# GOVERNMENT OWNED CORPORATIONS SCRUTINY COMMITTEE - Friday 18 June 2010

The Government Owned Corporations Scrutiny Committee convened at 1.30 pm.

**Mr CHAIRMAN:** Good afternoon, I declare open this public hearing of the Government Owned Corporations Scrutiny Committee of the Legislative Assembly of the Northern Territory on Friday, 18 June 2010, and I extend a welcome to everyone present.

I table a copy of the Order of the Assembly dated 5 May 2010, which appoints a committee for the purpose of examining and reporting on the activities, forms, principles and financial management of the Power and Water Corporation, a government-owned corporation under the *Government Owned Corporations Act* with reference to the Power and Water Corporation's Statement of Corporate Intent 2010-11. The order effectively uses the current membership of the Public Accounts Committee. I should also point out that the timing for the public hearing shall be 1.30 pm to 4.30 pm today. I would also like to 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 also advise that, as a result of a resolution of the committee. 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, in that questions should be put directly to the Chairman of the Board of the Power and Water Corporation, with assistance from the Managing Director and other officers as required.

Although this is a public hearing, it should be noted that, under section 20 of the Order of the Assembly, the Chairperson and other witnesses will advise when evidence is of a commercially sensitive nature and that such evidence can be heard*in-camera*. As Chairman of this committee, I will invite the Chairman and witness 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.

As stated in the previous opening address to the Government Owned Corporations Scrutiny Committee, in order to provide for completeness of process, an opportunity is made available for members during the Estimates Committee's public hearings to question the Treasurer, as shareholding minister, on the issue of Community Service Obligations made to the corporation by the government, as well as dividends paid to the Territory government by the corporation.

I now table the 2010-11 Statement of Corporate Intent and a copy of the Annual Report of the Power and Water Corporation.

The committee will now proceed to consider the activities, performance, practice and financial management of the Power and Water Corporation. I welcome from the corporation, Ms Judith King, Chairman of the Board, and Mr Andrew Macrides, the Managing Director. I now call on the Chairman to make an opening address.

**Mr TOLLNER:** Before we do that, Mr Chairman, can you just explain to me what output group the minister answers questions on Essential Services.

Mr CHAIRMAN: I just said that.

Mr TOLLNER: No, that is the shareholding minister.

Mr CHAIRMAN: That is right.

Mr TOLLNER: I am talking about the Minister for Essential Services.

Mr CHAIRMAN: So, what we are doing today is looking at ...

Mr TOLLNER: No, no.

**Mr CHAIRMAN:** Yes, I am explaining. There is the budget, and it has a budget paper, and it has output appropriations in it, and the purpose of the Estimates Committee, and now the Government Owned Corporations Scrutiny Committee, is to scrutinise the appropriations, so the people responsible for each appropriation answer those questions. So the Treasurer has responsibility for the appropriations that have the Community Service Obligations in them, as she is the shareholding minister, that opportunity was on the Friday, and the government-owned corporation, Power and Water is here to speak to their appropriations.

Mr TOLLNER: But what about the Minister for Essential Services?

Mr CHAIRMAN: We are here to debate the appropriation.

**Mr TOLLNER:** Yes, well, that is right, but there are some decisions that are out of the hands of Power and Water that are strictly in the control of the Minister for Essential Services. I am just wondering, I know we have got a schedule here, has there been an oversight in not calling the Minister for Essential Services?

Mr CHAIRMAN: No.

**Mr TOLLNER:** Well, when do we get the opportunity, normally, to question the Minister for Essential Services?

**Mr CHAIRMAN:** There is a government which sits and there is a process called Question Time where you can talk to ministers about policy and political debates, and there are statements in the House and other forms, and then there is also the Written Question process. But, specifically to the Estimates Committees' process and the Government Owned Corporation's process, we are looking at the appropriations of the budget.

I think what you are asking about is a policy and political debate, that is not here, this is a look at the appropriations.

**Mr TOLLNER:** No, let me just explain. The minister was asked to sign off on what they call early off specification gas. It actually required the signature of the minister to do that; the Minister for Essential Services, not the shareholding minister. I want to question the minister on ...

Ms SCRYMGOUR: You do that on the floor of parliament; I am sorry.

Mr TOLLNER: No, you cannot do that on the floor of parliament.

**Mr CHAIRMAN:** As I have explained, we are here to talk to the people responsible for this output appropriation and I will just quickly read ...

Mr WESTRA van HOLTHE: A point of order, Mr Chairman!

Mr TOLLNER: I have no dramas with what you are saying, I want to know ...

**Mr CHAIRMAN:** That is the Estimates Committee process; there are other processes of the parliament and the government which allow scrutiny. This particular process, this committee process goes to the appropriate debate and we are here to hold that ...

Mr TOLLNER: We need to take this up at a future meeting, I think, but not now.

**Mr WESTRA van HOLTHE:** I just want to add one thing for the record. The Minister for Essential Services has declined to attend and give evidence before the Council of Territory Cooperation and at least part of the basis for the decline of that offer, was because he could answer those questions before this Estimates Committee.

Mr CHAIRMAN: I am incapable of speaking on behalf of the Council of Territory Cooperation.

Mr WESTRA van HOLTHE: I understand that, however, I am putting that path for the record.

**Mr CHAIRMAN:** I can explain the Estimates Committee process and the government corporation scrutiny process.

**Mr WESTRA van HOLTHE:** I understand that, and I say that because I think that needs to be on the record. I am sure the Chairman of the CTC, the member for Nelson, is cognisant of what is going on here and I daresay that will come up for further discussion.

Mr TOLLNER: It certainly will within the PAC I hope. That is all right. I understand.

**Mr CHAIRMAN:** It is not an agenda line to the process, this is how previous years the Chair, and my understanding is that ...

**Mr TOLLNER:** That is fine, I understand. We have just identified a shortcoming in the system and we can take that up at a future meeting.

**Mr CHAIRMAN:** I think we should be looking at the Statement of Corporate Intent. Would you care to make an opening address?

**Ms KING:** Thank you, Mr Gunner, and thank you for the opportunity to make this opening statement. Perhaps the first thing I should do is just say that I will run through the members of our Board: Barry Chambers, who I think is well-known to all of you – engineer and former CEO of the Authority; Michael Hannon, a local business man with experience in a wide range of businesses; Margaret Gibson, an accountant; Mervyn Davies, who I think you are familiar with, who is an engineer and did the Davies Report after the Casuarina incident; Linda Mackenzie, a local business woman and chartered accountant with experience in the finance sector in particular; and my own background is service industry, trade and regulation, and I have over 20 years on the board of utility companies.

I will start with a brief overview of the year that was. A summary of the Corporation's financial position, an update on progress against major projects and an outline of approved strategic initiatives.

The year we are just concluding the four key areas of focus for Power and Water over that period have been and, looking into the future, are maintaining financial sustainability, making progress against the recommendations arising from the Davies Report, delivery of the very significant capital investment program we now have underway, and security of gas supply.

In terms of service performance over the past year, there were two major operational incidents which caused significant disruption of electricity supply to customers on the Darwin/Katherine grid. However, apart from that, we should recognise that network reliability levels adjusted for major event days have returned to longer term averages that are consistent with other network utilities, for instance ergo energy.

As noted in the recently released Utilities Commission Power System Review, network reliability in Katherine and Tennant Creek is better than the targets set, and in Alice Springs close to the target on

an adjusted basis. Importantly, the percentage of both urban and rural customers experiencing multiple interruptions has reduced significantly.

In water and sewerage services, the average duration of planned or unplanned interruptions is well below the target set for Darwin, and at the level of the target set in Alice Springs. With the capital investment program, and other measures outlined in the 2010-11 Statement of Corporate Intent, I am confident ongoing improvements to network reliability and customer service levels will be achieved. We fully support the Utilities Commission work on the customer service incentives scheme.

Turning to financial sustainability, last year at this forum I reported Power and Water was committed to maintaining financial sustainability. We have worked closely with the Northern Territory government regarding the implementation of recommendation from the Reeves report, an independent review that assessed the corporation's financial and commercial sustainability. While power tariffs will remain at previously announced levels, which are mid-range compared with other jurisdictions within Australia, measures to identify and implement rigorous cost control and efficiency gains continue in the organisation at every level.

In recognition of the corporation's \$876m investment in infrastructure assets over the next three years, the government is assisting Power and Water financially through continued dividend moratorium and a series of debt-for-equities swaps over the budget and forward estimates period, which will be reassessed annually.

The Northern Territory government's financial assistance, dividend moratorium, and capital contribution in the form of \$218.1m debt-to-equity swap, provides Power and Water with the means to fund required capital expenditure over the next three years, and still remain within the financial sustainability parameters recommended by the Reeves report.

The Davies report: implementation of the recommendations from the Mervyn Davies report has been a key priority within the corporation. This includes the ongoing investigation of equipment condition, the remediation of power and network infrastructure assets, specifically the zone substations. The Davies report made 11 major recommendations on substation maintenance, and Power and Water immediately established a remedial asset management program to undertake these works. That program, RAMP for short, is implementing three major projects to ensure these recommendations were undertaken, to give stakeholders and staff confidence in the integrity and safety of the power system.

The first, a remedial works plan, is designed to test the condition of zone substation assets, and where necessary, conduct repairs to ensure they operate safely and reliably.

The second is a greater focus on training, including participation and representation in relative national forums, to bring specialist skills into our workforce.

The third, a long term action plan, is designed to make sustained changes to maintenance practices procedures and culture. An independent source is monitoring the progress of the remedial work plan, and the long term action plan. These measures provide assurance the asset remediation plan is on time, and the long term changes are on track.

The infrastructure investment program. The corporation has invested substantially in maintaining upgrading and expanding electricity, water and sewerage infrastructure. In this financial year, we will have invested a forecast \$365.6m in plant and equipment. This is \$119m above that outlined in the 2009-10 Statement of Corporate Intent, and the increase is largely due to the bringing forward of additional generation capacity in the Darwin and Alice Springs regions. We will also have invested almost \$53.7m in the repairs and maintenance of existing infrastructure.

This year's Statement of Corporate Intent outlines the corporation's largest ever capital and maintenance investment program, including \$876m of capital investment, which will be made between 2010-11 and 2012-13, excluding investment in remote communities, to ensure reliability of service,

and to meet growing demand. \$158m will be spent over the next three years on repairs and maintenance.

After significant delays, the delivery of gas from the Blacktip field in early 2010 secured gas at a competitive rate for the next 25 years. As well, the completion in late 2009 of an interconnecting gas pipeline means gas from the DLNG plant can be accessed in an emergency. These achievements provide long-term certainty in keeping our power stations operational, and also ensure we can meet growing future demand.

The corporation's financial position. The 2010-11 nett loss after tax is projected to be \$10.8m. Revenues are projected at \$676.3m, up from \$539m in 2009-10, and operating costs are also forecast to increase to \$553.1m in 2010-11, from \$428.5m in 2009-10. The capital program for 2010-11 totals \$379.4m, excluding investment in the remote communities. The increased program has resulted in depreciation and amortisation costs on \$74.1m in 2010-11. The capital program is funded by a mix of new borrowings and debt-to-equity swaps. This maintains key financial measures recommended by the Reeves report, within a sustainable range and consistent with other interstate government owned corporations.

Update on major projects. In generation, the plant capital investments would improve reliability, improve efficiency, and increase capacity to meet forecast increases in the demand for electricity, which includes: completion of the Owen Springs Power Station outside Alice Springs later this year; installation of Sets 8 and 9 at Channel Island Power Station; installation of Set 3 at Weddell Power Station; replacement of the old sets at the Berrimah Power Station to provide cyclone secure backup supplies; and life extension works to Channel Island Power Station Sets 1 to 6.

Power networks have planned capital works on the Territory's power network aims to increase network security and reliability, and responds to increased demand for electricity, and includes: refurbishment of the Darwin City Zone Substation; design and construction of a new Snell Street Zone Substation; upgrades to the Channel Island Power Station 132 kV switchyard; and construction of the Lee Point or Leanyer Zone Substation.

Water services capital investment is designed to meet the forecast increased demand from planned infrastructure developtments, population growth, and comply with environmental regulations. Key projects include: construction activities to raise the full supply level of Darwin River Dam commenced in June 2009 and due for completion in 2010; recommissioning of the Manton Dam; planning to develop a major new dam or other alternative water source is under way with consultations held earlier this year with traditional owners of the proposed Warrai Dam area; construction of headworks to support new suburb developtments in Palmerston; closure of the Larrakeyah sewage outfall by October of 2011; and expansion of waste water treatment facilities at Leanyer/Sanderson.

There are other key strategic initiatives which include Power and Water is providing support to the Utilities Commission's regulatory and review program. This program includes eight separate reviews into Power and Water's asset management activities, competitive retail environment, service standards, and electricity network planning operations. The corporation has framed its strategy for environmental sustainability on the foundations of the Northern Territory government's *Territory 2030* strategy and Climate Change Policy. The development of a climate change strategy during 2010-11 will consolidate current initiatives such as the Indigenous Energy Source Strategy, Sustainable Energy Strategy, and the corporate environment plan. Crucially, this strategy will assess the potential operation and financial impacts of the various sustainability and climate change initiatives.

Power and Water is investing in renewable energy and working to minimise greenhouse gas emissions from electricity generation, including: ensuring that over 95% of the Northern Territory's electricity is generated using natural gas, which is a relatively clean energy source; installing new electricity generating plant that uses the most efficient technology available; acting as a key stakeholder in the Alice Springs Solar Cities project and the Green Energy Task Force; completing projects utilising solar power, both in a flat plate solar photovoltaic and solar dish concentrator technology, in many several remote communities; and supporting other green projects such as the

solar buy back program, where the gross production from rooftop solar panels is purchased.

Over the SCI period, Power and Water, through its subsidiary company, Indigenous Essential Services, will address the challenges raised by the policy initiatives of Closing the Gap on Indigenous Disadvantage by the Northern Territory government and the Commonwealth government's Strategic Indigenous Housing and Infrastructure Program. Both of these initiatives, along with an increasing focus on water for healthy communities, continue to significantly impact the demand for essential services, with an increased focus on both the capacity and reliability measure of services available.

Power and Water commenced a range of activities, including web-based interactive programs, media commercials, and bill inserts, aimed at encouraging Territorians to reduce their water and electricity consumption. Of note, the Save the Planet interactive web-based campaign was designed specifically to deliver energy and water efficiency messages to school students.

In 2009-10, the Power and Water Sponsorship budget of \$320 000 was spent on a balanced program of activities across a range of organisations, community groups and events with similar values. Activities included arts, culture, business, schools, sport, and the environment. An additional \$200 000 sponsorship was provided to COOLmob in order that their energy efficiency audits could continue in Territory households.

By way of closing, I would like to take the opportunity to record the thanks of the board and myself to all of Power and Water's dedicated hardworking staff who are charged with the responsibility of delivering on the service commitments. They do an amazing job under difficult circumstances, and rarely get praised by the media or others for their efforts. They do, however, get headhunted, and retaining our managers and staff is a critical issue for the corporation. It is a pertinent comment today, because we are farewelling Paul Heaton, who has been the General Manager for some 10 years and made an incredible contribution in the Water Services area, but also to the corporation as a whole. But on a positive note, we have also, during the year, recruited well, including two new General Managers and some other key staff, but my comments about the staff go well beyond the General Managers right through the organisation. Thank you.

Mr CHAIRMAN: Thank you, Madam Chair.

**Mr TOLLNER:** You mentioned a number of different reviews in your opening statement. Can you provide a list of all of the reviews that have been undertaken by Power and Water in the last two years; the cost of those reviews; who did those reviews; and copies of the final reports?

Ms KING: I will pass it over to Andrew to go into that detail.

**Mr MACRIDES:** Andrew Macrides, Managing Director. The Chairman's comments were actually in relation to reviews that have been conducted by the Utilities Commission, not by Power and Water, so I am not sure whether you are asking a question in relation to the specific reviews that we are providing input into?

**Mr TOLLNER:** The Reeves Sustainability report, or review?

**Mr MACRIDES:** Yes, that was a NT government review, so it is not something that we initiated, it is something the government initiated, and you would have to seek the government's ...

Mr TOLLNER: So you have not initiated any reviews?

**Mr MACRIDES:** The reviews that we initiate are predominately of high-end or of our operational outcomes, so when you talk about reviews, we have got a large capital program. We use consultants to assist us with design of various elements of our program itself, so if you are putting in a new generator, obviously you need expertise to assist you in designing the bits and pieces to go with the fitting of that generator. New water sources, where you are going to put pipes in the ground for water,

etcetera, so they are the kind of reviews that we do, but they are not reviews in the sense of the kind that Reeves might do, they are operational reviews.

**Mr TOLLNER:** It is all right, I can find that. In that case, this might be a bit unquantifiable; can you tell me what the costs to Power and Water for these external reviews have been? Obviously, if you are being reviewed, it would take a lot of man hours to respond to those reviews. What I want to know is whether you are being constantly reviewed, how that impacts on your business, and whether you actually have people full-time employed responding to reviews?

**Mr MACRIDES:** The organisation is a utility business and every utility business in Australia is regulated in one way, shape or form. So, the kind of responses to reviews from regulators, every utility business has a group of staff that are responsible for preparing those responses. What we do is no different to what the Ergon's, Energex's or the water businesses do in terms of responding to those kinds of reviews.

**Mr TOLLNER:** It is different, you will appreciate. In other parts of the country utilities do not own outright their transmission systems, there are separate retailers, there are separate power generators, and some choose to operate unregulated transmission systems. Now, you operate under a very specific range of rules, depending on how you operate your business, and that will impact on how the reviews are done and conducted in relation to Power and Water, specifically, which will be very different to other utilities and providers of power lines and retailing services around the country.

Mr MACRIDES: Generally, not. The only difference is we are a vertically integrated multi-utility.

**Mr TOLLNER:** You operate, I take it, a regulated transmission system.

Mr MACRIDES: We have a regulated transmission system.

**Mr TOLLNER:** There are plenty of them that are not regulated.

Mr MACRIDES: The majority are, in fact, regulated.

**Mr TOLLNER:** The majority of them are.

Mr CHAIRMAN: Mr Macrides has the call.

**Mr MACRIDES:** So the vast majority are regulated Australia-wide. In the case of, say, Energy Australia, Energy Australia is a transmission distributor business so they have a group of people who put in submissions to regulators; they have pricing and other submissions in relation to their regulatory business. Water businesses have similar requirements. The only difference is, we have all those bundled into one. So, getting back to the question you asked earlier on about are we doing nothing but responding to various reviews, we certainly ...

**Mr TOLLNER:** No, that was not the suggestion. I think you are probably doing something aside from responding to reviews.

**Mr MACRIDES:** We have a group of people who are regulatory experts that do provide regulatory submissions to the Regulator, but there are not hundreds of them within the organisation and they are a necessary component of the type of business we are in.

**Mr TOLLNER:** Maybe you can outline to me – and I am quite happy for you to take it on notice – the compliance costs that Power and Water bears in relation to meeting its obligations to be part of various reviews and such, over time?

Mr MACRIDES: In round terms, it would certainly be under \$1m a year, I would have thought. Bear in

mind, again, we are a multi-utility, so we have retail obligations, network obligations, water obligations and we have multiple regulators; we have the Utilities Commission that regulates part of what we do, we have the Controller of Water Resources that regulates our extraction licence for water purposes, and we have NRETAS that regulates our discharge licences for sewerage purposes.

**Mr TOLLNER:** Absolutely, but you only service 200 000-odd people. You are a pretty small organisation in the scheme of things. Other states and territories regulate a plethora of different utility businesses and so on. It is all focused on you here. The economies of scale are not the same here as they are in other parts of the country, so a little breakdown would be handy, Mr Macrides, if you could take that on notice.

Mr CHAIRMAN: Could you put that as a question?

**Question on Notice No 10.1** 

Mr CHAIRMAN: I need you to say that question.

**Mr TOLLNER:** I am interested in the costs of compliance as they impact on Power and Water in relation to various regulations and laws that apply around the country, and the cost of undertaking or responding to external reviews.

**Mr CHAIRMAN:** That is question No 10.1. Just as a matter of housekeeping, if an official is taking note of the Question on Notice, could it take note of the number and if you have an opportunity to answer the question later in this Estimates Committee process, if you could refer it to the number so *Hansard* can easily match it.

**Mr MACRIDES:** Certainly, it might take a little time to produce the information.

Mr CHAIRMAN: That is fine.

**Mr TOLLNER:** Can you advise the current debt position of the company? How much debt is on the books?

**Mr MACRIDES:** We forecast to finish the financial year - 30 June of the 2009-10 financial year - with \$900.4m worth of debt on our books.

Mr TOLLNER: What is the estimated interest payment for the year 2009-10, and 2010-11?

Mr MACRIDES: For 2009-10, the expected interest payment is \$44m, and for 2010-11 it is \$64.4m.

Mr TOLLNER: What is the estimated income for power generation transmission and retailing?

**Mr MACRIDES:** As a business, for the 2009-10 financial year we forecast our total revenue to be \$539m, and for the 2010-11 financial year the forecast is \$676.3m.

Mr TOLLNER: What is the estimated income for water distribution?

**Mr MACRIDES:** If you just bear with me for two minutes I will get the answer for you. I know you asked for water, but perhaps if I can give you the breakdown across our product lines. For 2010-11, we expect our electricity revenue to be \$340.3m, our water revenue to be \$69.3m, and our sewerage revenue to be \$38.8m.

**Mr TOLLNER:** In relation to power generation, you generate your own electricity; however I understand you purchase electricity. Can you give us an idea on the costs of those purchases, what

you are purchasing, and how many people are selling electricity to Power and Water?

**Mr MACRIDES:** Obviously I will not give you specific dollar values on the purchases, because of the nature of the information being commercial-in-confidence, but Power and Water has its own generation plant, and in a number of locations we purchase generation from private providers. There is a private provider in Pine Creek, and we have a power purchase agreement with that provider, EDL, where we purchase all the output from their Pine Creek power station.

In Alice Springs there is a private provider at Brewer Estate, and again we have a power purchase arrangement in place where we purchase all the output of that plant. There are some minor arrangements in place in other areas. For example, the Landfill Gas facility at the rubbish dump, which produces one megawatt of electricity per annum, we purchase all that output as well.

**Mr TOLLNER:** Do you receive any subsidy from government to purchase electricity from external parties?

Mr MACRIDES: No. We are a trading business so it is simply a cost of doing business.

**Mr TOLLNER:** Can you give me an idea of what you are prepared to pay for electricity? Is there an economy of scale rule you have? When EDL put power into the grid, are they paid at the same rate as somebody who has a PD unit on their roof that might be pumping a little energy into the grid as well? Do you have a set rate?

**Mr MACRIDES:** No. Obviously when you are negotiating a power purchase agreement with a supplier like EDL, you know your cost of production, and you would not contract with a supplier like that if what they are offering is greater than the cost of you doing it yourself. The kind of contract you have in place with a supplier like that is, basically, a contract that is based on your own marginal cost of supply. In the case of power purchase arrangements where somebody has a PV ray sitting on their roof, there is actually a gazetted tariff for that ...

Mr TOLLNER: Have you any idea what that is?

Mr MACRIDES: It is actually the same price as we sell electricity for ...

Mr TOLLNER: Oh, right. So they are pretty ...

**Mr MACRIDES:** In Australia, there are two different tariff arrangements. There is a nett feed-in tariff and a gross feed-in tariff. In the Territory, what we actually do is pay for all of the energy that is produced by the system sitting on a person's roof. So, every kilowatt that system produces, we rebate the owner for that. A typical system on a roof will probably only produce enough electricity to meet 20% of their annual usage. They actually get a full rebate for that whole production. In the eastern states, they have generally got a nett feed-in tariff which, essentially, means you only get paid when you export into the grid. The difference here is we pay you for everything you produce. On the eastern seaboard, generally, the utilities there will only be ...

Mr TOLLNER: Unless they are a larger generator.

Mr WOOD: Can I just jump in one minute on that?

Mr TOLLNER: Oh, Gerry, I know what you are like. Go for it, mate.

**Mr WOOD:** It will save me repeating later. I looked at Origins' web page, and it talks about 44¢ - or whatever it is. Is that the government subsidy, not the power company subsidy?

Mr MACRIDES: Origin, again, would have a gross feed-in tariff. What that 44¢ would represent would

be what they are prepared to pay somebody producing electricity and pumping it into the grid. They will only pay for - you can have a PV ray sitting on your roof, it might produce 100% of your needs, then a little more. When you export that little more into the grid, you get paid for that little more. Up here, we will actually pay you for everything that your system produces.

Mr WOOD: Which one is the most attractive, if you were ...

**Mr MACRIDES:** They actually both work out almost the same when you sit down and do the economics of them. Some figures that I saw - the gross rate which is what we have; the system we have is probably marginally better for small rooftop PVs. As I said, generally, a rooftop PV, particularly in the Territory context, will only produce about 20% of a person's power demand.

Mr CHAIRMAN: Depending on individual user's profile ...

**Mr TOLLNER:** If they are paying someone 44¢ ...

Mr CHAIRMAN: They would be buying less

Mr TOLLNER: Sorry?

Mr CHAIRMAN: They are buying less.

Mr TOLLNER: They are buying less, but if Origin ...

Mr CHAIRMAN: Sorry, Andrew.

**Mr TOLLNER:** If they are paying  $44\phi$ , there is, obviously, a major subsidy in there somewhere. You guys paying somebody or rebating at exactly what they would be charged, there is a big subsidy there because, obviously, the person generating the electricity in the house is not paying for the cost of transmission retail. On  $44\phi$ , where would the subsidy be coming from? The Queensland government or ...

**Mr MACRIDES:** I am not sure if there is a subsidy. When they strike their tariff rate, it is the same as if we strike an agreement with an independent power producer. We are looking at the avoided cost of electricity in terms of us generating it ourselves. I am sure they would also have a similar process in place for determining their tariff funding.

**Mr TOLLNER:** The member for Nelson is just explaining to me that it is the Queensland government's Solar Bonus Scheme, so that is where the subsidy is coming from.

Mr MACRIDES: That answers your question, then.

**Mr TOLLNER:** Maybe we should ask Gerry.

Mr WOOD: That could be a cliché.

**Mr TOLLNER:** The subsidy you are giving people for producing power on their rooves, is that having a marked impact at the moment on your bottom line?

**Mr MACRIDES:** The rebate we are giving? I think, no. Clearly, it is not. The interesting thing is the price of rooftop PVs have come down significantly over the last 18 months or so. Previously, the uptake of rooftop PVs was relatively minor. But, with the price differential that is now occurring as their price is coming down, we are seeing more and more people taking up rooftop PV options. In fact, by the end of this year, we think there will be probably over 1000 households in the Darwin, Katherine,

and Alice Springs areas that will have a rooftop PV.

**Mr TOLLNER:** Okay. Can they generate electricity at the same cost that Power and Water can out at Channel Island, these reduced-priced PV systems? Obviously, Mr Macrides, you are an accountant, you understand how charges are worked out, and you work out the cost of a unit on the roof, and how long it is going to last you, how much you get for a rebate from you guys.

Mr MACRIDES: The answer is probably no, and the reason for that is ...

**Mr TOLLNER:** Probably no.

**Mr MACRIDES:** Well, I think the reason for that is, there is actually quite a long payback period for these rooftop PVs, and what makes these rooftop PVs, I guess, price competitive, are the purchase of the RECS that go with them, and so, in the absence of there being an arrangement where the person putting these systems on their roof was getting some form of rebate, then the cost of solar is still probably the most expensive form of energy production at the moment.

**Mr TOLLNER:** For sure. Have you done any studies or modelling on the sustainability for Power and Water of these, well, sort of subsidy that you are providing to people who have got PV systems on their roofs? When does it actually start to bite?

**Mr MACRIDES:** Probably never, and the reason I say that is that one of the advantages of rooftop PV systems is, and remember, like every other retailer of electricity Australia-wide, we are bound by the federal renewable energy process, and so we have actually got to buy renewable energy certificates based on the emissions of CO2 from our power stations, so one of the attractions for us of this great uptake in roof top PV is that we get an opportunity to buy the RECS associated with them, which satisfies our mandated renewable energy target REC requirements.

**Mr TOLLNER:** But the point is, you are paying people for producing, or rebating people for producing electricity on their roof exactly the rate that it costs you to generate electricity, transmit that into electricity, and also pay all of the retailing costs of that electricity, and for them to put that power into the system, the little trickle of power that they are putting into the system, they are not paying any of those costs. They are not paying, you know, you are wearing the burden of the transmission system, the retail system. Somewhere along the line, the rubber has got to hit the road, when enough people pick this thing up, and you say, well hang on, we are not running a profitable business here.

**Mr MACRIDES:** Okay, so if I go back to a comment I made earlier on, I mean, you are talking about rooftop systems that produce no more than 20% of a person's annual household consumption, so ...

**Mr TOLLNER:** That is right. No, I understand that is a point now, but it is very minor. it is not impacting, but where is the point where it does start to impact when you, I mean, if every person in Darwin stuck a solar system on their roof, you would be out of business.

**Mr MACRIDES:** No, because if every person in Darwin stuck a solar system on their roof, assuming ...

**Mr TOLLNER:** Sorry, if every person stuck a solar system on their roof, and you were paying them exactly what it costs you to generate, transmit and retail that electricity, then you would be broke.

**Mr MACRIDES:** No, because, again, there is another side to this equation, and it is the same sort of concept of doing something about demand management, and what it does is, it delays the next lump of augmentation for you, so what it is doing is, I mean, if enough people take up solar PV options, then, instead of having to put another 45MW generator in, in five years' time, or ten years' time, it pushes that out. So there is actually another side to the equation, which is, it helps defer your requirement for capital investment moving forward, depending on the uptake.

**Mr WOOD:** Can I just ask, does it reduce the need for the capacitors, if you have got electricity going from one end of the system back into the system coming from another direction?

**Mr MACRIDES:** I am a humble accountant, Mr Wood. I will ask one of my engineering experts sitting behind me whether they know the answer to that, Bertram Birk, General Manager of Power Networks.

**Mr CHAIRMAN:** Just for Hansard, when you do actually sit at the table near a microphone, so they can hear you, and then you can just introduce yourself for Hansard.

**Mr BIRK:** Certainly, thank you. Bertram Birk, General Manager of Power Networks. It can do, as far as installing capacitors at the end of a network where there is voltage support problems, but of course, as far as solar electricity is concerned, they would only have an issue in the day, so at night time we are back to square one again.

Mr WOOD: It does have some effect, but only partially?

Mr BIRK: It would be very small.

**Mr TOLLNER:** Excluding any capital expenditure or interest payments, what is the nett profit the Corporation will achieve in 2009-10 when looking at power and water and sewerage income expenditure?

**Mr MACRIDES:** The nett profit after tax in 2009-10 we are actually forecasting a loss of \$5.2m. Sorry, 2009-10 we are forecasting a loss of \$5.2m, and we are forecasting a loss of \$10.8m in 2010-11.

**Mr TOLLNER:** Is that the raw earning capacity without debt and investment and depreciation taken into account?

**Mr MACRIDES:** One of the problems of using profit as any guide is that of value and I know that you have had the Auditor-General appear before you during the course of estimates who has explained this whole notion of accounting standards and the write-back and write-down of asset values ...

Mr TOLLNER: All Greek to me under the circumstances.

**Mr MACRIDES:** ... back up your profits, so it is a really bad proxy of the financial health of the business. The best proxy of financial health of a business is its earning before interest and taxes because, in effect, that is a proxy for free cash flows for the business. So, if you have strong, positive EBITDA then you know you have got sustainable financial business, basically.

So, do not use profit – it is very difficult using profit. Me saying we have a loss of \$5.2m this financial year, I mean, in previous years we have had massive write-backs and write-downs of asset values, you wind up with a \$96m loss, or whatever it might be.

**Mr TOLLNER:** What I am trying to do is extract that out and find out exactly where you are heading without taking into account assets and depreciation and debt.

**Mr MACRIDES:** Power and Water has, since probably 2007-08 Statement of Corporate Intent, indicated one our key priority areas is financial sustainability, and the Corporation has been working with government making this corporation financial sustainable and, obviously, has been looking internally in terms of our own cost structures to try and improve financial sustainability as a business.

So, what we include in our Statement of Corporate Intent is a table that has some financial health measures, and the two financial health measures included in here are the two measures of financial health Andrew Reeves targeted when he did his review of Power and Water's financial sustainability, and the two measures used by Reeves in his review, and they are two very good measures of

financial health, are the corporation's debt equity ratio and the free funds flow, from operations to interest times cover.

On page 16 of the document in front of you, member for Fong Lim, you will see a table in there that has that information on it. Reeves indicated in his report that a financially sustainable business was a business whose debt equity ratio was under 60%, and where its interest cover was at least two.

So, you will see for us our free interest FFO to interest is essentially two other than in the 2010-11 year when it is reduced to 1.8, and our gearing remains below 60% even going out to 2012-13.

Mr TOLLNER: I am looking at debt to equity ratio is 105%?

**Mr MACRIDES:** Yes. Do not worry about the debt to equity ratio, it is not a measure that Reeves has used.

Mr TOLLNER: Sorry, so you are not talking about debt to equity?

**Mr MACRIDES:** No, what I am talking about is the gearing ratio and the FFO to interest were the two ratios Reeves used in his report as being indicative of the financial health of the business; and the reason why debt to equity is, again, a really bad measure, is because of this application of an accounting standard where asset values get written up and written out.

Mr TOLLNER: Yes, all right, no worries.

Ms KING: Mr Tollner, a good number of utilities have a gearing ratio around 60% to 65%.

Mr TOLLNER: Yes.

Mr MACRIDES: In fact, in some generation businesses, ratios up to 90% appear.

Mr TOLLNER: Yes, but what I mean ...

Mr MACRIDES: Member for Fong Lim, does that answer your answer?

Mr TOLLNER: Yes, it does. Your gearing ratio is somewhere between 51% and 59%?

Mr MACRIDES: Yes.

**Mr TOLLNER:** That seems to be sailing reasonably close to the wind as far as Mr Reeves is concerned - we are below 60%.

Mr MACRIDES: Yes.

**Mr TOLLNER:** Obviously you do not take into account natural disasters and unplanned events, but if you had another lighting strike, or an act of God, on your systems similar to the last one where it seemed your whole system blew up, what impact could something like that have on your gearing ratio or gearing percentage?

**Mr MACRIDES:** The only impact on the gearing ratio, in the context of a major occurrence, is where you cannot produce services and therefore get a revenue stream. Short-term things, like an outage caused by a lightning strike on the 132kV line, are not a problem for us; the problem for us would be if we had another Cyclone Tracy or something like that. In circumstances like that, no business can plan for those types of circumstances.

**Mr TOLLNER:** I suppose you are a unique business, too. Government can always do a debt-for-equity swap and fiddle around with things.

Mr MACRIDES: They can indeed, but again no different to any commercial business either.

**Mr TOLLNER:** Apart from the fact you do not have government bailing you out every time something goes wrong.

Mr MACRIDES: We do have shareholders we can call up for equity injecting.

Mr TOLLNER: How much capital investment is planned by the corporation for 2009-10, and 2010-11?

**Mr MACRIDES:** Our original 2009-10 capital program was \$246.6m, but we are forecasting our capital program for 2010-11 to be \$365.6m. That is largely as a result of the announcement made about our generation augmentation program. In our 2010-11 budget, we have forecast a capital program of \$379.4m. This is the corporation's commercial operations. It does not include Indigenous essential services capital.

**Mr TOLLNER:** I apologise, Mr Macrides, I have been thrown into this in the last couple of days, so I am still getting my head around it.

Mr MACRIDES: That is all right, member for Fong Lim, hand in hand with the capital program ...

Mr CHAIRMAN: The member for Fong Lim is the acting shadow for good reason.

Mr TOLLNER: For good reason. I am glad you said that.

**Mr MACRIDES:** Member for Fong Lim, on top of that capital investment there is further investment in our assets by way of our repairs and maintenance program. Our repairs and maintenance program for 2009-10 is forecast to be \$53.7m, and for 2010-11 is forecast to be \$57.8m, and it is contained in that Statement of Corporate Intent.

**Mr TOLLNER:** Mr Chairman, at this point I want to get into ENI and the arrangements for gas from Blacktip. I am wondering about Gerry ...

Mr CHAIRMAN: Member for Nelson, do you have any questions at this point?

Mr WOOD: I want to ...

**Mr TOLLNER:** I am saying I would not mind moving to some of the issues to do with the delivery of gas and Blacktip, but I thought we might open it up for you guys if you want to ask something.

**Mr WOOD:** I have more specific questions, but if you want to go to gas, go to gas. I have specific questions about specific issues.

Mr TOLLNER: Yes, all right.

Mr CHAIRMAN: We have three hours.

Mr TOLLNER: We might not get to you, Gerry.

**Mr WOOD:** You will, because you said you would be three quarters of an hour. Do you want me to ask a couple to break it?

Mr CHAIRMAN: Do it now.

**Mr WOOD:** These ones might be taken on notice. Mr Macrides, the annual report you spoke about completed the 1000 mm water transmission pipeline to Palmerston. Are you able to give us the original cost, what the tender price was, and the price was when it was finished? Do you want it on notice?

**Mr MACRIDES:** If you could just bear with me for a few minutes. We will have to take that on notice, Mr Wood.

Mr CHAIRMAN: Could you repeat that again?

**Question on Notice No 10.2** 

**Mr WOOD:** For the 1000 ML water transmission pipeline to Palmerston, what was the original estimated cost, what was the tender price, what was the final price when it had finished, and were there any extra payments required?

Mr CHAIRMAN: That is question is No 10.2.

**Mr WOOD:** Another question is in relation to two letters I received regarding the extension of water in the rural area. In July 2008, there was a quote from Power and Water Corporation to people living on Mahaffey Road and Girraween Road, that for 28 benefiting property owners, Power and Water would connect water at \$17 311 per lot.

Less than two years later, there was a letter sent out to people on McLeod and Whitewood Roads for the same size pipe, saying that similar works for 58 benefiting property owners would equate to \$38 000 per lot. Could you explain why the cost of putting a water main on two streets in the rural area with the same size pipe has doubled within two years?

Mr HEATON: Paul Heaton, General Manager Water Services.

Mr MACRIDES: Do you have an explanation, Paul, or do you want to take it on notice?

**Mr HEATON:** We would have to take it on notice for actual detail but, in general terms - and as I say, I do not know the details of both those streets or properties - those cost estimates would depend on the actual work that is, obviously, required to be done. The total couple is then averaged over all the benefiting landholders who want to participate in that. There may be already existing landholders in the area who have their own independent supply; they are not interested in connecting up, or may already be on part of the reticulation system. Also, in those extensions, there may be a greater length of pipe required to, if you like, connect into the existing reticulation at both ends. There will be, necessarily, depending on the infrastructure in that area, a great variation of the cost. But for those actual costs, we would have to go back and get details.

**Mr WOOD:** If you could. I suppose the general question would be, because you are asking people would they like to connect, do you think that kind of figure - \$38 000 - is going to attract anyone? I could put two bores down for that amount, probably with a bit of change. Do you think you really are seriously going to get people to connect to town water for that sort of price?

**Mr HEATON:** Well, unfortunately, that is not our decision. The policy is that the actual costs of the infrastructure is borne by the landholders who benefit from it. We simply provide the information, do the calculations for the infrastructure required to connect them up, and provide that to the customers for their consideration.

Mr CHAIRMAN: Is there an aspect of that question that you want put on notice, member for Nelson?

### **Question on Notice No 10.3**

**Mr WOOD:** Yes, I ask Power and Water Corporation could they please explain the difference between the cost of putting a 150 ML water pipe along Mahaffey Road, compared with the same size pipe along McLeod and Whitewood Road, Howard Springs?

Mr CHAIRMAN: That is question No 10.3.

Mr WOOD: The other specific question relates to ...

Mr CHAIRMAN: Sorry. Did you need that material tabled?

**Members** interjecting.

**Mr WOOD:** The letter is from Power and Water so, hopefully, they have a good filing system like me. The other one is a letter in relation to a customer. You probably all know her, she lives in Dundee Beach. It says that there was Stage 2 of an electricity connection in that area. Some people paid \$7812 and other people paid \$7000 on the same street. Can someone give us an explanation of why there is a difference?

**Mr BIRK:** Bertram Birk, General Manager Power Networks. With respect to extending the electricity reticulation, it is similar to water. Being a regulated business, we have modelling we undertake and, once again, dependent on the number of houses and the people who will benefit, there is a simple model which is approved by the Utilities Commissioner, which gives a dollar cost per lot, and they will vary on each occasion.

**Mr WOOD:** Okay. If I was able to attain the specifics of the blocks of lands, or the roads that were actually given this price, would I be able to give them to you, and you could say, well, these are the reasons why these ones are dearer than those ones?

**Mr BIRK:** I think that particular letter you are referring to, we have already responded to that, and we are quite happy to give you a copy of the original response with all that data in it, if you wish.

Mr WOOD: Okay, if that is possible. Do you want that as a question, I will just rely on you to ...

**Mr CHAIRMAN:** Well, because we do not want to release the personal detail, we would rather take that as a question on notice.

Mr WOOD: No. Power and Water know who ...

**Mr BIRK:** We do, we know the resident, and we are happy to provide them with our response. I will undertake to provide that information to you.

**Mr WOOD:** All right. The other one relates to, it may be a utilities question, but it relates to the monopoly you have over water lines. It relates to a resident of Humpty Doo, who has a subdivision of land, who would like to distribute water to those people within that subdivision, because he is nowhere near the town supply. I suppose my question is, why cannot that person set up a system where he supplies the water to those people?

**Mr HEATON:** Paul Heaton, General Manager, Water Services. Basically, the supply of water and electricity as essential services, are regulated industries, are controlled by the Utilities Commissioner.

We work within that framework. Essentially, the framework stipulates that, within a designated licence area, Power and Water is the only licensee who can supply water for drinking water supply for public purposes within that area. There are a number of examples of, obviously, private water suppliers. We obviously do not supply water to the mining towns. There is the Southport community-based water supply, it is a private water supply. There are roadhouses, etcetera that have, cattle stations all have private water supplies.

In terms of the particular subdivision and the arrangements there, again, those arrangements as to whether land can be turned off and the water supply arrangements within that land, and including sewerage arrangements, where there are septic tanks or reticulated sewerage, they are not directly controlled by Power and Water, we are a respondent to, obviously, the Development Consent Authority, Department of Health is, Lands and Planning are, so there is a range of government departments involved in selecting what is appropriate in terms of providing public water supply and/or sewerage services.

Mr WOOD: Are you saying Southport is outside your area?

**Mr HEATON:** Southport is a private water supply.

**Mr WOOD:** Yes, but that is a government supply, the government put the bore and the tank in, and they supply water to the community, so who is responsible for that bore and tank at Southport?

Mr HEATON: The Southport Progress Association, or whatever they call themselves ...

**Mr WOOD:** But are they not then breaking your monopoly?

Mr HEATON: No, because they are a community-based private water supplier system.

**Mr WOOD:** Well, why cannot this gentleman who cannot get connected to your town supply put in a private water system for these subdivisions?

Mr HEATON: He could do that?

**Mr WOOD:** But the information he has got, there are issues about that. All right. Well, we will not solve that today, but I am glad that you have said that he can do it, and I will follow that up.

**Mr HEATON:** The question is clearly, though, that he has to get approval to do that. He cannot do that on a commercial basis as a private public water supplier provider, because he lives in our licence area. But it is a different situation to the Southport water supply system, which is a community-based, funded and operated system.

**Mr WOOD:** All right. I will go to a larger question. It is about leases on Aboriginal land for infrastructure. My question is: how far advanced is Power and Water, and I am including Indigenous Essential Services, in upgrading leases, or developing leases, for all your generating equipment, bores, your sewerage bonds, your power lines and water lines, where is that at this stage?

**Mr STRANGE:** Kelvin Strange, General Counsel. I guess the answer to the question about arrangements for leases under the various arrangements going on in both with federal and the state, the Northern Territory government, is that we are part of whatever is being discussed at a greater level. Power and Water in the remote areas is particularly interested in trying to normalise whether its licences, easements or leases for our own infrastructure. In town leases, we are very interested to make sure we get the proper access rights to protect our infrastructure. We can only move that along as fast as the big picture is going. So we are sitting around the table and when we are asked to be involved in negotiations we are putting forth what our requirements are.

Mr WOOD: Are you involved in the growth towns discussion.

Mr STRANGE: Not directly myself, no. I am, unfortunately, just legal and I do the words in the leases.

Mr WOOD: Have you any idea how much costs you will have to incur in ...

Mr CHAIRMAN: Did you want to add further to that answer?

**Mr DAY:** Power and Water looks after the central service of the growth town so we are part of the process of establishing leases in the growth towns.

**Mr WOOD:** Are you looking at having to cost in some extra expenses in relation to having to pay for those leases?

**Mr STRANGE**: I am not sure quite what you are asking Mr Wood. Are you asking whether the consideration payable as per lease payments and license payments directly, or additional indirect costs to support the infrastructure?

**Mr WOOD:** Well I do not know whether you are going to be asked and I am not sure I want to get into a philosophical argument but if you get a lease for your power station, do you think you are going to have to pay a lease payment to the Office of Township Leasing and will you be calculating those costs into a future budget?

**Mr STRANGE**: I might be able to answer the first one, the second one I might hand over to someone either on my right or left. I am aware that there have been discussions by the Department of Justice in relation to these wider issues with the Office of Township Leasing, and whether there be any consideration payable. We, of course, prefer not to but I think at the end of the day we would abide with the wider outcome on the negotiations.

**Mr WOOD:** In relation to outstations, the question came up the other day; in fact you already know about the Ranku situation, but what seems complicated with outstations is that you do not control the power and water on those outstations. Is that correct?

**Mr DAY:** Member for Nelson, that is correct there is an IS appropriation that relates to the 72 communities of which there is a number of growth towns within that. The funding for outstations and homelands is a separate program that is administered by the Department of Housing, Local Government and Regional Services. Power and Water has assisted in some of those outstations on a case by case basis but we do not have a program responsibility.

**Mr WOOD:** Do you have Essential Service officers working on a council that you paid for, is that correct? I was going to say because if they are do they work on those non-power and water facilities?

**Mr DAY:** Yes, for the 72 larger communities we have Essential Service operations agreements that service each of those locations. Those officers may work full time or part time. I think there are approximately 130 people involved and employed through shire councils, Aboriginal organisations and private contractors. Some of them may be involved in outstations but that is a separate arrangement between the recipient of outstation resource and funding, so that maybe an outstation resource centre that uses the same essential service operator. In the case of central Australian shire councils, they actually have funding they receive directly from the Department of Housing, Local Government and Regional Services to support some of the outstations.

**Mr WOOD:** Another broad question: you did some trials on tidal power on the Apsley Strait with Charles Darwin University. I remember years ago their were trials, so I was interested to know where these trials lead us because we have been a long time waiting.

**Mr HORMAN:** Mr Wood, Power and Water did sponsor five years of research by NT University, as it was then, in the Apsley Strait tidal project. Much was learnt from the project, but a number of issues arose such as marine growth in tropical sea waters, and logs that were floating through the water. The project did not prove to be a viable opportunity at that stage. In the meantime, there have been other proposals for tidal power, and they are being explored at the moment

**Mr WOOD:** I was going on what was in your annual report. That is referring to the old trial, not something new. Do you have any input into the possible Tenax Energy proposal to Clarence Strait?

**Mr HORMAN:** Yes, we are in discussion with Tenax, and they are working through EIS at the moment.

**Mr WOOD:** Another question on Darwin Harbour which would be fairly appropriate at the moment. Charles Darwin University, in conjunction with you, have been doing hydrodynamic modelling for nutrients in the harbour. Has that been useful in the recent debate about who is to blame for what regarding E. coli outbreaks?

**Mr MACRIDES:** My understanding of their modelling has not been in relation to nutrients in the harbour. I will ask Paul Heaton to clarify exactly what CDU has been doing on our behalf

**Mr HEATON:** Paul Heaton, General Manager, Water Services. The managing director is correct, the modelling we were doing in conjunction with Charles Darwin University was to understand the dispersion characteristics of our discharge points into the harbour. It was not aimed at nutrient modelling in the harbour; it was simply there on a particular basis to understand where our discharges are, and how far they move, and in what sort of concentrations they would move.

**Mr WOOD:** I was reading from your own report that says: 'use hydrodynamic modelling to track nutrients from the discharges'. I was quoting what was in your report.

**Mr HEATON:** It was not a model on nutrients in Darwin harbour; it was a model to track particles that come out of our discharge points, and how far they move, and what dispersion characteristics they have. It was not a harbour-wide model of the nutrient dynamics.

**Mr WOOD:** In relation to alternative powers, what is the outcome of the bio-diesel trials in Daly Waters? Was that an old trial?

**Mr HORMAN:** Yes, we trialled a burn of 60 000 litres of V100 bio-diesel through Daly Waters power station. The engine was stripped down when it was finished; there was no damage to the engine. We would be interested in burning further bio-diesel if supplies were available. That is the problem at the moment.

**Mr TOLLNER:** I have been meaning to jump in somewhere... One of the issues we face, although it does not receive much media attention, along with a residential land shortage or housing crisis, there is and even more acute problem in relation to industrial land for development. I asked the Essential Services minister a question before lunch in relation to that, and what proposals his department is aware of regarding land release. He has tabled a document, and I am more than happy to hand it over, but I do not think it is material to this question, however it outlines 254 lots that are available or being proposed. 108 of those lots, a little less than half of them, are contained in one subdivision, and that is the Wishart Business Precinct. It is a significant development as far as the industry and business community are concerned in the Territory.

One of the concerns that has arisen with that proposal has been aired by Power and Water in relation to DN375 water main. Can you tell me who is paying for that water main? Actually there are two water mains. There is DN300 and DN375. Who is paying for DN300 and who is paying for DN375?

Mr MACRIDES: I am not familiar with the particular water mains that you are referring to but, in

general, if I could just talk about the ...

**Mr TOLLNER:** For your illumination, DN300 is the connection to Woodlake Boulevard in Palmerston and that relates to Stage 1 of the development. DN375 is the water pipe that connects to the back of Palmerston. It is the second.

Mr MACRIDES: I assume you are reading off their development proposal, are you?

Mr TOLLNER: I have a series of letters, e-mails, and meeting minutes and the like.

**Mr MACRIDES:** In regard to that, I will just talk about the development process in general, then I can actually talk about that development in particular. In all cases of development, the developer is, generally, responsible for the utilities infrastructure associated with their development.

Mr TOLLNER: That is correct.

**Mr MACRIDES:** If they are putting in a development, there are various elements of cost associated with that infrastructure. First is the infrastructure requirement to service their individual development, and the second element, then, is the upsizing of any of the main supply points coming into the development.

If there is not sufficient capacity in the main supply points coming into their development, whether it be electricity, water or sewerage, the developer is also up for a component of upgrading those systems to provide their development.

In the case of this particular development, the development is a large development; it is light industrial. Water supply is dependent upon two factors, one is the actual water requirements - the flow requirements - for the development itself. The second element is, obviously, firefighting requirements for the development itself.

There is a complicated model that clever engineers do to work out what the water requirements are, based on what is happening on the development. That, then, gives rise to who pays for what elements of the infrastructure upgrades.

In the case of this particular development, all the discussions that are being held with developer - I must admit I have been involved in a couple of those discussions as well – have been associated with we cannot have a single point of water supply into a development of this size because, if there is a failure of that single point of water supply into a development of that size, you have huge problems, not only in terms of, obviously, the normal water supply to the people who have bought properties within that development itself, but also light industrial; there is a firefighting element associated with it. With most developments, we always insist upon dual points of water supply for those very reasons.

In a case like this, what we have said to the developer is we are happy for parts of their development to proceed based on a single point of supply but, when they come to developing the second and third phases of their development, they will have to put the second point of supply in. If they do not put the second point of supply in, we will not support their development application before the Development Consent Authority.

**Mr TOLLNER:** So, you have the power of veto on a development application if they do not satisfy your requirements?

Mr MACRIDES: Well, that is your choice of words.

**Mr TOLLNER:** Well, you might want to explain it differently.

**Mr MACRIDES:** Okay. The bottom line here is we have a requirement associated with the need to provide water, sewerage and electricity to these developments based on our standards. If they do not meet our standards, well then, yes, we have the right to go back to the Development Consent Authority and say this does not meet our standard.

**Mr TOLLNER:** Okay. In relation to this particular water main, there is an existing water main, and I have just been advised that DN375 and DN300 are actually diameters of pipe.

Mr MACRIDES: Yes.

**Mr TOLLNER:** It shows you what a Philistine I am with this sort of stuff. I understand that there is a DN375 pipeline, which is the larger diameter pipeline that already exists and terminates adjacent to that precinct. The other thing I understand is that Power and Water would very much like to have a security of supply of water to Palmerston, hence the need to build a second pipeline to Palmerston.

**Mr MACRIDES:** Power and Water has already secured, I guess, the requirements of Palmerston's water needs by virtue of the ring main that we have put into Palmerston, which was the question that the member for Nelson asked us previously about the costs associated with that ring main. The water supply is coming from one direction, which is obviously from Darwin River Dam back into Palmerston. That is secured.

Mr TOLLNER: Yes.

**Mr MACRIDES:** The supply around Palmerston is secured by the fact that we have put a ring main supply system in, so you can lose half of the system, and you can feed the part that is lost with the other half of the system.

**Mr TOLLNER:** Okay, well given there is a pipeline that already exists that runs to this development, what is the need for an extra pipeline?

**Mr MACRIDES:** We are not saying there is a need, sorry, we have said to the developer, they can connect up to that pipeline, okay?

Mr TOLLNER: Yes.

**Mr MACRIDES:** That is part of the first phase of their development, and we are happy with that connection point for the first phase of their development. However, when they want to then add on to the development, because they are adding significantly more loading on the system, you need multiple points of supply into the development, because if you lose that one point of supply, there is nothing else.

**Mr TOLLNER:** So what you are saying is that the supply can come back from Darwin, or go into it from Palmerston?

Mr MACRIDES: Correct.

Mr TOLLNER: That is the way you want to see it.

**Mr MACRIDES:** That is exactly what we are saying. We need a second point of supply to come in, so that if you lose the single point of supply, there is redundancy in the system, there is a second point of supply coming in. So the second point of supply would be back from Darwin side, along Wishart Road. If you take this one step further, the reason why this is such an issue for an organisation like Power and Water is that, if we said go ahead, build your 300 blocks, or however many there are being built in this development, and we will have one point of supply; that point of supply fails and there is a fire in there, and assets, people's properties get burnt, people themselves, you know, sort of lives get

lost or whatever, who do you think is going to get the finger pointed at them?

Mr TOLLNER: Okay. How many ...

**Mr WESTRA van HOLTHE:** How much of Darwin and Palmerston has a built-in redundancy like you are describing?

Mr MACRIDES: In terms of water supply?

Mr WESTRA van HOLTHE: Yes.

**Mr MACRIDES:** Almost everywhere, and that is the very reason why we continually upgrade supply systems into areas. You will see that we are doing work along the Esplanade here in Darwin, and the reason we are doing that is to break the city up into several zones so that, again, we have got a redundancy built into the city supply. We have just done it at Palmerston, and we do it wherever growth occurs and we need to reroute the system to provide redundancy into the system.

**Mr TOLLNER:** All right. Well, if that is the case, why have you asked the developers in this case, told them that they are not required to do anything in relation to stage 1, because there is an existing pipeline there, but as far as the next two stages are concerned, they have to put in a completely new pipeline between Darwin and Palmerston?

**Mr MACRIDES:** I am not sure what else I can say other than what I have said already. We have taken a risk approach ...

Mr TOLLNER: Yes.

**Mr MACRIDES:** ... and we have said, look, we are prepared to live with the risk for the first phase of this development, because the number of lots that are being turned off are relatively small in the first phase of the development.

Mr TOLLNER: There are 39 lots in the first stage, yes.

**Mr MACRIDES:** And we have said we are okay with that. I have to say I thought we also put a caveat on our approval for that first phase of the process which was they were required to connect the second pipe within a reasonable period of time and, we, I think, defined a reasonable period of time as being two or three years, I cannot recall which. So, we took a risk and allowed the first phase to proceed, but on the basis that we actually have a qualification in that development approval which said you have to build the second phase of this pipeline within a reasonable period of time, even if you only proceeded with those first 39 blocks.

**Mr TOLLNER:** But the point is, I suppose, you are after a certainty of supply, why would not the developer just build a piece of pipeline that connects the existing pipeline to another point of access?

**Mr MACRIDES:** There is no other point of access, that is the point. There are two points of access: one is the Palmerston side, which is the one we have allowed it to connect up to, so they built a bit of pipeline to connect into that point; the second point of access is the Darwin side.

Mr TOLLNER: So they have to build that pipeline to Darwin?

**Mr MACRIDES:** No, there is actually a pipeline that runs down Berrimah Road and they have to connect into that pipeline down Berrimah Road. Is that correct, Paul? It comes to the start of Wishart Road.

Mr TOLLNER: I have in front of me some advice provided by engineering consultants to the

developer. It says that the associated costs, as far as 2009 is concerned, in 2009 dollars, the cost of provision of the DN300 connection to Woodlake Boulevard, as required for subdivision, is \$1.1m. I understand that cost is being met by Power and Water. 26 October a letter from Power Water Corporation, Paul Heaton, confirmed that the completion of the water main loop was not a requirement for Stage 1 of the Wishart development. However, the letter also confirms that PWC will not approve a permit or permit any subsequent stages to proceed without the construction of the extension of the DN375 to Woodlake Boulevard; that extension is estimated to cost somewhere around \$2.6m.

The concern of the developer he says, from what I can gather, is that there is no benefit for this. He says that he has already had to excise off a significant amount of land, about 1000 square metres for the easement that Power and Water required; it had an estimated land value of about \$300 in lost land sales revenue, and I think the question the developers are asking themselves at the moment is: what is the point of even doing the development if they are going to have build infrastructure for Power and Water? \$2.6m is not an insignificant amount of money for anyone.

**Mr MACRIDES:** Can I just clarify that? I mean, they are not building infrastructure for Power and Water, they are building infrastructure for their development. Now in relation ...

**Mr TOLLNER:** ...Well, they have already got water at their development.

**Mr MACRIDES:** ... they have got water at their development, and there is always a water component to any development, and they are proposing to turn off a significant number of lots and they require multiple points of entry into it. That is a fact of life.

The comment about the easement, again, this particular parcel of land along Wishart Road, there is a 132 volt transmission line that goes through there, so the area they have excised from their development is the area where the transmission line sits. So, they bought this land knowing that there was this infrastructure on there that required an easement over it. I cannot comment on the developer's commercial thinking in terms of turning its land off, but this requirement for multiple points of supply into a development like this, keeping in mind it is an industrial development, is normal. Every developer who comes in and does a development of this size, has the same requirement of them.

**Mr TOLLNER:** Well, I do not know whether that is actually the case, Mr Macrides, I mean, if you are saying that you have to develop something on your land or do something on your land, that would be fine. But from an outsider's point of view, it certainly looks like a case of PWC extorting money from developers for things they should really be meeting the cost of themselves. That is how it looks; I have to be honest with you

**Mr MACRIDES:** I guess my response to that is we have just had this discussion about the corporation's financial sustainability. This business is a commercial business. We do business as a commercial operation. If government wants us to be a provider of these services to commercial developers making profit out of their developments, that is a totally different structure to what we operate under at the moment. This particular pipeline, for example, why would Power and Water invest in this pipeline? It has no purpose in providing anything to Power and Water. It is there solely for this development.

Mr TOLLNER: If the developer builds the pipeline, will the developer own the pipeline?

Mr MACRIDES: The pipeline is gifted to Power and Water

Mr TOLLNER: It is gifted to Power and Water? It sounds like extortion

**Mr MACRIDES:** The other side of the equation, member for Fong Lim, is the fact it is gifted to Power and Water. Power and Water then has the ongoing obligation to maintain and service that pipeline.

**Mr TOLLNER:** Yes, that is right. It is \$2.6m gift to Power and Water. If they do not give you that gift, you will not let this development go ahead, and our industrial land crisis escalates. It does not bother you, you are just Power and Water

Mr MACRIDES: You are putting words in my mouth. That is not what I said at all, I said ...

Mr CHAIRMAN: Member for Fong Lim, Mr Macrides has the opportunity to respond.

**Mr MACRIDES:** ... we have a set of rules we follow; they are the same set of rules which apply to all developers, and this developer is no different.

**Mr TOLLNER:** I do not know about that. It seems to me you guys have got the gun to the head of the developer saying: 'You will do this', at significant cost to the developer. The developer cannot own the pipeline, cannot maintain, service the pipeline, anything like that; cannot make any money off the pipeline, and if you do not get your pipeline built and gifted to you, you are not going to approve plans for a significant industrial estate between Darwin and Palmerston. That is the way it looks on the surface.

Mr CHAIRMAN: Mr Macrides has the call.

**Mr WOOD:** Member for Fong Lim, without trying to butt in too much, whether I agree or not, it applies to all subdivisions in the rural area. I would not be wanting one person getting a favour other developers do not get ...

Mr CHAIRMAN: Mr Macrides, would you like an opportunity to comment?

Mr MACRIDES: The only comment I was going to make was - it has gone straight out of my mind.

**Mr TOLLNER:** Let me put it to you another way, Mr Macrides. If you built this pipeline yourself, could you not recoup the costs of construction through water charges?

Mr MACRIDES: That is part of the cost ...

Mr TOLLNER: Are you seriously shaking your head there saying you could not?

**Mr MACRIDES:** Part of the modelling in relation to cost of these types of infrastructure takes into account the revenue we gain from this infrastructure over the life of the infrastructure. The other thing we do, where we know there a multiple developments occurring, we share the cost amongst developers.

Mr TOLLNER: Have you offered to share any costs here?

Mr MACRIDES: Absolutely, there was one or two.

**Mr HEATON:** There is one other developer on the other side of the road, and there has been a development contribution plan based on capacity for both water and sewerage infrastructure.

**Mr TOLLNER:** What happens if someone else wants to tap into it? Do they get a rebate for the contributions they have made previously?

**Mr HEATON:** If there is developable land, we take all of that into account. If there developable land and there is no proposal at this stage, Power and Water will often foot that additional capital cost to service that land and seek to recoup those costs in the future when that land is developed.

**Mr TOLLNER:** Like I say, sounds like extortion to me, but we will leave it there for the time being. I think the chair wants to have a quick break.

Mr CHAIRMAN: We will take a five minute break, and there will be a change of Chair on return.

The committee suspended

**Madam DEPUTY CHAIR:** Let us recommence, thank you. Mr Macrides, you have advised that you have got some answers to some questions on notice.

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#### **Answer to Question on Notice No 10.2**

**Mr MACRIDES:** Thank you, Madam Deputy Chair. Mr Wood, there was a question on notice, which I put down as No 10.2, which was a question regarding the Palmerston pipeline ring main that has been put in. The Palmerston ring main, which was from Lambrick Avenue to Temple Terrace, the original capital ...

**Mr WOOD:** Could I just check, that does not include from McMinns to Temple Terrace, were there two contracts?

**Mr HEATON:** The pipeline was from Lambrick to Temple Terrace that we constructed – that was the only contract that was put in place – it connected on to an existing pipe from McMinns up to Lambrick Terrace.

**Mr WOOD:** who dug that almighty big trench from McMinns to Temple Terrace along the old railway easement?

Mr HEATON: From McMinns to Temple Terrace?

Mr WOOD: Just on the other side of Howard Springs Road to Temple Terrace.

Mr MACRIDES: Yes, that was this, that was the connection point into the McMinn's pipeline.

**Mr WOOD:** Your description does not quite match where it started from. That is what confused me. It is nearly from Whitewood Road.

Mr MACRIDES: Sure. Okay.

**Madam DEPUTY CHAIR:** This is the answer to question on notice No 10.2.

## **Answer to Question on Notice No 10.2**

**Mr MACRIDES:** It is question on notice No 10.2. The original estimate which was done some 10 years ago, in fact, was \$7.5m and, because it has been on the planning stage for quite some time, tenders were called and tenders came in at \$8.4m. The final cost was \$9m and, I would imagine the \$600 000 difference between the tender and the final price, was some variations that occurred during the course of the construction process.

**Mr WOOD:** Who approves the variation to be put in?

**Mr MACRIDES:** There is a multiple set of gateways within the organisation for variations to contracts, so we have something called a Business Review Committee which is made up of procurement people and the senior management team that review any variation that occurs and, ultimately, depending on the size of the variation, general mangers may have the delegation sign off, or I might sign off on it depending on how large it is, or, it may go to the Board for the Board to consider, depending on how large it is.

**Mr WOOD:** Does someone make a decision as to whether it was a design fault or whether the contractor actually did not realise there was three tonne of granite below the surface; who actually decides that someone should wear it?

**Mr MACRIDES:** There are some fixed price contracts, and there are obviously some contracts that have you know a schedule of rates associated with them. I do not know the details of this particular contract, but I would suggest it was probably a fixed price contract, but there would have been some caveats on the fixed price, depending on certain risks associated with the nature of the job itself, one of which may have been the structure of the area being dug up.

Part of it may be the fact that we have asked for some changes to the work that has been done as a result of things we have observed as the construction has occurred. These things are designed by experts, but when you actually get out in the field and start doing the work, things that looked same on paper in an office environment are not always what you can front out there and when you are doing it?

So, a \$600 000 variation on a contract of this size is not that significant.

Mr TOLLNER: Who did you get to pay the bill?

Mr MACRIDES: Sorry?

Mr TOLLNER: The \$9m.

Mr MACRIDES: What do you mean who did you get to pay the bill?

**Mr TOLLNER:** It must have been going somewhere this pipeline. Who paid the bill for that infrastructure?

**Mr MACRIDES:** This is a Power and Water project and it gets to the question that the member for Katherine asked earlier on, which is the issue about redundancy built into the system. This was redundancy built into the Palmerston system by Power and Water.

**Mr TOLLNER:** There is no developer around you could hit for that then?

Mr MACRIDES: Correct.

**Mr TOLLNER:** What about the Coolalinga development, who is paying for the connection of water out there?

**Mr MACRIDES:** Ultimately, the developer will pay for that as well.

**Mr TOLLNER:** Where do they have to connect to? Are there places they can connect to your mains, or do they have to connect to ...

Mr MACRIDES: Depends where the development is, and it depends on the nature of the

development and the closest connection points.

Mr WOOD: He is surrounded by water pipes. He has four to five to the post office.

Mr MACRIDES: There you go.

**Ms KING:** Madam Chair, if I might comment to the member for Nelson that variations are not a popular item on the Board agenda, and when there are variations of scale that come to the Board they are always accompanied by very detailed explanations for why the variations have occurred and, at the other end at the front end of the process, there is a Board sub-committee that looks at the business cases attached to particular projects. There is fairly rigorous control at either end, but it is nature of the business that there are variations because of the reasons that Andrew has explained.

**Mr WOOD:** Does the board have any say if they felt a variation was not appropriate, and can they block that?

**Mr MACRIDES:** There have certainly been times when the board have grilled the management team about the appropriateness of variations proposed and the management team has been able to satisfy the board; in some cases it has been reluctant satisfaction. There have been other times it has been: 'Yes, we understand'.

**Mr TOLLNER:** With respect to the timing of delivery of gas to the Weddell power plant, what were those contractual arrangements, and who was contracted to do what?

**Mr MACRIDES:** Could I ask you to be more specific with the question? Are you talking about off specification early gas, or are you talking about normal gas supply?

**Mr TOLLNER:** I am talking about the total program. We will get to early off specification gas shortly, but I am trying to work out the arrangements, and who was responsible for what?

**Mr MACRIDES:** In the construction of a major project like a new power station on a greenfield site there are various components to the project. One component, at the end of the day, is gas supply to the generation site itself. There is supply within the boundary of the power station itself, and there is the connection to a gas supply system outside the boundary. We tend to use the existing pipeliner and seek quotes from them to put supply to a major power station. The pipelines in the Territory are predominantly owned by APA, and in the case of Weddell we would have asked APA for a price for a connection to the power station itself, and APA at the end of the day, owns and maintains that asset.

Mr TOLLNER: Out of interest, do they own the Darwin to Alice pipeline as well?

**Mr MACRIDES:** It is a bit more complicated. The Darwin to Alice pipeline was constructed under a leveraged lease arrangement in 1985. At the moment, the pipeline is owned by a group of banks. It is maintained and run by NT Gas, which is a subsidiary of APA, and under the terms of the original leveraged lease arrangement, APA have first right to purchase this pipeline when the lease expires.

**Mr TOLLNER:** We might come back to that somewhere down the track.

**Mr WOOD:** Could I ask two questions off that?

Mr TOLLNER: In relation to the Alice/Darwin pipeline?

**Mr WOOD:** In relation to gas. There were two recommendations we asked Power and Water about, and I could get a response on them while you are on that section.

Mr TOLLNER: You ask the question, Gerry, you seem to know what you are talking about.

**Mr WOOD:** Andrew, there were two recommendations from the CTC's first report. One was Power and Water send the CTC, at its earliest convenience, the results of the Power and Water Corporation and NT Gas investigation into events leading up to, and on the day, NT Gas stopped supply to the Weddell Power Station. The second recommendation was the final report from the discussions between NT Gas, APA Group, PWC, Worley Parsons, the regulator and ENI which identified risks and recommendations on the release of the EOSG be released to the CTC. Is any of that available?

Mr TOLLNER: I actually had that sitting right here ...

Madam DEPUTY CHAIR: Member for Fong Lim, if you can let Mr Macrides answer that question.

**Mr MACRIDES:** I am not going to pre-empt what the government response will be to the second CTC report, but we have advised government we are more than comfortable to make both of those documents available. We have also suggested it might be possible to do that by the end of this month.

Mr WOOD: Okay, thank you.

Mr TOLLNER: You cannot do that today? You cannot table them here?

Mr MACRIDES: No.

Mr TOLLNER: Why is that?

**Mr MACRIDES:** A number of reasons. I guess you could say that it is recommendations from the Council of Territory Cooperation I am responding to. I have advised government we are happy to provide that information by the end of the month. The reason why I cannot provide it now, is (1) I do not have it with me, and (2) there are other parties involved that we are discussing the release of this information with.

Mr WOOD: Thank you.

**Mr TOLLNER:** Can you tell me whether you guys made any recommendations to the minister, to sign off on the plan to allow early off-specification gas to be sent through the pipeline?

**Mr MACRIDES:** Yes, I heard you ask that question at the start of the process. The answer is no. The Minister for Essential Services is not involved in these decisions. That is the role of the Power and Water Board. Any recommendations ...

Mr TOLLNER: Ah, so, he never even signed off on that?

**Mr MACRIDES:** There was no requirement for him to sign off on it. Under legislation, Power and Water is a government-owned corporation with an independent board of directors, and that independent board of directors makes these strategic decisions. That decision went to the Power and Water Board which signed off on it.

Mr WESTRA VAN HOLTHE: So, the board agreed to take the early gas?

Mr MACRIDES: Correct.

Mr WESTRA van HOLTHE: Is the minister on the board?

Mr MACRIDES: The minister is not on the board.

Mr WESTRA van HOLTHE: Just checking.

Mr TOLLNER: The Treasurer owns him!

Mr CHAIRMAN: The chairman indicated the board members ...

**Mr TOLLNER:** Obviously, Power and Water and NT Gas have conducted, I would imagine, major and extensive investigations into the events that led up to, and on the day, that NT Gas stopped supply to the Weddell Power Station? Are any of the findings of those investigations can be made public?

**Mr MACRIDES:** That is the report that Mr Wood asked to be provided back to the Council for Territory Cooperation. Both Power and Water and NT Gas have appeared before the Council for Territory Cooperation where they held a specific inquiry into this particular issue. The request for the report is one of the recommendations that has come out of this inquiry. That was the report I indicated would be provided back to the CTC by the end of this month.

**Mr WOOD:** Let me know when you have a big gap.

**Mr TOLLNER:** No. In relation to the investment government committed to Power and Water of over \$100m to replace the burned-out gas turbines, did you look to partner with a third party competitor? Are you aware whether the government looked at a third party competitor, besides Power and Water, in that regard?

**Mr MACRIDES:** Sorry, I am not actually sure what the question is, member for Fong Lim. Are you referring to the midlife refurbishment of the sets out at Channel Island?

Mr TOLLNER: That is exactly what I am referring to.

**Mr MACRIDES:** Okay. The midlife refurbishment in relation to those sets - and I go back a step. The Channel Island Power Station was constructed in 1985. When it was originally constructed, there were six units out at Channel Island which, brilliantly, are called Sets 1 to 6. Those six sets out there are now 25 years old and, as a result of them being 25 years old, they are now at the stage where they require midlife refurbishment.

Midlife refurbishment, basically, is the process of stripping the engines down, fine-tuning them like you would with a motor vehicle, replacing bits and pieces on them. It extends the life of the engines by at least 15 years. These six sets are around about, in total, probably 180 MW. If I wanted to replace 180 MW of supply, I would be looking at least \$180m-plus to do that. So, the midlife refurbishment is the cheaper option for extending the life of these units.

In partnering, clearly, Power and Water has expertise in-house to do some of the work, but a lot of the work will be done for us by partners. Does that answer the question, member for Fong Limb?

Mr TOLLNER: Yes, it does and probably I am on the wrong track myself. I am trying ...

**Ms KING:** I wonder if I could just add too, Madam Deputy Chair, one of the things that has become evident over the last couple of years, as the investigations and the rigorous look at the plant and equipment, is that the light that is projected by the manufacturers of these generators and other equipment is not as long as they expect it to be in the climatic conditions we have got, and so a revision of our expected life of the plant is something that is very much part of the current processes.

**Mr TOLLNER:** Okay. I want to get on to the generator that blew up at the Weddell Power Station. I think there is some speculation as to whether that blew up because of some of the non-specification gas that was being pumped into it, and other substances, or whether it was a design fault. Firstly

though, can you just tell me, what is the cap that applies to ENI on liquidated damages?

Mr MACRIDES: We are talking about different issues here, the ENI liquidated damages ...

**Mr TOLLNER:** They are the ones who supplied the non-specification gas that, you know, and you guys have been running diesel and the like, and they have to meet the big costs ...

Mr MACRIDES: The price of the correction.

Mr TOLLNER: Yes. And there is a cap on those costs ...

**Mr MACRIDES:** But that has got nothing to do, though, with the damage associated with the engine, it is a totally different issue ...

Mr TOLLNER: All right, totally different. So, in relation to the cap on the ...

**Mr MACRIDES:** Look, I have indicated previously that is commercial-in-confidence. I have made that information available, on a confidential basis, in a closed session with the Council of Territory Cooperation, so the shadow minister for Essential Services has that information. I am not prepared, obviously, to indicate what is in an open session like this.

Mr TOLLNER: Can you just explain why it is commercial-in-confidence?

**Mr MACRIDES:** Because it is a commercial contract, and all commercial contracts have elements to them that are commercial-in-confidence, and price is one, the contractual terms are another, and so the LD cap is clearly one of the most commercial terms and, under contracts, there are two parties to a contract and, you know, you have an obligation to the other contracting party in relation to keeping confidential in terms of these contracts.

Mr TOLLNER: Can you say whether or not ENI I have reached that cap?

**Mr MACRIDES:** No, they have not reached the cap.

**Mr TOLLNER:** They have not. Do you expect that they will reach the cap, or they will just continue to pay the damages?

**Mr MACRIDES:** Well, the cap relates to the delays and the delivery of gas from ENI's Blacktip plant. That no longer is an issue. Since January, they have been providing us with our gas requirements from their plant in accordance with their contractual terms under the agreement, so there has been no need for us to seek recourse to the LD's component of the contract, because they are not in breach of that element of the contract.

**Mr TOLLNER:** Do you want to ask any questions on the stuff to do with ENI before we move on to the generator that blew up?

**Mr MILLS:** Mr Macrides, could you describe the back-up arrangements if Blacktip does go down again?

Mr MACRIDES: Prior to us taking gas from Blacktip, we had a single source of gas supply, and that was the Amadeus Fields out of Central Australia. The only other alternative Power and Water had in the event of failure of the supply out of the Amadeus Basin was the fact that we had a duel-fired plant, so we could resort to doing diesel. Since we have transitioned to the ENI gas out of Blacktip, prior to that transition occurring, we were in negotiations with ConocoPhillips for a connection into the ConocoPhillips plant, and a gas sale agreement with them for gas from the ConocoPhillips plant, under different circumstances, so we were finally able to reach an agreement with ConocoPhillips for

a interconnect pipe line into the Conoco Phillips plant and a gas sale agreement from them for a range of supply depending on circumstances. So, for the very first time in the Territory's history, we have actually got redundancy in our gas supply system because the arrangement we have in place with ConocoPhillips is one that in the event of failure of ENI gas supply, ConocoPhillips can provide us with all our gas requirements.

**Mr MILLS:** And both of those arrangements, the gas sale agreements, are they locked in and preclude any other gas supply coming to Channel Island?

**Mr MACRIDES:** They do not preclude any other gas supply coming to Channel Island; at the end of the day, Power and Water is a commercial entity and Power and Water looks for commercial supply arrangements. In fact, in our discussions with INPEX, we have suggested we are very keen for a third redundancy point to be built into our supply arrangements; that is we will be very keen to talk to INPEX about an interconnect pipeline into their plant and the gas sale agreement with them as well. The nature of the gas sale agreement we have in place with the ConocoPhillips plant is that apart from the costs associated with the interconnect, there is no cost to us for having in place that gas sale agreement. So, the only cost to us is the interconnect and the ongoing maintenance of that interconnect.

We do not have to pay for gas unless we use gas, so there is no pay obligation at all in relation to that contract, so we are obviously keen to have multiple redundancies built into our supply system. Conoco Phillips was able to come up with a deal that provides that to us, but we are hopeful that we can do a similar deal with INPEX in relation to their plant as well and, at the moment we have adequate back-up supply and adequate gas supply out of the ENI plan. So, it would have to be a very good commercial deal for us to take it up.

**Mr MILLS:** Do I assume therefore that the nature of the contract or the agreement with ENI has a binding affect in that it is in place for a certain period of time and you are required to purchase a certain amount of gas over a certain period of time, and it would have to be very good to warrant any change to that agreement?

**Mr MACRIDES:** The arrangement we have with ENI is the same arrangement we have with the Mereenie producers as a foundation custom; in effect, what we are doing is buying all the gas out of that field and are underwriting the development of that field. So, the arrangement we have with ENI in the same way we have with the Amadeus producers when they first established their field, is one that has a take or pay arrangement associated with it. So, over the life of the agreement, which I think is a 25-year agreement, Power and Water has an obligation to take certain quantities of gas on an annual basis.

Mr MILLS: 25 years?

Mr MACRIDES: I think it is a 25-year agreement.

Mr MILLS: 25 years from?

Mr MACRIDES: From the date of the first supply of on-specification gas which was on 19 January.

**Mr MILLS:** If that is the date for on-specification gas, what happened before that? Off-specification gas?

Mr MACRIDES: It was a separate agreement.

**Mr MILLS:** Okay. It appears to me that the situation we are in now is premised upon the belief that Mereenie was depleted and depleting and would be no more, or insufficient capacity. Is that actually the case? Does it actually run out?

**Mr MACRIDES:** There will be residual gas in Mereenie, there is no doubt about that. Mereenie started to produce supply in 1983 and the Amadeus fields have two fields in there, Palm Valley and Mereenie, and the Amadeus fields have been providing gas since 1983 at the height of production out of those fields. Palm Valley's peak production in the 1980's was about 40 terajoules a day, one terajoule is the equivalent of about 26 000 litres of diesel, basically. Since about 1985, production from Palm Valley had declined rapidly and its current output, so it has gone from a peak of 40 terajoules a day - its current output is five terajoules a day, which is about 12% of our daily requirements.

Mereenie production has also declined significantly over that period. They have had a peak of about 54 terajoules a day. They have now gone to - when we stop taking gas from them when our existing contract expired - 33 terajoules a day.

Mr MILLS: Are there any negotiations at all with parties involved in gas exploration in the Centre.

**Mr MACRIDES:** Yes, we have had some contact with the two parties involved in the ownership of the Amadeus Basin. One is Magellan, and the other one is Santos. Santos has put its share on the market. As I said, we are after a commercial arrangement. What we are not going to be is somebody's bank. At this stage in the discussions with the producers out of Central Australia, they have not been able to offer up a commercial arrangement that is viable for us.

**Mr MILLS:** I will go to the pipeline now. I understand the lease arrangement around the pipeline will be concluded soon. Is that the case?

Mr MACRIDES: Yes.

Mr MILLS: Can you describe what happens at the end of that lease?

**Mr MACRIDES:** The pipeline was constructed as part of the arrangements for the Amadeus field, and goes back to the time the Amadeus field was developed. It is a leveraged lease arrangement, and has a very tricky funding arrangement associated with it, based on tax advice that was given at the time. Under the arrangements that exist, the pipeline is owned by a consortium of banks.

Mr MILLS: Is that a different consortia than ATP?

Mr MACRIDES: Yes, APA is the operator of the pipeline

Mr MILLS: And the Black tip one as well?

**Mr MACRIDES:** A subsidiary of APA is the owner and operator of the Blacktip pipeline. The Amadeus Basin pipeline is owned by a consortia of banks. In the leverage lease arrangements put in place to finance the construction of this pipeline, the lease expires in June 2011, and under the agreement that was put in place to finance this arrangement in 1985, APA have first right of purchase of the residual value of this pipeline. They have to exercise that by this drop dead date in June of 2011.

If APA chose not to exercise their purchase right to buy this from the consortia of banks at whatever the value of this pipeline is, then the NT Government has a right to purchase it.

Mr MILLS: If APA does not exercise that right, the next step is the Territory government?

Mr MACRIDES: Correct.

**Mr MILLS:** It has to be commercially viable? If APA said no, the Territory government therefore has to buy it?

**Mr MACRIDES:** The commercial viability comes from the fact this 1600 kilometre pipeline is tolling gas from the Blacktip fields down to our generators in Central Australia.

Mr MILLS: It goes the other way.

**Mr MACRIDES:** Absolutely. So all we have done is transition from gas coming north, to gas travelling south. The owner of this pipeline, at the end of the day, profit comes from the contract with Power and Water for the tolling of gas through the pipeline.

**Mr MILLS:** That leads me to the off specification gas. I understand some damage resulted from the supply of that off specification gas. Has that off specification gas created any problems in the pipeline itself – corrosion or damage to the asset?

**Mr MACRIDES:** The answer is no as far as we are aware, but remember we do not own this. At the end of the day, this is an asset that, in the case of BGP, it is owned by the subsidiary of APA.

The off-specification gas was only used to provide gas supply to Channel Island and Weddell; it was not sent south. It is that section of the pipeline only we are talking about. APA, who own and manage this pipeline, obviously, were the key party in the arrangements for the acceptance of off-specification early gas because, clearly, they were not going to accept off-specification early gas through their pipeline unless they were certain there was not going to be damage to their pipeline. There has not been and is not.

**Mr MILLS:** Are you aware of any excavations at the present time on that pipeline - the one across Blacktip?

**Mr MACRIDES:** The only excavation I am aware of is there was a slug catcher removed from Ban Ban Springs which had to be removed to allow gas to travel south. There was some work done at the Ban Ban Springs end to allow the pipeline to, basically, be switched so the gas could flow south.

Mr MILLS: When did that occur?

Mr MACRIDES: It would have been late January.

Mr MILLS: You are not aware of anything in more recent times?

Mr MACRIDES: I am not aware of anything in more recent times.

**Mr MILLS:** If some repairs or some remediation of some kind was to take place, would you be advised?

Mr MACRIDES: Only if it affected supply of gas to us.

Mr MILLS: Right.

**Mr MACRIDES:** They own the pipeline, they maintain the pipeline. You would hope they are constantly monitoring and doing whatever they need to do.

Mr MILLS: Thank you.

Mr TOLLNER: So, where do you take ownership of the gas? At the end of the pipeline?

Mr MACRIDES: Yes, at the ...

**Mr TOLLNER:** Everything prior to that is some other corporation's concern?

Mr MACRIDES: Yes, that is right. The inlet point is the inlet point into each of our power stations.

**Mr TOLLNER:** Yes. Is it a requirement on Power and Water to clean the gas that goes into your power generators, or is it a responsibility of the supplier?

**Mr MACRIDES:** The contract that you have with the supplier has a specification associated with the makeup of this gas, and you contract on a basis of the supplier meeting the specifications that are in that contract. It is up to the supplier to ensure the gas stays within those specifications because, if it does not, they are in breach of the contract. It has a series of processes in place to monitor the gas specification going through the pipeline.

**Mr TOLLNER:** But that is where there is a cap, is it not? If the supplier is supplying you early off-specification gas that ruins your machine, they are liable for the costs that you bear because of that? Is there not a cap on those costs?

**Mr MACRIDES:** No. Again, as I said, we are talking about two different issues here. The liquidated damages component of the contract with ENI only relates to their ability to be able to provide gas on the date that was specified in the agreement. Okay? So, the original ...

Mr WESTRA van HOLTHE: Which was 1 January?

**Mr MACRIDES:** That is right. The original start date, 1 January, that is right. From that date, there is a period of grace they have under the contract, which was a three-month period of grace under the contract. After that, if they are unable to provide us with gas out of their plant to the volumes we require, then we have recourse to the LDs component of the contract to meet the additional cost we incur in a substitute fuel, whether it be diesel or whether it be gas from another source.

If, for example, their gas went off-specification after the date of the start of the contract, and they are supplying on-specification gas - from whatever the date is - 10 January or whatever it was - if the gas goes off-specification and it causes damage to our machines, then you clearly have a breach of contract right there. That gives rise to a different set of damages you are able to claim which, by and large, are uncapped because they are based on the level of damage that you have sustained.

Mr TOLLNER: Right, no worries. We will get back to that.

**Mr WESTRA van HOLTHE:** Just moving forward a little now in time, to the damaged gas turbine at Weddell. Where is that physically located now, that damaged machine?

**Mr MACRIDES:** It is currently over in the US and it is being repaired. The intention always was that when we took the unit out of service, replaced it with a new generator, the old unit was assessed as being capable of being repaired. It has gone back to the US. Generator repair facilities have this sort of process of, you get it over there, and then it is inducted into their production process, and then you wait for it to go through their process for it to be repaired, and then, at the end of the process, it is returned to you, and it will be a spare generator that we have, a spare engine that we have got for the two generators that are at Weddell. It is in the production process now and having the repair work done to it, and it should be returned, probably in the next four weeks, basically.

**Mr TOLLNER:** Just correct me, this was a brand new turbine, was it not?

**Mr MACRIDES:** It was. And I have to say that, I guess, there has been a lot of speculation about whether or not the off specification early gas was responsible for the damage to this turbine. What we have said is that we do not know. The jury is still out on that, and we will not really know until the repairs are complete. We sent a couple of experts over to the US to observe the repair process, and part of that process was enabling our experts to take samples once the machine was opened up, so

that we have samples of what is inside the machine, etcetera. Those samples have been taken. They have been sent to New Zealand for analysis, and we are waiting for our expert's report on the results of their observations when they were there, and the analysis of the samples that have been taken. Hopefully, that will then give us a more definitive answer as to what the likely cause of the damage to this turbine was.

Mr WESTRA van HOLTHE: Okay, so the experts you sent across, are they still in the States?

**Mr MACRIDES:** No, they are back now. I think one is in Queensland, and I am not sure whether the other one is from, New South Wales, maybe.

**Mr WESTRA van HOLTHE:** Right, so that would have incurred a cost? Who paid the freight to get the genset back to GE in America?

**Mr MACRIDES:** Power and Water. Because we are a business, we obviously insure components of what we do, and so this is actually covered by our insurer, and so the insurance claim is with the insurer. The insurer is now responsible for all elements associated with the repair process and all other costs. The component that Power and Water bears is obviously the excess component of the policy.

Mr WESTRA van HOLTHE: So has your insurer accepted responsible coverage for this yet?

Mr MACRIDES: I will refer to my lawyer.

**Mr STRANGE:** Kelvin Strange, General Counsel. The claim has been lodged, as you do with any normal insurance claim. Insurance companies are not modest at accepting things on face value, so they are also conducting their own investigations, and they are also particularly interested in the outcomes of the inquiries that the Managing Director has just discussed.

**Mr WESTRA van HOLTHE:** Okay. So just say, for example, the freight component of getting the genset back to the States, is that just an account sitting with the insurance company at the moment, or has it been paid? If it has been paid, who has paid it?

**Mr STRANGE:** If there was a requirement to pay it, we would have paid it, and then the claim would be on the insurer as part of the insurance claim.

Mr WESTRA van HOLTHE: And have you paid it?

Mr MACRIDES: I would not know.

**Mr STRANGE:** The suppliers and transporters are not in the commercial business of transporting bits of machinery without getting paid, so we would have paid for it, yes.

Mr TOLLNER: You guys paid for it, or GE?

**Mr STRANGE:** No, no, at this stage, we have paid for it. You have got to remember, at the moment, the inquiry is still being undertaken as to who may or may not be liable for the damage that was caused.

Mr TOLLNER: Have you got any other views on who may well be liable?

A member: ... the Council of Territory Cooperation.

Mr MACRIDES: I am not prepared to speculate.

**Mr TOLLNER:** No. But somewhere along the line you are required to speculate, because something like this could easily spin out into being ...

**Mr MACRIDES:** That ceases to be speculation; that is then based on fact. You do not pursue a legal case unless you have that to ...

**Mr TOLLNER:** How long will it take for the analysis of the substances and the materials and all of that sort of stuff to be done?

**Mr MACRIDES:** As I said, my understanding is that the samples are with the lab at the moment. The report is in the process of presumably being written. I would hope that we would have something back sooner rather than later, but obviously, they are not going to rush it. We want a detailed report that gives us a reasonable conclusion as to what may or may not have caused this damage.

**Mr WESTRA van HOLTHE:** How many interested parties are having these pieces of metal, or whatever they are, examined?

**Mr MACRIDES:** I do not know whether or not GE have taken the opportunity to do the same. I mean they obviously had an opportunity to do that. So from my knowledge we certainly have and I do not know about GE.

Mr WESTRA van HOLTHE: All right and you suspect the insurance company may be as well.

**Mr STRANGE:** The insurance company is interested in the investigation.

Mr TOLLNER: Probably not as interested as GE would be. They want to know if their machines work, or not.

**Mr WESTRA van HOLTHE:** I have lost my train of thought there for a second. Will the results of that investigation into the damage on the turbine be made public?

**Mr MACRIDES:** It depends on whether it prejudices our legal position. So we would wait and get the results and then we would sit down and work out what our options are. We certainly would not rush to release something if there was any likelihood that – as I said, it would prejudice our legal position.

**Mr WESTRA van HOLTHE:** So if GE do not accept liability and the insurance company do not accept liability do you have plans in place to commence work on that?

**Mr MACRIDES:** Again, too early to speculate until we actually have evidence of what may or may not have caused this. There are so many different elements to what may or may not have led to this turbine being damaged. That is why we have said we are not prepared to speculate because, from our perspective as a commercial entity, we want the data and facts, and the where to from here. It is not an exercise in finger pointing.

Mr WESTRA van HOLTHE: Yes, so you have now replaced that generator with another one?

Mr MACRIDES: Yes.

Mr WESTRA van HOLTHE: Power and Water bore the cost of the replacement machine?

**Mr MACRIDES:** Yes, we are on the public record as saying that this transfer process, buying a new generator and installing it cost in the order of about \$10m.

Mr WESTRA van HOLTHE: Okay and you said before that the other one will come back repaired?

**Mr MACRIDES:** Yes. The other one is over with GE at the moment being repaired and will come back and it will be a spare engine for either of the machines.

**Mr WESTRA van HOLTHE:** And the only question around that is who will be paying for it to be repaired?

Mr MACRIDES: That is part of the insurance issue.

**Mr TOLLNER:** Have you any idea of the cost of repairs?

Mr MACRIDES: Yes, I think it was in the order of about \$3m.

Unknown: Two million.

Mr MACRIDES: Two million dollars.

Madam DEPUTY CHAIR: Member for Nelson is looking to ask a question.

**Mr MACRIDES:** Sorry, Madam Deputy Chair, I actually have another answer back to one of the questions on notice which was question 10.3. Are you happy for me to provide that now?

### **Answer to Question No 10.3**

**Mr MACRIDES:** This was Mr Wood's question in relation to a water main extension in Mahaffey Road to Macleod Road. Macleod Road had 20% longer pipe line for connection of customers than Mahaffey Road did. So there was a cost associated with that 20% incremental link and the pipe line construction costs from contractors had increased from about \$300 per metre to \$450 per metre for 150 metre mm pipe.

Mr WOOD: What we need to do is bring the pipe size down and we will be right.

**Mr MACRIDES:** What it says here is that the information is provided to customers at the time of estimates only and it is based on best information and if a customer supports the project, the customer is aware up front of the actual prices, what they would have to pay once it has gone out to tender.

Mr WOOD: You know 50ml poly pipe along that 1km along side the road sounds very attractive.

**Mr MACRIDES:** It is called banjo pipe, isn't it?

**Mr WOOD:** Yes, that is right. I have your report, or **the** report. This is an issue - we were a little bit too early today with solar power generation on outback communities and yesterday we were talking to the department of Resources and Mines and Energy section, saying how they were investigating solar rays in certain places. I believe they had something to do with the Hermannsburg - I might be wrong.

The issue concerning me is you were having a process where one body was putting up the solar ray, and your cells might have the diesel generators, and unless those two are put together correctly, you are not optimising the most efficient use of your generators. My understanding - and this might apply to the solar city of Alice Springs – but if your generators are all the same, then you do have much room to move when you are getting optimum power from the sun, and you want to use minimal power from your diesel generators because all your generators are the same size.

Are there plans to change the way you generate power in outback communities? If there is only need for a small generator to operate, you have a low load, and you might have high solar energy coming into the system, is that the way you are thinking, or are you simply going to use what you have at the present time and not be as efficient as you could be?

**Mr MACRIDES:** Can I answer the first part of the question; I will get to the second part in a minute. The first part was in relation to the tender that has gone out for three power stations: Kalkarindji, Ti Tree and Alpurrurulam. In fact, what the department of Resources, or whatever the agency is, have actually not done this in isolation from us. They are the funding agency. They have a bucket of federal funding due to expire shortly, so they have gone out, on our behalf in effect, using this federal funding to get tenders for putting solar into these three locations. These are locations we have nominated. We are the people that have worked on the tender document in conjunction with this agency. It has not been them going off doing something in isolation from us. What they have done is what we have asked them to do, and we have been a key part of this process.

The second part of your question was in relation to sizing of generators in communities. We regularly move generators around, depending on what is happening with load in communities, to optimise the very thing you have said. We are constantly putting new generators in a community when a load goes up, and in some communities where load has gone down for a long period of time, we tend to move a large inefficient generator to a location where it is more efficient to put a smaller generator in that is more efficient.

Solar in these communities is not base load. It is there for diesel lopping purposes. It reduces the diesel consumption needs on the generators in those communities. Does that answer your question, Mr Wood?

**Mr WOOD:** Hermannsburg is a fairly big array, I am unsure how much it produces; probably more than you get on a proper house roof. If you can run a small generator, and the sun is really pelting down and there is not much load, as against having a three quarter sized generator – my understanding is you would have a great reduction in diesel on a big generator, even if the load was quite low you are still using up quite a bit of fuel, but if you have a small generator running at optimum load, that is much better efficiency, and you use less.

**Mr DAY:** Just clarifying Gerry, each of our power stations generally has a three engine power station, three different size engines, and some of the larger breakdowns we are now moving to four engine power stations. Generally, they are three different sized engines, and we have quite sophisticated control systems that match the engine to the load at the most efficient point. We are continuously optimising the efficiency of the overall station. When we add in renewable energy, it is really about displacing the maximum amount of diesel we can. With the project you are talking about, for Ti Tree, Alpurrurulam, and Kalkarindji, we have actually gone through with the proponent for a power purchase agreement, based on certain loads that meet the demand profile, looking at summer and winter variations. We are matching the sets so we can get full production out of the solar power station when that is connected into it. So, there is a lot of work being done in integration of the control system. The management of the overall power system will be integrated between the solar power station and the diesel.

**Mr WOOD:** Those three power stations - will we be able to see in the following years a detailed analysis of diesel use, power production, savings, carbon emission-type analysis?

**Mr DAY:** We are really looking forward to these power stations to be able to showcase how we can run much higher penetration of renewable energy than has traditionally been run, and is run at our other solar ray power stations in the Northern Territory. They will actually be quite high penetration so that the solar production during the day will be between about 60% and 80%. We will be certainly looking at making that available to the public.

Mr WOOD: We will keep an eye out. I might just get down to another basic question. You mentioned

about bats in your report, and they have been around a while. You talked about new types of insulators on your poles. There has been a lot of discussion about that for the many years. Do you have figures to show us – I do not want it for the whole Territory, but it will probably be Katherine and Darwin regions - what number of outages you estimate have been caused by bats? Could you say whether that has been reduced or is reducing? Can you, if it is reducing, put that down to changes in the equipment on top of your power poles?

**Mr MACRIDES:** We certainly have outage data. We have a good idea what caused each of the outages. I will ask Bertram to provide a bit more detail - Bertram Birk, General Manager of Power Networks.

**Mr BIRK:** That is a good question. Bats are one of our perennial bug bears. We are using new technology when it becomes available and on the market. The longer pin insulators and the bat guards which you see a lot now out in the rural areas are definitely having an impact. Also, we use new type of line construction. The construction is like out at Dundee Beach, where the conductors are suspended underneath the cross arms, which we have also found is very successful.

The other part of the equation is, generally, vegetation management up here as well. We have now some good contracts in place where we have quite an aggressive vegetation management program, which does cause us some discussions at times. Both of those are having a marked impact on our reliability statistics. That is improving.

**Mr WOOD:** We have some half palm trees in a lot of roads. How much of the half they cut depends on the life of the palm. Are you able to give us a data on outages - I do not want it to be too big, you have Darwin, the rural area and Katherine. Can you actually give us some details on outages, mainly from the point of view to see, say, over the last five years, whether outages are decreasing? Where are most of the outages that occur? Not only where they occur, but where they are of the longest frequency? Is that sort of data available? I get - and I would imagine the member for Goyder and, probably, the member for Katherine as well – in the rural areas we have people saying, 'I have a fax machine. It is the old type and it turns off and, when it comes on, a whole roll of paper comes out'. They come to my office with a whole pile of papers, and say 'This is how many outages we had'. It might only be for a few seconds, but they are enough to, obviously, turn equipment off. Are there figures available on outages?

Mr MACRIDES: Except that I do not think our systems would show auto re-close events, would they?

**Mr BIRK:** No, they do not and, unfortunately, in the rural areas they are spikes caused by lightening or momentary power glitches. Those old fax machines do pick up on those. Obviously, you know all about they, as we do. Certainly, that data is available. The Utilities Commissioner publishes our data, which we supply him, which breaks it down across various areas, and even down to the feeder level, and shows that data, and it is available now for quite a number of years, it is quite good, that data.

**Madam DEPUTY CHAIR:** So this would be a question on notice?

**Mr WOOD:** I think if I go to the Utilities Commissioner that might save that; they have the data, so I can write to them.

Mr BIRK: It is available on their website.

**Mr WOOD:** Okay. The other one. You have mentioned something about the Humpty Doo sewerage ponds. Any idea what the cost of that contract was, when it should be completed, and will it be big enough for expanded residential development in Humpty Doo, and industrial development?

**Mr MACRIDES:** I suspect that we might have to take some of that question on notice, but I will hand over to Mr Heaton, General Manager of Water Services.

**Mr HEATON:** Well, I will have to follow up on the actual construction cost. The second question, in terms of completion, that will also have to follow up. The completion date has been extended because the original contractor went into liquidation as the contractors out there. We have only just recently closed new tenders for the completion of the work following their liquidation. And the final question, yes, the ponds upgrade were sized to take considerable additional loading for that area out there.

**Mr WOOD:** Why was it a concrete design rather than a standard gravel design that you get for most sewerage ponds? Is this a new concept?

**Mr HEATON:** Yes, essentially, we have gone for vertical concrete walls on most of our new sewerage treatment ponds. It is just that we have not built any new sewerage treatment ponds in the Darwin area over the last several years, but certainly, over the last 10 years, particularly in remote communities where we have had quite an expansion of sewerage treatment facilities, the vertical concrete walls have proved to be far more environmentally beneficial in terms of limiting mosquito breeding, but also in terms of just efficiency of design and dynamics within the reservoir of themselves.

**Mr WOOD:** In relation to sewerage, might follow on from the earlier question from the member for Fong Lim, the development, say, at Coolalinga, the new development, is going to require, well, it does not look like we are going to get connected to sewerage, looking at the dollar signs, but where does Power and Water fit in to the supply of alternative sewerage systems, like a pump out system using vegetation, and if you do not take over those sorts of systems, why not?

**Mr HEATON:** All on-lot sewerage systems, such as septic tanks and those other systems pumps out, or irrigated higher tech systems, are all under legislation, under the control of the Department of Health, so we have no input into those. It is only when there is a reticulated sewerage system, again, that complies with the Utilities Commissioner regulations that we actually take over and administer those.

**Mr WOOD:** So even that shopping centre, which is going to become a small town to some extent, which will put all the sewerage pipes in, and then head off to an irrigated type of sewerage system, will have nothing to do with you?

Mr HEATON: That is correct.

Mr WOOD: So, to maintain those sewerage pipes, will it be the private developer?

**Mr HEATON:** Yes. All on-lot systems in terms of the reticulation and/or the treatment and disposal, all these are responsibilities of the land holder.

**Mr WOOD:** This might sound like a silly question, but I will try it. In writing the case of, say this developer, do you think, down at Wishart Road, could he basically say, well I only want the water to this point, and I will own the rest of the water line, and basically supply my private subdivision and control it, or is that because you have the monopoly over the supply of water?

Mr HEATON: He could not get into the ...

**Mr WOOD:** No, he could not own all those assets himself, and said I will take that responsibility on, I will maintain that pipe, water pipes and all that.

**Mr HEATON:** If he is the owner of all the infrastructure, if you like, on-lot, that is his and his to control. What is off-line, which is obviously the water mains, both to and connecting in both directions, becomes part of, obviously, our infrastructure to manage and operate, because it interconnects with the major system.

Mr WOOD: Yes, the question is about who owns what when it comes to subdivisions, I suppose. Just

one last question, you might have known a bloke called Peter Harrison, he has probably spoken about different systems for keeping algae down in sewage ponds with solar type of equipment that floats in the middle of the sewage pond. Have you tested those in the Northern Territory and do they work?

**Mr HEATON:** I am not sure exactly what sort of system you are talking about? Is it called a Solar B or is it ...

**Mr WOOD:** Yes, I think it is and it has something to do with controlling growth in the sewage ponds and it ...

**Mr HEATON:** We worked with Peter on a number of projects and Peter has a number of different interests in sewage treatment. We trialled extensively a duck weed ...

Mr WOOD: That is what it was called.

**Mr HEATON:** ... system that Peter had proposed down at the Batchelor sewage treatment ponds. We trialled it, initially in Darwin. Unfortunately, the full results of the trial have not been written up, but, in general, the results did not achieve the sort of outcomes that Peter was proposing or that we would like to see. In general, we would prefer, with our waste stabilisation ponds, we are very supportive of innovative technologies to improve the quality but are natural systems and are low energy systems As I say, Peter is very well known to us and we are always supportive of looking at different technologies to improve the quality of our discharges.

Mr WOOD: Thank you, that is all.

Madam DEPUTY CHAIR: Thank you, member for Nelson.

**Mr WOOD:** I do not know whether the member for Fong Lim has got that Rocklands Drive question still, have you?

**Mr TOLLNER:** Well, I do have the Rocklands Drive question still, but I do not think the gentleman who asked me to ask it ...

Mr WESTRA van HOLTHE: I might just have one question going back a few steps.

Mr TOLLNER: Yes, go for it.

**Mr WESTRA van HOLTHE:** Just going back to the gas turbine that is being prepared, what are the warranty arrangements should a warranty be required? If insurance does not pay, if there is no other means of footing the bill other than Power and Water paying, is there a warranty provision on the generator when it was purchased from GE?

**Mr MACRIDES:** Any new plant equipment has a warranty associated with it, but the warranty would relate to the actual nature of the equipment itself. So if, for example, there was a causal relationship between the failure and whatever the warranty covers well then you would have recourse to the warranty, but it is the establishment of the causal nature that is the issue.

Mr WESTRA van HOLTHE: Of course.

**Mr MACRIDES:** Yes. I do not know whether or not at the time of the incident the sets would have still been within warranty or out of warranty. I do not have that information at hand, but certainly if they were in the warranty period then it is part of what we would be looking at in terms of cause and effect.

Mr WESTRA van HOLTHE: Yes, so you do not know how long the warranty period is on that?

Mr MACRIDES: Off hand I do not.

Mr WESTRA van HOLTHE: No.

Mr MACRIDES: I could find out if you would like.

Mr WESTRA van HOLTHE: Well, if you would put that notice I would not mind knowing that.

Mr MACRIDES: Sure.

Madam CHAIR: Could you just repeat that question, please?

**Mr WESTRA van HOLTHE:** Yes, for Hansard, can you please outline what the warranty arrangements ...

Mr MACRIDES: Actually, sorry, member for Katherine, I actually might have an answer for you.

Mr WESTRA van HOLTHE: Okay, good.

Mr MACRIDES: Ian Pratt, General Manager Power Generation.

**Mr PRATT:** The unit, when it was damaged, was still under warranty.

Mr WESTRA van HOLTHE: Was still under warranty?

Mr PRATT: Yes.

Mr WESTRA van HOLTHE: Okay.

Mr MACRIDES: There you go, a simple answer.

Mr WESTRA van HOLTHE: There you go, it was nice and easy, thank you.

**Mr TOLLNER:** I have only got a couple of quick ones. Firstly, a question that was asked of me to ask was that evidently at 70 Rocklands Drive there is an emergency generator there, evidently it is running constantly, 24/7. What is at 70 Rocklands Drive?

**Mr BIRK:** We often use generators where we are either doing repairs to a component of the network or where a piece of the network has failed. So what you do is you just plug a generator in to substitute for a package substation or whatever may have failed, you know, a transformer may have failed.

**Mr TOLLNER:** Well, the feedback I have, Andrew, is this thing has been running pretty well constantly since ...

Mr MACRIDES: Yes, I do not know whether ...

Mr TOLLNER: ... since it was first installed.

Mr MACRIDES: I am not sure whether Bertram can shed any more light on it.

Mr BIRK: I do not know the particular gen set and the job in question but, certainly, if there is an

opportunity to back feed from another electrical source we use that and if that is not possible in order to keep supply on to customers 24/7 we do use generators. We have a heap of them for those purposes. I can find out and get back to you if you wish what the particular job is.

Mr TOLLNER: Yes, I might give you a question on notice if that is all right.

#### **Question on Notice No 10.4**

Madam DEPUTY CHAIR: Can you repeat the question please, member for Fong Lim?

**Mr TOLLNER:** What is going on at 70 Rocklands Drive? Is it an emergency generator and how long has it been running and what is it there for?

Madam CHAIR: That is question No 10.4.

**Mr TOLLNER:** In relation to sewerage, what is the expected date that the outfall will cease at Larrakeyah?

Mr MACRIDES: We are licensed to close the outfall down by 30 October 2011.

Mr TOLLNER: Will it happen before then?

**Mr HEATON:** Our current project and program is that it will happen before then. That is the deadline for completion, so yes.

**Mr TOLLNER:** Now the status with the Ludmilla treatment facility, and I was under the misguided view that that was being closed down as well, but it seems that there is a major expansion taking place there. How long will that last? What are the alternatives to having that treatment plant in Ludmilla?

**Mr HEATON:** You are correct. As part of the works we are looking to upgrade or expand the Ludmilla Waste Water Treatment Plant to cater for the additional load from the closure of the Larrakeyah outfall. The first part of that works is going out to tender in this Dry Season and we hope to have that work also completed by 30 October. We see Ludmilla as short to medium treatment strategy for Darwin. We are actively pursuing a whole of Darwin sewerage strategy which will look at the long-term options for either closure of the Ludmilla treatment plant or incorporation of that plant into part of a staged treatment process where we may treat some of the sewerage there and then transfer it to another location for higher levels of treatment.

**Mr TOLLNER:** When you talked about short to medium term, what are you talking about? One, five, 10 years?

**Mr HEATON:** Short to medium term is between five to 20 years.

**Mr TOLLNER:** In relation to yesterday's news that there seems to be sewage flowing out of a prison straight into a little creek into the harbour, do you guys have any responsibility for that?

**Mr HEATON:** No, that treatment facility is similar to what the member for Nelson was discussing previously. It is an on-lot private treatment system owned and operated by the prison facility. My understanding is the Department of Planning and Infrastructure has some input into the ongoing management and operations of that facility.

**Mr TOLLNER:** The Buffalo Creek outfall, what is happening there?

**Mr HEATON:** Again, we are looking at a number of both short-term and long-term options there. In terms of short-term options we are relatively limited because there is an existing treatment facility that treats waste in a particular way. We are looking to improve the efficiency of that operation as much as possible to facilitate that. In fact, just last week we flew out the recognised international expert on waste stabilisation ponds, a Professor Duncan Murra from London. He conducted a workshop and talked with our staff about various options for short to medium term upgrades there.

In the last month, we have also put out to public tender a major planning investigation to look at longer term large process upgrades there, including potential for reuse schemes in that vicinity, or within the northern suburbs. Again, that project and program will fit into the overall Darwin sewerage strategy that we are looking to develop.

**Mr TOLLNER:** On a larger scale, has PWC done any feasibility studies into converting waste to fertilisers or reusing it in other areas? I know there are communities around the world that have done these things. Has there been any studies done here?

**Mr HEATON:** Yes. Part of the treatment process we have with waste stabilisation ponds, in particular, means we do not have a continuous flow of biosolids, which is what is typically used and treated for use as fertilisers. What happens within waste stabilisation ponds is they treat the processes and those biosolids tend to accumulate within the ponds over a period of time. Typically, once every five to 10 years we de-sludge those ponds to remove the biosolids. We stockpile them on-site, because the health regulations are that you need to allow natural process and decay of any pathogens in there for a minimum of three years. That, generally, limits the opportunity to have a steady supply of a product for horticultural or other uses.

We have, in the past, engaged and continue to engage with the Darwin City Council for discussing opportunities for use of that sludge once it is stabilised, to mix with their current mulching and fertiliser operations at Shoal Bay. To date, we have not been able to bring those to any commercial or ongoing process. Again, potentially in the future, if we look at changes with treatment process, and we have a continual flow of product, there are opportunities for that.

The other thing to say is we do not have a particularly large horticultural or agricultural industry in close proximity, particularly to Darwin, that has created a large demand for those products, as in other locations.

**Mr TOLLNER:** Part of our soil has been leeched out by 10 000 years of rain. All the stuff that you are treating is probably what needs to be in there. Without it we would have had a horticultural industry up here.

**Mr HEATON:** We are very interested in those opportunities and have pursued them in the past, and will continue to do so.

**Mr TOLLNER:** I am aware that parts of Darwin are watered with effluent. Are there plans or studies done to increase the use of water into parks and road verges and the like with effluent?

**Mr HEATON:** The current scheme you are referring to is the Marrara Sporting Complex and the Darwin Golf Course. That water is actually supplied from Leanyer/Sanderson ponds. As I mentioned previously ...

Mr TOLLNER: Oh all right. Not only the golf course ponds.

**Mr HEATON:** No, that comes from Leanyer/Sanderson to the golf course and, then, it is treated further there on-site for the reuse. As I mentioned, as part of this planning study for Leanyer/Sanderson, we have asked consultants to look at a large-scale expansion on that scheme that would, potentially, cover the whole of the northern suburbs and allow irrigation of a number of school grounds, parks, and road reserves in that area.

We are also interested in other opportunities, potentially, from the Palmerston waste stabilisation ponds. We believe that potential for industrial development across the Elizabeth River holds great potential for a high value reuse there.

The bottom line, however, is that the cost in chemicals and electricity alone to provide that very high level of treatment is greater than the cost that we actually sell potable water for at this point in time. It is a very energy intensive, operator intensive, technology intensive form of water supply, which does not connect with most people's perception that effluent reuse is a cheap, alternate water source.

**Mr TOLLNER:** I have just got one more question, Madam Deputy Chair – a very quick one. It is probably best directed to Mr Macrides. Just curious, bearing in mind that there will, obviously, be levels of risk involved, what is the commitment of the Power and Water Corporation into investigating emerging technologies in a range of different areas, from renewable power generation, to sewerage treatment, to a whole of things? Do you have a set allocation of your budget, or it is just something that is done ad hoc, or do you have a company policy?

**Mr MACRIDES:** As an organisation, we are committed to maintaining of watching brief on what is happening by way of technological advancements across the various services we provide. We participate in a lot of the national forums for our industry. The industry has a couple of large forums that are on the energy side of our business, as well as a water side of our business and, in fact, Daryl Day is a former President of the Australian Water Association. He used to sit on the International Water Association Board.

Our involvement is not in allocating a set amount of money for research and development, our involvement is generally by way of maintaining active involvement in other committee structures and what is happening with our national peak organisations, and plus, we have a lot of, you know, very clever scientists, engineers and technical people who live and breathe this stuff, and spend all their time thinking about ways of introducing new technology to what we do.

Having said that, though, I mean, you know, the electricity side is a very old industry, and a lot has changed in a hundred years in the electricity side of the business.

Mr TOLLNER: Ah, there have been changes.

Madam DEPUTY CHAIR: Okay.

**Mr MACRIDES:** Madam Deputy Chair, I also have a response back to a question on notice No 10.4, which is 70 Rocklands Drive.

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#### **Answer to Question No 10.4**

**Mr MACRIDES:** It is a small generator that has been in place while a transformer change out has been occurring. I think the transformer might service one of our water or sewerage pumping stations, in fact, and my understanding is the transformer change out has now occurred, and so the generator will be removed in the next few days.

**Madam DEPUTY CHAIR:** Thank you, Mr Macrides. It being just after 4.30 pm, that now concludes the Government Owned Corporations Scrutiny Committee public hearing process.

I would like to take this opportunity to thank the members of the Public Accounts Committee who formed the core membership of the committee, and for the overall manner in which these public hearings have been conducted.

I would also like to place on record a vote of appreciation from the committee to all other members who participated in the public hearing process.

On behalf of the committee, I extend my thanks to the Corporation's Chair and its Managing Director for attending today, and all of those others who have been involved in the process.

I formally close the public hearing of the Government Owned Corporations Scrutiny Committee for 2010.

**Mr MACRIDES:** And a big thank you to Paul Heaton, because this is his very last act of work with the Power and Water Corporation.

Madam DEPUTY CHAIR: Thank you, Mr Heaton.	
	The committee adjourned.