Clarity on advisory role to government and ensuring that there is no conflict.
- How grandfathering will be applied to existing market participants.

3.5.4 Corporate costs

NTESMO is a ring-fenced Power and Water business unit. We use corporate assets, e.g., IT and corporate property and use corporate resources such as finance, legal and procurement. We pay a fair share of the costs based on how much we use the asset or corporate resource. Our corporate costs have been higher than anticipated in the current period. The drivers include higher corporate costs in Power and Water, increased allocation to NTESMO to reflect its increasing share and use of corporate services, and the additional financing costs associated with corporate assets.

Figure 22 illustrates stakeholders at the workshop indicated modest support for NTESMO seeking additional revenue for corporate costs. The general view appeared to be that ‘all businesses have operating processes that are dependent on corporate services being provided’.

Figure 22: August workshop - Do you support NTESMO seeking additional revenue for corporate costs?



Written submissions

Jacana Energy noted that while it is supportive of NTESMO performing a role in rule development, NTEM reform advice, and facilitating renewable energy integration into the Northern Territory, it is concerned whether it is in fact NTESMO performing these duties, or Power and Water. Jacana Energy is supportive of market reform that sees the separation of NTESMO from Power and Water, noting that should this separation occur, continued sharing of resources (in particular regulatory resources) with Power and Water could limit the functional independence the separation is designed to achieve.

When we queried on what additional information stakeholders would like to see in our Regulatory Proposal, the following factors were noted:

- Clarity on the percentage of under-recovery that is represented by corporate overheads.
- Clarity on the allocation of costs and ensuring that this is reflective of what is needed, not just what exists (e.g., appropriateness of allocators).
- Potential for an independent review of corporate structures.
- Clarity on what is sought to be recovered and whether this extends to prior years.

Written submissions

The following additional clarifications across the cost drivers were raised:

- **EDL Energy** suggested further information on the relative share of each cost driver.
- **Jacana Energy** considered that the cost drivers do not meet the principle of 'reasonably not foreseeable or certain' and that there is limited information to determine 'prudence' and 'efficiency' of associated expenditure. For example, Jacana was of the view that greater evidence could be provided to support that increased personnel costs and corporate cost allocations were efficient, economic and effective. In particular, Jacana Energy questioned whether the increased investment in technology has translated into efficiencies around other corporate costs that should drive a cost reduction.

3.6 Options to defer recovery

Deferring revenue is another way to reduce customer bill impacts in the regulatory period. We consider that there are three viable options to mitigate customer bill impacts – deferring cost recovery by 25%, 50% or 75%.

The change in bills for a typical industrial customer consuming 1000MWh under each option are shown below relative to current approved prices today, and the bill impact if there was no deferral. This is based on both System Control and Market Operator regulated charges, for an industrial customer in Darwin-Katherine.

Figure 23: Bill impact for customer consuming 1000Mwh (large industrial customer)

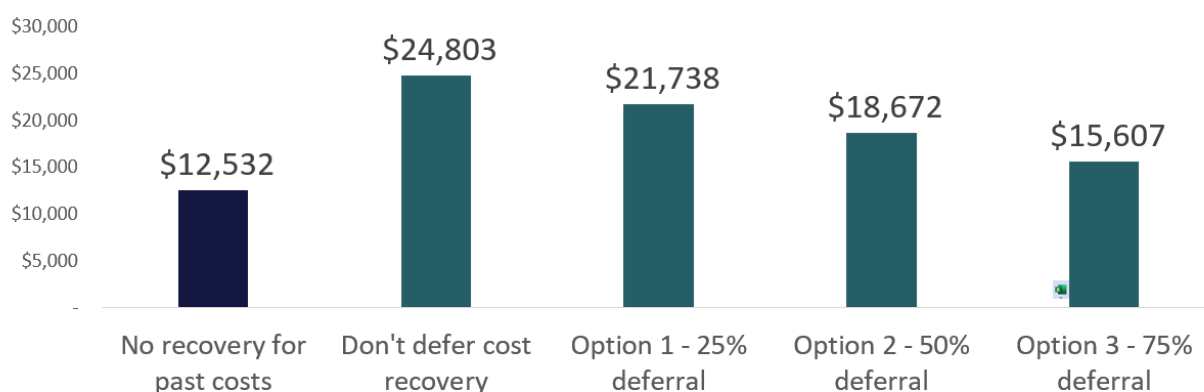


Figure 24 and 25 illustrates stakeholders at the workshop support deferring revenue recovery to a future period and which option is preferred.

Figure 24: Do you support deferring revenue recovery to a future period?

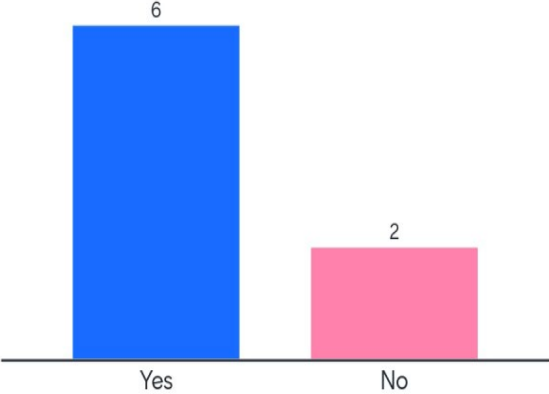
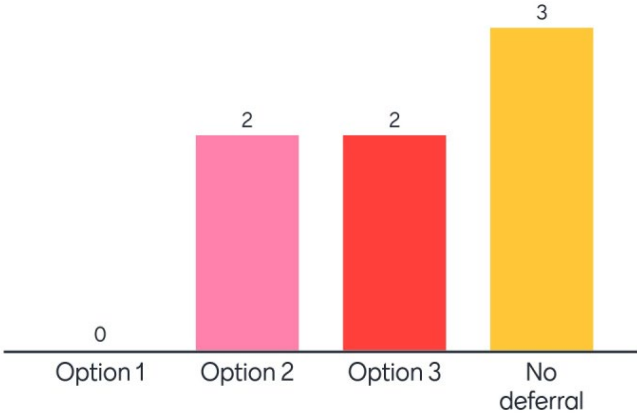


Figure 25: Which option is preferred?



Although a number of stakeholders supported the concept of revenue deferral, there was no clear consensus between Option 2 (50%) and Option 3 (75%). It is important to note that any deferral pushes revenue recovery and price impacts to future periods.

Written submissions

- **EDL Energy** agreed that we should consider deferring revenue recovery to future periods, but had no preference option.
- While **Jacana Energy** considered that these costs should not be recovered from customers, should they be recovered, a longer recovery period would reduce the customer impact. In determining the preferred number of years for deferral it would be appropriate to consider the expected years of benefit from investments and customer affordability.

4. Next steps

Stakeholder feedback from across the entirety of our consultation program is being used to shape and inform the Revised Revenue Proposal that will be submitted to the Commission in December 2023.

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