No. 166

LEGISLATIVE ASSEMBLY OF THE NORTHERN TERRITORY

WRITTEN QUESTION

Mrs Lambley to the Treasurer:

Territory Generation

1. When (provide a date) did you, as the portfolio Minister, responsible for Territory Generation, find out about the severe financial problems in Territory Generation which led to your decision to inject $20m of tax payers funds into Territory Generation and to sack the Board?

2. What will the extra $20m of Government funding injected into Territory Generation pay for?

3. What did the board do wrong which led to you sacking them? Please provide details of what requirement they breeched and why their performance was not up to your expectation?

4. Explain in detail why there has been a $20m blow out in the Territory Generation budget for this financial year?

5. Is there any publicly availably explanation and documentation about this $20m blow out in Territory Generation? If so, could you direct Territorians as to where they can access this information?

6. How was this situation in Territory Generation communicated to you as Minister?

7. When did you first become concerned about the serious financial problems in Territory Generation?

8. In your media release dated 22nd December 2017 you said “Since coming to government I have been concerned about the financial sustainability of Territory Generation” – why didn’t you act sooner to prevent the problems of Territory Generation?

9. Will you reverse the separation of the Power and Water entities and make it one big Government Owned Corporation?

10. Are Power and Water and Jacana also having financial problems like Territory Generation? If so, please provide specific information about the financial problems of these GOCs?

11. When (provide a date) did you decide to inject $20m of tax payers funds into Territory Generation?

12. Why did you choose 22nd December 2017 to inform Territorians?

13. When (provide the date) did you formally sack the Board of Territory Generation?

14. Did you advise the board members of Territory Generation in writing of their dismissal? If so, what date was that?

15. How did you choose the people to replace the board member vacancies of Territory Generation?

16. Who are the new members of the board of Territory Generation?

17. What are their specific qualifications and experience of each of these new Board Members, relevant to managing Territory Generation?

18. How were these people selected to the temporary Board of Territory Generation?

19. What is the approximate or estimated cost to Territory Generation of purchasing and installing the new battery for the Top End?

20. Is the extra $20m of tax payer funding you have allocated to Territory Generation simply paying for this new battery for Darwin?

21. Provide details on the commissioned report into Territory Generation by Mr Jim Colvin.

    a) Who is Mr Jim Colvin?
    b) What expertise does Mr Colvin have in this area?
    c) How was he selected to undertake this work?
    d) What will the cost of this report be to Territory tax payers?
    e) What are the Terms of Reference for this work?
    f) When will the report be completed?
    g) Will the report be made available to the public?
    h) Will Mr Colvin be asked to advise on reversing the separation of the Power and Water entities - Territory Generation, Power and Water and Jacana?

22. Please provide details on the recruitment process for permanent Board positions:

    a) When will recruitment occur?
    b) What will the selection process be?
    c) Who will select the new board?
    d) What expertise will the new board members require?
    e) When will the new permanent board members of Territory Generation be in place?

23. Will the NT Government looking to reduce the cost of electricity to consumers in the NT?

RESPONSE

1. When (provide a date) did you, as the portfolio Minister, responsible for Territory Generation, find out about the severe financial problems in Territory Generation which led to your decision to inject $20m of tax payers funds into Territory Generation and to sack the Board?

The portfolio Minister is the Minister for Essential Services. The Treasurer is the shareholding Minister.

The shareholding Minister was sent a request for $20 million in additional funding on 31 October 2017.

Once aware of Territory Generation's forecast cash position, the shareholding Minister approved an increase to the Corporation's temporary overdraft facility from $10 million to $20 million while further investigations were undertaken in relation to Territory Generation's financial performance, financial position and financial management practices through an external expert review.

2. What will the extra $20m of Government funding injected into Territory Generation pay for?

As noted above, in early November 2017, once aware of Territory Generation's forecast cash position, the shareholding Minister approved an increase to the Corporation's temporary overdraft facility from $10 million to $20 million while further investigations were undertaken.

3. What did the board do wrong which led to you sacking them? Please provide details of what requirement they breeched and why their performance was not up to your expectation?

In accordance with section 15 of the *Government Owned Corporations Act*, the board of a government owned corporation is responsible for the operation of the corporation and accountable to the government owned corporation's shareholding Minister for the financial performance of the corporation.

The shareholding Minister was concerned with the deterioration of Territory Generation's financial performance for 2016-17 against targets set in the 2017-18 Statement of Corporate Intent and the further financial deterioration forecast for 2017-18.

As a result of Territory Generation's revised forecasts for 2017-18 and the findings from the review by Mr Colvin, the shareholding Minister no longer had confidence in the capability of the Board to manage the corporation in the interests of Territorians and the objectives of the *Government Owned Corporations Act*.

4. Explain in detail why there has been a $20m blow out in the Territory Generation budget for this financial year?

Forecasts provided by Territory Generation at the end of October 2017 predicted a financial deterioration in Territory Generation's financial performance for 2017-18 and the need for an additional $20 million in new funding.

The deterioration in financial performance was the combined result of reduced electricity sales, increased system constraints and associated fuel costs, significant delays and cost increases for major capital projects, higher than forecast personnel costs, professional fees and other operational costs.

Once aware of Territory Generation's forecast cash position, the shareholding Minister approved an increase to the Corporation's temporary overdraft facility from $10 million to $20 million while further investigations were undertaken.

5. Is there any publicly availably explanation and documentation about this $20m blow out in Territory Generation? If so, could you direct Territorians as to where they can access this information?

In the interests of transparency, the shareholding Minister made the external review report by Mr Colvin available on 22 December 2017, subject to redacting commercial-in-confidence information. The report provides significant detail in relation to Territory Generation's cost pressures.

A copy is attached.

6. How was this situation in Territory Generation communicated to you as Minister?

Through its September Quarterly Performance Report to the shareholding Minister.

7. When did you first become concerned about the serious financial problems in Territory Generation?

Following receipt of Territory Generation's September Quarterly Performance Report provided on 31 October 2017 to the shareholding Minister.

8. In your media release dated 22nd December 2017 you said "Since coming to government I have been concerned about the financial sustainability of Territory Generation" – why didn't you act sooner to prevent the problems of Territory Generation?

Territory Generation's financial performance during 2016-17 deteriorated from the previous year, however targets set by the Board for 2017-18 as part of the 2017-18 Statement of Corporate Intent forecast an improvement in the financial position of the corporation primarily due to completion of major capital projects.

Territory Generation's continued forecast decline in profitability for 2017-18 was first communicated by the Board on 31 October 2017 through its September Quarterly Performance Report to the shareholding Minister.

The shareholding Minister commissioned an external expert review of Territory Generation to consider the financial and non-financial performance of the Corporation. The external review also considered Territory Generation's proposed immediate actions and strategies for addressing its financial position and operational issues that impact on its financial position.

9. Will you reverse the separation of the Power and Water entities and make it one big Government Owned Corporation?

This is not a decision for the shareholding Minister in isolation. Such a decision would need to be made by the Government in consideration of what is in the best interest of Territory consumers. It would also require significant legislative amendments.

10. Are Power and Water and Jacana also having financial problems like Territory Generation? If so, please provide specific information about the financial problems of these GOCs?

Information on the financial performance of Power and Water Corporation and Jacana Energy is available in the respective annual reports.

Forecasts provided by Power and Water Corporation and Jacana Energy as part of their September 2017 Quarterly Performance Reports indicate financial performance were relatively consistent with the respective Statements of Corporate Intent targets.

11. When (provide a date) did you decide to inject $20m of tax payers funds into Territory Generation?

As noted previously, in early November 2017, once aware of Territory Generation's forecast cash position, the shareholding Minister approved an increase to the Corporation's temporary overdraft facility from $10 million to $20 million while further investigations were undertaken.

12. Why did you choose 22nd December 2017 to inform Territorians?

The external review by Mr Colvin was finalised on 21 December 2017 so the shareholding Minister acted immediately on that report.

13. When (provide the date) did you formally sack the Board of Territory Generation?

Following the findings of the report by Mr Jim Colvin, the shareholding Minister acted swiftly and advised Chair of Territory Generation on 22 December 2017 that a new direction was needed for the Corporation.

Some members resigned later that day. In accordance with section 13(6) of the *Government Owned Corporations Act*, the appointments were officially terminated by the Administrator on 22 December 2017.

14. Did you advise the board members of Territory Generation in writing of their dismissal? If so, what date was that?

See response to Question 13.

15. How did you choose the people to replace the board member vacancies of Territory Generation?

The three interim Board members were identified as having the appropriate skills and knowledge to address the immediate issues facing the Corporation.

16. Who are the new members of the board of Territory Generation?

Mr Dennis Bree (Chair), Mr Richard Galton and Ms Christine Charles.

17. What are their specific qualifications and experience of each of these new Board Members, relevant to managing Territory Generation?

Mr Bree is a civil engineer based in the Territory. He commenced with GHD in 1974 and spent three years after Cyclone Tracy involved in structural design prior to joining the Commonwealth Government where he focused on water and sewerage, particularly in remote areas and then moved into management roles with the Department of Transport and Works and Power and Water Authority (PAWA). At PAWA, Mr Bree was Executive Director Operations and was responsible for Generation as well as other business units.

Mr Bree was previously Deputy Chief Executive of a number of government departments and Chief Executive of the Department of Business.

Mr Galton is a civil engineer and has a Master's degree in Business Administration. He previously worked for the NSW Department of Main Roads as a planning, design and construction engineer. He was seconded to the Northern Territory in 1982 to manage road network development.

Since 1994 Mr Galton held senior executive roles including the role of Chief Executive Officer for a range of Territory Government agencies including the Department of Primary Industries and Fisheries and Department of Business, Economic and Regional Development.

Ms Charles is Managing Director of D4G Pty Ltd which provides strategic advice about external issues and challenges to companies, government and non-government organisations. She has broad knowledge of the mining and energy sector and spent several years in a global group executive role with Newmont Mining.

Ms Charles has tertiary qualifications in Arts and holds the University of Queensland Fellowship, and an adjunct Professor at the Sustainable Minerals Institute at the University of Queensland.

18. How were these people selected to the temporary Board of Territory Generation?

The three interim Board members were identified as having the appropriate skills and knowledge to address the immediate issues facing the Corporation.

19. What is the approximate or estimated cost to Territory Generation of purchasing and installing the new battery for the Top End?

Territory Generation's expression of interest process for the Energy Storage System closed on 22 January 2018. The expression of interest submissions, including price, are considered commercial-in-confidence. Territory Generation is required to undertake an assessment of the responses and provide a full business report to the Board.

20. ***Is the extra $20m of tax payer funding you have allocated to Territory Generation simply paying for this new battery for Darwin?***

No.

21. ***Provide details on the commissioned report into Territory Generation by Mr Jim Colvin.***

a) Who is Mr Jim Colvin?

Mr Colvin is an independent consultant. He is also the Northern Territory Motor Accident Compensation Commissioner.

b) What expertise does Mr Colvin have in this area?

Mr Colvin has extensive experience in providing specialist advice in relation to corporate governance and reform of state owned enterprises (SMEs). He has strong transactional experience in both the public, government owned businesses, private sector and related policy experience in monopoly regulation, pricing and industry structuring.

Mr Colvin has been a member of the International Monetary Fund Expert Panel since 2011 and was previously a Senior Economist for the Directorate for Financial and Enterprise Affairs for the OECD in Paris, a director of an independent consulting firm and Deputy CEO, Department of the Chief Minister from 1998 to 2002.

Mr Colvin has a Bachelor of Laws and Bachelor of Commerce.

c) ***How was he selected to undertake this work?***

Due to the urgency of the work required, a select tender process was undertaken.

d) What will the cost of this report be to Territory tax payers?

$37 800.

e) What are the Terms of Reference for this work?

The consultant was required to consider Territory Generation’s financial and non-financial performance since its establishment in July 2014, financial position as at 30 September 2017, financial and non-financial performance for 2016-17 and revised forecasts for 2017-18 relative to comparable businesses.

The consultant was also requested to consider Territory Generation’s proposed immediate actions and identified strategies for addressing its financial position and operational issues that impact on its financial position and areas that should be of concern for the shareholding Minister with regards to financial risk and performance for government as owner.

f) When will the report be completed?

The report was completed on 21 December 2017.

g) Will the report be made available to the public?

The report was made available, subject to commercial-in-confidence information being redacted, on 22 December 2017.

h) Will Mr Colvin be asked to advise on reversing the separation of the Power and Water entities - Territory Generation, Power and Water and Jacana?

The Government has not asked Mr Colvin, or anyone else, to advise on reversing the structural separation of Power and Water Corporation.

22. Please provide details on the recruitment process for permanent Board positions:

a) When will recruitment occur?

A recruitment process will be undertaken prior the expiry of the interim board appointment in June 2018.

b) What will the selection process be?

Territory Generation's executive will be requested to engage an experienced recruitment firm to provide advice on the identification, selection and appointment of individuals suitable for future appointments to the Board.

c) Who will select the new board?

New board members will be appointed by the Administrator on the recommendation of the shareholding Minister.

d) What expertise will the new board members require?

The expertise of the new board members will be considered by Government following advice from the experienced recruitment firm and the interim board and with regard to the opportunities and challenges facing the corporation going forward.

e) When will the new permanent board members of Territory Generation be in place?

The current interim board is appointed until 30 June 2018. The new board will need to be appointed prior to the expiry of the interim board appointments.

23. Will the NT Government looking to reduce the cost of electricity to consumers in the NT?

The Government has committed to no price increases above CPI.

Review of
Territory Generation's
Financial Performance

21 December 2017

Jim Colvin

Table of Contents

EXECUTIVE SUMMARY

Territory Generation ("T-Gen") has experienced a significant deterioration in its financial performance since its establishment as a stand-alone business. Since the 2014/15 Financial Year, earnings, revenues and cashflow have all declined, while costs have increased.

Many costs have increased because of discretionary projects undertaken by T-Gen, such as the Remote Operations Centre, and the refurbishment of the Head Office. Financial performance in 2016/17, in particular, was adversely affected by a significant increase in Professional Fees and Other Costs; which were cumulatively $10M over budget. The increase in system constraints by the System Controller has led to increased costs, and the internalizing of services previously provided by Power and Water Corporation has caused some increases in staff. However, this is not the dominant reason for underperformance over the last financial year.

On 1 July 2015, T-Gen, in coordination with Government, established a lower generation tariff for regulated customers in the Darwin-Katherine Region. At the same time, Government as shareholder set T-Gen up with a commercial balance sheet capable of supporting the lower tariff, with a write-down in assets and a significant debt reduction. [redacted] To date, T-Gen has not made any meaningful savings in its cost base or staffing levels, despite past SCI forecasts that this would have already occurred.

Capital expenditures have been substantial since T-Gen's establishment. T-Gen's SCI forecasts of capital expenditure have not been strongly aligned with the projects that have been completed or their eventual timing. The $100M generation renewal at Alice Springs and Tennant Creek did not progress through the SCI process. The 2017/18 capital budget was for $38.3M, with the current forecast for $58.3M in work. As a shareholder and financier, a lack of visibility and predictability makes capital financing decisions extremely difficult. Government approved an additional unscheduled $20M loan in the 2016/17 Financial Year to help fund capital projects, and has recently increased the overdraft facility from $10M to $20M.

For 2017/18, the current planned capital expenditures of $58.3M are $20M above budget, and forecast operating cashflows are well below budget. T-Gen does not have the financial resources to complete this level of capital works this year. Completion of the current capital works program will only be possible if Government contributes even more funding. T-Gen could take on more debt, but its debt servicing metrics are already below investment grade. T-Gen is not earning a commercial return on the existing equity, so any additional equity would effectively be a grant. This is not a capital financing arrangement consistent with the objectives of the *Government Owned Corporations Act*.

Based on the most recent financial information, T-Gen will have a negative cash position from February 2018 and will remain that way for the remainder of the financial year. If corrective action is not taken, then the forecast cashflows provided by T-Gen show that the existing $20M overdraft will not be sufficient to allow T-Gen to pay their outgoings as they fall due at some stage during the remainder of the 2017/18 financial year. This is a critical position for the business. At a minimum, T-Gen will require a combination of: an adjustment to the current lumpy payment terms with Jacana and PWC; implemented cost savings; and a deferment of some capital works to be able to end the year with a positive cash balance. These steps should be a pre-requisite to any consideration by Government of further capital financing.

T-Gen has identified a cost reduction strategy, although the information presented to the shareholding Minister does not identify cost reduction targets or timelines and so it is unclear the extent to which this will contribute to the resolution of the critical cashflow issues. In the updated quarterly forecast provided to the shareholder, the revised forecast for 2017/18 shows the expectation is for most cost categories to be above the targets set out in the 2017/18 SCI Budget.

In terms of T-Gen's non-financial performance, their SCI provides no metrics against which to assess their performance. Their reporting of performance against the SCI equally does not provide an assessment of their achievement of non-financial objectives. Without these metrics it is not possible to assess their non-financial performance, or to assess the effectiveness of the significant capital investments (such as those related to safety) that have been made to implement their important non-financial objectives.

The current tariff freeze expires on 1 July 2018, and T-Gen has flagged its intention to pursue an increase in tariffs to recover its costs. Previous studies have highlighted that the efficient costs to a new thermal generator would be substantially lower than T-Gen's existing tariffs. Costs to renewables providers are also lower, evidenced by the fact that there are a number of existing proposals to install new generation capacity. Increasing tariffs will accelerate the competitive threat. In addition, any tariff increase will either have to be borne by consumers or the Government through an increase in the CSO. The latter would be an effective back-door subsidy to T-Gen.

T-Gen has done modeling that estimates the incremental cost of system constraints to profitability at approximately $8.5M. It is likely a reasonable estimate of the incremental costs to T-Gen (although the timing of when those costs are incurred is less certain). This estimate is against actual costs, not efficient costs. It is understood that some of the constraints can be alleviated by capital works and DTF should work with T-Gen and System Control and DTF to facilitate agreement on what works will be sufficient to remove the constraints.

The SCI process is critical to giving Government visibility around the performance of T-Gen and a set of benchmarks to assess the capacity of T-Gen to execute on its strategy. There have been large variations in performance and actions against these SCI targets for the last two years, and the reporting of these variations to the Minister has not been timely. This has rendered the SCI process largely redundant to date. The 2018/19 SCI process must be used as the basis for the parties to agree on realistic, credible and firm targets for: the cost savings under the cost reduction program; the reduction in personnel costs that T-Gen have forecast; and the capital investment program over the SCI horizon.

T-Gen faces an extremely difficult external operating environment, with actual and potential market competition. This will become more acute with the transitional to a 50% renewable energy target. The market model is not yet developed that would fund T-Gen to provide the necessary reserve capacity / ancillary services that a 50% renewables market will require. T-Gen's existing business model will not survive the transition to a 50% renewables market, and the Board has actively considered the strategic options that they face. T-Gen either has to become a significant participant in the provision of renewables or become a base-load and capacity provider with a much smaller footprint. T-Gen's sees its greatest prospect for success as a mandated coordinator for the renewables market. The Roadmap to Renewables Report, in contrast proposed an enabling action that excludes T-Gen from the renewables market, at least during the transition.

Both approaches carry significant risks for Government, and its preferences may not necessarily align with the commercial options developed by T-Gen or its current strategic direction. Regardless, T-Gen has a role to play in the Territory's electricity industry and it must operate financially sustainably. If T-Gen is the market coordinator, capital risks will be borne on their balance sheet either directly or through take or pay obligations under Power Purchase Agreements (with Government effectively underwriting that risk). Execution risks will be significant. If T-Gen becomes a baseload/reserve provider, it could reduce costs to some extent, but it would still have a large fixed cost base that would have to be funded from much lower volumes. This will mean either high capacity pricing under the renewables market model, withdrawal of capacity, or some form of Government subsidy.

As the market model for delivery of the renewables target progresses, Government needs to work with T-Gen to determine an agreed strategy. But, to do this, will require detailed modeling / scenario testing of the impacts on T-Gen of the alternative approaches, with such work not yet having been undertaken.

1 T-Gen's financial and non-financial performance since its establishment

ToR 1: At a high level, T-Gen's financial and non-financial performance since its establishment in July 2014, focusing on movements in main cost and revenue categories.

Territory Generation has experienced a significant deterioration in its financial performance since its establishment as a stand-alone business. Since the 2014/15 Financial Year, earnings, revenues and cashflow have all declined, while costs have increased.

In addressing recurrent financial performance, this review placed its main focus on changes in T-Gen's earnings before, interest, tax, depreciation and amortization (EBITDA), which is an effective proxy for the cash generated by the business to pay for capital works and the returns to Government. The Government is at the one time, the equity holder, the debt financier, and the taxation system. Accordingly, it gets all pre-tax returns on the assets, and EBITDA is the best measure of this.

The following table sets out actual and forecast EBITDA for the last three and current financial years:

Year	EBITDA ($million)	EBITDA - SCI Budget ($million)	EBITDA/Revenue (%)
2014/15	$85.3	$84.2	24.6%
2015/16	$59.2	$68.5	19.1%
2016/17	$33.4	$51.0	11.3%
2017/18		$58.9	

There has been a marked deterioration in financial performance in each year, as highlighted in the terms of reference.

The ability of the business to generate significant pre-tax cashflows is of fundamental importance because of the high current and future capital needs of T-Gen. Operational cashflows should be the principal source of financing for the capital expenditure needs of the business. In 2015/16 the large capital projects in Alice Springs and Tennant Creek required a $50M capital grant from Government. In 2016/17 the reduction in cashflows meant that the capital works could not be funded from internal resources and Government was required to invest an additional $20M as debt. In 2017/18 additional working capital, in the form of an increase in the bank overdraft, has already been provided, and the Company is seeking additional debt or equity funding to complete its capital financing requirements.

1.1 Income Statement

The causes of the deterioration in EBITDA involve movements across both revenues and expenses:

- For past financial performance, Revenues have moved lower, principally because of the revised tariff introduced for regulated customers on 1 January 2015;
- Energy costs have moved higher, in proportional terms, because of increased system security requirements imposed by the System Controller and an escalation in gas price;

- Personnel costs have increased, partly to replace services previously provided under the External Services Agreement with PWC, and partly because T-Gen has embarked on a number of business transformation projects that have been both staff and capital intensive;
- Professional Services Fees (consultants) and Other Costs have increased significantly, particularly in 2016/17 when the combined increase was $10.0M;
- All other cost categories have generally increased, with the exception of costs under the Eternal Services Agreement, which have reduced substantially. The costs of Insurance and the cost of Materials are the only other cost categories that have declined over the two years.

[redacted]

	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
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[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

1.2 Balance Sheet

[redacted]

[1] Reflects the fact that the SCI was prepared on the basis that the PPA at Pine Creek would cease, whereas it continued in operation until 1 July 2017.

[2] Excluding costs ultimately recovered under warranty.

In the two financial years since 1 July 2015, there has been approximately $130M invested in capital works, which has (net of depreciation) increased the fixed cost base. Leverage has increased marginally via $20M loan provided by Government. But, the majority of funding provided by Government has been by way of a $50M capital grant. This has meant that the debt to assets ratio of the business has remained relatively constant, despite the large investment in capital assets.

This can be shown below:

Year	Total Fixed Assets ($M)	Total Assets $M	Total Borrowings $M	Debt to Total Assets (%)
2014/15	$338.4	463.0	180	38.9%
2015/16	$364.6	521.7	180	34.5%
2016/17	$423.4	530.0	200	37.7%

1.3 Cash Flow

Operating cashflows have shown a high degree of variability over the three years, which is a function of accruals relating to the financial settlement from the disaggregation from PWC. This has had the effect of overstating underling cashflows in 2015/16, and understating cashflows in 2014/15. When normalized, the cash from operations have shown a gradual reduction consistent with the deterioration in EBITDA over the same period.

In net terms, Government has provided more funding in terms of capital grants and additional debt than T-Gen has provided by way of returns on invested capital: Dividend and interest payments at $51.2M; as against capital grants of $50M and additional loan funding of $20M.

The following table summarizes operating, investing and shareholder cashflows since the establishment of T-Gen.

	2014/15	2015/16	2016/17
Opening Cash	-	$22.8	$78.9
Cashflows before Interest /Tax	$51.0	$96.9	$30.6
Interest	($10.2)	($6.9)	($7.7)
Tax	-	($17.1)	($8.8)
Cashflow after tax/interest	$40.8	$72.9	$14.1
Less: Capital Investments	($18.1)	($48.8)	($80.9)
Grants	-	$50.0	-
Dividends		($18.0)	($8.4)
Net Debt Increase	-	-	$20.0
Ending Cash	$22.8	$78.9	$23.7

2 Reasons for Variations in T-Gen's Performance[3]

ToR 2: The reasons for any significant variations in T-Gen's recent financial and non-financial performance, both compared to its SCI targets and to previous financial year actual results.

2.1 Revenues

The vast majority of T-Gen's revenues are generated through the wholesale sale of electricity. From 1 July 2015, T-Gen has entered into three-year bilateral contracts with the active Retailers in the form of Wholesale Electricity Supply Agreements (WESA). The contracts are fully flexible load following contracts for a fully bundled rate in each region that includes energy and all ancillary services. The System Controller provides T-Gen with the monthly consumption data by each retailer to facilitate billing.

T-Gen has little control over demand for its core wholesale product. Once prices are set, it effectively is a "taker" of its revenue line. Additional revenues can be earned from projects outside of its core services, and T-Gen does have some plans to generate incremental revenue but, to date, these revenues have been negligible.

There have been three fundamental impacts on T-Gen's revenues since establishment.

[redacted]

[redacted]

[redacted]

[redacted]

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3 ToR 2 and ToR 3 have been reversed in this report.

[redacted]

2.2 Costs

As noted in Section 1, T-Gen's costs have increased across most categories. Many costs have increased because of discretionary projects undertaken by T-Gen, such as:

- The Remote Operations Centre;
- Implementing the Safe Systems of Work;
- Improving Cyber Security Controls;
- Refurbishment of the Head Office.

Without the suite of transformation and business improvement projects, costs and staffing levels would be lower. It is difficult to determine the extent to which all of these projects are necessary for the current scope of operations, or to what extent they are an investment in future capacity. T-Gen is clearly of the view that they need to expand their operations (into renewable generation capacity particularly). To the extent that the ultimate agreed strategy adopted for T-Gen is not one of expansion, then any investment in additional operating capacity will have been unnecessary.

2.2.1 Energy Costs

[redacted]

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[4] T-Gen estimate the impact for 2016/17 to be $2.5M in decreased revenue and $0.5 reduction in profit. For 2017/18 their estimate is for a reduction in revenues of $28M and a reduction in profitability of $4.7M.

[5] The large increase between 14/15 and 15/16 is ascribed by T-Gen in their 2015/16 Annual Report to unseasonably hot weather that year.

[redacted]

[redacted]

[redacted]

2.2.2 Personnel Costs

There has been a significant increase in staffing and staff costs, and this has contributed to the reduction in EBITDA over the last three financial years.

Date	Established Positions	Monthly Average	Annual Personnel Cost ($M)
July 2014	171	148	
July 2015	203	198	$20.5
July 2016	219	205	$26.9
July 2017	240	238	$33.9

The causes of increased staffing numbers and costs relate to the following:

- An increase in staff as a result of T-Gen operating as a stand-alone business, with the increased staff costs offset by a reduction in the External Services Agreement with PWC;
- An increase in senior management positions;
- Increases related to the development of specific transformation projects, related to the establishment of the new operating model.
-

Impact of Insourcing PWC External Services

In 2014/15, T-Gen paid $11M for the External Services Agreements, which is the relevant base for comparison.[6] The following table shows the combined cost of External Services Agreements and Staff Costs. This likely understates the costs of replacing external services, since some of

[6] While T-Gen has also highlighted the estimated ESA costs in the 2014/15 Interim SCI, this was an early PWC estimate and did not reflect the cost of the original agreement entered into.

the cost conversion would be represented in other cost categories, particularly Professional Fees.

Year End	Staff Cost ($M)	ESA Costs ($M)	Combined Costs ($M)
2014/2015	$20.5	$11.0	$31.5
2015/2016	$26.9	$3.8	$30.7
2016/2017	$33.9	$3.0	$36.9

What can be seen from this is that the majority of the salary cost increases in 2015/16 can be attributed to replacement of the ESA, whereas very little of the cost increase in 2016/17 is related to the ESA. This would suggest that staffing costs not related to insourcing of external services agreement increased by 15 and 20percent between 2015/16 and 2016/17.

2.2.3 Professional Fees

Professional Fees covers external consultants such as accountants, lawyers etc. While a component of this is non-discretionary, this is a cost element where the business has the highest degree of discretion. For instance, T-Gen spent $1.5M in 2016/17 on consultants to advise on future strategies for the business.

Professional fees is the cost category that has experienced the greatest growth. There was an increase in these fees in 2015/16 and 2016/17 (both against the prior comparable year and against forecast). This has had an impact on T-Gen's performance.

In 2015/16 the expenditure in excess of budget was $0.5M broken down as follows:

Description ($'000)	2015/16 SCI	2015/16 Actuals	Under/(Over) Spend
Internal Audit	-	64.7	(64.7)
Consultancy – Financial	1,113.8	455.6	658.2
Consultancy – Other	-	1,860.1	(1,860.1)
Legal Fees	159.6	118.8	40.8
Professional Fees	938.8	314.2	624.6
Other	117.5	-	117.5
Total Professional Fees	**2,329.7**	**2,813.4**	**(483.7)**

In 2016/17 the expenditure on Professional Fees was $5.1M in excess of the budgeted amount as follows:

Description ($'000)	2016/17 SCI	2016/17 Actuals	Under/(Over) Spend
Internal Audit	205.0	355.8	(150.8)
Consultancy – Financial	-	667.3	(667.3)
Consultancy – Other	2,069.7	4,386.0	(2,316.3)
Legal Fees	240.0	266.9	(26.9)
Professional Fees	-	1,950.7	(1,950.7)
Other	-	-	-
Total Professional Fees	**2,514.7**	**7,626.7**	**(5,112.0)**

The largest cost over-runs were in "Other" consultancy services where $4.4M was spent. T-Gen advised that this includes:

- Development of potential future options to be reviewed and provided as strategies for the business ($1.5M);
- On site safety support ($0.3M);
- Supply Chain redevelopment support ($0.3M); and
- Contractual support for OEM contracts with GE & Siemens ($0.2M)

The $1.95M in "Professional Fees" included

- Cyber security support and advice ($0.3M);
- Backfill of roles across the business ($0.4M); and
- Technical support for operational plant and projects ($1.2M)

2.2.4 Other Costs

Other Costs is another category where costs have increased year on year in both 2015/16 and 2016/17. It also is an area that will reflect discretionary or non-routine expenditure.

In 2015/16 the increase in cost compared to the SCI budget was $6.8M, as shown in the following table. It is worth noting that the majority of this ($3.6M) is only temporary relating to the costs of failure of KPS Unit 4 that was recovered via warranty in the following financial year.

Description ($'000)	2015/16 SCI	2015/16 Actuals	Under/(Over) Spend
Operating Projects	-	1,704.7	(1,704.7)
Minor Assets Purchases	92.2	719.4	(627.2)
Other Fixed Costs	1,060.0	1,047.5	12.5
Other Variable Costs	-	741.9	(741.9)
External Audit Fees	-	99.2	(99.2)
Loss on Disposal of Assets	-	3,618.8	(3,618.8)
Total Other Costs	**1,152.2**	**7,931.5**	**(6,779.3)**

Operating Projects included the safe systems of work project ($0.8M in 2015/16). The minor asset purchases of $0.7M was predominantly related to the fit-out of the headquarters.

In 2016/17 Other Costs were $4.9M over budget as per the table below. The two biggest components of this were: Safe Systems of Work ($2.3M); and the "Transformation Project – consultation and development" ($1.1M). Minor asset purchases, which included the Headquarters fit out, was again $0.7M over budget at $1.1M.

Description ($'000)	2016/17 SCI	2016/17 Actuals	Under/(Over) Spend
Operating Projects	-	4,178.4	(4,178.4)
Minor Assets Purchases	448.5	1,114.8	(666.3)
Other Fixed Costs	1,306.9	1,498.4	(191.5)
Other Variable Costs	668.7	507.6	161.1
External Audit Fees	*NA*	*NA*	*NA*
Loss on Disposal of Assets	-	0.0	0.0
Total Other Costs	**2,424.2**	**7,299.1**	**(4,875.1)**

2.2.5 Repairs and Maintenance

[redacted]

[redacted]

[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]

[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]

2.2.6 Ancillary Services and System Constraints

In their memo to the Treasurer on 2 August 2017, T-Gen advised that one of the reasons for the difference between their actual financial performance and their SCI forecast was the additional costs associated with directions given by the System Controller in relation to System Constraints and Ancillary Services.

T-Gen's tariff is a bundled tariff that incorporates the cost of ancillary services. The original "price" for ancillary services in the Darwin-Katherine region was derived in early 2015 from an estimate of the costs of 25MW spinning reserve plus an estimate for diesel and black start capability. This price was determined at $5.40/MWh. As noted above, the price is bundled with their general tariff, so they only recover direct revenue from external generators (ie EDL).

The System Controller has, over time, issued a number of formal and informal directions to T-Gen to improve system reliability. This is within the mandate of the System Controller and these are decisions that have not been made in a vacuum, but in response to legitimate concerns about system reliability. Some, but not all, of these additional constraints were introduced in 2016/17.

[redacted]

[redacted]

[redacted]

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[7] Incremental costs include gas costs, usage variable repairs and maintenance, and usage variable depreciation and amortization.

[8] Refer Table 17, p.44 "Ancilliary Services Evaluation for the Darwin-Katherine Region", T-Gen, 11 November 2017

Notwithstanding that there have been additional costs imposed on T-Gen, it does not necessarily follow that this provides an explanation of the below forecast performance against the SCI targets.

It is important to note that the constraints imposed by the system controller have evolved over time, with some in place prior to the 2016/17 financial year. For instance:

- The 2 frame requirement was first imposed in November 2014; and
- WPS constraints were imposed in July 2015;

Other constraints were imposed in 2016/17, but before the finalization of the SCI, for instance, the output limits on CIPS 8 & 9 in July 2016. Finally, the most recent constraints in the model were imposed in May 2017, so would not have had a full impact on 2016/17 financial year.

When comparing actual performance against the SCI targets, the majority of the difference relates to the fact that the initial forecasts in the SCI did not accurately estimate the Ancilliary Services costs that were already embedded in T-Gen's cost base.

In summary:

(i) As against a comparison with its operating cost base at inception, the additional system constraints have led to substantial additional costs for T-Gen. While the model has not been externally validated, the methodology contained in T-Gen's internal analysis provides a basis on which to assess this cost. If it is correct, then the $8.5M in additional costs would be a reasonable assessment.

(ii) However, this is an assessment against additional actual costs, not efficient costs. There are a number of actions that T-Gen (and others such as PWC) can take to reduce these costs.

(iii) These incremental costs cannot entirely be used to explain a variance of $8.5M between the SCI and the actual results. At least part of this difference reflects the fact that the initial forecasts in the SCI did not accurately reflect the cost of the additional system constraints already embedded in T-Gen's cost base.

2.3 Non-financial Performance

It is difficult to assess T-Gen's performance against its non-financial performance targets. While the SCI contains a number of Key Result Areas of a non-financial nature (such as safety, sustainability, customer satisfaction) because the SCI has qualitative outputs for non-commercial objectives but no measurable performance targets. Without non-financial targets and ex post reporting, it is not possible to understand the outcomes achieved, or assess them against internal targets and external benchmarks.

In addition, the current Key Result Areas and Objectives in the SCI do not address plant performance, reliability or availability. This is one the key non-financial result area for an electricity generation business. Future versions of the SCI should include at least one measure of plant performance.

Finally, some of the transformation programs that T-Gen have invested in are related to the achievement of non-financial performance objectives, as is the case with the safe systems of work. Without clear performance metrics on its non-financial objectives, it is not possible to assess the necessity for, or effectiveness of, these investments.

Recommendation: As part of its 2018/19 SCI, T-Gen should establish specific metrics against which to measure its non-financial performance, across each Key Result Area. The SCI should also include objectives and measures relating to plant performance, which is currently not covered under the Key Result Areas.

3 T-Gen's financial position as at 30 September 2017.

ToR 3: T-Gen's financial position as at 30 September 2017, financial and non-financial performance for 2016-17 and revised forecasts for 2017-18 relative to comparable businesses.

3.1 Position at 30 September

When T-Gen submitted its 30 September 2017 quarterly report, it showed significant variation from the SCI, and a continued significant deterioration in the performance of the business. The report advised that T-Gen needed a cash injection of $20M by November 2017. In response, the Treasurer approved an increase in the overdraft from $10M to $20M.

Based on the most recent financial information, T-Gen will have a negative cash position from February 2018 and will remain that way for the remainder of the financial year. If corrective action is not taken, then the forecast cashflows provided by T-Gen show that the existing $20M overdraft will not be sufficient to allow T-Gen to pay their outgoings as they fall due at some stage during the remainder of the 2017/18 financial year. This is a critical position for the business. At a minimum, T-Gen will require a combination of: an adjustment to the current lumpy payment terms with Jacana and PWC; implemented cost savings; and a deferment of some capital works to be able to end the year with a positive cash balance. These steps should be a pre-requisite to any consideration by Government of further capital financing.

For 2017/18, the current planned capital expenditures of $58.3M are $20M above budget, and forecast operating cashflows are well below budget. T-Gen does not have the internal resources to complete this work this year. Completion of the current capital works program will only be possible if Government contributes even more funding. T-Gen could take on more debt, but its debt servicing metrics are already below investment grade. T-Gen is not earning a commercial return on the existing equity, so any additional equity would effectively be a grant. This is not a capital financing arrangement consistent with the objectives of the *Government Owned Corporations Act.*

3.1.1 Cashflow

T-Gen budgeted to start the year with $31.3M in cash and to have positive operating cashflows of a further $38M. (The starting cash position was boosted by $20M after Government advanced an this amount in additional debt during the 2016/17 financial year.) This would have been enough to cover the total expected capital expenditure of $38.3M and to pay a modest dividend to Government of $4.1M. Ending cash at 30 June 2018 was forecast to be $27.1M. In effect, the budget showed that, while T-Gen's performance was not at a level previously achieved, with the additional $20M debt funding they received in 2016/17 they should have been able to self-fund their capital works program.

As it has transpired, T-Gen commenced the 2017/18 financial year with only $23.7M in cash, because of the deterioriation in their performance highlighted above. Their expected capital expenditure has increased from $38.3M to $58.3M. Their most recent forecast shows a deterioration in profitability so that operating cashflow is more likely to be in the region of $20-25M. This suggests a funding gap of in the order of $15M.

The cashflow analysis of T-Gen suggests it will be worse than this. Based on current payment patterns, T-Gen will go close to exhausting their overdraft in February 2018. This is in part a function of the fact that they make monthly payments to PWC in advance of receiving monthly payments from Jacana. If they are able to renegotiate payment terms with PWC so that they are paid after T-Gen receives its payments from Jacana, then their cash will be less "lumpy" and they would avoid exhausting their overdraft. However, even in this scenario, the cash position would be negative by February 2018 and largely remain that way until the end of the year.

[redacted]

3.1.2 Balance Sheet

T-Gen received an additional $20M in borrowings in 2016/17 and have recently had their overdraft extended from $10M to $20M. Long-term borrowings now stand at $200M, which is within the 50% gearing ratio that T-Gen's Board set as their preferred benchmark. Because most of the additional funds received by T-Gen have been capital grants (namely $50M for the Alice Springs / Tennant Creek upgrade) leverage is not at a high level for a business of T-Gen's type.

[redacted]

[redacted]

3.2 Performance Relative to Comparative Businesses

T-Gen has a very specific business, operating a regionally dispersed set of generation assets, with a relative size that is small compared to other generators. The state owned NSW generation businesses, Delta and Macquarie, were sold in 2015. WA's generator, Verve, was merged with the retailer Synergy in 2014.

The closest comparators are CS Energy and Stanwell in Qld, although they are larger; have different generation profiles and sell into the National Electricity Market. However, they are also dealing with similar strategic challenges, including the displacement of thermal generation by renewables.

For the 2016/17 year, the following table shows the relative performance of T-Gen compared to CS Energy and Stanwell. This shows that the cost base for T-Gen is high relative to the Qld generators and that, as a result, it is not generating a return on assets consistent with its peers.

2016/17	T-Gen	CS Energy	Stanwell
Revenue	$294.8M	$871.0	$3,058.7
EBITDA	$33.4M	$371.4M	$785.3
EBITDA % of Revenue	11.3%	42.6%	25.7%
Personnel as a % of Revenue	11.5%	10.3%	3.9%
Return on Gross Fixed Assets[9]	>1%	16%	25.2%

4 T-Gen's Proposed Actions and Strategies

ToR: T-Gen's proposed immediate actions and identified strategies for addressing its financial position, cash balances and operational issues that impact on its financial position.

As noted above, T-Gen's most recent forecast is that cash balances and the $20M overdraft will not be sufficient to meet their payments by February 2018. Immediate actions to address this

[9] EBIT / Fixed Assets

shortfall are critical. T-Gen's first preference is for Government to provide an additional $20M of funding in the form of debt or equity.

If they do not receive additional funding, T-Gen has proposed a number of initiatives through this review then most of the contingency plans (aside from renegotiated payment terms) involve T-Gen deferring capital projects. T-Gen's view of these contingency plans, as communicated through this review is that "any contingency plan implemented would likely have flow on effects within the business, for example, future costs, increased product pricing, capital spend or reliability issues including increases to the frequency and duration of under-frequency load shed events to maintain system security, that could significantly outweigh the short term "savings" achieved."

4.1 Immediate Actions

4.1.1 Cost Reduction Program

In his letter to the Treasurer of 29 November, the Chairman provided details of the cost savings program that T-Gen has implemented to address its financial position. The table attached to the letter contains a number of initiatives across most cost centres, as well as a capital expenditure review.

It is not clear from the information provided what the expected savings are from this program, and what impact it might have on the business going forward. The proposed actions contain no targets for savings or timeframes. As an example, Professional Fees is one area where costs have been significantly over budget and where savings could be material. The action plan provides that the initiative is a "Professional fees reduction"; the key benefit is "A reduction in professional fees" and the action is "Pro-active management". At a minimum, an action plan should identify specific actions, and a target level of savings. Forecast professional fees for 2017/18 as at November 2017 are $0.3M above budget.

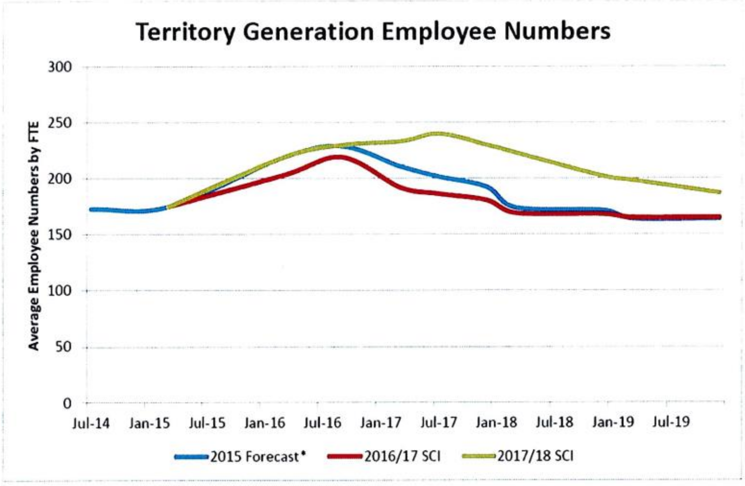
In fact, as at November 2017, the forecast for all cost centres except IT are above the budget contained in the 2017/18 SCI. (This excludes Energy which is also lower because of the loss of the Pine Creek PPA).

Recommendation: T-Gen to make firm commitments to the shareholder Minister, in terms of both quantum and timing, on financial savings targets on each of the target areas under its Cost Savings Program and to periodically report under the shareholding arrangements on the achievement of these targets.

4.1.2 Staffing Reduction

T-Gen have for some time been predicting that staffing levels will reduce, after a temporary increase. When T-Gen briefed the Treasurer in March 2016, they acknowledged (though ultimately under-estimated) the increase in staffing as a result of the transformational projects. At that stage, the estimate was that steady state staffing would reduce to 164 positions by 2019.

The most recent estimate contained in T-Gen's submission to this review is that the reduction in staffing will be both delayed because of the project over-runs and not return to the levels initially envisaged. The following table shows how those forecasts have evolved over time. In correspondence to the Board in November, the Minister directed that T-Gen should freeze staffing levels immediately. If, necessary, this could be made as a formal Direction to the Board under the GOC Act.



Recommendation: T-Gen to provide the shareholder Minister with a target date and end point on stable employee numbers, and a pathway on achieving this target. T-Gen should periodically report under the shareholding arrangements on the achievement of these targets.

4.1.3 Pricing

[redacted] Previous studies have highlighted that the efficient costs to a new thermal generator would be substantially lower than T-Gen's existing tariffs. Costs to renewables providers are also lower, evidenced by the fact that there are a number of existing proposals to install new capacity. Increasing tariffs could accelerate the competitive threat. In addition, any tariff increase will either have to be borne by consumers or the Government through an increase in the uniform tariff Community Service Obligation funding. The latter would be an effective back-door subsidy to T-Gen.

Recommendation: Price Increases should not be considered for regulated customers until progress is made on cost efficiencies, including staff reductions.

4.1.4 Ancillary Services and System Constraints

T-Gen have requested that the Treasurer issue a direction to the System Controller (via a direction to the PWC Board) to remove a number of system constraints that have been imposed to improve system reliability. This would reduce the immediate costs to T-Gen from complying with these constraints.

It would be inappropriate to accede to this request. The system control function continues to operate within PWC independently of its other business units. The System Controller has established system constraints under the System Control Technical Code, based on desired levels of reliability. The recommendation from T-Gen to over-ride these constraints is not based on any analysis of the appropriateness or otherwise of the system constraints, but simply on the additional costs it is imposing on T-Gen.

Using a Ministerial Direction to override regulated constraints is not the intended purpose of the Ministerial Direction power under the GOC legislation. To issue such a direction would expose the Treasurer to responsibility for any power system reliability/stability defects that arose in the future.

4.1.5 Capital Expenditure

Over budget capital expenditure of $20M in 2017/18 is one of the principal causes of the deterioration in T-Gen's cash position. The cost savings proposal provided to the shareholding Minister on 29 November identified that the sustaining capex in the forward estimates from Interim SCI, could be reduced and prioritised from "$30M+" to less than $25M. There are no details on which projects will be delayed or deferred or what the impact will be on operations.

Recommendation: T-Gen to provide the shareholder Minister with a revised capital expenditure program for 2017/18 that includes deferral of non-critical investments.

5 Consistency with the Statutory Objectives and with Commercial and Industry Practice.

ToR 5: Whether the financial and other management practices and strategies of T-Gen are consistent with the statutory objectives of a GOC and with commercial and industry practice.

5.1 Risk and Governance

T-Gen has a Board structure and process that are consistent with good practice. The Board met 13 times in 2015/16 and 8 times in 2016/17, which is consistent with practice for an entity of T-Gen's size and scope of operations.

In addition to the Board, T-Gen has created two sub-committees: the Audit and Risk Committee and the People & Safety Committee. The Audit and Risk Committee is responsible for the oversight of financial management, external reporting, audit, risk management and statutory compliance. The People & Safety Committee has oversight of ensuring the effective development, implementation and monitoring of initiatives, policies, practices and systems in relation to people and safety.

T-Gen has a structured risk management process based on the relevant Australian ISO Standard, and overseen by the Audit and Risk Committee. The risk policy provides for: an aggregated quarterly risk report is prepared by each Risk Owner and compiled by the Manager Audit, Risk, Compliance and Legal to show an aggregate view of risks faced by T-Gen; top risks considered 'extreme' and 'very high' to be reviewed every month by management and quarterly by the Audit and Risk Committee; and Territory Generation business units use the risk assessment process as a tool for business decision-making, including the preparation of business plans, the management of internal projects and investments, and for safe and secure operations.

I have reviewed the interim and final audit management letters issued by the Auditor-General to T-Gen. While there are a number of matters arising identified in the audits, the Auditor-General's view has been that key processes and systems relating to Territory Generation's activities were found to be generally satisfactory.

5.1.1 Shareholder relations

It has been clear through the review that there has been friction between T-Gen and the shareholder representatives regarding the level of autonomy that should correctly be afforded to the Board to determine strategy. The overriding objective of the GOC legislation is for GOCs to operate at least as efficiently as any comparable business, and this implies a similar level of strategic autonomy to that of a private company.

While the level of autonomy should be the same as for a private business, the form of accountability is fundamentally different. T-Gen is not a company established under the Corporations Act. It does not have the accountability framework of that legislation. It is not subject to the discipline of capital markets. It cannot be taken over. It does not have a hard budget constraint, nor, in practice, can it be made bankrupt. While the Boards of listed private sector companies may have a high level of autonomy, they are subject to all of these constraints.

For a GOC, these accountability measures are replaced by a framework that uses the Statement of Corporate Intent as the key accountability tool. The SCI process is critical to giving Government visibility around the performance of T-Gen and a set of benchmarks to assess the capacity of T-Gen to execute on its strategy. There have been large variations in performance and actions against these SCI targets for the last two years, and the reporting of these variations to the Minister has not been timely. This has rendered the SCI process largely redundant to date. Board autonomy in the context of a GOC is fundamentally dependent on an effective functioning SCI process. When that process fails, the capacity of the Board to maintain its autonomy is also fundamentally compromised, just as it is for a private company when its external constraints apply.

In Queensland, the GOC legislation provides (at section 7(2) that the SCI is intended to be a performance agreement between the Board of Directors and the shareholder Minister. In contrast, the Northern Territory legislation does not characterize the SCI as a performance agreement. The Queensland approach reflects the policy substance of what the Northern Territory is trying to achieve with its SCIs. It would be a useful signal to the Boards of GOCs of the fundamental importance of the SCI process if they were restructured as formal agreements. In the medium term this could be achieved by making an amendment to the legislation.

In the short term, the shareholder Minister should seek agreement from the Boards of each GOC to restructure the 2018/19 SCIs as formal performance agreements. For T-Gen, the 2018/19 SCI process must be used as the basis for the parties to agree on realistic, credible and firm targets for: the cost savings under the cost reduction program; the reduction in personnel costs that T-Gen have forecast; and the capital investment program over the SCI horizon.

Recommendation: The 2018/19 SCI for all GOCs should be structured as a performance agreement between the Board of each GOC and the shareholder Minister. For future years, the GOC Act should be amended to make this clear.

5.2 Strategic Planning and Financial Forecasting

5.2.1 Strategic Planning Framework

In their submission to this review, T-Gen describes its strategic planning process feeding into the SCI as involving the following:

- A number of strategic workshops involving staff, Management and the Board.
- Market analysis and a review of the external environment.
- Strategic analysis and modelling to support key strategic positions.
- The setting of the strategic direction of the business and key focus areas for the planning period.
- Development of KPIs that include stretch targets and measure the success of the strategic objectives.
- Development of functional plans for every functional team for the first year of the planning period. These plans are aligned with the longer term strategic direction of the business.
- Development of detailed budgets by every Budget Owner. The budgets are reviewed and approved at each level to ensure there is alignment within our accountability framework. They are then consolidated to produce an overall company-wide set of financial projections.

The key strategic result areas are set out in section 6 of the SCI, which then flow through to specific actions identified in section 6.6 of the SCI. T-Gen's SCI does not, however, provide any measurable targets against which their success can be measured. For instance:

- The KPIs for internal processes are "operating expenditure as a percentage of total revenue" and "operating expenditure per MWh generated" but no targets are established or benchmarks identified.
- The KPIs for safety, customers and employees all refer to survey results, but there are no targets for the survey results.
- The KPI for sustainability is "tCO_2 equivalent emissions per annum" but no target is set.

For the financial targets, T-Gen does provide a target of 10% rate of return on equity, but "is not forecast to be achieved under current conditions in the SCI". This renders the target obsolete. If the target was a hard constraint, T-Gen would revise its operating budget until the target was achieved. If that is not possible, the SCI process would ideally be used to work out what business changes are necessary to make the target achievable.

As a point of comparison, CS Energy in Qld provides 6 high level measurable targets in their SCI against which they report. These include a Total Case Recordable Frequency Rate for safety; Free Cash Flow Yield and Return on Gross Fixed Asset targets for finance; and Equivalent Availability Capacity Factor Demand % for plant performance.

Sections 39 to 41 of the Government Owned Corporations Act sets out the required processes and content for an SCI. Section 40(g) provides that the SCI include "the financial targets and other measures by which the performance of the corporation may be judged". It is arguable that this requirement is not being currently met by T-Gen.

5.2.2 Suitability of Rate of Return on Equity as a Financial Target

Rate of return on equity is a well-known financial metric commonly used in the analysis and monitoring of performance of businesses. A 10% target is easily understood and intuitive. However, for a government owned infrastructure business, it suffers from a number of constraints:

- Government is the shareholder, debt provider and taxation authority. Focusing on returns to equity is limited to one component of their financial interest. The denominator is a function of the capital structure, which is defined by Government. Changes to the capital structure would change the metric but not change the total risks to returns to Government in any material way;
- Similarly the numerator is influenced by accruals (depreciation), which are set by the asset valuation. As noted above, the asset valuation was adjusted downward in 2015. Given the funding structure, taxation and interest are both economic returns to Government.

A preferable approach is to look at economic return measures before tax and financing. The Qld Government owned electricity generators use two such measures as set out in the CS Energy 2016/17 SCI.

"In accordance with the Mandate, CS Energy will monitor its financial performance through two measures: Return on Gross Fixed Assets (**ROGFA**) and Free Cash Flow Yield (**FCFY**). ROGFA is calculated by: Underlying EBITDA / Gross Fixed Assets + Net Working Capital. FCFY is calculated by: Free Cash Flow / Gross Fixed Assets + Net Working Capital."

Recommendation: T-Gen should adopt a Return on Assets measure, based on pre-tax and pre-interest flows as their preferred financial return benchmark.

5.2.3 Forecasting Approach

In their submission to this review, T-Gen state that a forecasting approach is in place to meet the requirements under the Corporate Governance and Reporting Framework for Government Owned Corporations.

The forecast process undertaken by the 37 Budget Owners who are accountable for meeting the forecast targets. Quarterly templates are provided with year to date actuals and Budget Owners are required to review their previous forecasts and actuals and update for any changes. Explanations for variations to previous targets are required and the completed templates are submitted to the relevant General Manager for review and approval. The forecasts are consolidated and approved by the Executive Leadership Team and submitted to the Board for approval. Each quarter the final forecast is submitted to the shareholding Minister, the portfolio Minister and DTF.

However, the forecasting methodology has not resulted in timely advice to the Minister on T-Gen's financial performance. For financial years prior to the current year, the shareholding

Minister has had less than ideal visibility around revisions to the performance of the business. As noted above, actual performance for both 2015/16 and 2016/17 were below the levels of performance budgeted for in that year's SCI and also below the performance forecast midway through the year for the following year's SCI. [redacted]

[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]

Section 15 of the GOC Act requires a GOC Board to inform the Minister immediately it becomes aware of matters that have arisen that may prevent, or significantly affect, achievement of the targets in the corporation's statement of corporate intent. The Chair provided a notice with respect to 2016/17 financial year on 2 August 2017, after the end of the financial year. This suggests that the forecasting and budgeting methodology that was in place during the 2016/17 financial year was not of sufficient quality to predict this deterioration in performance until the end of year financial accounts was being finalised.

In the current financial year, the Treasurer noted in her letter to the Chair on 6 November 2017, on 3 November that she was notified by Northern Territory Treasury Corporation that T-Gen's cash position had reduced to $0.7M but that she had not been, at that time, notified of this by T-Gen. Given the current cash position of the business, reliable and timely disclosure to the shareholder Minister is absolutely critical.

5.3 Capital Investment Process

T-Gen has a well-documented Project Management Process that covers all capital works projects. This includes structured project governance, led by the Board. There is a four-step Gate process with decision points covering Identification; Selection; Execution and Post Implementation evaluation. All projects are required to go through pre-feasibility, feasibility, preliminary and detailed design prior to execution.

T-Gen has an Asset Management Plan and Strategy, which was developed in early 2016. This guides the selection and prioritization of asset investments.

Capital projects are assessed using financial modeling, including Net Present Value analysis and calculated internal rates of return. Hurdle rates of return for new investment are set at the weighted average cost of capital.

[redacted]

[redacted]

The use of the Weighted Average Cost of Capital and positive Net Present Value as the financial hurdle rate of return provides a framework for assessing projects, when aligned with more qualitative requirements. If T-Gen is targeting a return on equity of 10% then it is critical that new investment at least meets the WACC hurdle. However, given the propensity for project costs to escalate and the difficulty of delivering post investment savings, a conservative strategy would be to set hurdle rates of return at a higher level than the WACC.

[redacted]

The Treasurer's approval of the project was conditional upon these savings being achieved. In her letter to the Chair dated 8 December she stated that "Given the significant cost associated with the project and its importance to T-Gen's commercial strategy, I request that T-Gen updates me on whether the project is being delivered within budget and achieving the intended ongoing operational efficiencies upon commissioning and two years post commissioning. This reporting is to be in addition to T-Gen's regular performance reporting through the Statement of Corporate Intent and Annual Report."

This approach could be extended to all of the capital investment projects that involved staff savings as part of the business case.

6 Strategies to Improve the Financial Position and Future Sustainability

ToR 6: Strategies that may be appropriate to improve the financial position and future sustainability of the business.

6.1 Short Term Measures to Improve Financial Performance

The range of effective short term options available to address the current financial position include:

- embarking on a cost-cutting strategy across discretionary expenditure areas;
- reducing staffing levels
- deferring or not proceeding with planned capital works;
- rescheduling working capital payments to and from the other GOCs;

T-Gen has identified plans to address the first three of these issues, although no tangible progress has been achieved to date.

T-Gen's preferred strategy includes seeking an additional $20M in funding from Government (as either debt or equity) and implementing a price increase on 1 July 2018. Neither of these options should be considered until more tangible progress is made on the measures that are within the control of the company:

- *Increased pricing*: Previous studies have highlighted that the efficient costs to a new thermal generator would be substantially lower than T-Gen's existing tariffs. Costs to renewables providers are also lower, evidenced by the fact that there are a number of existing proposals to install capacity. Increasing tariffs will accelerate the competitive threat. In addition, any tariff increase will either have to be borne by consumers or the Government through an increase in the CSO. The latter would be an effective back-door subsidy to T-Gen;
- *Additional capital:* Government has this year already provided a $20M loan, and approved an increase in the overdraft to $20M. The $20M loan was approved as part of the 2017/18 SCI process and represented a bringing forward of existing approved borrowings from May 2017. At the time, DTF, TCorp and T-Gen agreed that a new loan was not required. At that time, it was noted that an additional $20M may be required in October 2017 but more robust forecasting was expected to be provided by T-Gen during the preparation of its 2017-18 SCI. Subsequently, T-Gen's 2017-18 SCI did not forecast the need for the $20M additional borrowings or any cash flow issues. Government does not have the visibility around future capital financing needs to be in a position to approve additional financing at this time. At best, this should be dependent upon successful negotiation of the 2018/19 SCI, and on tangible progress being made by T-Gen to manage their cashflow issues.

6.1.1 Cost Reduction Program

As noted above, T-Gen has provided high level details of a cost reduction program, although the information provided shows no targets and no timelines, and no estimate of overall savings. Evidence to date suggests that, as currently formulated, the program has had limited success, with costs forecast to be above budget for the 2017/18 year across most cost categories.

Details of this cost-out program should be fleshed out. A specific governance arrangement around the delivery of the targets could be established with a structured framework for periodically reporting results through the quarterly updates to the Treasurer.

6.1.2 Reducing Staffing Levels

There is a significant opportunity to reduce staffing costs. T-Gen have acknowledged this, but the gains have not been realized to date because of what they describe as project overruns; increases in the time and cost of delivering some of their transformational projects.

It is important to note that the business case for many of the transformational projects is predicated on a permanent reduction in employee numbers through increased operational efficiency. For instance, the commissioning of the Remote Operations Centre is meant to result in a reduction of 10 full time employees through natural attrition.

6.1.3 Deferral of capital works

[redacted]

6.1.4 Rescheduled Working Capital Payments

[redacted]

[redacted]

6.2 Long Term Strategic Approach

The external operating environment for T-Gen is challenging:

- There is current and future planned competition in wholesale supply, with competitors currently able to provide interruptible supply without any capacity obligations.
- Behind the meter generation is currently at a low level compared to inter-state but is likely to grow given the favorable policy settings and cost advantages to consumers;
- The Government's Renewable Energy Target will mean the development, over the next 12 years of significant additional generation capacity that will replace T-Gen supply;
- The cost of renewables is decreasing and has negligible marginal cost once installed;
- The regulatory and market framework underpinning the Territory's electricity industry and the transition to renewables is not settled.

Internally, T-Gen has a set of aging assets with an unavoidably high fixed cost base. It has an obligation to supply generation capacity across the Territory as the generator of last resort. T-Gen's input costs is going to increase as the cost of inputs (especially gas) increase. In comparison, the cost of renewables is likely to continue decreasing and once, installed, it has little marginal cost.

6.2.1 Strategic Implications of 50% Renewable Target

By far the biggest challenge is the Government adoption of a 50% renewable energy target by 2030, which has a fundamental impact on T-Gen's business model. The operationalization of this target, and the role allocated by Government to T-Gen in meeting the target, will effectively define the business model of T-Gen.

It is an open question as to what T-Gen's role should be in the market going forward and T-Gen needs guidance from Government as to its preferred strategy.

Different options will have different financial consequences not only for T-Gen, but for Government more broadly. The best strategic option for T-Gen, might not necessarily align with the best option for Government, given its wider ownership (of both PWC and Jacana); its obligations under gas contracts, and its wider policy preferences. T-Gen can only proceed on the options available to them, so if that does not accord with Government preferences, then it is incumbent on Government to provide that direction to T-Gen.

The potential options for T-Gen's future range from it having the leading role in the delivery of renewable capacity as a market coordinator, through to it becoming a reserve generator providing the balance of the base load (to a competitive renewables market) and properly priced system security.

In their submission to this review they argue that "to remain a viable entity, T-Gen's preferred outcome is for it to be tasked with the management of the transition to a renewable energy future on behalf of the NT." This would involve them contracting for the supply of renewables and (battery) capacity either on their balance sheet or through Power Purchase Agreements.

The alternative end of the spectrum is the approach envisaged in the Roadmap to Renewables Report. Under this model T-Gen would be confined, "at least during the transitional market phase, to improving the efficiency of its existing gas-fired generation capacity and to not monopolise future renewable energy projects."

[redacted]

[redacted]

- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]

[redacted]

At this stage, it would be fair to say that there is not a clear consensus between the T-Gen Board and Government as to the role T-Gen should play in the renewables market. The Roadmap to Renewables report, for instance, recommends the opposite approach to that advocated by T-Gen. Recommendation 6(b) states that "The Northern Territory Government should review enabling legislation for existing government owned corporations (GOCs) in the energy sector to ensure the objectives, incentives and strategy of each GOC are aligned to the objectives of the Northern Territory Government's Energy Policy and the 50 per cent renewable energy by 2030 target. This may include confining Territory Generation, at least during the transitional market phase, to improving the efficiency of its existing gas-fired generation capacity and to not monopolise future renewable energy projects." Government has only supported this recommendation in principle.

Looking forward, developing this consensus regarding T-Gen's market role is the most critical task facing Government as shareholder.

Recommendation: T-Gen should provide the shareholder Minister with modeling to show the likely financial outcomes to T-Gen from its preferred future strategy, and the "Insurance Product" approach advocated under the Roadmap to Renewables Report. Modelling should include a schedule of likely generation asset retirements under each approach.

Recommendation : Subject to receiving the analysis in the Recommendation above, the Shareholding Minister should clarify with the Board T-Gen's role in the implementation of the 50% Renewables Target in the Territory.

6.2.2 Future Market Design Challenges

The evolving competitive landscape means that there will have to be some fundamental changes to how the market operates.

Solar generation by itself is intermittent. It cannot be relied on to to meet fluctuations in demand. Without allied storage capacity, the reliability of the system is dependent upon having dispatchable energy to meet peak total demand. At present this means the thermal generation that is predominantly owned by T-Gen. Under the present market structure, solar installations can benefit from the revenue of generating electricity but don't have to meet the cost of providing this reserve capacity.

The existing threat of competition from renewables, and the Government's firm commitment to a 50% RET will require a market structure that facilitates appropriate levels of affordable and guaranteed dispatchable energy, and reserve capacity, and a pricing structure that internalizes these costs for market participants.

[redacted]

In the alternative, a market-based approach would involve transparent and cost-reflective pricing for ancillary services and capacity. If the Northern Territory can manage to develop a functioning market, then these price signals have the potential to promote cost-effective private generation. The reality is that with Government owned entities through the value chain, it is likely that large-scale developments will proceed with some degree of Government involvement. But the appropriate market mechanisms would still be necessary to ensure that smaller scale investments are internalising the capacity costs of providing intermittent supply.

To inform these decisions, T-Gen (and other market participants) will require a greater degree of clarity around the ancillary services and capacity requirements that will be imposed on generation market participants as part of the implementation of the 50% RET. Given that there are already significant solar projects being developed, this requirement is critical. It will inform the business case around both solar projects and any storage and reserve capacity decisions.

Recommendation: DTF to work with System Control to develop a set of consultation guidelines on the reliability requirements that will be imposed on market participants as part of the implementation of the 50% RET.

7 Links between T-Gen, DTF, and other GOCs

ToR 7: The links between T-Gen, the Department of Treasury and Finance, and other Territory GOCs including Power and Water Corporation System Control and the impact, if any, on T-Gen's financial position, financial projections and financial management strategies.

7.1 Shareholder Governance

For Northern Territory Government Owned Corporations, the SCI is the principal accountability mechanism for Government as shareholder. It is styled as a form of performance agreement setting out the Board's objectives, plans and the targets against which it should be assessed. The Board's capacity to operate with a requisite degree of independence and autonomy is fundamentally conditional on their capacity to commit to the targets and objectives in the SCI.

It will always be the case that actual performance will deviate from the budgets and forecasts. The important thing is for the shareholder (the Treasurer and DTF) to come to a shared understanding of the causes of the deviation. As an owner, this is necessary to inform an assessment of the business' underlying performance, and allow more informed assessments of future capital requirements. As a policy maker, it also facilitates a better understanding of the wider policy issues that may be negatively or positively impacting the business.

The deviation from forecasts in 2014/15 and 2015/16 would seem to be within a reasonable degree of expected deviation. The business was in a state of flux and changes in actual costs compared to forecast are largely attributable to factors that could not be reasonably forecast (such as the warranty claim, and unscheduled R&M).

The shareholder governance requirements imposed on T-Gen (and other GOCs in the Territory) include significant information sharing obligations, and commitment thresholds that are established under legislation and a Governance policy framework issued by DTF. There has been some reluctance on the part of T-Gen to comply with these requirements, in particular the Ministerial approval thresholds established for capital commitments. T-Gen have expressed the concern that these would make the Minister a "shadow director" of T-Gen as per the provisions of the Corporations Act.

The information sharing requirements and pre-approval requirements for GOCs in the Territory are of a different level and structure than would be imposed on a listed private company. However, a Government Owned Corporation has a different structure to a private company. The Government is not just a shareholder, but debt provider. If the business has a cash shortfall, (as at present) Government is the only source of funds. If the business fails the Government will not, in practice, have limited liability. Unlike a listed company, the business cannot be taken over or sold if it is poorly performing. For all of these reasons, the level of scrutiny and oversight by Government and by DTF has to be of a higher order than applied by shareholders of a listed company. The Board is meant to be both independent, but highly accountable.

The structure and approach to disclosures and approvals adopted for GOCs in the Territory is consistent with good practice elsewhere for state owned enterprises, and suitable given the specific circumstances faced by GOCs.

7.2 PWC Gas Pricing

[redacted]

[redacted]

[redacted]

7.3 Jacana Contracting and Gentailer restrictions.

T-Gen is restricted under its legislation from being a retailer (a model known as being "gentailer") for 5 years from the commencement of its legislation, at which point there is a process to review the ongoing need of the restriction. This review is due to be completed in 2018. T-Gen considers that the Gentailer restriction is unnecessary and limits their capacity to generate returns.

In their submission, they express a concern that Jacana has become an effective Gentailer through their power purchase agreement with EDL. In their submission they state that "T-Gen understand that Jacana don't have the same legislative restriction as T-Gen in developing a gentailer model. They can in effect vertically integrate by contracting generation capacity, thereby displacing T-Gen's generation in the market."

Entering into supply contracts with another electricity provider does not make Jacana a gentailer. It is the nature of a retailer under the current NT market structure that they would have to secure wholesale electricity through contract.

The restriction on T-Gen becoming a gentailer was designed to address the concern that it could use internal transfer pricing to provide a competitive benefit to its retailing arm, and so stifle competitors. This is a particular concern in the Territory because of T-Gen's market power as the dominant provider of wholesale electricity. Jacana's purchase of electricity from EDL does not create the same market integrity concerns.

7.4 System Control Constraints and Ancillary Services

In a power system, reliability refers to the appropriate level of capacity installed and available for dispatch. Security on the other hand is making sure that the installed capacity is able to be dispatched and remain intact and within a set of technical parameters such as voltage and frequency Reliability and security are treated separately and market arrangements use commercial mechanisms to drive investment and availability of generation whereas security is generally managed through a series of technical standards.

T-Gen provides both ancillary services, and is subject to system security constraints. There is a pricing mechanism for funding ancillary services, but there is no mechanism to recover the costs of imposed system constraints to achieve reliability. The System Controller could establish greater transparency and improved guidelines for the provision of ancillary services (security standards), including provision for the System Controller to procure ancillary services from other providers, not just T-Gen.

Imposing reliability requirements has costs for generators, but has benefits for consumers. From an economic perspective, additional constraints should be imposed on generators up to the point at which the marginal cost of the additional reliability is equal to the marginal benefits to consumers, with a pricing mechanism to recognize the costs. In a market-based system, such as the NEM, reliability can be achieved primarily through price signals.

In the Territory, without a functioning spot market, reliability has to be deterministically set. The System Controller adopts reliability criteria for generating plant as set out in the System Control Technical Code. For T-Gen, this has meant a number of system constraints imposed on their operating generators. These constraints have imposed costs, as noted in Section 2. To ensure that these constraints are economically appropriate, there needs to be a process to balance these costs against the expected benefits. The System Control Technical Code does require the System Controller to take these matters into account, but there is no mechanism for the costs to be funded through user charges.

At present, there is not a formal reliability standard, but one is being developed as part of the proposed electricity market reform. The Utilities Commission does not currently have the appropriate legislative/regulatory head of power in place for it to introduce a standard and legislative changes are required. In the short term, DTF is proposing to be responsible for setting this standard.

As the Territory moves to a 50% renewable target, the need for system reliability standards will become more important, since renewable generation is generally intermittent. A market mechanism is required that internalizes the cost of reliability for market participants providing generation capacity. This would then provide an economic basis for market participants to invest in infrastructure, such as batteries, that could replace the reliability currently being provided by thermal generating sets.