GOVERNMENT OWNED CORPORATIONS SCRUTINY COMMITTEE
POWER AND WATER CORPORATION

The Government Owned Corporations Scrutiny Committee convened at 8.30 am.

Mr CHAIRMAN: Good morning, everyone. I declare open this public hearing of the Government Owned Corporations Scrutiny Committee of the Legislative Assembly of the Northern Territory today. I extend a welcome to the Treasurer, the Minister for Essential Services, the Chairman and Managing Director of the Power and Water Corporation, the Under Treasurer, and to everyone else present.

The Order of the Assembly dated 2 May 2011 appointed this committee to examine and report on the activities, performance, practices and financial management of the Power and Water Corporation with reference to the Power and Water Corporation's Statement of Corporate Intent 2012-13. The public hearing will go from 8.30 am until 12.30 pm today, a total of four hours.

I also report that the member for Nhulunbuy was elected Deputy Chair of the committee in accordance with paragraph 4 of the Order of the Assembly. I advise that media can be present and are able to report and broadcast proceedings of this hearing.

A procedural issue I should bring to everyone's attention relates to section 19 of the Terms of Reference for this committee. Questions should be put directly to the portfolio minister, the shareholding minister, or the Chairman of the Board of the Power and Water Corporation. The Managing Director and other officers may assist the ministers and Chairman in the provision of relevant information when requested.

Although this is a public hearing, it should be noted that, under section 20 of the Order of the Assembly, the Chairman and other witnesses will advise when evidence is of a commercially sensitive or confidential nature and may request that such evidence be heard *in camera*. If this arises, I will invite the Chairman and witnesses to give the reasons for their request.

The procedures adopted by the recently completed Estimates Committee to address questions taken on notice will also be utilised through the public hearing of this Government Owned Corporations Scrutiny Committee.

The committee will now proceed to consider the activities, performance, practice and financial management of the Power and Water Corporation. Is there an opening statement?

Ms LAWRIE: Yes, Mr Chairman, somewhat unusual, there are three opening statements, albeit three brief opening statements, one from myself as shareholding minister, one from the Minister for Essential Services, and one, of course, from the Chair of Power and Water Corporation, Judith King. I will get straight into it.

In my brief opening statement in relation to my presence here today and my responsibility as shareholding minister for the Power and Water Corporation, I have with me the Under Treasurer of the NT, Ms Jennifer Prince, and other senior Treasury staff. Witnesses include Assistant Under Treasurers, Mr Craig Graham and Mr David Braines-Mead.

I am happy to answer any questions from the committee relating to my responsibility as shareholding minister. In particular, this would relate to questions of a financial nature, including Community Service Obligation payments, dividends and tax equivalent payments, and regulated customer revenues. Furthermore, questions relating to the financial position of the corporation will be answered by me in conjunction with the Power and Water representatives here today. Operational or other policy questions relating to Power and Water should be directed to the Minister for Essential Services and the Power and Water representatives present today.

Mr Chairman, the Power and Water Corporation is continuing to deliver on the largest ever capital and maintenance investment program in the corporation's history. This investment is critical to enhancing the reliability of supply, responds to growing demand across the Territory, and forms a key part of this government's strategy to grow the Territory.

Mr KNIGHT: Mr Chairman, I will make a brief opening statement as per my responsibilities as the portfolio minister for the Power and Water Corporation. I have with me today the Chair of the Power and Water Corporation, Judith King, Managing Director, Andrew Macrides, and the management team from the Power and Water Executive.

I am happy to answer questions from the committee relating to my portfolio responsibility. Questions of a financial nature or aspect of the Power and Water Corporation should be directed to the Treasurer as previously stated. Operational and policy questions relating to Power and Water should be directed to me or Power and Water representatives present today, through the Chair of the Board, Ms Judith King.

The continuation of work is in the area of $1.8bn capital spend. This is the biggest stated investment in Power and Water in its history. This level of infrastructure spending demonstrates the commitment this government has to service Territorians in all locations across the Territory. The planned capital works will focus on generation, the power network, and water and sewerage assets to cater for growth and service reliability. Major works in this SCI include the life extension work on the Channel Island Power Station, supply and installation of additional generational capacity at Weddell Power Station, and augmentation of Tennant Creek; improved water and sewerage services with works continuing on Manton Dam to meet additional capacity and emergency water supplies for Darwin, Palmerston and the rural area, including the development of a major treatment plant for the Darwin regional water supply; upgrading treatment processes at Leanyer, Sanderson, Katherine and Palmerston waste water treatment plants, and the completion of the Larrakeyah outfall closure plan, which involves the diversion of sewerage from Larrakeyah to the Ludmilla water treatment plant; ensuring drinking water is accessible to remote communities under the Water for Healthy Communities initiative; commitment to the environment through reducing greenhouse gas emissions with the gas completion project at Wadeye; and the commissioning of three new solar power stations at Ti Tree, Kalkarindji and Alpurrurulam.

Ms KING: Chairman and members of the committee, Treasurer and Under Treasurer, I am Judith King, Chair of Power and Water Board of Directors, and my fellow board members, Linda McKenzie, Michael Hannon, Rob Skinner, Steve Margetic, Megan Davies and Andrew Macrides. Andrew heads the executive management team, and members of the team are here today and will answer questions as appropriate.

Over the past 12 months, the momentum of change in Power and Water's operating environment and within the organisation has continued with the drive to upgrade and operate as a modern utility. The utility sector in Australia is facing major challenges and the Northern Territory is not exempted from that. We operate in a world that is grappling with climate change, global focus on new and sustainable energy sources, and conserving valuable water resources.

Locally, investment in new industries and construction of new suburbs in Darwin and Alice Springs has influenced our strategic plans for the next few years. We have progressed, milestone by milestone, the comprehensive set of deliverables identified in Mervyn Davies' inquiry and report on the Casuarina incident, and I thought the committee would find a snapshot of the progress over those four years since the report useful. You will recall the Casuarina Zone Substation had a number of electrical equipment failures which resulted in widespread power disruption in Darwin's northern suburbs. In essence, the corporation has been shaping the organisation and equipment to meet the needs of the Northern Territory today, using innovation and sound engineering and technical knowledge to build the best model product in service delivery.

Fundamentally, the corporation has changed the way it works, instituting rigorous maintenance regimes, upgrading and refurbishing equipment, recruiting and training specialised staff and, most importantly, putting that in the context of future growth of the Territory. This is underpinned with systems and management that are appropriate for a modern utility.

To give some perspective to the dire need for renewed power generation systems, we need to recall that it has been 25 years since the last major power station was constructed in the Northern Territory. Since 2008, the corporation has delivered more than 200 MW of additional generation capacity at Weddell and Owen Springs, and two new Rolls Royce units are operational and providing power to the Top End and Central Australia. To achieve this, over those years the corporation has also instituted a priority program of systematically upgrading and developing new zone substations to support the additional generation capacity. Funding an extensive program to review and refurbish the network infrastructure was critical to replace ageing equipment and ensure a new era of power supply for customers into the future. Over the last four years, a comprehensive inspection of all zone substations has taken place and a schedule of priority works identified and actioned.

These upgrades and refurbishments are complete at major zone substations, including Casuarina, Darwin and Lovegrove in Alice Springs, which will support the Owen Springs Power Station. Woolner Zone Substation will replace the antiquated Snell Street Zone Substation by early 2013, and parts of Palmerston and East Arm area are being gradually shifted to the new Archer Zone Substation. Archer Zone will also

support the new suburbs of Mitchell, Johnston and Zuccoli currently being developed in Palmerston's southern regions as well as the rapidly expanding business community of Palmerston.

We remain committed to cleaner energy production, with more than 90% of the electricity generated from natural gas. Our 25-year agreement with ENI Australia continues to position Power and Water Corporation as a leader in cleaner electricity generation for future Territorians. We have extended our work on gas generation to the remote community of Wadeye where, later this year, a 5 MW power station will be fuelled solely on gas from the Blacktip gas field located in the Bonaparte Gulf, and that is a new power station.

Regional centres have benefited significantly from our focus on upgraded power generation, with Katherine, Tennant Creek and Yulara receiving additional capacity to meet the growing demand. Not only have there been advances in generation networks, we have also closed the Larrakeyah outfall after almost of 50 years of service. Work continues on the ongoing upgrades at Ludmilla Waste Water Treatment Plant, as well as improvements at the Leanyer/Sanderson ponds. I might add that I have been in other places associated with major utility and equipment upgrades, but I have not ever been anywhere where it has been happening across water and electricity networks at the same time.

The corporation also has a significant role in the guardianship of the Territory's most precious resource - our water. We have tropical deluges in the north, while our Central Australian deserts are amongst the driest on earth. Territorians use excessive amounts of water. Typical household consumption is more than double that of elsewhere in Australia. The corporation's role is both to provide and to secure for the future safe drinking water for the benefit of all Territorians, and also to educate the community about water management. The corporation has introduced a range of innovative water conservation initiatives in major urban centres and across remote communities aiming to reduce water consumption by 20% by 2015 and 30% by 2020 - ambitious targets. These initiatives and commitment from individuals is vital and may delay the need to seek additional water sources, including bringing Manton Dam back into service. We also lead the Alice Water Smart Plan, which educates Central Australian customers about their water supply source and sensitivities, and the plan aims to reduce water consumption in the area of 1600 million litres per year.

A further challenge faced by Power and Water Corporation is delivering reliable services to some of Australia's most remote communities, and we are proud of the work that has been achieved in those communities. The corporation provides services to 20 Territory growth towns, 52 remote communities and a number of nominated outstations. While we juggle many competing priorities in remote communities, we are focused on reducing reliance on distillate through the introduction of solar and wind generating infrastructure and, with this in mind, construction of three new solar sources for Ti Tree, Kalkarindji and Lake Nash is complete, with three supplementary wind turbines at Lake Nash. All will be commissioned and supplying communities with power by the end of this year. The Ti Tree facility will generate approximately 550 million watt hours per year. Over the three communities, a total of one million watts of solar panels is being installed, allowing the sun to supply more than 80% of electricity used during the day by the residents in these communities. I had the opportunity to visit Ti Tree last week and it really is an impressive solar installation.

Other technologies like smart meters, supervisory control and data acquisition, and improved control systems are improving remote facility operations and maintenance with a positive impact on service delivery.

Last year, we made a significant step forward with the integration of Uterne, a new 1 MW solar system into the Alice Springs electricity grid as part of the Alice Springs Solar City program. This is currently Australia's largest solar tracking device. We have signed an agreement with SunPower to purchase the power it produces for the next 20 years.

The corporation's ability to deliver change relies on its people, and we have invested heavily in equipping our staff with skills and structures to support the increased demands our operating environment requires of them, and to do so safely.

Like many major employers in the Territory, attracting skilled and experienced staff remains challenging and the corporation firmly believes that growing our own will help overcome these challenges. We currently have over 100 apprentices and a number of graduate trainees in programs across the corporation, providing solid local training with great career opportunities. We manage and train over 155 full-time and relief essential services operators, ESOs, who live and work in remote communities, providing essential frontline support with daily monitoring and maintenance. More than 70 remote communities across the

Territory rely on their ESOs to keep water, power and sewerage services operating, with support from Power and Water staff.

Power and Water has launched its 19 Mile rural depot near Coolalinga as the Trevor Allwright Training Centre with the objective in sight of training at home on equipment which is unique to the Northern Territory, and this means greater convenience for our staff and important cost savings for the organisation - still much to do.

Another of our future challenges will be increased competition from new electricity retailers entering the market. Power and Water is mindful of the increasingly competitive utilities landscape and is working hard to respond to the competitive pressures. Over the past two years, our retail unit has continued to tender for and successfully win the vast majority of large customer contracts.

This snapshot highlights some of the immense amount of skilled and professional work and progress made by the corporation in the past few years. Investment in Power and Water has ensured significant advances in generation, networks, water and sewerage services in a relatively short space of time; however, these advances are necessary to provide a more robust and reliable service to meet today's standards.

I am confident that Power and Water will continue to demonstrate the sound and economical approach to providing the essential services. In conclusion, I take the opportunity to acknowledge the leadership of Andrew Macrides and the executive management team, and staff at Power and Water who have all made a significant contribution to advancing the corporation. I add that I notice a level of energy and enthusiasm which is paralleling the perceived and obvious changes in the standard of equipment, and organisation and planning in Power and Water. Thank you.

Mr CHAIRMAN: Thank you. Any questions?

Mr ELFERINK: Thank you, Treasurer, minister, and Ms King. My first comment – in fact, I will pick up where you left off perhaps, Ms King, because, needless to say, we now have the entry of another retailer into the marketplace, which could be accused, if you like, of cherry-picking the Tranche 1 customers. What threat does that pose to Power and Water Corporation in terms of its income?

Ms KING: Mr Elferink, any competition is a threat, but companies generally thrive on the competition, and it is a driver to improve their performance and their operating platforms. The management team has done a significant amount of modelling, and considering how it meets those competitive threats and issues. Perhaps Andrew might make some comment on that.

Mr MACRIDES: Andrew Macrides, Managing Director. In fact, there are actually two entrants to the marketplace up here: QEnergy is one, and ERM Power is also a recent recipient of a retail licence in the Territory.

As Judith said, competition is both good and bad. Competition forces the corporation to be more efficient and to operate in a more competitive environment. Regarding loss of revenue, you have to remember the way the market is structured here. Any retail competitor entering the marketplace has to come to Power and Water to buy the generation to retail on to customers. It also has to toll that energy through our poles and wires business. The element of revenue that is, I guess, available to an alternate competitor entering the marketplace is the retail margin. Typically, retail margins are between zero and 5%. You are talking probably in the order of $5m in total for the contestable marketplace.

Mr ELFERINK: Overall, with the likelihood of these new entrants cherry-picking the Tranche 1 customers, you do not anticipate placing a huge amount of pressure on the lower tranches in the tariffs?

Mr MACRIDES: I doubt that very much.

Mr ELFERINK: That is somewhat reassuring to hear.

Minister Knight, I note you said in your comments that the capital expenditure for rebuilding the assets, or building the assets, of the Power and Water Corporation has reached $1.8bn. I am curious because, on page 17 of the annual report – which is the last annual report - that figure is $1.5bn, which would indicate that there has been an increase in capital expenditure of $300m in the current financial year. Both of those figures are substantially more than four or five years ago when the original forward estimates for this was

about $1bn. Could you describe what is causing the large increase in expenditure, particularly in the current financial year?

Mr KNIGHT: Basically, it is repairs and maintenance, but I will get Andrew Macrides to talk about it.

Mr MACRIDES: It is actually a combination of both the capital and maintenance programs, so it is actually our investment program. About $1.5bn of it is the capital component, and about $300m of it is the repairs and maintenance component. In total, it is $1.8bn being invested in our asset base.

Mr ELFERINK: To date, for the current financial year, what has your R&M expenditure been?

Mr MACRIDES: Year to date, we are running at approximately $58m.

Mr ELFERINK: Last year, it was in the order of about $81m, and then a couple of years of $50m before that. I am curious. With the $58m R&M expenditure, a statement of $1.5bn in the annual report, the minister now tells us the expenditure has been $1.8bn to date. If you subtract the $58m, that leaves you with $242m in capital expenditure. Was that anticipated expenditure, or planned expenditure?

Ms LAWRIE: As shareholding minister, I want to point out, that is a five-year capital program, with the R&M component added into that total. That would not be an unreasonable anticipated expenditure.

Mr ELFERINK: Well, it is ...

Ms LAWRIE: Cabinet has made a conscious decision to build the assets of Power and Water because, as you would appreciate, the Territory is moving into a significant growth period. That being said, the utility assets were also very old. That is not unusual. If you look at utilities around the nation, they are all making significant capital and R&M expenditure right now, because they all had assets sitting at around that 20 to 25 year mark. Cyclically, it was the time to make record investments in their assets - as the Chair quite appropriately pointed out – both to improve the reliability of the system and, most importantly, to increase capacity of the system.

Mr ELFERINK: Thank you, minister. The question remains however that there is a $1.5bn commitment in the last annual report; it is now $1.8bn according to the minister. There is $58m on R&M in the current financial year, which leaves about $240m-worth of new capital expenditure brought online in the last 12 months. Can I have a description of what that $240m is being spent on?

Mr MACRIDES: Do not forget, you are actually adding another year's-worth of expenditure into your forward estimates here as well, so the $1.8bn also includes the additional year.

Mr ELFERINK: The new financial year?

Mr MACRIDES: Yes.

Mr ELFERINK: Okay. How much of that $240m has been expended in the current year?

Mr MACRIDES: Can I correct a figure I gave you earlier on in relation to our R&M spend year to date? R&M spend year to date is actually $63.9m

Mr ELFERINK: So you would be looking at probably $80m towards the end of the financial year?

Mr MACRIDES: The budget for this year is actually $83m. Obviously, most of our R&M expenditure occurs in the Dry Season for obvious reasons. Another $20m spend, or $17m spend over the 30 days of June, is not usual at all.

In relation to our capital program, our budget for capital for this year was in the order of $264m, I believe. If you can bear with me for two minutes, I will give you the year to date spend. Do you want to ask another question?

Mr WESTRA van HOLTHE: Could you please break that down into regional spends, Mr Macrides?

Mr MACRIDES: It would take a bit of time to do that. I do not have figures here, but we certainly can provide that before the end of the period. Year to date expenditure on capital is $189.3m.

Mr ELFERINK: Okay, $189.3m?

Mr MACRIDES: Yes.

Mr ELFERINK: That is largely new generation capacity, I suspect?

Mr MACRIDES: No, it is actually across all areas. It is new generation capacity, it is new zone substations that are being constructed, it is the work we have done on water main upgrades, the closing of the outfall, etcetera.

Mr ELFERINK: This, of course, places you under much pressure. This is expenditure by a corporation far in excess of what it earns. The last annual report shows a loss. I presume that is a loss generated by capital expenditure. When do you anticipate returning to a point where you are going to be returning profits again?

Mr MACRIDES: The loss last year was actually an accounting loss due to the application of an accounting standard. We have had this discussion at previous Estimates Committee hearings, where this particular accounting standard requires us to run what is called a recoverable amounts test. Based on that test, you either write the value of your assets up or down. Over the last few financial years there has been significant write-down in the asset base as a result of the application of this particular standard. That write-down goes straight to your profit and loss, which then largely results in the loss that you see.

Mr ELFERINK: It will be reflected in - the operating result was okay in the notes to the financial ...

Mr MACRIDES: Yes, that is right. The bottom line of all this, of course, is that if we were trading at significant losses over a long-term period of time, and that was an underlining loss, not a loss that has been generated because of the application of a particular accounting standard, you would expect your accounts to be qualified by the Auditor-General. That clearly has not happened, and the reason for that is that a business essentially derives its income from three sources. It derives its income from its own operations; the cash that it generates from its business operations. It also funds things via debt funding, and it funds things via equity funding through its owners. So a business that is trading on the stock exchange, for example, raises equity by issuing new shares. We raise equity by going to our owner and asking for an equity injection.

The important component, if you are looking at the organisation's ability to service its debt, is the earnings before interest and taxes, because that is a proxy for free cash flows, the amount of money the business is generating to pay its way.

Mr ELFERINK: Yes, so your operational costs are okay with your capital expenditure?

Mr MACRIDES: Yes. We pay for our capital expenditure via debt.

Mr ELFERINK: There is a limit to the amount of debt that you can carry on the books, hence you are going to the shareholding minister who then provides a debt for equity slot?

Mr MACRIDES: Well, there is no limit on how much debt you can have. The real question is the ability to service that debt.

Mr ELFERINK: Okay. What is the cost to the Power and Water Corporation of servicing your debt?

Mr MACRIDES: In dollar terms or …

Mr ELFERINK: Yes.

Mr MACRIDES: If you are talking about the current financial year, our interest expense on our debt is $75.1m.

Mr ELFERINK: Okay, that is year to date, or is that ...

Mr MACRIDES: No, that is the anticipated expenditure.

Mr ELFERINK: So it is the final estimate?

Mr MACRIDES: Correct.

Mr ELFERINK: What was it last financial year?

Mr MACRIDES: It was $51.7m.

Mr ELFERINK: That is a pretty sharp increase. The year before that, just so we know what we are comparing, each piece?

Mr MACRIDES: It was $44m.

Mr ELFERINK: Very good. That demonstrates a fairly sharp rise in interest costs. Does that reflect a rise in debt?

Mr MACRIDES: Absolutely.

Mr ELFERINK: What is the dollar figure, sorry, of your overall debt position at the moment?

Mr MACRIDES: Our debt position at the moment is forecast to be $1.2bn.

Mr ELFERINK: Last year, that debt position was? And the year before that?

Mr MACRIDES: I will ask my CFO who will pass me the information shortly.

Mr ELFERINK: He is reading frantically at the moment.

Mr MACRIDES: So if you will just bear with us.

Mr ELFERINK: That is fine.

Mr MACRIDES: It was $1.081bn last financial year, and the year before that it was $904m.

Mr ELFERINK: Okay. As a matter of curiosity, your interest payments have gone up substantially. Whilst that is not a huge shift in your debt position why are the interest payments going up so sharply? It is not reflective of the overall debt.

Mr MACRIDES: Remember you have a debt portfolio with parts of the debt expiring at different times, so you roll the debt over. When you roll the debt over, you are obviously rolling it over at new rates.

Mr ELFERINK: And this is done for you by Treasury Corporation?

Mr MACRIDES: It is, indeed.

Mr ELFERINK: Is that indicative then of higher rates being imposed because of the new debt being purchased?

Mr MACRIDES: Undoubtedly, every time you go back to the market, in the current climate, the interest rate is higher than it was previously, so obviously the weighted average interest rate you are paying on your debt portfolio goes up.

Mr ELFERINK: Between two financial years ago and the current financial year, what has been the interest rate change, comparing those two years, on average across your debt? I presume you are holding a series of these things.

Mr MACRIDES: Indeed. I would have to see if we can work it out.

Mr WHITE: There is a whole range of portfolios, but it is sort of sevens and eights.

Mr MACRIDES: Yes, it is sevens and eights. The average portfolio would have been around – no, that is what it is currently; six and three-quarters currently.

Mr ELFERINK: And what was it a couple of years ago?

Mr MACRIDES: A couple of years ago, it probably would have been slightly under that. One of the other things we have been able to do is that some of the debt instruments we have had have been long-term debt instruments with high interest rates. In fact, when we have rolled those over, we have actually been able to get low interest rates on the debt portfolio, which has actually brought the average interest rate down. It is clouded a bit because of the extent of the portfolio and the number of instruments we have in our debt portfolio.

Mr ELFERINK: All right. What I glean from this is that a small change in the average interest rate on your debt portfolio means a fairly substantial shift in your interest repayments.

Mr MACRIDES: If you are looking at a portfolio of $1.2bn, you can work out what a one percentage change does to your portfolio in terms of your repayments each year.

Mr ELFERINK: So clearly, having a debt, you have to repay it. Perhaps my next question goes to the Treasurer. Treasurer, from the Territory's perspective, how much revenue have we forgone with the dividend holidays that we have provided to the Power and Water Corporation?

Ms LAWRIE: I am advised that in the last three years the dividend relief amounts to about $35m.

Mr ELFERINK: Last three years?

Ms LAWRIE: Yes.

Mr ELFERINK: Okay. What is the value of the debt for equity swap, or what has that been as an imposition to the Territory?

Mr MACRIDES: The agreed debt for equity swap arrangements with the Territory government are over four financial years. The first debt for equity swap occurred in 2010-11, which was $110.9m. The second tranche was in 2011-12 of $41.7m; 2012-13 of $63.8m; and 2013-14 of $82m.

Mr ELFERINK: Plus the $35m.

Mr MACRIDES: Giving you a grand total of $298.4m.

Ms LAWRIE: Over four years.

Mr MACRIDES: Over four years.

Mr ELFERINK: That is still projected out, but basically through the dividend holidays plus the ...

Mr MACRIDES: No, that is just the debt for equity swap.

Mr ELFERINK: Yes. I am looking at it from the Territory's perspective rather than the Power and Water Corporation's perspective. The dividend holiday is worth $35m, so relief, for lack of better words, from the Northern Territory government to Power and Water Corporation is in the order of $333m. Would that be a fair assessment?

Ms LAWRIE: During a time of a capital and repairs and maintenance program of $1.8bn, we make no apology for ensuring that the Territory investment in our utility occurs. There is a very real and pressing need for that investment. We had to build generation, we had to improve networks across, not just electricity, but we have put significant infrastructure into water as well as sewerage. A wise investment, I would have thought.

Mr ELFERINK: This is not an attack. This is just a series of questions to get an assessment as to where we are at, that is all.

Ms LAWRIE: That is curious, when you spend your time putting out press releases, Mr Elferink, condemning the government's spending decisions and really don't point out why. You like to trumpet out the figures, but you don't actually explain to Territorians what that expenditure is going to, which is capital and R&M.

Mr ELFERINK: Thank you for that, Treasurer.

Ms LAWRIE: My pleasure.

Mr ELFERINK: Mr Macrides, the plan to pay back your debt, clearly you will have one - in fact, in your Statement of Corporate Intent there is debt management. Can you expand on it for us, please, and basically outline the plan to pay this off? Obviously, you are going to be running into increasing costs as well into the future.

Mr MACRIDES: There will always be debt on Power and Water's books. Power and Water will always have a debt portfolio just like any company has a debt portfolio. There will be some elements of the portfolio that we will pay off during the course of the length of that loan period, both in terms of the principal and obviously interest repayments on it, and then others will be rolled over. So it is a very difficult question to answer, because it will depend on the circumstances at the time as to whether or not an instrument that comes up for retirement either is paid off or gets rolled over.

Mr ELFERINK: So you want to manage your debt, but it is very hard to outline any specific paid off by a certain date?

Mr MACRIDES: There is obviously an amount of money within our budget, and within the Statement of Corporate Intent, for the repayment of both principal and interest. The question is that, as each instrument comes up for renewal, we go through a period of analysing whether or not we want to roll that debt over for another period of time, or whether we want to basically retire the debt. That depends on the circumstances and the instrument that is coming up for retirement.

Mr ELFERINK: All right, I am not going to pursue the financial position much longer. There are other important questions that need to be asked ...

Mr MACRIDES: Sure.

Mr ELFERINK: ... so thank you very much for your kindness.

Minister, in terms of, how do you pronounce it, is it SAIDIs, or basically the …

Mr MACRIDES: SAIDI.

Mr ELFERINK: SAIDIs.

Ms KING: SAIDIs and SAIFIs.

Mr ELFERINK: SAIFIs and SAIDIs, I love acronym-speak. I note on page 18 of the last annual report that you are reporting SAIDIs. In your key performance indicators, page 18, your KPIs for last financial year was less than 220 minutes. The result was 355, and there was reference to Cyclone Carlos as part of the contributing factor ...

Mr MACRIDES: Well, about 20% of the contributing factor.

Mr ELFERINK: Yes, as part of the contributing factor. How are we tracking this year, for Darwin in particular, because that was probably unsatisfactory from your perspective in terms of the SAIDIs?

Mr MACRIDES: Absolutely. For this year, we won't obviously have the data for a bit of time yet, but for Darwin, I believe we are on target and will hit the target. The regions have been slightly problematic for us. I do not think we are going to hit our SAIDI target for Alice Springs, and we may not hit the target for Tennant Creek.

Mr ELFERINK: I notice that Alice Springs has a less than 108 minutes; the result was 245 last year.

Mr MACRIDES: Yes.

Mr ELFERINK: Wet weather has been singled out as one of the issues, probably the primary issue, in terms of Alice Springs. You now say that you are expecting another result outside of the KPI. Has it been a particularly wet year again this year, or is there something else driving it?

Mr MACRIDES: It has not been a particularly wet year. What we have had in Alice Springs has been the new power station coming online, and when you bring a new system into a very small power system you

wind up with teething problems, basically, when you introduce the system. We have had some outages that have been as a result of bedding down the way the system is configured to cope with the new Owen Springs Power Station being included as part of the generation mix in Alice Springs, and unfortunately you cannot rule those out of your figures, you have to include them in your figures.

Mr ELFERINK: Yes, because, basically, if your light switch works or does not work, that is a duration consideration, not a problem down the other end?

Mr MACRIDES: Yes, that is right - that is exactly it.

Mr ELFERINK: The other KPI I am curious about appears on page 19 of the annual report. The average time taken to answer a call - less than 20 seconds is the KPI - the result was 74 seconds. Whilst that does not sound like much, we all love hanging on the end of the telephone whilst we are being told how important the call is to the recipient at the other end. Are you able to tell us how we are tracking for this year on that KPI, or is it not counted until the actual year is completed?

Mr MACRIDES: We actually do have a rolling average to date. The reason for the significant increase last year was the wet weather event. When you have a major incident like a cyclone coming through - I believe in the height of Cyclone Carlos, for example, we had some 24 000 customers without supply in that period. We operate a 24-hour a day call centre operation when those events occur, and customers ring in wanting to know what is happening, so that compounds the figures.

Ms KING: I might add, Mr Elferink, that the Managing Director reports to the board on each of those KPIs on a monthly basis. Where there is an exception, such as a spike in the call centre replies, there is an explanation of why that happens.

Mr ELFERINK: Yes, and I can well imagine there would be in this case. The reason I asked the question is, I suppose one of the reasons you have a KPI is to determine where your vulnerabilities are. The point is where you have something like an unusual event - for argument's sake, Cyclone Carlos – you then have a plan in place which can respond to it, in anticipating you know what is going to happen in that wet weather event.

Mr MACRIDES: Yes, and so the response, as I said in the case of Carlos, is crews on standby ready to go when the incident occurs. In the case of the call centre operations, it is a rostering system which is in place to allow the centre to operate on a 24-hour basis until the event ends. In doing that you obviously then get an increase in customer numbers, call volumes coming in, that drives the change in the increase in the call response times. Clearly, for wet weather events or major cyclonic events, Power and Water has very complex plans in place because this is par for the course for what we do at this time of year.

Mr ELFERINK: Yes. What I am questioning is how effective are those plans? Your durations spike because of, in part, a wet weather event. You have a wet weather event in Alice Springs which is attributed to a duration issue. You then have a wet weather event, or something like Cyclone Carlos, which pushes out your calls and your response times. What I am trying to ascertain by asking how you are tracking this year is whether or not your plans are actually working, essentially, and if they are reducing those results back towards the KPIs desired.

Mr MACRIDES: Obviously, in the case of the call centre operations, the reduction would occur naturally anyway, because you do not have the call volume if you do not have a major wet weather event like we had with Cyclone Carlos.

The plans are twofold though. One is the expenditure we make, both in our capital maintenance program on improving asset reliability, and the plans associated with responding to an event. Both plans are fairly complex. I believe they work very well.

Mr ELFERINK: Okay. We will have a look with interest at this year's annual report.

Mr MACRIDES: So will we.

Mr ELFERINK: Did you happen to get that call centre number of KPIs?

Mr MACRIDES: Yes. At the moment, the response rate to calls is around 59% hitting the target. About 60% of calls that have been received, year to date, have met the benchmark of being responded to in less than 20 seconds.

Mr ELFERINK: What is the average?

Mr MACRIDES: I knew you were going to ask that and we do not have it. We are sitting here working it out, furiously.

Mr ELFERINK: We can come back to that, perhaps, if you interrupt me.

Mr MACRIDES: Sorry.

Mr ELFERINK: No, that is fine. One that really concerned me from the last annual report, and I will be curious to know how you are tracking year to date – and I will be very surprised if you cannot give me the number - is the lost time injuries. Your target is less than 4%; your result last year was 20%. How are you tracking this year and what caused this spike?

Mr MACRIDES: Power and Water invests an awful lot of money its safety systems. Quite clearly, this is an inherently dangerous industry for employees. In fact, any LTI is unacceptable from my perspective. Although we have a target of four LTIs or fewer, clearly one is unacceptable. Last year was a difficult year for us. There were quite a few muscle/skeletal injuries in the 20 recorded. We do have an ageing workforce in part, and many of the injuries were related to people injuring themselves lifting tool kits out of trucks, etcetera. As a result of that, in the analysis that was done of the cause of those injuries, we have invested quite heavily over the last 12 months in our safe spine program and rolled it out across all our operational businesses. So if you see some of our guys out in the field who do not appear to be working on power lines and are doing bending and stretching, it is the safe spine program in operation.

For year to date, in fact, we have just recorded our 10th lost time injury for the year. I would hope that will be it and that, touch wood, between now and 30 June 2012, there are not any further LTIs. Again, the vast majority of the LTIs from the analysis to date have been hand injuries. These things seem to go in cycles, so quite a few cutting off the tops of fingers by jamming them in gates, etcetera.

Mr ELFERINK: Do you ever do any homework in relation to randomness? It does not actually appear random; you get blobs of events? You have spines and hands now, that sort of thing. Clearly, safety continues to be a concern and …

Mr MACRIDES: It continues to be a priority.

Mr ELFERINK: Yes, it is in your Statement of Corporate Intent. It is right up the top there in relation to what you are looking at.

Mr MACRIDES: In relation to our hierarchy of doing things, safety is absolutely the number one thing, and we will not compromise safety in anything we do.

Ms KING: Mr Elferink, I might point out that the board's Health, Safety and Environment Committee is chaired by Michael Hannon, who has experience in operational type work. It is a number one priority for him. We are working on trying to understand what the drivers of these blobs of like injuries are, as well as what else we might do to address and educate.

Mr WESTRA van HOLTHE: Mr Macrides, of the injuries that have happened this year to date, and also in the previous financial year, can you break those down for me into injuries that have occurred within Power and Water properties - power stations and what have you – and injuries that have occurred in the field?

Mr MACRIDES: I would have to take that on notice because I doubt very much we would have that data with us. We might be able to get it from my safety team prior to the end of the hearing. Would that be okay?

Mr WESTRA van HOLTHE: Yes, that is suitable for me, thank you.

Mr ELFERINK: This then feeds into the next KPI, which is your staff satisfaction index where you are looking for a result greater than 81%. The result last year was 70%. You have been tracking it again this year, I presume?

Mr MACRIDES: In fact, the survey has just closed.

Mr ELFERINK: All right, so you do not have a result on that.

Unfortunately, I am going to have to return to financial management quickly. I neglected to just raise one or two issues but, very briefly, the KPI target return on assets was 2.7%; your KPI result was 1% in the last annual report. How are you tracking for this year?

Mr MACRIDES: Year to date, and these figures are to the end of May, our return on assets is 2.5% against a budget of 3.5%.

Mr ELFERINK: So it is still tracking a little bit lower than you would like it to be?

Mr MACRIDES: Yes.

Mr ELFERINK: Do we know why that is happening and why you are having trouble getting up to that level?

Mr MACRIDES: Return on assets is largely driven by your asset spend. I imagine we still have a fair amount of money sitting in our work in progress account that yet has to be capitalised.

Mr ELFERINK: So it is rolling out, the process?

Mr MACRIDES: Yes.

Mr ELFERINK: The lag affect.

Mr MACRIDES: Yes. Say, come 30 June, you are sitting with a couple of hundred million dollars in work in progress that is yet to be capitalised, that will obviously affect your return on asset figure.

Mr ELFERINK: Okay. I am curious, with all of this work that has been done in generation particularly, I was surprised to read in the last annual report, and I am now referring to page 22, that the power and water installed capacity, this is generational electricity, based on gross maximum capacity, has actually reduced from 2010 of 473 MW to the year 2011 of 452 MW? What is that figure now?

Mr MACRIDES: Our total capacity at the moment in the Darwin/Katherine system, which I assume - sorry, what page was that figure on Mr Elferink?

Mr ELFERINK: Page 22 of the annual report. It is the very first. You have a statistical summary as at June 30 2011, electricity generation, and then your first line item is power and water installed capacity based on gross maximum capacity. So that is how much you can generate if you are being asked to. I am a little bit surprised that with all of the capital expenditure we see a drop of 21 MW over that year period. I am just wondering why that is?

Mr MACRIDES: Sure. What has happened in that period is that there are two units at Berrimah, each of them around 10 MW to 11 MW in capacity. Both units have been offline, and they are only ever used in emergency circumstances, and we are considering replacing those units. They use kerosene as a fuel source. They are very expensive to operate, so we have actually taken those out of the calculations until we make a decision about what we want to do with them. We are not actually going to be using them because we have plenty of capacity in the system itself. So that accounts for the 20 MW reduction. Since then, of course, we have had the two new units at Channel Island come on, so we have had an extra 90 MW of supply added to the Darwin/Katherine system.

Mr ELFERINK: So currently that number would be pushing around 540?

Mr MACRIDES: Well, yes, if I give you an example. Darwin and Katherine it is 282; Alice Springs is 57 and Tennant Creek is around 8 MW.

Mr ELFERINK: Yes. I am looking for like with like in terms of …

Mr MACRIDES: I will have to add all of those up.

Mr ELFERINK: Yes, all right, but basically we have lost 21 in that instance, but another 90 gained here.

Mr MACRIDES: Yes.

Mr ELFERINK: Okay. That is fine, that would explain that. Has there been a drop in consumption? I notice that the amount of electricity generated has fallen between the year 2010 and 2011?

Mr MACRIDES: We are a very weather- dependant business, obviously. When it is hot, people use more energy and use more water; when it is cold, people use less energy and use less water. In 2011, we have had the El Nino impact upon the weather patterns in the Territory. That has had a profound impact on our revenue as a result. So, yes, there has been a significant reduction in demand for both electricity and water in 2011 and, again, with the continuation of the El Nino pattern, although it was not as extreme this year as it was last year, there has also been a significant reduction in energy demand. Water, though, is actually on target.

Mr ELFERINK: Yes. I am interested in that because I note - I think it is page 59 of the annual report - I want to spend a little bit of time here and we will talk about water for a second. Do you have any paper work - I have seen these graphs somewhere where there is a projection of the requirement to bring on new water supply, and then in that graph there is a mixture of potential outcomes which, if you reduce consumption, you can then push out the requirement to bring more water online. Ultimately, you are talking about the dam at Adelaide River, which I keep mispronouncing and being corrected by Rob, so I will not try to pronounce it. Do you have those graphs available? Do you know the ones I am referring to?

Mr MACRIDES: No, I do not, sorry.

Mr ELFERINK: I have seen them; I am just trying to place them. Can you perhaps ask the folks behind you if there is such a graph of projected water supply and demand floating around in one of the folders behind you?

Mr MACRIDES: Sure. If it is something that is on the public record I am happy to provide it.

Mr McKENZIE: We do have them. I think the graphs you are referring to relate to the 2030 year projections.

Mr ELFERINK: That is right, yes.

Mr McKENZIE: We do not have them with us today but we can get them delivered before the end of the session.

Mr ELFERINK: Is it possible to do that, or even electronically delivered, so e-mailed through the system and printed out somewhere?

Mr MACRIDES: Sure.

Mr ELFERINK: I note that on page 59 of the annual report you talk about the decrease of water consumption. It is largely attributed to, once again, the weather events. I am concerned that an anomalous weather event may be having an effect on your water reduction targets for one year. I am wondering if you are tracking your water reduction targets for the current financial year and you are getting a result, which is what you would like to get in terms of the water consumption reduction. I have just found the comment:

Water revenue increased by $4.1 million due to the 20 percent tariff increase, however actual consumption decreased by 13.4 percent due to the record rainfall experienced in the 2010-2011 wet season.

Now that we are returning to a more normal cycle, are you still meeting your water reduction targets?

Mr MACRIDES: We actually do not have water reduction targets. Our desire is to push the need for major capital expenditure out as far as possible. In that context, we are working with the NT government and the various key stakeholders to look at what we can do in relation to efficiency in demand management.

Just to give you a picture of the Darwin water supply system itself, Darwin, through the two principal sources, the bore fields and Darwin River Dam, has a capacity of about 45 000 million litres available per annum. Demand in 2010-11 was around 39 000 million litres, so we have considerable headway there at this stage. Growth is around 1% per annum, so it is about 400 megalitres a year. From our perspective, we believe that there is significant opportunity for us to do something about the Top End's insatiable demand for water, and if we can achieve even a 10% reduction in demand, although we think that we can achieve somewhere between 15% and 20%, it significantly helps with the requirement for you to bring on new

supply at some stage in the future by pushing that out. That is obviously what we are trying to achieve here, because, one, it is the right thing to do - at double the usage of anywhere in Australia, there is clearly capacity for the Top End community to do something about its water demand; and two, it obviously helps in the long run in terms of the need to invest significantly in bringing new infrastructure online.

That is not to say though that we are not planning to bring new infrastructure online. Clearly, our plans are around bringing Manton Dam back online whenever we have to. We would like that to be as late as possible.

Mr CHAIRMAN: At that point, we will take a five-minute break and return to that line of questioning.

The committee suspended.

Mr CHAIRMAN: We are resuming with the member for Port Darwin.

Mr ELFERINK: Thank you, Mr Chairman, and thank you for the break, it was necessary.

We were on water, as memory serves me. Minister, one of the components in water that concerns me, of course, is the dam at the Adelaide River. How do you pronounce it, Warrai, or?

Mr MACRIDES: Warrai.

Mr ELFERINK: Warrai. Okay, I have it right for a change. We have the Warrai Dam. Some issues have been raised in recent times about the issuing of an exploration licence in the catchment of the Warrai Dam. In one of the maps I have seen, the exploration licence area also takes in the area that would be inundated should the dam be built. What is the position of Power and Water in relation to this because it is, historically, the favoured dam and at some point in the future it is going to have to be built? Was the Power and Water Corporation informed or consulted before that exploration licence was issued?

Mr KNIGHT: I am not aware that there has been an exploration licence issued.

Mr ELFERINK: Really? I thought it had been issued. Was there an application for one?

Mr MACRIDES: My understanding is there is an application currently before the regulator for consideration of the issuing of a licence. Clearly, we are consulted by the regulator about licence applications like this.

From Power and Water's perspective, our preference would always be to have closed catchments in all our water sources, but nowhere in Australia does that exist. It is an aspirational issue with all very conservative water authorities like the corporation. If an exploration licence is granted which ultimately ends in a mine developing, we will deal with it in the same way that we deal with a whole range of alternative usage around our existing water sources, such as the Kamfari. Sorry, Gerry.

Mr WOOD: You read my mind.

Mr ELFERINK: Clearly, Mr Macrides, your stated preference would be that there would be no exploration permit issued over that proposed catchment area - and for obvious reasons.

Mr MACRIDES: As I said, I do not believe there would be a water authority in Australia whose position would not be closed catchments. However, the reality is that nowhere in Australia is that in existence.

Mr ELFERINK: Has Power and Water lodged an objection to this permit, or communicated an objection to the issuing of this permit?

Mr MACRIDES: Not per se. Power and Water has obviously been consulted in relation to the application. Our position has been that we would prefer that a licence was not granted, but, clearly, if the licence is granted, we will deal with it.

Mr ELFERINK: Okay, you have no choice; you would live with that if it was granted. I am ensuring Power and Water's opinion has been clearly telegraphed to government because of the needs of the many, in this case, from a purely utilitarian point of view.

Are there any other sources of water being investigated or looked at in a prospective fashion? There is the Bennet Dam over the Finniss which was mooted, you have the Marrakai Dam, and you have the bore field at Howard Springs. Has Power and Water Corporation even turned its eye to any other potential source of water at all in the greater Darwin area?

Mr MACRIDES: We have done a lot of work around potential water supply sources, ranging from, if you look at the back of Robertson Barracks; for example, there are some old quarries there that fill up with water during the Wet Season. Looking at options for whether or not we can use part of that for a non-potable water supply to places like Robertson Barracks. There has been much work done. My understanding of the location for prospective dams, that work has occurred over the last 20 years, and the sites that have been identified are the only prospective sites available given the topography of the Top End.

Mr ELFERINK: I am less interested in dams and more interested in underground supplies, aquifers, and those types of things.

Mr MACRIDES: With the exception of the Howard East and McMinns bore fields, I am not aware of any other prospective aquifers that exist, in the Top End at least, for a potable water supply.

Mr ELFERINK: None whatsoever?

Mr MACRIDES: I said I am not aware of any.

Mr ELFERINK: Okay.

Mr MACRIDES: That is not to say there are none.

Mr ELFERINK: Is any work being done to try to discover any of those?

Mr MACRIDES: Mr Elferink, my advice is that in the greater Darwin area we have looked at alternate aquifer sources and, apart from Howard East, there are none.

Mr ELFERINK: There is nothing prospective at all?

Mr MACRIDES: Not that we are aware of, but we would be delighted if you could find some for us.

Mr ELFERINK: Oh no, that is fine, it is just that, unfortunately, when you are sitting on this side of the Chair and not actually involved, you hear things from time to time. I was under the impression that some research was being done on something prospective outside of the Howard bore field. I was curious to know if that had proven up or whether that was just a nasty little rumour.

Mr MACRIDES: I am not aware of that rumour and it is certainly not work that we are doing.

Mr WOOD: There is only the Berry Springs aquifer, which is quite small.

Mr ELFERINK: Another one was being nominated. However, I shall not pursue it because the answer I am getting is no.

Iron filings, the dreaded things that caused so much pain since we last spoke - the source of the iron filings has not been identified - this is for the generator that was badly affected by the presence of iron filings. Where are we at with that? I understand there is the potential for some liability to fall at somebody's feet if that can be identified?

Mr MACRIDES: The books have now been closed off on that. The issue was dealt with by the Council of Territory Cooperation. We provided a final report to the Council of Territory Cooperation which essentially indicated from all the research and analysis that had been done on the failure mechanisms, that there was not a single source. The iron filings appear to have entered the system from two areas that bypassed the filters in the NT Gas side of the system. They have also bypassed the filters that exist within the generation side. They are micro-filings and nobody has been able to explain the source of them. What we have done as a result of this occurring is, we have changed the filters in our side and NT Gas has changed the filters in their side and the problem obviously has not reappeared. In terms of liability, because there is no smoking gun here, it is an insurance claim.

Mr ELFERINK: All right. So there will be an insurance payout at some point?

Mr MACRIDES: Well, if it passes the threshold for insurance payout, yes.

Mr ELFERINK: Okay, fair enough. In recent times, there has been the issue of, actually no, sorry, I have to return to one other thing. I have made some notes here and I have missed a note. Going back to the issue of water, pressure reduction programs as a way of saving water, how do they work and how will they be managed?

Mr MACRIDES: Way beyond my expertise. I will ask Steve McKenzie, who is our General Manager Water Services, to perhaps take the microphone and give the technical explanation in lay terms that we can all understand.

Mr McKENZIE: Essentially, the water pressure in any water system can be quite variable. We guarantee to provide a minimum pressure of around 20 metres or so, but within a system, any water supply system in Australia, it can vary significantly, it could be 40, 50 or 60 metres. That means there is an increase propensity for mains to burst, for leaks to occur, and for water to be used more rapidly than is absolutely required. One of the strategies to reduce leakage and to reduce consumption is to consider narrowing that band of variability to reduce water pressure.

We have two projects on the go. We completed one in Palmerston about a year or so ago to reduce pressure, I think, to within a range of about 20 to 40 metres. That has occurred. It really only affects what we are calling one part of Palmerston that is in a slightly lower area and has slightly higher pressure. I think it is related to the newer suburbs. That has gone quite well without any impact on customers. When we do that, we have to be cautious that we continue to provide a minimum pressure, but that minimum pressure is guaranteed on your worst day of the year, and the hottest day when water demand is at its highest, so we must always try to guarantee that.

It may impact on areas where there are certain firefighting requirements within a building, so we must be aware of those requirements and previous agreements with customers, so we have to be cautious. Therefore, they are quite a challenge to manage but, potentially, if they are done they can reduce water consumption without any impact on the customer, and improve reliability to the system because, in fact, you should get less burst water mains.

The other area we are looking at is Alice Springs. We have not actually done any work yet, but we are looking at doing a similar project around the CBD. That will be largely driven by being able to maintain fire pressures for some of the commercial customers.

Mr ELFERINK: Clearly, this has been identified as an issue because it gets reported, I believe it is in the Statement of the Corporate Intent or the annual report, I cannot remember where I read it. So 20 to 30 metres is basically a measure of pressure in the same way bars are a measure of pressure, I take it, the old 33 feet for one atmosphere, is that the old measure?

Mr McKENZIE: That is right.

Mr ELFERINK: Okay, I just want to make sure I am speaking in the right terms. How much water do we lose, seeing it has been identified as a particular issue? How much water do we lose through this problem of burst mains and leakage?

Mr McKENZIE: The pressure reduction is not the only strategy; it is just one of the strategies. Overall leakage nationally, and it is no different in the Territory, could be in the order of 10% to 20%. That is not unusual.

Mr ELFERINK: Of the overall consumption?

Mr McKENZIE: That would not necessarily just come from bursts; it could come from actual metered consumptions, where the meter is not actually working, faulty meters, firefighting that is not needed, or flushing. For instance, we had some dirty water events around January and February, that relies on our maintenance people going out and doing quite a bit of flushing to improve the water supply for the people in that area. It is difficult to measure that when we try to make estimates, but all of those things add up, and I can give you that sort of total figure of, as I say, 10% or 20%.

Mr ELFERINK: How many complaints do you get about dirty water necessarily every year?

Mr McKENZIE: It varies. I have the figures right behind me.

Mr ELFERINK: Feel free to go and grab them.

Mr MACRIDES: Dirty water complaints, I can actually give you data for the last five years. It varies. The reason it varies is obviously because of the weather conditions. If you have a very wet Wet Season, the turbidity in the water is significant and therefore you obviously have more sediment rising. If you have a very poor Wet Season, again, you are drawing down to a very low level within your dam, which also is an area where there is sediment that has settled over a long period of time. In 2007-08, the number of complaints was 359; in 2008-09 they were 319; in 2009-10, it was a stellar year, only 86 complaints; 2010-11, 133 complaints; and, year to date, it is 257 complaints. The industry uses a measure of complaints per thousand properties, and if you use that measure, in 2007-08, the figure was 7.3; 2008-09, 6.3; 2009-10, 1.7; 2010-11, 2.7; and, year to date, 5.1.

Mr ELFERINK: So a rise in recent times.

Mr MACRIDES: Interestingly, it did not occur in 2010-11, in spite of the fact that we had a three metre rainfall, but then I assume people were using less water in that year. This year, again, it has risen and the number has been 257.

Mr WESTRA van HOLTHE: Is that Territory-wide?

Mr MACRIDES: No. These are the greater Darwin area, which tends to be where we get the majority of the complaints. In fact, I do not actually recall seeing complaints out of the regions.

Mr ELFERINK: I couldn't imagine Alice Springs, you would have to burst a pipe to get that water dirty, it is straight out from the ground. Is this particularly pronounced in certain areas? Are there geographical locations like Palmerston or the northern suburbs where this stuff is appearing? I have just had a few complaints out of Palmerston, that is all.

Mr MACRIDES: I do not believe there are any clusters. If you are at the end of a supply main, you are more likely, I guess, to experience dirty water. Steve, can you explain?

Mr McKENZIE: Some areas this year were impacted more than others. It is somewhat of a seasonal event and we usually stick an ad in the paper advising people there may be some variations in water quality so they are aware. It is sort of seasonal. Typically, around the January to March/April period, when we are starting to get some rain into the reservoir that is creating some inflow and maybe changing the water quality. Also, at different times of the year, the reservoir can effectively turn over, so that iron and manganese that collects in the sediments and is quite stable, and the customers aren't impacted in that part of the year, water from the bottom of the reservoir will actually rise to the top and bring some of that sediment with it. That typically occurs during that period so, thinking of it as being the source of your water, properties closer to the dam probably tend to be affected first and most. We probably did have a higher number of calls from the Palmerston and northern suburbs areas, and virtually none from the CBD, but we also had calls from Fannie Bay. Really, there is somewhat no rhyme or reason. Because the system is a network, it tends to pop up here, there and everywhere and you tend to chase it around the system.

Mr ELFERINK: Probably because I have lived in Darwin for such a long time, whenever I get brown water down my pipe I sort of don't really bat an eyelid. When you do get complaints, do you actually go and test it?

Mr McKENZIE: Yes, we do. We may not test absolutely every household, but we test locations, and we always test for chlorine residual, which is a key factor for us. Whatever the quality of the water appears to be visually, we want to ensure that it is safe to drink and, in every case, the water had a chlorine residual. From a public health perspective, that indicated the water was safe to drink. So it was a visual effect, it was really impacting more on people's visibility in the bath tub or washing.

Mr ELFERINK: You go from mild chamomile tea colour to full-on strong black tea, as a way of expressing that. Do you do a rating, or keep a record in terms of that quality of water coming down the system and, if so, can you describe that record keeping system?

Mr McKENZIE: We do not formally keep a record system. The guys in the field who go out to do the flushing can observe how long it takes to clear and how dirty the water was. We do collect samples, so we can see them in a bottle. We do not score it in a sense. Some of the customers provide photographic evidence. It can be quite coffee coloured water, but a property up the road may have almost no effect at all, so it is really somewhat random and difficult to manage, because we cannot do anything other than flush

water out of the system, which is a waste, but also usually means the problem moves down the street to someone else, so all we end up doing is exacerbating the problem.

Mr ELFERINK: That then takes us to a topic that has come up recently, and this is the apparent nexus between the Northern Territory government's policy of enhancing generation through solar panels on roofs and those sorts of things, and the limitations that Power and Water seem to want to put on the capacity for these panels to generate. I understand there is a problem with the network, or a potential problem with the network. Can you take us through the issue and what the problems with the network are?

Mr MACRIDES: Can I start off by saying there seems to be a lot of myth and legend surrounding this particular issue.

Mr ELFERINK: Which is why I framed the question in those terms.

Mr MACRIDES: Yes. Starting from the perspective of Power and Water is actively discouraging people from putting solar onto their roofs, that is not the case at all. We have always had a policy whereby systems in the order of 2.5 kW can be installed without too much problem. We have recently reviewed the policy and are looking at whether or not we can relax the minimum level and, in fact, we will probably go up to about 4.5 kW in the not-too-distant future and say, look, in terms of the capacity of people to install solar PV onto their roofs, if it is a 4.5 kW system, tick the boxes, paperwork, and all is done.'

Systems larger than that though, and we are only talking about domestic customers here as well, not commercial customers, we have said we want to be able to consider the impact on the network of installing something above 4.5 kW. The reason for that, and this is not a problem unique to Power and Water, this is a problem the industry is grappling with Australia-wide, networks were designed to deliver electricity to households. They were never designed to receive electricity from a household back into the network. Typically, what happens with an influx of rooftop PV, it has the capacity to affect voltage, and you wind up with significant voltage drops that occur as a result of an overload of rooftop PV going into certain areas.

For example, Carnarvon in WA has actually now said the network there is saturated and are not allowing any more rooftop PVs to be installed. I do not believe we will get into that situation for a long time. The principal issue is voltage management in a network, because networks were not designed, obviously, to be able to receive electricity back into a grid.

Having said that though, the other issue is that these rooftop PV systems have inverters on them. Depending on the nature of the inverter, the inverter may actually close the system down if it recognises that there is a voltage drop, and so a person could actually have a rooftop PV system sitting there that is actually doing nothing, because the inverter has actually cut the system off as a result of this voltage fluctuation.

Again, getting back to what I said at the start, we are not discouraging people from putting rooftop PV in, in fact, we are wholeheartedly supporting the installation of rooftop PV. We have limits on terms of the minimum level of rooftop PV that can be installed – no questions asked, in effect. But, above that, we need to go through a process of analysing whether or not the network can cope with systems above 4.5 kW.

Mr WESTRA van HOLTHE: What is the minimum?

Mr MACRIDES: At the moment, the minimum is 2 kW and, in the not-too-distant future, we will go to 4.5 kW.

Mr ELFERINK: Thanks, I forgot to ask him about that.

Mr MACRIDES: Oh, sorry, maximum – my apologies. Maximum, no questions asked, and then anything above that requires consideration and approval.

Mr WESTRA van HOLTHE: So, at the moment, applications within that range are automatically approved?

Mr MACRIDES: Basically. At the moment the bar is 2 kW. If an application comes in for a system up to 2 kW, it is simply, fill out the paperwork and approval occurs. We will take that up to 4.5 kW in the not-too-distant future.

Above that, though, what we are saying is that there will be an approval process above just ticking the boxes. That approval process will require us to actually go and analyse what the impact on the network is going to be of a system greater than 4.5 kW being installed. If somebody wants to come in and install a 6 kW or 10 kW system on their roof, there will be a process whereby we will have to ascertain whether or not the system can cope with a system of that size being installed. Again, to put this in context, a 1.5 kW to 2 kW system will probably meet around 20% of an average household's usage; a 4.5 kW system will meet about 70% of an average household's usage.

Mr WESTRA van HOLTHE: Mr Macrides, you mentioned that the power distribution system is designed to deliver electricity, not receive it. What remedial action can be taken, and at what cost, to correct that imbalance?

Mr MACRIDES: There are major difficulties in correcting the imbalance, and it is horrendously expensive. Basically, as I understand it - and I have experts here who can correct me if I get this wrong - you are actually having to build a parallel network, in effect.

Mr WESTRA van HOLTHE: Okay. I probably do not need to ask anymore about that, because the costs of that would be astronomical.

Mr MACRIDES: Absolutely. As I said, it is not a situation that is unique to us, every utility, every network provider in Australia is grappling with this difficulty. It is becoming more extreme as the cost of solar PVs comes down. I noticed recently there was an article in one of the papers that Harvey Norman; for example, is going to now start selling rooftop PV systems in their retail shops. That indicates how the cost has come down, so now it is just a consumer item.

Mr ELFERINK: There was also another announcement recently, that there was just basically a paint you just spray onto a roof and create …

Mr MACRIDES: Oh, happy days!

Mr ELFERINK: Yes.

Mr WESTRA van HOLTHE: I have heard that one.

Mr ELFERINK: I remember reading it somewhere and thinking to myself, basically you paint this stuff on and off you go. That would be a challenge, I suspect.

Mr WESTRA VAN HOLTHE: You could attach a wire to each corner of the roof and …

Mr ELFERINK: Essentially, that is pretty much how it works.

Mr WESTRA van HOLTHE: Can I just go on with that?

Mr ELFERINK: Yes, keep going.

Mr WESTRA van HOLTHE: Mr Macrides, in the current financial year to date, and in the previous financial year to date, how many applications for solar systems have you received?

Mr MACRIDES: I do not have the figures here, but we may be able to get the figures. I can tell you, though, that probably three or four years ago, maybe a bit longer, you could count on one hand the number of rooftop PV systems that were installed. Since the cost has come down - and there were large government subsidies available there for a period of time to people to put rooftop PV in and, of course, we have had Solar Cities in Alice Springs as well - the number of rooftop PVs at the moment is probably in the order of about 1500. I am not sure. We get dozens of applications a week: in 2008 - eight; in 2009 - 500; 2010 - 1000; and in 2011 - 1500. That is the totals in each of those years, not the number of applications. You would have to subtract. It is the incremental increase.

Mr WESTRA van HOLTHE: Okay.

Mr MACRIDES: In 2008, there were eight rooftop PVs in existence, and in 2009 there were 500 - so there were 492 approved in that year, etcetera.

Mr ELFERINK: There is clearly a trend there. More people like the idea, they think it is cheaper.

Mr MACRIDES: Absolutely.

Mr ELFERINK: And it is going to continue.

Mr MACRIDES: And we strongly encourage them to do it.

Mr ELFERINK: The technology, of course, also has the effect of not only being cheaper, but probably more effective as well.

Mr KNIGHT: It is a plateauing over three years of 500 a year.

Mr ELFERINK: That still means 500 more online each year, which is a challenge.

Mr WESTRA van HOLTHE: How many cases would there have been during that period from 2008 where applications have been refused or not approved?

Mr MACRIDES: I am not aware of any. There were none.

Mr WESTRA van HOLTHE: Out of the applications, were any approved on a different basis to which they were applied for, say fewer panels or something like that, or were they all approved to the full application?

Mr MACRIDES: I am advised there were about 20 where there have been variations in the size.

Mr WOOD: Member for Katherine, can I ask a quick question on that? Have the issues about getting solar panels cyclone approved caused any reduction in the number of solar PVs being constructed on roofs?

Mr MACRIDES: I wouldn't think it would have caused a reduction. There was certainly a delay, quite clearly, in the installation time whilst the issue of building code approvals was gone through by the various providers of these rooftop arrays. I do not think it has had an impact on the number, but it has had an impact on the time it has taken for people to get systems on their roofs. Again, that is clearly outside Power and Water's control; that is an issue of building code approvals.

Mr WESTRA van HOLTHE: Are there any regional differences in the solar scheme? Can you apply for something in Darwin, something in Alice Springs, or Katherine or Tennant Creek, and it goes through the same process of approval?

Mr MACRIDES: Yes, absolutely the same process for approval Territory-wide.

Mr KNIGHT: The boundaries are different in the Alice.

Mr MACRIDES: The tariff in Alice is slightly different at the moment because of the Solar Cities arrangement, but the tariff in every other jurisdiction is the same.

Mr WESTRA van HOLTHE: What is the tariff difference between Alice and the rest?

Mr MACRIDES: Alice, at the moment, because of the Solar Cities arrangement, is a slightly higher buy-back rate. The reason for that is that Solar Cities is subsiding the buy-back rate. When Solar Cities expires, the buy-back rate goes back to the normal buy-back rate, which is essentially a gross buy-back rate. We buy back any kilowatt of energy that is produced. We rebate the bill by the cost that we would charge the householder if they were taking energy from us.

Mr WESTRA van HOLTHE: What is the difference then, say, you have Alice is getting one …

Mr MACRIDES: Yes, Alice is on a special tariff as a result of the Solar Cities arrangement. In every other jurisdiction, the tariff that is applied is the same as the tariff we charge for electricity. At the moment, that is about 19¢ per kW hour or thereabouts, in fact, it is 19.77¢ per kW hour.

Mr WESTRA van HOLTHE: So the rebate for everybody in the Territory is 19.77¢?

Mr MACRIDES: At the moment, yes. The rebate at the moment is, for every kilowatt that you produce, we rebate your electricity account by the rate that we would have charged you if you had taken that energy from us.

Mr WESTRA van HOLTHE: Yes.

Mr MACRIDES: The gazetted tariff is 19.77¢ per kW hour at the moment. That is the tariff that applies.

Mr WESTRA van HOLTHE: When does Solar Cities expire?

Mr MACRIDES: In 2013.

Mr WESTRA van HOLTHE: Are there any moves to extend that program?

Mr MACRIDES: Solar Cities is actually a federal government-funded program. The Solar Cities program itself no longer exists. At the end of the program period, the $20m funding pool ceases to exist. We are in discussions at the moment with all the foundation members of Solar Cities to see what elements of the project may be sensible to carry over into the future and how we would go about funding that. No decisions have been made at present.

Mr ELFERINK: Thank you. I believe I am good on solar for the moment.

You identify as a prime risk in terms of renewable energy certificates constrained or limited pass through of the LRET and the SRES costs to consumers. Can you describe how you intend to deal with that prime risk?

Mr MACRIDES: The way we deal with it is the same way we deal with it now, that is that we wear the differential.

Mr ELFERINK: How much exposure does that give you?

Mr MACRIDES: If you look at our revenue base, about 42% comes from the old contestable marketplace, so contracted customers. In the case of those customers, we pass any changes to the regs on to them as part of their contractual arrangements, and every retailer does the same thing by the way, not just us, but any other retailer in the marketplace up here.

Mr ELFERINK: So you are not registered charities then?

Mr MACRIDES: Not that I am aware of. In the case of the rest of our revenue base, it is the old franchise marketplace, so it is the gazetted tariff. Those costs obviously do not get passed on to those customers at any rate.

Mr ELFERINK: Which then brings me to the next area of interest. In your Statement of Corporate Intent, you raise the issue of the carbon tax as one of your prime risks. In fact, you go on to say that the prime risks are inability to fully recoup the cost of the carbon tax, and practicalities and compliance costs. You have produced modelling in relation to how much the carbon tax will raise tariffs. For the sake of the record, can you reiterate the results of that modelling here?

Mr MACRIDES: Sure. The Statement of Corporate Intent was predicated on the basis of not really knowing what was happening in relation to the carbon tax. At that stage, I do not believe the legislation had even been passed in parliament, so the issue that was raised there is the risks associated with it, not knowing what the final form of the carbon tax was going to be. Since then, of course, the tax has been passed and most of the regulations have now been issued under the act itself, so we have a much clearer picture of what the impact is on our operations.

Like every other utility in Australia, we have had to justify what the end pass-on rate is to consumers, so we have gone about ensuring that that analysis was done at arm's length from the business. We had a review done of all the implications for us by SKM. The report has been published. The non-commercial elements of that report are available in the public domain and it is actually on our website.

Essentially, what the report shows is that, for 2012-13, the impact on us, in terms of direct, indirect and administrative costs will be in the order of approximately $30.3m. Then, looking at that $30.3m and the impact that it has on tariffs, effectively, what that will mean is that, on 1 July, the carbon impact on electricity

tariffs is an extra 1.45¢ per kilowatt hour on the variable charge; no impact on the fixed charge for electricity; remember, there is a fixed component, a daily fixed charge and a variable charge.

For water, it is 0.93¢ a kilolitre, and for sewerage it is $3.25 per connection. The reason why there is an impost on water and an impost on sewerage is because the principal means of getting water to a household is electricity.

Mr ELFERINK: Yes, you have to push it up ...

Mr MACRIDES: Absolutely, and sewerage treatment, yes.

Mr ELFERINK: Okay. From a practical point of view, so from a layman's point of view, what does that mean in percentage terms in charges in determining the change to power, water and sewerage?

Mr MACRIDES: For electricity, it is around a 7% increase in the tariff.

Mr ELFERINK: About 7%. And for water and sewerage?

Mr MACRIDES: For water it is 0.9%, and for sewerage it is so small I cannot even make it register.

Mr ELFERINK: No, that is fine. So, basically power up by 7%?

Mr MACRIDES: Yes.

Mr ELFERINK: Did that accord with previous projections that were issued, or is this the first projection that you would consider to be truly reliable?

Mr MACRIDES: This is the first projection that is absolutely reliable, but having said that, there were some back-of-the-envelope calculations done, not just by us, but others had also done some back-of-the-envelope calculations based on our annual report, the carbon emissions that are indicated in our annual report and the knowledge about what the price was going to be for carbon. When we did our first back-of-the-envelope calculations, we thought it was going to be in the order of 5% to 10%.

Mr ELFERINK: So you are in the range?

Mr MACRIDES: We are certainly in the range. The legislation has some peculiarities in it, particularly the regulations. Some of those things we were not aware of, so when we did our initial calculation, for example, we were not aware that the diesel fuel subsidy was going to be reduced to match the imposition of a carbon tax for electricity generation in remote communities. There were some slight variations, which is why we settled somewhere between 5% and 10%.

Mr ELFERINK: All right. I am trying to get it for Mr and Mrs Malak to get their head around the impact on their power bill. So 7% is pretty obvious. In dollar terms, is there an average power bill for a Tranche 4 and 5 customer?

Mr MACRIDES: Yes, there is. In fact, we have actually published that information on our website. It is slightly clouded, but the way that we have done it is so that you can see the clear distinction between the 1 July tariff increase that was due to CPI, and then the addition of the carbon tax on top of that.

Mr ELFERINK: What was the tariff increase?

Mr MACRIDES: On 1 July, there was already a foreshadowed tariff increase of CPI of 2.8%. Based on an average household electricity bill, on 1 July with the CPI increase, the weekly increase in the bill is $1.02. Add the carbon tax on top of that, and the carbon tax accounts for another $2.48 a week, giving you a total of $3.50 a week for the average consumer.

Mr ELFERINK: And, per quarter, that adds up to?

Mr MACRIDES: On a quarterly basis, it is about $45.53 a quarter.

Mr ELFERINK: Basically, the average power bill is going to go up by $45.50?

Mr MACRIDES: Yes. On an annual basis, the average power bill is going to up by $182.14. $129.17 of that is carbon related, and $52.97 is the CPI increase.

Mr ELFERINK: Sorry, 120, what was carbon related?

Mr MACRIDES: $129.17 is carbon related, and $52.97 is CPI related.

Mr ELFERINK: Okay. The roll-out of …

Mr MACRIDES: As I said, those figures are actually available on our website. There is a fact sheet on our website that has all that information on it.

Mr ELFERINK: The practicality and compliance aspects of the carbon tax and emissions trading schemes are currently being assessed by the corporation and their potential impact is being ascertained. This is when we transfer to a trading scheme rather than the straight tax. When you say it is being currently ascertained, and this is from your Statement of Corporate Intent, what are the variables, and do you have any projections yet in relation to this?

Mr MACRIDES: We know that there is a fixed price for the first three years of the operation of the scheme, and then it goes, obviously, to a market-driven price. Honestly, the work that we are doing at this stage is fairly rudimentary because, in four years' time, you know, we just do not know, and I am not sure anybody knows, what the marketplace is likely to look like in terms of the strike rate known for carbon credit.

Mr ELFERINK: This is not the only carbon trading scheme in the world. Has there been an experience in other jurisdictions?

Mr MACRIDES: Absolutely, and the experience in other jurisdictions, particularly the European scheme, has been a significant reduction in the price of carbon, and I assume that is largely as a result of the financial crisis over in Europe.

Mr WESTRA van HOLTHE: Could I just ask, Andrew, what is the average power bill that you have used in your calculations?

Mr MACRIDES: Sure. What we have done is, for an average residential customer, the consumption is 8908 kW hours.

Mr ELFERINK: Which works out to how much in dollar terms?

Mr MACRIDES: In dollar terms, the annual bill is around $2000.

Mr ELFERINK: So $500 a quarter?

Mr MACRIDES: Yes.

Mr ELFERINK: Thank you. I have a couple of other minor issues on power. The undergrounding has pretty much been completed in the areas where undergrounding was going to be done?

Mr MACRIDES: Yes.

Mr ELFERINK: Where are we at with removing the existing power poles? Apparently there were some problems with that.

Mr MACRIDES: No, in fact, I think by the end of this month all the poles that were coming down will have been taken down. In fact, I can probably count on one hand the numbers that are still standing at the moment.

Mr ELFERINK: Okay.

Mr MACRIDES: There was a transition period between the existing contract that we were using and the new contractor. The new contractor is on deck and is out there removing power poles at a frightening rate.

Mr WOOD: John, could I just ask a question on removing power poles?

Mr ELFERINK: Yes, go your hardest.

Mr WOOD: Brandt Road, I wrote a long time ago and asked what was happening. I do not think I have heard anything since. They have got power poles there. There was a car accident, a fatality, and I wrote to Power and Water and asked what the story was. We really have not heard anything back as to, is there a program to remove those poles?

Mr MACRIDES: The answer is no, there is no program.

Mr WOOD: I suppose the next question is, why not? They are redundant, I believe.

Mr MACRIDES: We will get back to you, Mr Wood.

Mr WOOD: Okay.

Mr MACRIDES: I do recall the issue coming up. I will have to find out.

Mr WOOD: You could at least sell them as scrap metal if you do not want them.

Mr Elferink: You get down there with an angle grinder.

Mr Wood: They are big poles.

Mr ELFERINK: Get down there with a big angle grinder. By the way, did we find those water charts that I referred to earlier?

Mr MACRIDES: No, they are still on their way. I do have an answer, by the way, to the average call centre time you asked earlier on.

Mr ELFERINK: Okay.

Mr MACRIDES: I had actually forgotten we also had a cyclone at the start of the year as well, Cyclone Grant, so it is ...

Mr ELFERINK: It was a very forgettable cyclone.

Mr MACRIDES: Yes, it might have been, but it created a fair degree of angst, particularly for three days prior to the cyclone. We had significant wet weather events. The average answer time is now 64 seconds.

Mr ELFERINK: So it is still high?

Mr MACRIDES: Yes, and that is the difficulty of this particular measure, because it is impacted on by these major weather events.

Mr ELFERINK: I would then assume that, generally, setting aside those major weather events, you would be hoping 20 seconds is still about right.

Mr MACRIDES: Historically, 20 seconds has been achievable.

Mr ELFERINK: Yes, so the weather events push it out extraordinarily then. How long are people hanging on the line then in these extraordinary weather events?

Mr MACRIDES: It depends. I mean, it ...

Mr ELFERINK: Five or 10 minutes?

Mr MACRIDES: Well, again, it depends on what time they call.

Mr ELFERINK: Okay. Perhaps it might be worth revisiting how you use that measure then in terms of its usefulness.

Mr MACRIDES: Well, the measure is actually a standard of service measure that is imposed on us by the regulator.

Mr WESTRA van HOLTHE: Could I go back to solar for just a moment? In the last 18 months or so, there was talk about large scale solar arrays being brought to the Territory. Where are we at with that? Is there any further work being done on that in terms of when and location?

Mr MACRIDES: You are talking about a major renewable energy system?

Mr WESTRA van HOLTHE: Yes.

Mr MACRIDES: Yes. We went out to the marketplace last year with an expression of interest process for a major renewable energy option on the Darwin/Katherine grid. The process was one to actually test the marketplace to see where costings were at. We had a fairly large response rate, and spent a lot of time talking to the respondents to the expression of interest process. It was not a tender process, it was just simply, tell us what your capabilities are and what the price range is. All the expressions of interest that came back were way beyond our marginal costs still, but almost every one of them indicated the price of solar in particular is coming down at a significant rate. We have continually monitored where the industry is at around large-scale PV and pricing, and are still in discussions with quite a number of the parties that submitted expressions of interest.

I suspect, in the next 12 to 18 months, that the time will be right to go out again and test the marketplace to see how far costs have come down, and whether the project of that size is viable with the price that is being offered. I believe we are close.

Mr WESTRA van HOLTHE: You mentioned a project of that size. What size are we talking about? What is the indicative cost for that range of …

Mr MACRIDES: At the end of the day, what we were looking for was a proponent to own and operate the power stations, so build, own, operate, and we just buy the output from the power station. The price that is on offer is basically the kilowatt hour price that is offered to us, taking account of all of their costs of developing the system itself.

In terms of how much it costs to build something like this, that is obviously a matter for these proponents, not us. We are only concerned about what the price is that they are going to be offering us to take all of their output from the power station. In regard to size, we were looking at anywhere upwards of 10 MW, and, incrementally, perhaps going up to 50 MW to 100 MW over time.

Mr WESTRA van HOLTHE: What sort of kilowatt price were they able to come back with?

Mr MACRIDES: I cannot give the price, obviously, because it is commercial-in-confidence, but what I can say is, they were still significantly away from our marginal cost of production using our existing generation capacity. However, the prices are coming down rapidly and, as I said, in the next 12 to 18 months, I suspect the prices will be much more competitive as the price of solar comes down.

Mr WESTRA van HOLTHE: Thanks. I might just have a talk to you about some of the power issues on the Darwin/Katherine network.

Mr MACRIDES: Sure.

Mr WESTRA van HOLTHE: There have been a couple of instances during the last Wet Season, particularly where the whole network south of Manton or thereabouts has gone out after heavy lightning strikes on the high voltage lines. I believe those lines are 33 000 volts, aren't they?

Mr MACRIDES: 132 000 volts.

Mr WESTRA van HOLTHE: 132 000 volts, sorry. Those events happen. Katherine is then able to come on in what they call island mode, …

Mr MACRIDES: Yes.

Mr WESTRA van HOLTHE: … isolate ourselves from Darwin. Is there sufficient generating capacity in Katherine for the remainder of that network south of Manton, so I guess going up as far as Adelaide River, Pine Creek, and then down to the south and east, and wherever else it goes?

Mr MACRIDES: There wasn't, but since then we have put another generation unit into Katherine. In fact, we are in the process of final commissioning of that unit at the moment. It is a 14 MW unit. With the addition of that unit going into Katherine, there will be sufficient capacity for us to meet demand down there if we need to go into island mode.

Mr WESTRA van HOLTHE: It sometimes takes several hours for us to come back online.

Mr MACRIDES: It should not.

Mr WESTRA van HOLTHE: It should not, I know, but I know there is a period generally between, say, 30 and 50 minutes, which would be the ideal time to get us back on island mode and do all the rest of it. Given that these things do happen often enough to cause some major problems in town, has any thought been given to Katherine operating in island mode on a semi-permanent basis over the Wet Season period?

Mr MACRIDES: The simple answer is no. It is really not cost-effective for us to be able to run Katherine in island mode for long periods of time, but what we have changed though is our approach. If we know there is a storm front coming in, we will start running sets up at Katherine in anticipation of a strike on the line so that we actually have sets up and running in Katherine. Generally, it should not take two hours to restore supply. In fact, we should be able to hit the button at the power station and get supply running within about 15 minutes to half-an-hour for the first set to come on, and then obviously sets after that will then come on progressively.

There were some unique factors associated with the incidents that had occurred over the Christmas/New Year period in Katherine that were related to the configuration of the system, which we have since changed and, hopefully, touch wood, will have overcome that problem come the next Wet Season build-up.

Mr WESTRA van HOLTHE: It is more expensive, I gather, to run Katherine in that mode than it is to provide power to Katherine and the southern regions from Darwin.

Mr MACRIDES: Yes.

Mr WESTRA van HOLTHE: What is the cost difference in generation between power coming from Darwin and power coming out of the Katherine station?

Mr MACRIDES: It is quite significant. Typically, the plants that we have out at Channel Island and at Weddell are in the 37% to 43% efficiency range. These are highly efficient gas turbines. To put this in context, for every 1% efficiency we get out of our system in the Darwin/Katherine grid, we save $6m in fuel.

Mr WESTRA van HOLTHE: Per annum?

Mr MACRIDES: Yes, per annum. The Katherine sets are fairly small sets. They are not as efficient as these sets in Darwin and, as a result of that, you find you can burn millions of dollars by running them this way. As I said, 1% efficiency equates to $6m in energy expense.

Mr WESTRA van HOLTHE: In relation to the network, is Werenbun on the network, or does it produce its own?

Mr MACRIDES: Bear with me.

Mr WESTRA van HOLTHE: Do you know where Werenbun is? It is out near Edith Falls.

Mr MACRIDES: Yes.

Mr WESTRA van HOLTHE: Do power lines run out past Mt Todd? That is what I am getting at? They do? There are nods at the back of the room.

Mr CHAIRMAN: The sage individuals at the back are all nodding, saying yes.

Mr WESTRA van HOLTHE: Okay.

Mr MACRIDES: Forgive me, I have not heard of it.

Mr WESTRA van HOLTHE: That is all right. Where I was going with it is a question around whether, if Mt Todd does come back online, will they be drawing power from the grid or generating their own? Has that discussion been had with Power and Water?

Mr MACRIDES: I am not aware if we have actually been approached by Mt Todd about their own fuel requirements or not. Again, just hang on two ticks. They have not decided, and we have not had any substantial discussions with them about whether they will self-generate or take energy out of the grid.

Mr WESTRA van HOLTHE: Okay. Moving a bit further down the track, the line between Katherine and Mataranka, and I suppose ultimately on to Larrimah, is that – and I am unsure if I asked this question last year, if I did. I cannot remember the answer – is that just about at capacity now?

Mr MACRIDES: It is. There aren't any prospective customers online that we know of that would make the upgrading of the line viable.

Mr WESTRA van HOLTHE: Right, so what would it cost to upgrade that line to give it more …

Mr CHAIRMAN: You asked these questions last year.

Mr WESTRA van HOLTHE: I suppose that is almost like how long is a piece of string, depending on how much you have to upgrade it.

Mr MACRIDES: Bear with me. Somewhere between $5m to $6m would be needed to upgrade the line.

Mr WESTRA van HOLTHE: That is just from Katherine to Mataranka?

Mr MACRIDES: Yes.

Mr WESTRA van HOLTHE: All right. And the same question for the line out to Nitmiluk Gorge, is that running at capacity?

Mr MACRIDES: No, that line has recently been upgraded to cope with the development at the gorge.

Mr WESTRA van HOLTHE: The Cicada Lodge development?

Mr MACRIDES: Yes.

Mr WESTRA van HOLTHE: All right. Last year at estimates, I asked you about some issues subcontractors were having with a contractor who was doing some work on the Katherine Power Station. I do not want to make a big issue out of it, but were all those issues resolved that you are aware of?

Mr MACRIDES: The issues with the subcontractors, I honestly cannot say whether or not the principal contractor has paid the subcontractors, and I have no way of finding that out. The issues in terms of the contract with us were resolved in the sense that we severed the contract. The last component of the work that needed to be done, we brought another contractor in to finish it.

Mr WESTRA van HOLTHE: Right. Did that incur any additional costs as a result of that?

Mr MACRIDES: No. Essentially, what happened was that we paid the contractor up to the point of the work the contractor had done. Then there was about another $85 000-worth of work needed to be completed which they would have done if we had not severed the contract.

Mr WESTRA van HOLTHE: Was there any remedial work that had to be done?

Mr MACRIDES: No, it was all done as part of the negotiation with the principal contractor at the point of severing the contract.

Mr WESTRA van HOLTHE: Right. So that has resolved itself?

Mr MACRIDES: Yes.

Mr WESTRA van HOLTHE: All right, that is good news. Out of your planned capital expenditure and repairs and maintenance, how much has been allocated to Tennant Creek, particularly the power station,

last financial year? What has been spent this current financial year, and what would you be expecting to spend in the next financial year?

Mr MACRIDES: While my CFO searches last financial year for me, in terms of the expenditure proposals for the power station over the next three financial years, $25.2m is allocated to upgrade the generation supply into Tennant Creek.

Mr WESTRA van HOLTHE: That is $25.2m over three years?

Mr MACRIDES: Yes, it is. I cannot give you a figure for networks, because most of the network spend is on smaller capital projects.

Mr WESTRA van HOLTHE: All right. What will that $25.2m buy in the next three years?

Mr MACRIDES: What we are looking at is actually augmenting the plant in Alice Springs and retiring some of the older sets down there. Tennant Creek is an interesting power station because it has a mix of engines there. In fact, I cannot recall how many engines there are there, but there are probably 10 or more. Some are less efficient than others, so what we are looking at is consolidating the generation plant in Tennant Creek so that it makes more sense from an operational perspective. What it will do is, it will allow us to retire some of the older and smaller sets, and put in stuff that is more appropriate for the load size in Tennant Creek.

Mr WESTRA van HOLTHE: I just want to clarify, because you mentioned Alice Springs just then, the $25.2m is just for Tennant?

Mr MACRIDES: That is Tennant, sorry, yes.

Mr WESTRA van HOLTHE: Right.

Mr MACRIDES: I think Alice has had its fair share of generation expenditure over the last couple of years.

Mr WESTRA van HOLTHE: Yes, I would think so. Do you have any KPIs in relation to the number of power outages for Tennant Creek? Is that something you break down?

Mr MACRIDES: Yes. We use the SAIFI/SAIDI measures for each of our systems, so we have the Darwin system, the Katherine system, the Tennant Creek system and the Alice Springs system obviously separate. In terms of the Tennant Creek system, the target for the year for SAIDI – just to explain what this measure is - it is the average time a customer will have off supply in the course of a year, so it is a measure in minutes. In Tennant Creek, the target is 411 minutes. The year to date rolling figure is 388.5 minutes. So, for Tennant Creek, we will meet and, in fact, exceed, touch wood, the SAIDI figure for Tennant Creek.

The other figure that the industry uses is a figure called SAIFI, which is the frequency of interruptions, so the number of interruptions a customer will experience in the course of a year. In Tennant Creek, the target is 9.8 and the rolling figure is 5.7 year to date. So, again, we will exceed the target. These targets are standards of service targets that are set by the regulator.

Mr WESTRA van HOLTHE: Okay. Moving on to one of your favourite subjects I am sure, bats.

Mr MACRIDES: Oh, God.

Mr WESTRA van HOLTHE: I knew I'd get that sort of response from you.

Mr ELFERINK: Pink ones or black ones?

Mr WESTRA van HOLTHE: Not the pink ones that kill people, no. Full credit to the frontline fellows at Katherine, they do get in there and do a heck of a lot of work on the distribution system in putting up little protectors around the insulators. I did make an inquiry with the regional office in Katherine a little while ago about some issues on Florina Road. Since then, they have attacked that and got some of those protectors up, and thank you to Power and Water for doing that. However, it is very reactive, I guess. Is there some kind of rolling program in these areas to get these protectors up on the lines, because obviously there are a lot of power poles with a lot of insulators in the region that is affected by flying foxes?

Mr MACRIDES: We have what we call a Poor Performing Feeder Program, and we monitor what happens in relation to performance of certain feeders. Feeders are simply the length of line that provides customers with electricity. The Florina Road feeder has been problematic. One of the difficulties we have with flying foxes is that they are very opportunistic and we never know where we are going to wind up with a flying fox colony inhabiting an area, because it depends on where the first flowering trees or fruit occurs. Whilst we do have a program of upgrading the insulators in rural areas, in areas where we know we have problems, bat guards and all sorts of things, we think that we have got an area solved, and then we wind up with a bat colony in another area, probably as the people of Tindal found.

Mr WESTRA van HOLTHE: So, it is going to remain a reactive sort of program?

Mr MACRIDES: No, we actually have a proactive program of installing bat guards in areas where we know there are problems. We have been doing that for several years now, not only just bat guards, but replacing pole top insulators as well with different size insulators. One of the problems is, we have had bats hanging off each other and then causing an outage as a result of them being able to cling together and forming this mass, and then shorting out the line. We have a very reactive program of installing these bat cages and whatever else in areas we know are a problem for us, which is fine, it is reactive, though, when we find where a new bat colony has arisen for the first time.

Mr WESTRA van HOLTHE: Okay. They have caused a great deal of grief. I understand the system is that when the system detects a fault, the recloser opens?

Mr MACRIDES: Yes.

Mr WESTRA van HOLTHE: And it gets opened for 15 seconds or something, and then closes again. If that does not clear the line, it opens again for a couple of minutes. Am I right?

Mr MACRIDES: Well, no, what happens is that the auto recloser should open and close in milliseconds, and if it clears the fault, then the line is back in service. If the recloser cannot clear the fault, then there is a standard industry practice of waiting 15 minutes before they attempt to reclose the feeder. If they can reclose after 15 minutes, then it is fine; if they cannot reclose after 15 minutes, then they have to send a crew out to actually find what the fault is.

Mr WESTRA van HOLTHE: Okay. Of course, not only is this an inconvenience, but it does cause damage to appliances and things like that. Would you be able to tell me, in the current financial year, how many letters there were to Power and Water to say that a power interruption has affected appliances?

Mr MACRIDES: I would have to get that information for you. We have an insurance officer who deals with all insurance claims. I am unsure how many applications we have received, but we will try to get the information for you before the end of the hearing.

Mr WESTRA van HOLTHE: All right, thank you. In terms of the power network, I gather with the Alice Springs upgrades in recent times, Owen Springs and what have you, that the power generation capacity there will last us some time into the future?

Mr MACRIDES: Depending on what happens with demand down there, there may be a need for us to supplement supply at Owen Springs. In fact, in our forward plans, again, depending on what happens with supply, probably in 2016-17, 2017-18, we might need to bring another set online, but it is that far out.

Mr WESTRA van HOLTHE: Yes, that is reasonable. In the case of Tennant Creek and Katherine?

Mr MACRIDES: As I said, in the case of Tennant Creek, we have $25.2m-worth of expenditure going into Tennant Creek over the next three years. In the case of Katherine, we have just supplemented supply in Katherine with this new set which has gone in and we are in the final commissioning stages.

Mr WESTRA van HOLTHE: In terms of the $25m-odd going into Tennant Creek, will that also increase capacity?

Mr MACRIDES: It would do. The problem with Tennant Creek is we are not seeing growth in demand there. What we are seeing is, in fact, a drop in demand. But, yes, the answer is it will increase capacity, and it will improve the operational arrangements for the power station there by getting rid of the ridiculous number of gensets we have and having a more appropriate mix of gensets available.

Mr WESTRA van HOLTHE: Yes. And it is the same question, really, around water provision in Alice Springs, Tennant Creek and Katherine. Capacity and growth of the network for water reticulation in those areas, are there forward plans for carrying out expansion of that network?

Mr MACRIDES: In fact, in Alice Springs, over the last two or three years, we have actually invested quite heavily in upgrading the Alice Springs water supply, in the tens of millions of dollars, in fact, in terms of putting more bores in the bore fields in Alice Springs. On top of that, obviously, we are working with the community with this demand reduction program. For Katherine, again, I understood that we have upgraded supply.

A witness: Supply is adequate.

Mr MACRIDES: There you go, supply is adequate.

Mr WESTRA van HOLTHE: In thinking about Katherine and a little bit of growth in the industrial areas – and I am not sure if you are familiar with Emungalan Road, which runs of the Stuart Highway just north of town. It is a little light industrial area. There is no reticulated water down that road, even though the mains runs past down the Stuart Highway. Those businesses – or anyone who wants to set up there - are having to sink their own bores. On top of that, they are facing issues around fire protection in that the fire department is requiring them to install their own fire protection systems, which means getting tanks of a certain size to store their water in, and then pumps of a certain size to run them. Are there any plans to grow the reticulation system down Emungalan Road?

Mr MACRIDES: The only way we would contemplate growing the reticulation system would be on the basis of a contribution scheme from all of the beneficiaries of extending the reticulation scheme out there. I am not aware of whether we have done any work on it, or whether we have been approached by the business community down there to have a look at it, so I am not aware of what the costs are or what the likely amount would be for each of the businesses to connect up to a system like that. These things do not come cheap.

Mr WESTRA van HOLTHE: Yes, I understand that.

Mr MACRIDES: Particularly, obviously, because you then have to build the system to cope with the firefighting requirements.

Mr WESTRA van HOLTHE: That is right, yes. I might have a break and go back to you, if that is all right?

Mr ELFERINK: Moving on then from Power and Water, let us talk sewerage …

Mr MACRIDES: Can we go now?

Mr ELFERINK: No, let us talk sewerage for a moment.

Mr MACRIDES: I was not quick enough.

Mr ELFERINK: It was mentioned in the opening statements about the Larrakeyah outfall. Has that now actually been taken offline - it is now no longer pumping sewage through the outfall?

Mr MACRIDES: I can absolutely put my hand on my heart and say, on 31 May 2012, the Larrakeyah outfall was closed down.

Mr ELFERINK: I am curious because, in prior estimates, Power and Water has said, 'not us', in terms of the increased level of bacteria being found on our beaches, and you run a strident defence. Has any testing been done on the beaches in that area to see if there is any change to bacteria levels?

Mr MACRIDES: I am not responsible for harbour monitoring …

Mr ELFERINK: I am just wondering if you would be aware of it, that is all.

Mr MACRIDES: I have no idea.

Mr KNIGHT: The reports done by CDU and Professor Campbell have exonerated Power and Water from those outfalls, both at Larrakeyah and East Point. What has been indicated is near shore. The results were appearing within 30 m of the shore then disappearing. As has been highlighted by Professor Campbell, the bacteria deteriorates within metres of coming out the outfall. The likely culprits, I suppose, are animal and human faecal matter onshore, or toilet blocks at East Point, and the lake at the gardens as well.

With the improvements to the Ludmilla treatment plant - they are going to secondary treatment - the quality of the outflow has improved. There are also issues with yachts in the harbour, especially around times of the Sail Indonesia, Ambon and Dili races. All those need to be managed.

Mr ELFERINK: Yes, but that work was done a while ago. I was specifically asking, in relation to the outfall having being shut down, if any work has been done in case for some reason transmission - whilst I appreciate the work that was done that says there was a sharp fall in bacteria levels nearby the outfall, if any subsequent work has been done on local beaches to see if there has been any change - if something has been missed?

Mr KNIGHT: Although Power and Water is in the working group, harbour monitoring is really the responsibility of NRETAS. However, Power and Water does its own monitoring near the outfalls and the bacteria levels decrease to nothing within metres of that.

Mr ELFERINK: I was aware of that work. I was curious to see if anything had been done and whether there had been anything discovered that might indicate there is some sort of transmission beyond those metres. I understand the work done has found it decreases to zip near the outfall, but I am curious to see if any subsequent testing has been done on nearby beaches, and the answer is that, or you do not know.

Ms LAWRIE: NRETAS has the lead on that.

Mr ELFERINK: Yes, I was wondering if you were in …

Mr MACRIDES: Nothing is coming back through us.

Mr ELFERINK: So, you have heard nothing back in relation to that; that is fine. The sewerage works – I notice there was some reopening recently of the works done in, I was going to call it Jack Haritos Park but, of course, is it Da Costa Park? I mentioned last time we were here that we should change the name to Jack Haritos Park. I have now doorknocked the area and there is a bit of support for that. If I was to write to the Place Names Committee, could I expect a letter of support from Power and Water Corporation or not?

Mr MACRIDES: No, but you could expect a lot of support from Andrew Macrides, the individual.

Mr ELFERINK: Yes, okay. In relation to Uncle Jack?

Mr MACRIDES: Absolutely, Uncle Jack and Aunty Helen.

Mr ELFERINK: It would be a very deserving name. I am unsure where Da Costa Park comes from?

The work had been done, the grass had been laid down, and I recently noticed some holes had been re-dug there. Was that part of the normal course of works, or was there something that had to go back, had to be repaired, or attended to?

Mr MACRIDES: It may have been that there were some temporary connections put in that needed to finalised.

Mr ELFERINK: Yes, I suspect that might be the case.

Mr McKENZIE: For clarity, are we talking Larrakeyah Terrace?

Mr ELFERINK: Yes.

Mr McKENZIE: I am guessing you are thinking of work that might have occurred in the last couple of weeks?

Mr ELFERINK: Yes, that is correct.

Mr McKENZIE: That was a physical disconnection of the existing system and reconnection into the new system, which actually occurred on that Wednesday 30 May and Thursday 31 May. They had to physically disconnect and plug some of the old connections with concrete, for instance, and break up the pipework. That is probably what you saw. That occurred at at least two points along – at least one above the actual macerater and one about halfway down the road - maybe a third point. It was ...

Mr ELFERINK: No, I suspected that was the case.

Mr McKENZIE: ... the final swansong of the outfall.

Mr WOOD: Was there a closing ceremony? We open everything, surely there was a closing.

Mr MACRIDES: We might have a street party at some stage.

Mr ELFERINK: It looked like a very unceremonious event. It struck me that all the lawn had been put down, such as it was, and then they returned to dig something up. I am not surprised that that is the answer. I would be very surprised with the effort that went in there to have something missed. I thought I would ask the question nevertheless. I presume you simply closed it over and lawned it for safety's sake in the meantime?

Mr MACRIDES: The alternative is to have barriers up there and leave the pit open, which was both a safety issue and fairly unsightly.

Mr ELFERINK: That park is Territory government property not council property?

Mr MACRIDES: I am not sure, Mr Elferink.

Mr ELFERINK: I am sure it is. That being the case, the lawn that has been replaced - of course, Jack set a very high benchmark. I have received some rumblings from local residents about the quality of the lawn. The final remediation work will bring the lawn to a Haritan quality, will it?

Mr MACRIDES: We will, prior to the end of the Dry Season, reinstate that whole park area.

Mr ELFERINK: So, by the end of the Dry Season?

Mr MACRIDES: Yes.

Mr KNIGHT: I thought Greek lawn was concrete, wasn't it?

Mr MACRIDES: Steady on.

Mr ELFERINK: Okay. This is pretty much the good news story. So now everything is going out to Ludmilla; the treatment works have advanced at Ludmilla in a substantial fashion. How are we tracking with those?

Mr MACRIDES: Yes. The diversion of the flow to Ludmilla and the existing plant capacity can cope with the diversion of flow. The increase that we are doing to Ludmilla is to give Ludmilla a 300% increase in its capacity to cope with future growth in the CBD, particularly infill development. Works are on track and are going along at a cracking pace.

Mr ELFERINK: Okay. There was also remedial work being done at, what is it called, just north of Leanyer?

A witness: Buffalo Creek.

Mr ELFERINK: Yes, the Buffalo Creek area and the settling ponds there.

Mr MACRIDES: The Wastewater Treatment Plant at Leanyer?

Mr ELFERINK: Yes.

Mr MACRIDES: There is a fair degree of work happening at Leanyer and there will be a fair degree more work happening over the next couple of years.

Mr ELFERINK: And that is tracking in accordance with all plans?

Mr MACRIDES: It is. With the longer-term upgrade work for Leanyer, obviously we are working closely with the regulator in terms of the regulatory requirements for the upgrade.

Mr ELFERINK: And one last one I want to touch on, it goes back off sewerage but back into water mains. Nothing has changed in relation to spaghetti mains?

Mr MACRIDES: The answer is no. It is a hugely expensive exercise to replace the mains …

Mr WOOD: Nearly as expensive as undergrounding power in the northern suburbs.

Mr MACRIDES: … $30m to $40m, and it is certainly not on our horizon.

Mr WOOD: No benefit to anyone.

Mr ELFERINK: Your liability essentially stops where the spaghetti mains are attached?

Mr MACRIDES: That is right. The mains, the actual run lines themselves, are the property owner's responsibility.

Mr ELFERINK: Yes, that is a mess, isn't it, because they run through road reserves about that far under the ground.

Mr MACRIDES: Yes, it is often quite difficult to actually follow where they run.

Mr ELFERINK: Yes, so people are discovering every time they dig a hole in that part of the world, and they are poly pipe to boot, which means you cannot even detect the damn things.

Mr WOOD: You can when the grass grows green in about August. You see this patch of green around the leak.

Mr ELFERINK: Okay, fair enough. Getting back to sewerage: Alice Springs still has the evaporation ponds there. There was a pipe built from the evaporation ponds at one stage to AZRI, at great expense, with a view to using it as agricultural water. Is there anyone using that water at this stage?

Mr MACRIDES: Not at present. Our commitment was a licensing commitment to reduce or, in fact, get rid of wet weather discharges at that treatment facility.

Mr ELFERINK: At the Ilparpa Swamp?

Mr MACRIDES: Yes, and so the solution was to put in a recycling plant. The water is treated at this $10m plant there, pumped to AZRI, it goes into some settlement ponds, and then slowly trickles down into an aquifer and is available at some stage for reuse. Our obligation stops at the settlement pond area, and after that the water is a matter then for DBE, NRETAS, I am not sure who …

A witness: NRETAS.

Mr MACRIDES: NRETAS – in terms of any future use of that water supply.

Mr ELFERINK: In terms of future use, does that include for human consumption?

Mr MACRIDES: I do not believe the existing plant treats up to potable level. Steve …

Mr ELFERINK: Well, pulling it out of the aquifer at some point in the future, I presume at some point it becomes …

Mr MACRIDES: There has been a fair bit of work done by CSIRO as part of this process, but Mr McKenzie ...

Mr ELFERINK: Perhaps we will leave this with Steve. He probably knows more about it than we do.

Mr McKENZIE: First up, just to clarify, there is no extension to AZRI. It is the pipeline to the SAT basin that passes through AZRI. So there was no additional cost. It is a research project. They have permission, I believe, from NRETAS to take a relatively small amount of water, 10 or 100 megalitres a year or something, to do some research on growth for horticulture, and that is to highlight that it is a valuable resource that could be used. The water is actually trickled through these basins into the aquifer, and there it remains for future use. Whoever chooses to take that will have to enter into a process to get a licence from NRETAS, and it will have to be for whatever use they choose, but it will not be by us, and it is in a separate aquifer to the current town potable supply. So, nominally, it is horticultural use that is yet to be determined by an applicant who does not yet exist.

Mr ELFERINK: How much water has now been returned to that aquifer?

Mr McKENZIE: It is about 300 megalitres a year, and it has probably been running for, effectively, the last three years, so let us say 1000 megalitres so far.

Mr ELFERINK: That is a fair amount of water.

Mr McKENZIE: Yes.

Mr ELFERINK: How much do we evaporate off the ponds each year?

Mr McKENZIE: I could not give you an exact figure, but I believe the total inflow is around 1500 megalitres of which around 300 megalitres is going to the SAT basins, a couple of hundred go to some local recycling, and then ...

Mr ELFERINK: So it is a measurable percentage that is being pushed through.

Mr McKENZIE: Yes, probably a similar amount that is going to the SAT basins is evaporating.

Mr ELFERINK: So it is a measurable percentage of the water being returned to that aquifer. How much can the aquifer hold? Is there a saturation point?

Mr McKENZIE: I could not tell you that. I am sure the experts would have some figure. It would be infinitely more than we are putting in the aquifer. I do not think there is a level that we are likely to see or be concerned about.

Mr ELFERINK: So, basically, we are banking it. It is an available resource. It is water in the bank, so to speak.

Mr McKENZIE: That is right. Even if the application emerges in three or five years' time, there is a valuable resource that is available.

Mr ELFERINK: No prospectives that you are aware of?

Mr McKENZIE: Not yet, around the corner.

Mr ELFERINK: Does the aquifer in any way interact with the new suburb of Kilgariff? Not that you would be drawing water for Kilgariff. They would be on town water. How deep is the aquifer under the ground, do you know?

Mr McKENZIE: We are recharging to a depth of something like 80 metres.

Mr ELFERINK: So it is substantial?

Mr McKENZIE: Yes. I am not sure of the extent of the aquifer boundary, but it probably sits below the Kilgariff development. We are not proposing to use the water, or extract the water from the aquifer. Anyone else would have to make their own licence application.

Mr ELFERINK: Okay. So your responsibility basically stops when it disappears into the aquifer?

Mr McKENZIE: That is right. It becomes, in effect, a government resource. It is a water resource that is owned by the government for them to choose and manage in whatever way they wish.

Mr ELFERINK: Has it dealt with the issues that arose - the overflow of the ponds into the Ilparpa Basin? It was literally washing across Ilparpa Road during wet weather events. Have we had any inundation of Ilparpa Road, and have we dealt with the problem that it was responding to?

Mr McKENZIE: We had particular problems last year because it was very wet. It rained almost continuously through the whole year, so there was fairly regular overflow. The plant was full and we had to release at the time when there was just lots of water generally. This year, it has been less so because it has been much drier, but we still have to release water into the swamp occasionally when the sewerage pond is full. It has reduced. We are about to commence expansion of the SAT basins to try to move the amount we can recharge from 300 megalitres to at least 600 megalitres, and maybe up to 1000 megalitres a year. That is our plan. If we achieve that, we will be something close to a water balance where we should not have to discharge to Ilparpa swamp, except in extreme wet weather events.

Mr MACRIDES: Which is all done with the approval of the regulator.

Mr ELFERINK: Yes. I am wondering where we were going with it, because I have always found it odd that in the middle of one of the driest, or if not the driest, continent in the world, we evaporate a billion litres of water off our swamps every year. I know the water is cheap, but it always strikes me as a bit wasteful, and I know I am not Robinson Crusoe in that opinion. Thank you for that, Mr McKenzie.

Mr MACRIDES: I have a response to a question asked of me by Mr Wood earlier on. Mr Wood, the unused power poles on Brandt Road were originally part of a 66 kV line that ran between McMinns and Casuarina. The line, as you quite rightly point out, was decommissioned in the 1990s and not all the poles were removed at the time of decommissioning. At the moment, we are doing a Territory-wide review of unused electricity assets so that we can actually put those in our maintenance plan to remove our assets throughout the Territory. Given there are only four poles in Brandt Road, we are looking at whether or not we can do those as a small project within the existing maintenance plan for this financial year.

Mr ELFERINK: Those water prediction charts, I suspect they are not going to make it before the end of the day? Steve has bolted out the door.

Mr MACRIDES: He ran.

Mr ELFERINK: I will then go over to supply into Indigenous communities, which you do contracts for under your CSO obligations through your subsidiary. What was the cost of the subsidiary in the last financial year, and what do you project the cost to be in the current financial year?

Mr MACRIDES: Bear in mind that the subsidiary that you refer to, which is called Indigenous Essential Services Proprietary Limited, is a wholly-owned subsidiary of Power and Water. It is actually a not-for-profit entity.

Mr ELFERINK: I understand that.

Mr MACRIDES: It derives income from its own operations, the sale of electricity, water and sewerage in the 72 communities and 33 outstations we have responsibility for under our funding agreement to service, and then it receives a recurrent grant from government for maintenance and for the differential between our costs and what we receive in the way of income from service provision. We also get a capital grant from government in terms of what capital they want us to deploy in these communities.

Mr ELFERINK: It is actually a contract to government?

Mr MACRIDES: Absolutely, a contract on a not-for-profit basis. In the 2011-12 financial year, the current financial year, the forecast of revenue is $103m; and forecast of expenses is $86.8m.

Mr WOOD: What was the revenue?

Mr MACRIDES: $103m.

Mr WOOD: All right, sorry.

Mr MACRIDES: Expenses are $86.8m. The subsidiary will have a small profit of $1.5m, obviously that is just simply an accounting profit.

Mr ELFERINK: So it gets rolled into the next year, essentially?

Mr MACRIDES: It is not cash, in a sense.

Mr ELFERINK: So basically it comes on …

Mr MACRIDES: And depreciation is about $14.7m, so yes.

Mr ELFERINK: And the year before?

Mr MACRIDES: Sorry, that is the current financial year. Next financial year, the budget revenue is $126.2m; expenses are $88.3m. The reason that the differential between revenue and operating expenses is so great is because, under accounting standards, the capital grant that we get is actually treated as revenue. This is an operating statement, which means that the costs of building something with that capital are not expensed on your operating statement. They actually go against your balance sheet.

Mr ELFERINK: Right.

Mr MACRIDES: So the differential that you see here is effectively the capital grants we get.

Mr ELFERINK: I notice, and that is why I am asking, because it is a substantial increase, if you like, in the capital expenditure, so what is being built?

Mr MACRIDES: The main drivers of the capital program relate to the Wadeye Power Station, the strategy for safe drinking water, and work we do on behalf of the Territory government under the SIHIP program are all included in there. For example, the capital program for asset renewal in 2012-13 is $14.45m, and there is another $7m on top of that which is for priority water projects, bringing the capital program to $23.45m in 2012-13.

Mr ELFERINK: We started general and went into a lot of specifics. Now I would like to return to the general to wrap up before I hand over to Mr Wood.

It is the policy of government, of course, as far as possible, to have Power and Water operate under the rules and standards of the NEM. I note in your Statement of Corporate Intent that Cabinet had a series of reviews:

The reviews were completed in December 2011 and the recommendations from five of these reviews have been approved by Cabinet. The recommendations from the final three reviews; being the Corporation's capital and maintenance program, system planning monitoring and reporting and system planning and market operation roles and structures have yet to be approved by Cabinet. The quantum of the reviews equates to approximately 100 different recommendations for implementation over the next five years.

Do you anticipate that Cabinet will be signing off on these last three reviews?

Mr MACRIDES: I obviously cannot comment on that.

Mr ELFERINK: Have you had any signals yet back from government in relation to it?

Mr MACRIDES: These submissions are by Treasury as the regulatory body.

Mr ELFERINK: Okay, so it is a case of hurry up and wait from your perspective?

Mr MACRIDES: Correct.

Mr ELFERINK: Your prime risks in that Statement of Corporate Intent are described as:

Increased exposure of failing to comply with regulations involving fines or penalties at a corporate or individual level.

Do you see anything that is a standout problem for you in relation to that particular risk - being fined?

Mr MACRIDES: That risk is probably around the national OH&S harmonisation legislation. We invest considerable funding in our approach to safety, and have done an enormous amount of work around the national harmonisation legislation. I do not believe the risks will crystallise, but the risks are always there. It is just really a matter of mitigation.

Mr ELFERINK: That is basically the primary area where you see an exposure for your firm - the national workplace harmonisation?

Mr MACRIDES: There is a range of things. Do not forget that we are regulated in our sewerage discharge licences, our water extraction licences, as well as a whole range of regulations surrounding the electricity marketplace. All of them have penalties attached to things if you do not comply.

Mr ELFERINK: I am curious about the compliance cost component. Have you done any work on reviewing what your compliance costs are for different legislative instruments; for example, the national uniform workplace legislation? How much has that caused your compliance costs to increase?

Mr MACRIDES: The national harmonisation legislation is probably best practice in relation to safety, and it is no different to what we had been doing over a number of years. The only difference in our approach to dealing with this legislation compared to what we have done in the past is that we have a bigger focus now on the contractors which work for us to ensure they are equipped to be able to meet our safety standards. As a result of that we have had some additional costs. In fact, our approach has been to take on six full-time resources to work with our contractor community over the next two years to ensure our contractor community meets, as I said, our safety standards. From our perspective, it is a worthy investment. We literally have thousands of contractors which work for us, from the big end of town to very small operations. It is the small side of the contractor community we are interested in working with to ensure they can comply with the legislation and, ultimately, we can comply with the legislation.

Mr ELFERINK: Yes, compliance costs for you are a prime risk. That is across, obviously, a raft of legislative instruments - so much so that you describe it as a prime risk. Are you anticipating a rise in compliance costs across a raft of legislation?

Mr MACRIDES: I have no doubt that, as community expectations increase, regulators' expectations will also increase to match community expectations. As licence renewals come up, particularly environmental licence renewals such as sewerage discharge licences, the regulator will be more stringent in its licensing requirements to us. Will that increase our cost of doing business? Yes. Is it a marginal increase? Yes.

Mr ELFERINK: It has a descriptor as 'a prime risk' and now I am being told it is 'marginal'.

Mr MACRIDES: No, it is a prime risk. For example, if a regulator says to us that in the context of any licence renewal for sewerage licences we require you to upgrade your treatment facilities to tertiary treatment over the next three years - if a regulator asks us to do that, the capital component for doing that is in the order $500m. That is a prime risk.

Mr ELFERINK: Okay, so, it is an exposure of a potential?

Mr MACRIDES: Correct.

Mr ELFERINK: I notice some charts have just come back into the room. I suspect those are the charts I was asking for.

Mr MACRIDES: Before we get onto those – unfortunately, the member for Katherine has just left - I might put on record a response to a question asked of me earlier by the member for Katherine which related to the makeup of our lost time injuries and which of those were on-site and which were off-site.

Madam ACTING CHAIR: Is there a number against that question?

Mr MACRIDES: No, they were not taken on notice, sorry.

Madam ACTING CHAIR: That is fine.

Mr MACRIDES: In 2010-11, there were eight on-site and 12 off-site, a total of 20 LTIs. Year to date, for 2011-12, nine on-site and one off-site, giving you the total of 10.

Mr ELFERINK: The charts that have arrived, are you in a position to table those?

Mr MACRIDES: Yes. Can you give me a few minutes to look at the chart? Do you want to continue asking questions?

Madam ACTING CHAIR: I was going to call for a break as well.

Mr ELFERINK: Perhaps a five-minute break. Gerry, do you mind if I take another five minutes on this and then I promise to be a good boy?

Madam ACTING CHAIR: We will break for five minutes and resume at 11:30 am.

The committee suspended.

Madam ACTING CHAIR: Member for Port Darwin, you have the call.

Mr ELFERINK: Thank you, Madam Acting Chair. I thank Mr McKenzie and Mr Macrides for providing the chart I have been asking for. I note that it has a projection into the future in the orange area reflecting increased consumption into the future. For the record, Mr Macrides, can you tell me whether or not that projection into the future is accommodating of your reduced reduction policy? Does the orange area reflect future projections with anticipated results of the future reduction policy, or doesn't it?

Mr MACRIDES: Just a couple of explanations about the chart, Mr Elferink. This is done on a worst case scenario basis. It does take into account residential demand management of around 24%, and what the chart shows is that, if we achieve that demand management, all things being equal, you would be looking at returning Manton Dam to service in about 2017, and then you would be looking at another lump of augmentation around 12 years later. That other lump of augmentation could be, for example, increasing the height of the Manton Dam wall in the same way we did with Darwin River Dam, to increase capacity in Manton Dam. It takes into account a series of variables and, as I said, it seems to be a worst case scenario.

Mr ELFERINK: I note your comment 'if you achieve your reduction'.

Mr MACRIDES: Yes.

Mr ELFERINK: And if you don't?

Mr MACRIDES: Well, it is also based on a 1.5% demand projection, and historically demand has been 1%.

Mr ELFERINK: Okay.

Mr MACRIDES: That is what I am saying about it being a worst case scenario for us.

Mr ELFERINK: All right. I will leave it at that. I am going to hand over to Mr Wood.

Mr MACRIDES: Just before I go over to answer any questions from Mr Wood, I have some responses to other questions that were asked earlier that I said I would get answers to. I was asked a question about the number of customers who had lodged letters to our insurance officer in respect of potential insurance claims. In 2010-11, we had 90 requests and, in 2011-12 year to date, it is 70.

I was also asked for a regional breakup of Capex. For the current financial year, 2011-12: Darwin, the figure is $218.5m; Alice Springs - $39.8m; Katherine - $26.2m; and, Tennant Creek - $5.2m. For 2012-13, the figures – sorry. I wasn't sure whether you had just asked for a Capex or R&M. The 2012-13 figures I have are a combination of both Capex and R&M. I do not know whether that helps, but I will give you this data anyway. For 2012-13, the Capex and Repairs and Maintenance figures for Darwin are $765m; for Alice Springs - $75.1m; Katherine - $59.8m; and, Tennant Creek - $25.2m. It would appear there is about another $50.7m in minor works across all areas, which is almost impossible for us to break down.

Mr ELFERINK: Without doing an audit.

Mr MACRIDES: Yes, without doing a fair bit of extensive work. Sorry, I do not have a total for that.

Mr ELFERINK: Just before we hand over to Mr Wood, I do not know if I am going to be here by the time this wraps up, I have a few other things to do upstairs. I just want to say on the record, your performance here is exceptional. It is a standout. The knowledge you have of your organisation, for lack of better words, and the quality of your answers are excellent. Thank you very much for the effort you have made. It gives me great confidence in your abilities and the future of Power and Water Corporation under your management.

Mr MACRIDES: Thank you, Mr Elferink.

Madam ACTING CHAIR: I thought you were commenting on whether or not you would be here next year, Mr Elferink.

Mr ELFERINK: That is in the hands of the voters.

Mr WOOD: At the outset, I thank Mr Macrides for the support his office gives me. I often have people ring me up about issues, and the office always gives me a good hearing and always attends to those issues. I believe that is a good sign that Power and Water is working with consumers to fix up any problems they might have, so I thank Mr Macrides for that.

I have a very general question, I do not know whether it should go to the Minister for Essential Services, but, under the Utilities Commission Annual Report, it makes the statement that, for electricity, the commission monitors standards and conditions of service and supply in the operations of electricity supply to industry and entities, but when you go down to the section on water supply and sewerage, it says the commission has no role in developing service standards in the water and sewerage industry. Minimum standards that a licensee must meet in providing water supply and sewerage services to customers are set by the Minister for Essential Services.

I am wondering, should the Utilities Commission have a service performance role in water and sewerage as it does for electricity?

Mr MACRIDES: The commission's prime responsibility is the electricity industry regulation up here. It does have some oversight role in relation to water and sewerage, mainly the monitoring of our asset management plans for water and sewerage. The commission, as a regulator, has an advisory role to government, and can advise both the regulatory and portfolio ministers on matters that the commission thinks needs to be drawn to the attention of either the minister, or the ministers ask of the regulator to provide assistance on.

Regarding your query about whether they should have a role, clearly that is a matter for the regulatory minister and the regulatory regime up here, but they do have an advisory role.

Mr WOOD: That is why I asked him.

Ms LAWRIE: Mr Wood, the Utilities Commission, in its advisory role, is looking at Power and Water's capital and maintenance program. Significantly, that work goes to understanding the program in regard to water and sewerage as well as the electricity network, but we have obviously primarily focused the Utilities Commission work in the area of electricity. That is in step with what is occurring nationally.

Mr WOOD: I have some bigger questions and some local questions. I might get the local questions out of the way. One will be about the Kamfari, Mr Macrides. I am not asking about the Kamfari per se, but I was at the Kamfari this year, and there is a new track being built there by some sports enthusiasts which appears to be a bit like a speedway track. I asked people: 'How come that is right there?' And they said: 'The owner of this track, who built it, has permission from Power and Water to build it'. It is a substantial track. It is built on the Kamfari car park area. I looked at it and thought, well, after all the years of battling with you about the permission to have Kamfari there, did you give permission for another sporting facility to be built on that site?

Mr MACRIDES: The simple answer is, no, we have not. Not that we have to give permission either, by the way. Clearly, we have not been asked about it. I am on the public record as expressing my views about the compatibility of these types of events over a main aquifer for emergency water supply to the

Darwin area. There is no way that we would say that is a great thing to do, to build another motor sport facility over the aquifer.

Mr WOOD: Most of us live in that area over that same aquifer, but we will not go down the Kamfari path this year. I needed to ask because I was told they had permission to build that facility.

As you know, there has been an upgrade of power to the new prison site, and there will probably be an upgrade of power to the INPEX accommodation village. I was asked if that upgrade would include upgrading the existing lines into Howard Springs and Howard River Park. As I understand it, it is a fairly old system. We get outages there, and part of it is to do with switching - I am not sure if that is correct, and whether, with these upgrades, some of the local areas will be upgraded as well?

Mr MACRIDES: Mr Wood, I thought you were going to ask about water supply. I did not brief myself about the electricity network, so I will ask Bertram Birk, the General Manager, Power Networks if he is able to respond to that question.

Mr BIRK: The two electricity suppliers for INPEX will actually be 22 kV dedicated suppliers. One of them will be fed out of Palmerston and the other one will be out of McMinns, and they will be underground supplies all the way. As the Managing Director said earlier, we do have a program around our, what we call 'poorly performing feeders'. Some of those supplies you mentioned are on that program.

Mr WOOD: Any idea when they will be coming on to the program?

Mr BIRK: They are on the program already, and they are scheduled to do over the next year or two.

Mr WOOD: Does that include McMinns, because that is one area I get rung up about often?

Mr BIRK: McMinns features prominently because of the outages there. I know that is at the top of the list.

Mr WOOD: Quickly, while we are on electricity. I notice around the place now you see these little boxes that look like transformers, but they have an antenna and some sort of control box at the base of the pole. What are they?

Mr BIRK: They are what we call gas break switches. They are automated switches. Part of our strategy around addressing these poorly performing feeders is to isolate faults more quickly. It does, unfortunately, cause interruptions as we try, when the fault is detected, to open the circuit off but then reclose it. What it does do is minimise the actual area where the fault is located so fewer customers are off. The strategy is, more automation, more automatic switching, which minimises the inconvenience to customers in the longer term.

Mr WOOD: This is a new thing, because I have only noticed them?

Mr BIRK: Relatively new technology in the communications, integrating back into our system control centre, so we have visibility over those switches to see when they operate, where the fault is, so we can send, once again, our crews, who can identify more quickly where the source of the fault is.

Mr WOOD: At another time we might try to get some more information on where they are and tell people what is going on because people are going to ask what that little aerial is doing on the power pole.

Mr BIRK: Very happy to do that.

Mr WOOD: Thanks. Mr Macrides, in relation to INPEX, I notice that in the Statement of Corporate Intent it says baseline forecasts do not include INPEX. What do you see will be the general impact of the INPEX village, and you mentioned there is going to be a new line going there, but also the actual facility? What power will you need to put into that facility? I am presuming they are going to have their own power generation. Will that power generation have any capability of being sourced back into the rest of the system?

Mr MACRIDES: The way we prepare our Statement of Corporate Intent in relation to major new customers is that we do not include those numbers in here until we have a signed contract in place with a customer. We do that deliberately so we do not overstate the figures which are in the financial data. What we tend to do in the Statement of Corporate Intent is to indicate where there is upside for the business, and

INPEX clearly is one of those major projects where there is upside for the business. In fact, the revenue from INPEX, both in electricity and water, is substantial, so the upside for us is many millions of dollars in additional revenue as a result of that particular project.

Regarding the supply of electricity and water to INPEX, clearly, the accommodation village will have mains power supply to it, and that power supply, as Mr Birk has mentioned, is coming from two different feeders so that they have a 22 kV feed into their property.

In relation to the plant itself, the plant is serviced by a 22 kV line out to the plant, which will be sufficient for their construction phase. In their operation, once the plant is fully operational, they will self-generate. In fact, I believe they have gone out recently with the tender for the installation of the generation capacity they require out there. There will not be a capacity for them to connect back into the grid simply because there is not a grid connection. There is a very small 22 kV line out there.

Mr KNIGHT: We will be providing some start-up gas, and could receive gas, in a worst case scenario.

Mr MACRIDES: In relation to our negotiations with INPEX, clearly INPEX is interested in electricity supply for its workers village, temporary supply for their construction village, water for the construction site as well as the workers village, and sewerage at the workers village. It is also interested in commissioning gas for its plant. Part of the discussions with INPEX in relation to commissioning gas - because we have to build a pipeline to get commissioning gas out to the plant in the same way that we have to interconnect into the ConocoPhillips plant - we are trying to achieve a similar outcome with INPEX.

Mr WOOD: In relation to the INPEX village, will the underground power come from McMinns substation, or will it come along the infrastructure corridor that goes along the old railway line? Is that where that ...

Mr MACRIDES: My understanding was the two supply points are actually above ground. Perhaps Mr Birk can answer that question. We will need to confirm the cable route, Mr Wood.

Mr WOOD: I thought the comment before was that it was underground all the way?

Mr MACRIDES: My apologies, it is underground.

Mr WOOD: In relation to sewerage from INPEX, I had a developer see me the other day. We had some discussions about the possibility of joining other areas of the rural area onto that sewerage line. His development would be in the vicinity of the existing Coolalinga residential development. He was under the impression that the sewerage pipeline from INPEX to Palmerston would not be big enough to connect onto that. My impression from discussions was that it was going to have the capability for that to happen. Will the pipeline from INPEX have the capability of other connections, or will it be just for INPEX?

Mr MACRIDES: My understanding is that we are upgrading the pipe; however, Mr McKenzie, General Manager, Water Services can answer the question?

Mr McKENZIE: There is certainly capacity in the upgraded pipe for INPEX for other regional development - we have been in discussions with you and some of the local community members - that included Howard Springs and some other reasonably well understood developments that might occur. It may not have specifically included that development, but there is capacity for hundreds of lots of potential development in that area.

Mr WOOD: That is what I thought. This would be a connection from the Coolalinga area up to that existing pipe. He told me at the meeting that he had been told by Power and Water that the line would not be big enough. I showed him a letter I had from Power and Water saying something like the opposite. I gave him a copy. Hopefully, it gets back to you, or maybe that just needs clarification.

Mr MACRIDES: Yes, we are often seen as causing all types of things out there. Verballed is the word I am looking for, not necessarily in this case, but yes ...

Mr WOOD: I was trying to help him. There was no bad feeling, and we gave him the letter and told him to go back to the department and have a look.

Mr MACRIDES: Absolutely.

Mr WOOD: The water line to the prison, was that installed by you or by another government department?

Mr MACRIDES: No, it has been installed by DCI as part of the development for the prison. We have also worked very closely with DCI about the size of that pipe. They have upgraded the infrastructure as a result of our requirements, and we have contributed to that cost so the pipe can service future developments out there, for example, the pine forest so, in fact, the pipe can handle about another 1000 lots.

Mr WOOD: I am told different stories. I am told there is a 600 ml pipe to point A, and I asked was the pipe to the prison, and I said was that sufficient to feed rural residential blocks on the way to the prison, and I was told, no. So, the pipe going along the prison road will be sufficient to service some residential development?

Mr MACRIDES: The pipe along Howard Springs Road is being upgraded. That upgrade will be sufficient to service an additional 1000 lots of land if, for example, the pine forest area gets turned off.

Mr WOOD: Yes, and we have issues there at the moment.

Mr MACRIDES: Sure.

Mr WOOD: And the power is sufficient as well?

Mr MACRIDES: Power should be sufficient.

Mr WOOD: That is good news. We will work on that issue a bit harder now. I am trying to do all the local questions first, because I scribbled a few extra while you were talking.

Mr MACRIDES: Damn!

Mr WOOD: I know, damn is right. I was out at the dam, because I always try to see it when it is full. It was like surf the day I went out. There was a strong south-easterly wind and the waves were breaking over the spillway. The croc trap was out there, and I was talking to one of the local workers. He said the croc trap belongs to you. He said Power and Water have actually bought some themselves. So what happens? Do you catch crocs? I gather there are many salt water crocs in that dam. Do you have an arrangement with Parks and Wildlife to remove them?

Mr MACRIDES: Mr McKenzie.

Mr WOOD: People do have picnics there, by the way.

Mr McKENZIE: We do have some croc traps but we do not catch them ourselves. Parks come and take them away if we actually catch any.

Mr WOOD: So you own them?

Mr McKENZIE: I believe so, so that they are there all the time.

Mr WOOD: This is a mixture of water and sewerage. Chlorination facilities that you have at Girraween Road - in fact, I was out there the other day and I noticed one of the schools was doing a study of it. There were some schoolchildren out there; I think they were being shown the facility. That bore is chlorinated because of the potential risk of nearby septics. Is that chlorination treatment good enough to allow the Girraween District Centre to be developed? The limitations for some of the development in that area is the 400 metre radius around each bore where no septics can occur. However, in this case, with this particular bore, you have installed a chlorination plant on the bore, so does that allow a development now to be closer to that bore than previously allowed?

Mr McKENZIE: I may have to seek advice. We have a UV plant on one of the bores, but I do not believe it is chlorination, and that was installed because there had been previous *E. coli* detection, so it provides a level of additional protection to support the public water supply but is not intended to reduce the area of separation around the bore.

Mr WOOD: All right. But if it does reduce the risk, can you reduce the radius?

Mr McKENZIE: No, that is not the intention. The intention is that we have had *E. coli* detections in the past, which is unusual from a bore, it usually comes out of the ground sterile, so we took the extra step to put the UV in. That is purely so we can use that bore reliably if we need to. It is not intended to reduce the 400 metre buffer zone.

Mr WOOD: All right. There was another one on hot water rebates. You give rebates to seniors and pensioners when putting solar hot water systems in, is that correct? I saw something, and I will read it, I think it is in the annual report – hopefully I have the right - it is the one thing I did not write down.

Mr MACRIDES: Mr Wood, I am advised that we administer a scheme on behalf of government. The actual funding source is Treasury.

Mr WOOD: All right, so it is not your scheme?

Mr MACRIDES: No.

Mr WOOD: Okay, I will move on from there. I am interested in some of the work you are doing in relation to renewable energy. I know you are doing it at Kalkarindji and Alpurrurulam. Is that program and will those capital items belong to the Indigenous essential services company?

Mr MACRIDES: In all three locations the plant is being built for us by a third party, and I think is being owned and operated by a third party. We are just buying the output from the plant. I will ask Darryl Day, General Manager, Remote Operations, if that is correct.

Mr DAY: Yes. The commercial arrangement is that we have a power purchase agreement for the output of those three plants. The Australian government has contributed 50% of the capital cost, and 50% is from private equity. There are associated costs of $4m that the Northern Territory government has invested in the power station at Lake Nash, into the wind turbines, and also into the integration of the control systems into those three existing power stations.

Mr WOOD: Okay. I might get lost here because last year I asked questions about solar energy and, if I put it in simple terms, my understanding is that one reason Power and Water was not too keen on putting in solar installations was the cost, and it was buying some rebates back from the Commonwealth government, if I remember rightly, in lieu of doing that work?

Mr MACRIDES: No. Like every utility, we are caught up by federal legislation called the Mandated Renewable Energy Targets which require 20% of Australia's generation to be sourced from renewable sources by 2020. The scheme is broken up by what they call small RECs and large RECs. Small RECs relate to the installation of solar PVs on people's houses and those kind of things. Large RECs are obviously big wind farms, etcetera. The acquisition of RECs to satisfy Power and Water's component - there are not sufficient RECs available in the Territory so the answer is, yes, we have to buy RECs on the open market.

Mr WOOD: Is that also because the cost of renewable energy sources is more expensive than, say, putting a diesel generator on the community?

Mr MACRIDES: The issue is that the REC targets are quite significant and you need a very large-scale renewable energy source to be able to satisfy the REC targets locally. So, yes, the answer is, we have not been able to attract a large-scale renewable energy source in the Territory yet, so we have done it incrementally. So the 1 MW Uterne power station, the 1 MW landfill gas station at the dump, the systems we are putting into Indigenous communities, which, by the time these three communities' solar dishes go in and a small wind farm goes in, there will be about another 1.8 MW of supply from renewable sources from these communities and then, obviously, we buy whatever RECs we can buy from people installing rooftop PV, people installing solar hot water systems, etcetera.

Mr WOOD: In relation to Alpurrurulam, I was visiting both Alpurrurulam and Lake Nash Station last year, and I think I asked why Lake Nash, which is just that far away, cannot be connected. I know it is an Indigenous essential services not-for-profit company, but if we are looking at efficiencies and we are talking about reducing carbon emissions, can Lake Nash be joined up with the power station at Alpurrurulam?

Mr DAY: We have been undertaking commercial negotiations for some time with the owners of the Lake Nash pastoral lease and when the excision was established the water supply available for the community was not great in terms of quality or quantity. However, just off the excision there is water so we

are discussing with them access to water and, in turn, access to power. It has been a complex discussion and …

Mr WOOD: Sounds like a fair swap, actually.

Mr DAY: It sounds very attractive.

Mr WOOD: Yes. Regardless of that, you would think that if you have a power station operating somewhere not far from a homestead the possibility of allowing that to happen would …

Mr MACRIDES: That is the issue though, Mr Wood. The issue is not that we will not allow it to happen; the issue is the cost associated with doing it, and whether or not the receiver of the service is prepared to pay the cost of doing this.

Mr WOOD: Yes, and the reason I then have a concern is because, on page 11 of your annual report, and this did not quite come out in your statement about how much revenue, your revenue from electricity, water and sewerage services for Indigenous essential services covers about 20% of the costs in delivering these services. In other words, you already do not cover the costs from the revenue you get from consumers.

Mr MACRIDES: That is right.

Mr WOOD: It seems to me that when you go to a person next door that is not part of that Indigenous community, you will hit him full tote odds. These communities are not viable communities. You simply do not get anywhere near the amount of revenue from the customer to run it. I am not saying you should not do that, by the way, but then it is very hard to say to a bloke, who is a couple of kilometres over the road, 'You have paid full tote odds'. The full tote odds are not being paid in these communities. The water is not being metered, the sewerage is not being metered, and certainly the costs are high. It just seems, from a broader perspective, a bit unfair, that is all. And I am not saying you who run the policies, but …

Mr MACRIDES: Yes. I guess the corollary to that though is that a commercial business operating in these communities is paying commercial tariffs. It is the domestic side that gets subsidised.

Mr WOOD: People do live on cattle stations too. It is not all …

Mr MACRIDES: Correct.

Mr WOOD: I just see that, if you are out living out there, you see it as a bit of an anomaly. There is a community out there and in many cases it does not have any industry. Over here, there is a place that creates industry. This one gets subsidised but this one has to pay full tote odds. Anyway, I think that needs looking at.

In relation to water and sewerage, they are generally not charged for on Aboriginal communities that you operate your essential services under?

Mr DAY: We charge for water and sewerage across all 72 communities at the gazetted tariff to all customers other than public housing, so everybody is metered and charged. In 2012-13, that will be $3.4m revenue from water and $2m from sewerage.

Mr WOOD: Are you saying every house that does not belong to NT Housing is metered?

Mr DAY: Public housing, so Aboriginal domestic housing, is not charged and generally at the moment is not metered. We are pursuing a number of initiatives around that. That includes all of the new houses built under SIHIP or the NPA on Remote Indigenous Housing. They are being metered, but not charged at this stage, but the metering is being used for demand management. We have also been working in a number of communities. Santa Teresa is putting a smart metering system in. In Gunbalanya, at the moment we are installing meters on all houses with smart metering technology. We are progressively working through installing the infrastructure that we could move to charging the owner of the asset, which is the Department of Housing, Local Government and Regional Services.

Mr WOOD: Considering the other gentleman was talking about the amount of wastage in Darwin from leaking taps and from all those sorts of things, and having had some experience in those communities, there is an awful lot of wasted water.

The other issue that sits with that is we now have these growth towns, which are meant to be normal towns, and the requirement for more water is going to be an essential part of whether these towns are growth towns. If you look at all those issues, surely you must be looking at metering water, otherwise the wastage will continue. Why isn't the rule for meterage of water applied to all customers, regardless of whether they are NT Housing, or the store, or whatever?

Mr MACRIDES: We operate within the bounds of policies of government. At the moment government policy is not to charge for domestic water supply in these communities. Clearly we are in the process of installing metering to help with demand management so that we can educate communities about the importance of water conservation. There is a whole range of other programs we are also developing in relation to the water conservation message. However, we do not set the policy, Mr Wood.

Mr WOOD: Okay. I have seen dripping taps since going to Bathurst Island in 1974. Lots of water was wasted; you simply had a tank that went up and down. It is an issue that really needs addressing.

In relation to sewerage, you only look after the sewerage ponds, is that right? In some of these communities, if there is a sewerage pond, that is your responsibility, not septic tanks?

Mr MACRIDES: No, we do not have any responsibility for septic tanks.

Mr WOOD: And sewerage ponds?

Mr MACRIDES: If there is a sewerage treatment plant, which may be ponds, then the answer is, yes, we would be more than likely responsible for it.

Mr DAY: We have 56 of the 72 communities as part of our agreement with the Northern Territory government to provide sewerage systems. That is similar to any other urban town where we operate and maintain the sewerage pipes as well as ponds up to the house boundary. The balance of those communities still have septic tanks, and they are considered the property of the owner of the house, so they are maintained as part of the house maintenance. Those septic tanks and absorption trenches are part of the house package for maintenance.

Mr WOOD: Is there any charge for sewerage connections?

Mr DAY: Only in those 56 communities for which we provide sewerage services. We charge for sewerage to all customers except for the public housing.

Mr WOOD: Many people are on a card system for electricity, so how do you bill those people for a sewerage system?

Mr DAY: The charges for sewerage are based on connection. The gazetted charges we see in urban centres are applied in the same way for communities. The owner of the property is charged for the sewerage service, with the exception of public housing.

Mr WOOD: Still with the exception of public housing?

Mr DAY: Yes.

Mr WOOD: The other issue that arises here is, you have a large number of assets on this Aboriginal land. Have you budgeted for what the lease payments would be for these? Do you have any idea how many assets you have across the Northern Territory that are going to require a lease?

Mr DAY: Yes, we have been working very closely with the Territory government in obtaining leases over all the facilities. Indeed, we have recently executed quite a number of leases over the Tiwi Islands and on Groote Eylandt, and we are working through the other communities at the moment. We have included the consideration of those in our financial projections.

Mr WOOD: Do you require a lease over power, water, and sewerage easements?

Mr DAY: The leases have been taken out over facilities only – so sewerage ponds, the bore head, the water supply tanks, treatment works for water and water storage, with access to the pipes and wires that are not covered by a lease, physically, over those assets, but has been part of the ongoing discussion.

Mr WOOD: Technically, those water lines, power lines and sewerage lines, if not covered by an official easement, would technically be owned by an Aboriginal land trust in some cases?

Mr DAY: I believe the complexity is that there are multiple uses. Where we are taking out leases, there is an exclusive use, if you like, over the power station or the treatment plant. But where we have a power line, or pipes, there are multiple uses, roadways, people can access that. It is not appropriate for a lease over those facilities.

Mr MACRIDES: Mr Wood, I also have an answer in relation to the INPEX feeder routes. As we indicated, there are two feeders, one coming from Palmerston. It comes from the Palmerston Zone Substation under Temple Terrace, along the southern side of Temple Terrace, crossing the Stuart Highway to the eastern side into a service corridor. It follows along the service corridor between the existing overhead 22 kV and 66 kV lines, staying along the western side of the 66 kV line, through to the northern side of Howard Springs Road. It then follows the northern side of Howard Springs Road, past the Whitewood Road intersection, then crosses under Howard Springs Road and directly into the INPEX intake station. The McMinns feeder exits the McMinns Zone Substation running parallel with the existing overhead 66 kV line along the eastern highway side to where the 66 kV crosses the highway. It runs 3 m from the eastern toe of the rail line, and 0.75 m from the eastern road reserve to the service corridor, then 4 m east of the overhead 66 kV line to Howard Springs Road. It stays on the south side of Howard Springs Road to the INPEX intake station.

Mr WOOD: There are two things I get out of that. One, it had better not touch the railway line, because you still have to get the bicycle path to Coolalinga. Two, I know it is going right through the garden I have been growing there for umpteen years, because I saw the paint lines ...

Mr MACRIDES: I am sure we will remediate it.

Mr WOOD: I do not think it will be there. On a more serious note, Howard Springs Road is being duplicated, and on the maps I have seen, the road has a slight movement across to that area where I believe you were going to put in the underground power. I hope there are some discussions, because I do not know whether the design for the road has matched up with the design for your underground power. I am not saying it has not, but it should be looked at.

Mr MACRIDES: Yes. We have very close working relationships with the relevant NT government authorities.

Mr WOOD: Yes. In relation to your workers out bush, do you have many Indigenous essential services operators employed?

Mr MACRIDES: We have none employed by ourselves. All PSOs are employed by third parties that we fund to employ them.

Mr WOOD: When you fund to employ them, do you pay them enough for uniforms, a vehicle, accommodation, and those types of things?

Mr MACRIDES: The rate struck includes on-costs.

Mr WOOD: I raise this because, in the recent Deloitte review of shires, they mention that some of the agency work councils do is costing the council money. I am not saying you are one of those agencies. Are there discussions between shires and yourself to ensure the money for those operators is sufficient to not be a load on the council's normal budget?

Mr MACRIDES: We have contracts in place with the relevant shires. The negotiations for the price under those contracts are very robust.

Mr WOOD: The agreement between Indigenous Essential Services and NT government expires in June 2013. Is work being done on a new arrangement?

Mr MACRIDES: Yes, there is a working party comprising ourselves, the funding authority and Treasury, which has been working on a revised agreement for a considerable time.

Mr WOOD: I have some more technical, and slightly local, but to some extent general questions. You say you have 100 apprentices working for you. Do you see problems with the INPEX development affecting your employees drifting off into another job because of the pay rates?

Mr MACRIDES: We have done an analysis of the INPEX pay arrangements and compared those to our pay arrangements. It is a bit of a crystal ball gazing exercise at the moment as to whether we are or are not likely to lose people to INPEX. I do not believe we will lose a huge number of people, to tell you the truth. We have competitive wages for our workforce and the multiskilled nature of the business is attractive to people.

In relation to apprentices, our approach over the last couple of years has been to significantly increase our apprentice intake so that we grow our own. We target young Territorians for our apprentice intake and, as the Chairman indicated in her opening speech, we currently have 100 apprentices working for us. I am not sure many of them will be attracted to INPEX simply because of the variety of the work experience we offer them. And, as I said, we have competitive rates for apprentices as well.

Mr WOOD: Is that training area being built out at McMinns for apprentices as well, or is it training in general for staff?

Mr MACRIDES: It was originally started for apprentices in particular. Apprentices doing line work apprenticeships cannot do a significant component of their apprenticeship here; they have to go interstate for parts of their apprenticeship, which is very expensive for the corporation. The training facility was originally designed so that we have a pole yard there so apprentices can do the theory leg of their apprenticeship on our facilities rather than sending them interstate.

The initial focus was on the apprentices but, over time, we want to increase the capacity of the organisation to be able to train and develop its own workforce in-house using our own facilities. We are still developing a business plan for the growth of the Allwright Training Centre.

Mr WOOD: Is that facility now open?

Mr MACRIDES: Oh, absolutely, yes, it is …

Mr WOOD: Will I be able to ring up someone to see if I can have a visit?

Mr MACRIDES: I am sure if you give me a call, Mr Wood, I can organise for a visit.

Mr WOOD: See, I told you what a wonderful bloke you were.

This is more a general question about gas versus distillate. When the carbon tax comes in, does it differentiate between whether you are trying to use, not a clean source of energy, but a slightly cleaner source of energy than distillate, that is, gas? Do you get any bonus points for using more gas than distillate? I thought that is why carbon tax was coming in, to try to …

Mr MACRIDES: In terms of the federal legislation, the industries that are the principal polluters are obviously coal-fired power stations. They will get credits from the federal government as part of their process. We will not because we are already on a lower emissions fuel source. Having said that, the benefit to us is that our emissions are significantly below that of a coal-fired power station; if it was not for that, the cost of the carbon tax to us would be significantly higher.

Mr WOOD: So there is no differentiation. I think in your annual report you show a figure for - I have it here - it might be gas from your power stations. Owen Springs, for instance, is that on gas or diesel?

Mr MACRIDES: Gas.

Mr WOOD: Gas. What about Ron Goodin?

Mr MACRIDES: Gas.

Mr WOOD: And Weddell and Channel Island, which are lower in emissions, is that because they are better?

Mr MACRIDES: Gas.

Mr WOOD: Is that because they are better, more efficient?

Mr MACRIDES: Yes. It is a different plant; it is a high efficiency plant.

Mr WOOD: If I was to put, say, the Katherine diesel generator against that, in tonnes, would I see quite a substantial increase in tonnes of CO_2 per MW hour?

Mr MACRIDES: Yes. If you look at emissions from a natural gas-fired power station, typically the emissions profile is around 550 kg of emissions per MW hour; distillate is around 860 kg per MW hour.

Mr WOOD: I suppose that is what I was asking, whether ...

Mr MACRIDES: The differential is quite significant between gas and diesel. It is even more pronounced between gas and coal. Black coal is 950 kg and brown coal is 1100 kg.

Mr WOOD: There is nothing wrong with my briquettes, is there?

Mr MACRIDES: What can I say?

Mr WOOD: What is the incentive then to get off diesel except for cost? What is the incentive to, say, increase the number of generators in the Northern Territory on gas?

Mr MACRIDES: The incentive is that the carbon – at the moment we get a diesel fuel rebate, and that is being phased out over time, to replicate the impact of a carbon tax on diesel fuel. So it is cost; cost is the prime driver here. The cost in not only the impost of the carbon tax, but also it is a very expensive fuel source. Diesel is horrendously expensive compared to gas, which is why part of our strategy is looking at converting at least 10 power stations over the next few years to gas.

Mr WOOD: All right. I am conscious of time here. The other question I have been dying to ask, because I think I asked it last year and when I asked Dr Burns, in debate in estimates, he said I was wrong, and do not get me wrong, I am not knocking him. It was to do with the reduction of power when people turn off switches in a building. You go to a school and say you reduce your power, and therefore you reduce - what do they call it - is it GHG, is that the correct title?

Mr MACRIDES: Gigawatt hours.

Mr WOOD: Yes. I have this summary of projects, for instance. It says: 'Summary of Projects Approved by GEEP Steering Group'. I think I know what it means. It means the Government Energy Efficiency Program. It says the Royal Darwin Hospital had a lighting upgrade which cost $455 000. The annual environmental savings are 2083 GJs, gigajoules. The GHG tonnes per CO_2 was 453. I will just give you a bigger one. Alice Springs Hospital co-generation funding allocation, $2.123m, energy saved 25 578, and tonnes was 1430. It has a whole series on of some of the schools.

The Alice Springs one is by the far the biggest. If we are saying to people that if you install energy efficient lighting in a school that will save some money from the bill, how do I say that it really did make a difference to the output from Weddell, or Channel Island or Katherine, or whatever? Where is the scientific correlation that a reduction in my power consumption at my house, or my school, or my business can guarantee I will have reduced at the Darwin hospital by 453 tonnes of CO_2? Is that measurable?

Mr MACRIDES: You are not actually comparing apples with apples. There are two emissions sources here. There is the emission source from the actual equipment in use at these particular schools; as well as the emissions source from our generators. There is not a strong nexus between the two.

Mr WOOD: Can I clarify so I understand it better?

Mr MACRIDES: Yes.

Mr WOOD: Say it is a lighting upgrade at Royal Darwin Hospital. Where are the emissions then? Is that emitting carbon?

Mr MACRIDES: I assume it is. Trevor Horman is my expert on renewable energy. You were just waiting for a guernsey, weren't you?

Mr WOOD: And nothing on the Adelaide River Railway today, Trevor.

Mr MACRIDES: Please help me out, Mr Horman.

Mr HORMAN: The answer to it is that the school would have been consuming a greater amount of energy when they had the old lighting system, so they reduced the amount of energy that they used, and then it is directly related to the amount of generation we send out from the power station.

Mr WOOD: Last time I asked this they said you would not make a big effect until you turned off the whole power station. I might be wrong there. I am not saying I am wrong or right. If that school reduces, say, its power consumption by - take the Peter McAulay Centre, it reduced its energy consumption by 44 GJ and said it reduced its tonnage of CO_2 by 9.67 - not that high. Will a generator, you really want running at full capacity, I presume, reduce its gas consumption, which therefore reduces emissions, by a similar amount of a change in the power usage in a building, or will it just keep pushing out the same amount?

Mr HORMAN: No, member for Nelson. For every kilowatt hour, every megawatt hour we send, there are emissions associated with the generation of that. It is just like fuel into your car; depending on how hard you drive it, you use more fuel.

Mr WOOD: Yes, and that is fair enough, but do those types of plants have to have load on them?

Mr HORMAN: We dispatch the generators according to the load at the time, so we bring on enough generation to match the load.

Mr WOOD: I didn't know whether, like with old diesel motors, you didn't run them on no load because they wore out. Generally, even on a cattle station, you stuck something on to keep a bit of load on them to make them work. Does that apply to these gas generators, or will they use less gas as the power demand decreases?

Mr HORMAN: Yes, we will have enough generation online to match the load at the time, and we will be running the machines at their maximum economic rating. We never get to a zero load situation like you have with the diesel, which is a different problem; it is glazing of the bores there that is the problem.

Mr WOOD: So, these lights do emit carbon?

Mr HORMAN: No. It is the energy that they use; the energy emits carbon at the power station.

Mr WOOD: That is what I thought. I didn't know whether you said there was carbon ...

Mr MACRIDES: I probably did.

Mr WOOD: Yes, I know, you are just trying to confuse me.

Mr MACRIDES: Did it work?

Mr WOOD: Yes, it did. Trevor, when we are sitting down making sure that that new power line is not digging up the old railway line from around the back of Coolalinga, I wouldn't mind having a more fulsome discussion, so that when people come and talk about it, I can say this is what actually happens. I believe there is some confusion over the reality of reducing carbon. If I turn off a switch at home, does it make it any difference?

Mr HORMAN: Absolutely.

Mr WOOD: Okay, it makes a difference. I do it because I am trying to reduce ...

Mr HORMAN: The most cost-effective way of reducing carbon emissions is to turn it off.

Mr WOOD: That is good. This might be a scientific question. What is the amorphous silicon solar power unit at Bulman? I have been to Bulman and they have a large solar array. What is different about theirs?

Mr HORMAN: Sorry, the question is: what is amorphous silicon?

Mr WOOD: Yes. It did say in your annual report that there is an amorphous silicon solar power display station at Bulman.

Mr HORMAN: There is a 55 kW solar power station at Bulman. The technology we used was amorphous silicon, which is silicone layered on to a metal substrate, compared to polycrystalline, monocrystalline, which cover your panels normally. So it is a different type of solar technology.

Mr WOOD: Better or ...

Mr HORMAN: It has advantages. It is lower efficiency, so you need a bigger area of it, but that is not usually a problem. You can shoot a bullet through it, so it is vandal-proof, which is often a useful characteristic.

Mr WOOD: Dear Residents of Bulman ...

A member: That is what we need in the rural area, Gerry.

Mr WOOD: Yes. One last question. Do you have a percentage of renewable energy in the Territory versus other forms of energy? Do we have a percentage of how much is produced in the Territory versus, you might say, standard electricity production?

Mr HORMAN: Mr Wood, while we are looking for the number, the number will vary according to the centre. There is a higher number in Alice Springs than there is for the rest of the Territory just because the climate there is suitable for it, and we put the large scale projects in there as part of the Solar Cities project, but we are sub-1% at the moment with the total energy.

Mr WOOD: That is okay. I thank Power and Water for their answers.

Ms KING: Just before we close, on behalf of the Power and Water Corporation Board, through the Chair, I note the comments by Mr Elferink in relation to the Managing Director. Given the particular challenges and opportunities of the current substantially increased capital program, and some of the other challenges that are around with carbon pricing, etcetera, I particularly appreciate that on behalf of the board.

The Power and Water Board is comprised of experienced and quite robust personalities who challenge regularly and question the management. I believe Andrew would be the first to say that he is supported by an incredibly experienced, dedicated and talented team. I believe that, for the record, the government can, as Mr Elferink suggested, be very satisfied with their performance. So thank you.

Madam ACTING CHAIR: Thank you, Ms King. That now concludes this session. On behalf of the committee, I thank the shareholder minister, Essential Services Minister, and the Chairman for appearing before the committee, as well as the Managing Director and all the Power and Water officials who assisted today.

Ms LAWRIE: Thank you, Madam Acting Chair. As is customary, I extend my thanks to the Power and Water Corporation, to the Chair, Judith King; Managing Director, Andrew Macrides; and on behalf of my colleague, the Minister for Essential Services and I, to the staff who put many dedicated hours into preparing for the Government Owned Corporations Scrutiny, thank you.

Madam ACTING CHAIR: Thank you, Treasurer.

I have a closing statement on behalf of the Chair. This now concludes the Government Owned Corporations Scrutiny Committee public hearing process. I take this opportunity to thank the members of this committee for the hard work they have put in and for the overall manner in which these public hearings have been conducted. I also place on the record a vote of appreciation from the committee to all members who have participated in the public hearing process.

On behalf of the committee, I extend my thanks to the Treasurer, the Minister for Essential Services, Ms King, Mr Macrides, and also Ms Prince who was here earlier, and the team of people they have had working with them. I extend our thanks to all others who have been helping with this hearing.

I remind you that questions on notice are required by 19 July 2012.

I now formally close the public hearing of the Government Owned Corporations Scrutiny Committee for 2012. Thank you.

The committee adjourned.
