ECONOMICS AND INDUSTRY STANDING COMMITTEE

INQUIRY INTO DOMESTIC GAS PRICES

TRANSCRIPT OF EVIDENCE TAKEN AT PERTH WEDNESDAY, 10 NOVEMBER 2010

SESSION ONE

Members

Dr M.D. Nahan (Chairman)
Mr W.J. Johnston (Deputy Chairman)
Mr M.P. Murray
Mrs L.M. Harvey
Mr J.E. McGrath

Hearing commenced at 9.15 am

SCOTCHBROOK, MR JUSTIN EDWARD

Senior Manager, Commercial and Business Development, WA Gas Networks Pty Ltd, examined:

EVANS, MRS DEBORAH MARY

Manager, Regulatory Affairs and Risk, WA Gas Networks Pty Ltd, examined:

The CHAIRMAN: Good morning. Thanks for coming today. I will read an opening statement.

This committee hearing is a proceeding of Parliament and warrants the same respect that proceedings in the house itself demand. Even though you are not required to give evidence on oath, any deliberate misleading of the committee may be regarded as a contempt of Parliament. Before we commence, there are a number of procedural questions I need to ask. Have you completed the "Details of Witness" form?

The Witnesses: Yes.

The CHAIRMAN: Do you understand the notes at the bottom of the form?

The Witnesses: Yes.

The CHAIRMAN: Did you receive and read the information for witnesses briefing sheet regarding giving evidence to a parliamentary committee?

The Witnesses: Yes.

The CHAIRMAN: Do you have any questions relating to your appearance before the committee?

The Witnesses: No.

The CHAIRMAN: The committee would again like to thank you for your appearance today. Before we ask any questions, do you wish to make an opening statement?

Mr Scotchbrook: Yes, I do have a brief submission that I would like to make.

The CHAIRMAN: Okay. Please do.

Mr Scotchbrook: Thank you, Mr Chairman.

Firstly, WA Gas Networks supports the work of the committee and like many Western Australians is eager to hear the outcome of the inquiry. I would like to start by providing some background on WA Gas Networks. We own the majority of gas distribution infrastructure in Western Australia. This infrastructure has reliably and efficiently supplied gas to residential, commercial and industrial customers in metropolitan Perth, Geraldton, Bunbury, Busselton and the Kalgoorlie–Boulder district. We also reticulate liquefied petroleum gas, otherwise known as LPG, to domestic customers in Albany. We are an efficient operator that is regulated and well governed. The gas network is sound and well maintained and as a business we put a high focus on the safe long-term planning of the operation and expansion of our distribution network.

As the largest distributor of natural gas in WA, we provide a gas connection to 625 000 consumers, including households and a range of commercial—industrial businesses. Of these consumers, the industrial and residential segment represent about 80 per cent of the gas transported across our network. Our network encompasses just over 12 800 kilometres of pipeline across an area of approximately 3 800 square kilometres.

Over the last five years, the growth in these networks has been approximately 260 kilometres of pipeline per annum, with an average connection rate of approximately 19 000 new customers per annum. This represents a rate of about three per cent growth each year. We believe that the use of gas is of benefit to the community, and we continue to be involved in ways to stimulate the use of gas through new technologies and energy solutions. We believe gas is a clean energy solution with lower carbon emissions than other energy sources. WA Gas Networks employs more than 220 people throughout the state of WA, operating service centres in Jandakot, Wangara, Geraldton, Albany, Bunbury and Kalgoorlie. As the committee may be aware, our business is subject to economic regulation, with 93 per cent of our revenue derived from the largest network, known as the Mid-West and South-West Gas Distribution System that covers the greater metropolitan area of Perth.

Regulated distribution tariffs are charged to our customers, such as Alinta Sales and Synergy, for connection to and use of our distribution system. Growth in these regulated distribution revenue tariffs is driven by changing customer demand and the number of new connections. The regulated tariffs are set by the Economic Regulation Authority as part of our access arrangement. The current access arrangement for the Mid-West and South-West Gas Distribution System was finalised in August 2005. In August this year, the ERA published its draft decision on our revised access arrangement for the next period ending in June 2014. The draft decision will increase real revenue by around \$5 million per annum. We responded to this draft decision last month and the ERA is expected to publish its final decision later this year. The other gas distribution networks, Kalgoorlie and Albany, are unregulated and contribute approximately two per cent to our total revenue. The remaining five per cent comes from unregulated revenue sources.

I would now like to give you a brief history of WA Gas Networks. As you may be aware, the State Energy Commission of WA was disaggregated in January 1995 into separate gas and electricity corporations. On 13 July 2000, legislation was passed by the government of WA for the sale of the gas corporation known as Alinta Gas. WA Gas Networks was part of the broader Alinta group and as a result of the takeover by a consortium comprising Singapore Power International, Prime Infrastructure and Babcock and Brown Power, the company was split into separate businesses. Alinta retained the WA retail business; with WA Gas Networks receiving asset management, construction and maintenance services from WestNet Energy. We transferred these functions and key corporate services, including the related employees, from WestNet Energy in August this year. WA Gas Networks now has direct control of all the operating functions that support the network.

In closing, we understand WA has extensive gas resources and reserves, and we believe that gas has a long-term role to play as an energy source for WA. Our distribution business provides predictable and regulated revenues. We are an efficient and effective operator that has invested in a long-life gas asset. Because of our continued investment in our infrastructure, and in WA, we would want to see an equitable framework for differing energy sources and a cost structure that reflects the actual cost of supply. Thank you. We welcome any questions.

The CHAIRMAN: To describe your business, you are a state-owned, price-regulated, reticulation pipeline company in the south west of Western Australia—is that right?

Mr Scotchbrook: The second part is correct. We are not state owned; we are privately owned. Our ownership is currently held by Prime Infrastructure and a diversified group known as DUET. It is 75 per cent held by Prime and 25 per cent held by DUET—or thereabouts.

The CHAIRMAN: The reason why we were instructed by the Parliament to undertake this inquiry is the widely held growing concern that there is a growing physical shortage of gas in the long term and the rapidly rising price of gas that will adversely impact our competitiveness. Do you accept that diagnosis and do you have any evidence or otherwise of it happening through your market?

Mr Scotchbrook: That is a difficult one for me to comment fully on because we are part of the overall supply chain and we do not invoice the customer directly; for instance, our customers are

Alinta Sales and Synergy. We are very cognisant of our cost base. I am aware of information about what is happening in the market and have a personal view, which seems to be tracking with what is reported in the press.

The CHAIRMAN: Is that what your customers tell you? Even though you probably do not track prices and that you are just a transmitter of gas and not a marketer, is that what your customers are telling you? Obviously, you would have interest in terms of market intelligence about demand and what it will be.

Mr Scotchbrook: Definitely the retailers that we interact with tell us that the price of gas is increasing, and increasing significantly. We have had some interaction with larger consumers who are customers of these retailers and they have adjusted their business operations to suit the higher price, with some potentially reducing their demand or looking at alternate methods of operation.

The CHAIRMAN: We have also heard evidence that there is a chance that the characteristics of the gas contracts will change from flexible to inflexible arrangements. Have you heard that? Will that impact on your business?

Mr Scotchbrook: Firstly, I have not heard the detail on that so I cannot comment. In terms of impact on our business indirectly, I would say no because our contracts are with the retailer specifically. Indirectly, we are, to a degree, impacted by customer demand. If those arrangements have the end result of changing customer demand and customer uptake of gas, then yes, we would be impacted.

The CHAIRMAN: One of the notable omissions from our market is gas storage; other markets around the world have that. Are you involved in or considering developing gas storage? Do you know of any gas storage infrastructure that is being developed?

Mr Scotchbrook: I am aware of the Mondarra facility through APA. Whilst we do not need the supply from gas storage, our role is to facilitate that storage into the market. At the moment, APA has a single pipeline into the broader metropolitan area and there is only one point of connection to our network. I am working with APA at the moment to facilitate greater entry into broader parts of the network to provide a security of supply method for WA.

Mr W.J. JOHNSTON: I will just clarify that. One-point connection—are you saying your network only connects to the Dampier to Bunbury line?

Mr Scotchbrook: No; to the APA pipeline. There are two pipelines that come into WA. We have approximately 15 to 16 connection points on the Dampier to Bunbury pipeline. That is the majority supply source for the metropolitan area.

Mr W.J. JOHNSTON: But you also connect to the Parmelia line?

Mr Scotchbrook: Correct. There is a single interconnection point and we are looking —

Mr W.J. JOHNSTON: Okay, right. Now I understand. Sorry.

The CHAIRMAN: Where is that connection point?

Mr Scotchbrook: It is north of the metropolitan area. I cannot give you the exact location.

Mrs Evans: It is around about Caversham.

The CHAIRMAN: One of the things that we heard was that, firstly, domestic or household consumption of gas was quite small, and that the cost of gas is a small proportion of the charge of that service. We have also heard that there is very little growth in that market. Could you comment on those?

Mr Scotchbrook: One of the things that we are seeing is a decline in the average use of gas; effectively, connected customers are using less gas on average.

The CHAIRMAN: Each connected customer is using less gas?

Mr Scotchbrook: Each connected customer.

The CHAIRMAN: Okay.

Mr Scotchbrook: However, we are still seeing a desire for gas from residential customers. As I said, we connect approximately 19 000 per annum and we have done at least the last five years and probably for the last 10 years.

The CHAIRMAN: Is your ratio of connects to potential connects increasing or constant?

Mr Scotchbrook: Reasonably constant. In effect, that has additional growth in terms of more gas coming through the network, but if you look at the average use of gas for those customers, it has decreased. Anecdotally, I think that back in 2000 the average use of gas was about 20 gigajoules per annum; we are now seeing numbers in the 17 to 18 gigajoules per annum.

The CHAIRMAN: Why do you think that is?

Mr Scotchbrook: A couple of competing factors. For us, there has been a lot of introduction of reverse cycle air conditioning that has impacted our traditional gas heating mode. Solar hot water systems impact our traditional gas storage hot water systems. You could say those are the key competitive threats to the use of gas. I also suspect price is a factor, but the numbers are too early to tell.

[9.30 am]

The CHAIRMAN: Up until recently electricity prices have been constant. Do you see that as a factor in people substituting electricity for gas?

Mr Scotchbrook: Possibly. The issue for a consumer is—and this is my personal view—that the decision is made at the appliance selection, usually at a renovation or a new home, and they will decide on their appliance make-up. That is really the key driver. It is a fairly significant expense for the average homeowner to shift all of those appliances: their hot-water system, their cooktop and maybe a heater.

The CHAIRMAN: Do you think it is not driven so much by relative prices—electricity versus gas—but the characteristics of the appliance?

Mr Scotchbrook: I think historically it was not. I think with price rises in the electricity market over the last couple of years, that is one that we are tracking very keenly. I am not confident to have realistic statistics at this stage.

The CHAIRMAN: It will be interesting to see what will happen with the hailstone impact causing many people to buy new appliances and whether they go for the solar or otherwise.

Mr J.E. McGRATH: You talk about the usage and the customer base. Looking to the future in Western Australia, if there is going to be a demand for more gas among domestic users, do you see that coming from industry more than domestic? Where do you think the future for gas consumption is? We are told that there is going to be a huge demand for gas in Western Australia. You are now telling us that some people are not using gas because they are using reverse cycle air-conditioners. Where will be the big demand in the future for gas, do you see?

Mr Scotchbrook: In my view, the demand for gas has historically always been at the industrial and commercial level. WA has predominantly been project based in terms of its energy usage and I think other speakers you would have heard would have commented similarly to that degree. Gasfired generation is a large driver.

Our climate is one that means we do not require a lot of heating. Compared with other eastern states' cooler climates where gas usage at the residential level is more significant, they have a different climate to support that. As a business, though, we are looking at alternate means of using gas to continue to provide choice to the end-consumer. You can use gas for air-conditioning, believe it or not. You can exchange the heat pump for a gas supply rather than electricity. One

option for gas is for it to be an offset for the electricity infrastructure. If you have a significantly overburdened electricity network, you can shunt between the two to provide alternate means of securing that supply.

The CHAIRMAN: Is there a concern about new homes or dwellings not taking up an attachment to gas to provide a future option?

Mr Scotchbrook: We have not seen that to date. Our penetration or connection rate in new subdivisions is close to 100 per cent, but what we are seeing is a change in the appliance make-up. So most people, families et cetera, want a gas cooktop; they want gas for cooking. When it comes to a hot-water system, they are seriously thinking about a solar system with gas boosting as opposed to a traditional gas hot-water storage. Similarly, reverse cycle air-conditioning is an issue.

The CHAIRMAN: We have heard evidence that in new subdivisions there is a reluctance to connect. Is that not your experience?

Mr Scotchbrook: No. Where we have difficulty is with what we call subdivisions leaping the development front. As Perth expands up and down the coastal strip, effectively, it costs more for us to extend our infrastructure beyond that development. Where we have subdivisions that are only incrementally expanding, it is a much less costly exercise for us to connect those subdivisions. For instance, we have one with Yanchep looking to connect, which is seven, eight kilometres away for our nearest infrastructure. Therefore, the cost of connecting that infrastructure is almost prohibitive.

The CHAIRMAN: Is that because when you connect, let us say, Yanchep, you have to extend your outer arterial pipelines?

Mr Scotchbrook: That is a very good analogy. We need to put the backbone in to maintain the supply.

The CHAIRMAN: Given the growth rate of Perth, why do you not build excess capacity in those arterials in stride with that?

Mr Scotchbrook: We have factored that in and that is what we proposed to the ERA. However, there is a restriction on us in undertaking what is viewed as speculative investment. We need to balance the tension of the usage of that pipeline.

The CHAIRMAN: Can the ERA be very inflexible?

Mr Scotchbrook: I am sure Peter would be able to comment more fully on that.

The CHAIRMAN: That was a different life.

Mr J.E. McGRATH: Before we get in to some other questions that might be considered to be more nitty-gritty, I am interested in the supply of the LPG in Albany that you talked about. Can you explain your customer base down there and how you supply Albany? What is your view on the planned pipeline extension to Albany? How necessary do you think that is?

Mr Scotchbrook: I can give you some background on Albany. Albany originally started with a network that was originally supplied by what was known as tempered LPG, which is LPG mixed with a degree of air. That air mixture was removed and so it is now an LPG supply. The reason for that is there is no pipeline infrastructure; there is no natural gas pipeline to take natural gas down there and so it is an isolated network. Effectively a truck of LPG is tankered down to Albany. We have what we call an LPG plant. You may have seen at service stations those large white LPG bottles. We have got about six of those in a series and that is the supply source of gas for the Albany township.

The CHAIRMAN: Is it reticulated around Albany?

Mr Scotchbrook: It is reticulated throughout Albany. Rather than having LPG bottles at your home, the Albany customer has effectively no difference from the Perth customer; they just turn the gas on. That convenience is what home-users are seeking, rather than having individual bottles. The

make-up of the network in Albany is primarily residential with some commercial customers. From memory, there is very little industrial load, if any, down there. We have about 6 000 customers. It is wanting to grow. The problem with that network is that it is constrained. For us there are only six bottles or bullets, as we call them, in that plant. We need to continue to re-supply and at the moment there is a truck going down once a week. It becomes inefficient to have greater demand in that network. The proposed natural gas expansion of the DBNGP is one solution for Albany. The conversion of that network is something that would probably enable further growth in Albany and the surrounding areas.

Mr W.J. JOHNSTON: Can I just ask, if you were to convert from LPG to natural gas, are there questions of infrastructure changes or your infrastructure would potentially work okay with natural gas?

Mr Scotchbrook: Changes are required. LPG is a much different gas from natural gas. Unfortunately all the appliances need to be changed.

Mr W.J. JOHNSTON: The consumer appliances?

Mr Scotchbrook: The consumer appliances would require changing. There may be some changes to our network required as a result of that. We have not done a detailed analysis. The problem with natural gas is that it has what is known as a lower heating quotient. You need to burn more natural gas to the LPG equivalent. Therefore, a greater volume of natural gas would need to be passed through the pipes. We would need bigger pipes or higher pressure pipes to supply the natural gas equivalent to the consumer.

Mr W.J. JOHNSTON: I know that there are some remote power stations that use trucked LNG. Have you ever considered trucked LNG for the market in Albany? Is that realistic or impossible?

Mr Scotchbrook: It is entirely possible. Personally off the top of my head, it is very similar to what is happening at the moment. However, to me you are forcing a change of appliance and you have still got the refuelling infrastructure of the tanks of the LNG tanks. But it is definitely a possibility.

The CHAIRMAN: There is quite a large farming community and small homestead community around Albany that is growing in that area. Are they using LPG?

Mr Scotchbrook: I suspect so. There is probably LPG bottles or something like that. That is the predominant gas source through most of the rural areas, if they are using gas.

Mr W.J. JOHNSTON: Can I ask a question on this issue, although not related to Albany? I understand they use LPG bottles in Karratha. Would it be possible to extend your network to Karratha to do reticulated LPG for —

Mr Scotchbrook: It would not be an extension. We would have to actually build a network there.

Mr W.J. JOHNSTON: Yes, extension of the concept, rather than extension of the network.

Mr Scotchbrook: Correct. It is entirely possible. It is no different from what we did with Kalgoorlie.

The CHAIRMAN: Since it is closer to the pipeline why would you not go up there and put in a natural gas reticulation system for Karratha?

Mr Scotchbrook: It is effectively an issue of demand and the economics to do so. To give you an idea, we have three employees out in Kalgoorlie to actually service and maintain the network. So we effectively need to install a service centre, a depot, out there. We have one in Geraldton. Karratha would be too far from Geraldton so we cannot leverage any benefit from there. It is essentially a cost. If we get the right demand and the initial baseload customers or foundation customers, then it can be made economical for us.

The CHAIRMAN: Let us go back to the cost to the consumer. We have been told that the cost of the gas itself is only about 25 per cent of the cost of the total cost to the consumer. Is that approximately right?

Mr Scotchbrook: I could not say. I do not have visibility across all of the supply chain in terms of those contracts. However, I know what our price would be for the consumer and what our make-up is

The CHAIRMAN: Is there a real scale on this reticulation system?

Mr Scotchbrook: Yes. We have over 12 000 kilometres of pipeline that need to be maintained; that is, our cost base is relatively fixed. Transporting an extra petajoule of gas a year does not change our maintenance profile drastically. We are not really driven by marginal costing, so we need to recover those fixed operating costs to maintain the network as it is.

Mr J.E. McGRATH: Are your costs fixed by regulation?

Mr Scotchbrook: They are reviewed by the ERA. When I said fixed costs, we incur them regardless of size and they are all open to scrutiny by the ERA review.

Mr J.E. McGRATH: Can you have some variations—unforeseen circumstances and things like that?

Mr Scotchbrook: Correct, and step change. One of the things we have seen is with the growth of metropolitan area, as I said, up and down the coastal strip, we are having to establish extra service centres. One of the things we put in our draft submission was the need to install new centres closer to Yanchep, and one further south, to support the metropolitan area. We have KPIs—key performance indicators—that say we need to respond to a gas break within an hour. That is a mandated requirement on us. To do so, we need to have service crews within a ready response zone.

Mr J.E. McGRATH: How old is some of that infrastructure and some of those old gas pipelines?

Mr Scotchbrook: In the metropolitan area?

Mr J.E. McGRATH: Yes.

Mr Scotchbrook: It varies. For instance, some parts are quite new and probably less than 10 to 15 years old because Perth has grown quite recently, whereas other parts, some of the steel network and the metropolitan CBD, would be much older—closer to 20 or 30 years.

[9.45 am]

We even have some very old networks that we inherited at Fremantle, which we are currently replacing, which were old cast-iron. They were much older. So it is a bit of a mix. We say that the average age is about 30 to 35 years in the network, so relatively young in comparison with other networks.

Mr J.E. McGRATH: So the network is in pretty good shape.

Mr Scotchbrook: We believe it is, yes.

The CHAIRMAN: Fremantle Gas and Coke, is that Fremantle?

Mr Scotchbrook: That is correct.

The CHAIRMAN: Some of that was coal gas, was it not?

Mr Scotchbrook: That is correct, and it was a very unique, isolated pocket of a network. It has been a rolling program for us to change that because a lot of the pipes were cast iron. That deteriorates. In order to maintain the supply we have been replacing that with steel or polyethylene as needed.

The CHAIRMAN: As you say, the expansion of Perth is along the coast and, therefore, the footprint of the city is very large geographically and it stretches out utilities such as yours. There is

a policy of trying to have densification to limit the expansion of the equipment and make it more densely compact. Does that help you or otherwise?

Mr Scotchbrook: In some parts it helps, but it also creates other issues. For instance, subdivisions create issues for us for access to our pipelines to the home. That has its own unique set of issues. We need to maintain fairly stringent safety standards in putting the gas infrastructure in place. Sometimes developers do not take that into consideration when they are doing some of these higher or medium density initiatives. In terms of the capacity of the network, yes, it does. If it is underused or not used to full capacity, then, yes, it just utilises it further.

The CHAIRMAN: Is your near-city infrastructure close to capacity?

Mr Scotchbrook: That is very difficult to answer. It is predominantly medium pressure infrastructure, and it is something that we monitor closely. We maintain for worst case scenario winters, so we always have to build the extra capacity into the network to cater to that. For instance, if we have a warm winter, we have quite a bit of capacity, but we are catering for that one winter when we get quite cold and significant draw.

The CHAIRMAN: So yours is a very seasonally peaky demand?

Mr Scotchbrook: Correct.

The CHAIRMAN: Do you have many small-business customers?

Mr Scotchbrook: Yes.

The CHAIRMAN: What kind of characteristics would they have?

Mr Scotchbrook: A good example, as I say, is a laundry or a bakery. They are great example of a decent-sized small business consumer.

The CHAIRMAN: When we had the Varanus accident, I think the laundries had key issues.

Mr Scotchbrook: Yes. A lot of industrial grade dryers and washers are gas powered, because it is more efficient.

Mr W.J. JOHNSTON: What sort of load would those dry cleaners and bakers draw on your network?

Mr Scotchbrook: It can vary depending on what the scale of the operation is—about five terajoules a year.

Mrs Evans: Yes, you get quite a broad range simply because it depends on the size of those businesses and the pressures that they are actually using, which is driven by the appliances, but, yes, it can range from about one terajoule through to about five terajoules for the smaller commercial business.

Mr J.E. McGRATH: You would not have much contact with them, though, would you, because they would be dealing with their direct supplier?

Mr Scotchbrook: Not direct contact, no.

Mr J.E. McGRATH: Do you have any of those people ask what is happening to the price of gas and why it is going up all the time?

Mr Scotchbrook: Not usually, because their relationship is with the retailer. Our interaction with the consumer is usually at the installation when they are sizing their appliances. So when they are wanting a gas connection that is when we get involved and say, "Is there a gas line outside the premises and what metering equipment is there to enable your connection?" After that, the relationship of the customer is with the retailer.

The CHAIRMAN: Those people really do not have any alternative to gas, do they?

Mr Scotchbrook: At the one terajoules level, for the commercial customers there is contestability. The alternatives in the current market are Synergy and Premier Power.

The CHAIRMAN: If they did not have gas, there is not a technical substitute between gas and electricity?

Mr Scotchbrook: Correct. It would require a shift of their appliances, and that is similar to the residential customer. They could look at LPG as a supply source; they could look at alternative energy supplies. But again, that would mean changing their equipment, and how readily changeable that equipment may be is very much dependent upon the customer.

The CHAIRMAN: Do you have any cogeneration people using your pipeline?

Mr Scotchbrook: Yes, we do. Pinjarra Aquatic Centre—I am not sure if they are online as yet—use cogen. Fiona Stanley is touted as one that is committed to cogen. Those are some of the areas we are looking on as potential future uses. It is embedded, distributed generation. Again though, that becomes very much a pricing decision for the end consumer. I am trying to recall if we have any existing. I am not sure that we have any current ones in use.

The CHAIRMAN: What would happen if we found gas in the footprint of your distribution system? Could you facilitate bringing that gas onto the market?

Mr Scotchbrook: Definitely. We would not be involved in exploration or anything like that, but if the gas is found, yes, we would definitely be a facilitator to bring that to market. From our perspective we are indifferent to the supply; it is gas coming into the network and to the end consumer. The more that we can bring in the better.

The CHAIRMAN: Would there be any impediments to somebody else, let us say, building an LNG unloader and bringing it into your system?

Mr Scotchbrook: Other than technical requirements, how that is put through, the quality of the gas that comes in and how we need to map towards the relevant regulations and standards of gas in our network—those are probably the primary issues that would need to be resolved.

Mr J.E. McGRATH: I am keen to know your views on the Western Australian consumers' reliance on gas. We talked before about what happened with the explosion at Varanus Island. What impact did that have on your network and on the availability of gas, and how was the state affected in general terms? How would you describe the effect that had on the state in relation to our reliance on gas?

Mr Scotchbrook: Firstly, the impact on our network from Varanus: we saw a reduced usage primarily at the commercial and industrial business level. We tracked minimal change in the domestic profile during that period. So the end consumer may have had some behavioural change to their consumption patterns, but overall there was limited change. In terms of actual revenue impact to us, it was approximately \$1.5 million to \$2 million cost to us, or lost revenue, because we actually charge retailers based on gas through the network, so a volume charge. It was lost revenue to us. I think in terms of the market, and this is my own personal view, there is a degree of confusion within the market on the retail operations, because you had one retailer in Synergy that did have gas that was able to supply, yet Alinta were unable to offer supply. But that is my own reflection on what appeared to be happening. I was not close to those relationships.

Mr J.E. McGRATH: We read about hotels that could not do the laundry and were bringing in sheets and things like that from other states. Was it that big an impact?

Mr Scotchbrook: Again, it is difficult for me to comment fully. I was monitoring the press the same way and just hearing information, but again, we were not direct to that. From our perspective, we were managing more the transition of a customer from one retailer to another and making sure that our metering information for that customer transferred appropriately. As I said, there was confusion where you would have some customers who were being told they needed to shut down

whereas other customers were being allowed to consume because they had different retailers with different supply arrangements.

Mr J.E. McGRATH: It did not shut the city down; we got by.

Mr Scotchbrook: I think it was a unique situation, in that only about 30 per cent or thereabouts of reserves were not supplied into the network. Yes, we got by. It was a challenge that I do not think many people had foreseen. A lot of our emergency scenarios were for a total stoppage of supply, so it did create some changes. I was on the Gas Supply and Emergency Management Committee, and we went through that in a lot of detail. Things like gas storage were seen as another possible way to mitigate those sort of scenarios into the future.

Mr W.J. JOHNSTON: Going onto a completely new topic, there is discussion about using natural gas as transport fuel. The bus network does that at the moment. There is discussion in the media about other companies perhaps following that same path. I am just wondering whether you saw that your distribution network will be able to facilitate that and has your organisation made any sort of desktop studies or anything about that type of proposal?

Mr Scotchbrook: Yes, we have. It is probably the most significant advance or the most mature technology that I think we could take at the moment. As you said, 50 per cent of the bus fleet is run off our network, or supplied with gas through our network. I am currently in the process of arranging for some of our fleet to be transferred to CNG, or compressed natural gas, as a test. So we would get about two or three vehicles and a filling infrastructure at our Jandakot operational depot. We have a number of courier companies that are expressing interest in CNG infrastructure.

Mr W.J. JOHNSTON: So you would see that your current network would support that type of infrastructure, say, for a courier company that might have a couple of depots?

Mr Scotchbrook: Definitely.

Mr W.J. JOHNSTON: I have no technical knowledge of these things. Is the infrastructure that the company would have to install to support CNG transport particularly expensive or complex?

Mr Scotchbrook: I do not consider it overly expensive. The question comes down to what the customers are willing to tolerate. The issue with the infrastructure is how quickly you want to fill, because we have a pressure in the pipeline. For instance, the buses require, because the volume of their fleet, what is known as a very high, fast-fill infrastructure. That in itself has some specific requirements. If you are willing to wait a little bit longer—say, five minutes as opposed to two minutes—then it changes the course of infrastructure. We have even done some initial investigation into refuelling infrastructure for the home, where you can have a CNG refiller on your residential supply. Plug it in overnight and it refills your car.

Mr W.J. JOHNSTON: You might not want to answer this question, and I am relaxed if you do not, but what sort of cost are you expecting in order to put your pilot plant in at Jandakot?

Mr Scotchbrook: I have not got that finalised to date.

Mr W.J. JOHNSTON: Is it hundreds of thousands or tens of thousands?

Mr Scotchbrook: Less than half a million, I think I can comfortably say, and that would include the vehicles as well as the trucks and the complete installation.

The CHAIRMAN: What is the cost of converting a vehicle to compressed natural gas?

Mr Scotchbrook: Again, that varies for the vehicle.

The CHAIRMAN: Let us say a Falcon.

[10.00 am]

Mr Scotchbrook: A Falcon would be reasonably cheap for a passenger vehicle.

The CHAIRMAN: Cheaper than LPG?

Mr Scotchbrook: I think it is a little more expensive; again, it depends on what solution you go for, because you can have different material for the tanks. You can go for a steel tank, which is relatively cheap, or you can go for a carbon fibre tank—that is for the gas tank—which is much more expensive. But there are cheap options that are reasonably comparable to LPG. We are looking at options for our trucks as well, so that is why it is a —

The CHAIRMAN: Does a conversion make economic sense, let alone the access issue? If you convert, and you do have access, does it pay for itself? Is the payback period reasonable?

Mr Scotchbrook: I believe that the payback period is reasonable in comparison with diesel and distillate.

The CHAIRMAN: Distillate in Western Australia is expensive.

Mr Scotchbrook: Yes. One advantage is that it is difficult for the end consumer to really get security on the pricing of distillate, whereas you could sign a longer-term gas contract and have a bit more security in the knowledge of what your transport pricing is going to be.

The CHAIRMAN: Are there cars made with this technology already in them?

Mr Scotchbrook: The passenger vehicles are not currently in Australia, but things like the trucks—Iveco, Isuzu and so on—make what is known as OEM, or original equipment manufacture, straight out of the plant with CNG. They have a small petrol igniter and a very small tank, so realistically it is a hybrid. There are some that are pure CNG.

The CHAIRMAN: They could use a pilot light lighter!

Mr W.J. JOHNSTON: If this became commonplace in Western Australia and people had an overnight refueler in their home, what would an overnight refueler in the home cost? What would be a ballpark figure? I am not asking you to give a guarantee, but just a concept.

Mr Scotchbrook: Conceptually, a very approximate number in the order of magnitude would be between \$5 000 to \$8 000, I think from memory. Again, there is —

Mr W.J. JOHNSTON: Yes, I am just asking because we are thinking about this; it is an important issue. If you have done any study, you will be ahead of us.

Mr Scotchbrook: It is like most things. Technology, when it first comes to market is traditionally more expensive, but uptake and broader usage brings the price down.

The CHAIRMAN: Logically, you would say that if there is a push to have electric cars, which is interesting, you plug those in at home and that is actually generated by gas, so it is perhaps better in terms of the efficiency of the energy used to use direct gas and also use design cars.

Mr Scotchbrook: Correct. From what I understand of the actual manufacture of an electric vehicle, the drive train is completely different to a gas vehicle, whereas a gas conversion is very similar to LPG.

The CHAIRMAN: What is the difference between compressed natural gas and LPG in terms of the use of the vehicle? Is it better to use just LPG, rather than CNG?

Mr Scotchbrook: I think, again, the biggest difference is size of the tank; it comes back to the heating quotient in the gas. You need less LPG compared with natural gas. In terms of the green credentials, I believe there are some really good carbon dioxide benefits, but I do not have that information to hand. But a number of studies have been done, mainly in Europe et cetera. I was actually at a launch in Canberra for a public natural gas CNG refilling station, so the east coast is looking at moving to CNG in a fairly significant way.

The CHAIRMAN: Yes, other countries are doing this too.

Mr Scotchbrook: Yes.

The CHAIRMAN: What about heavy duty trucks going north?

Mr Scotchbrook: As was mentioned, LNG is really the better source; you cannot get enough CNG on the vehicle for the range that is required. What we have identified is that CNG traditionally has been used for short-haul, back-to-base methodologies of use, such as couriers that return to a depot each night to refuel—for those sorts of vehicles, it is ideal.

The CHAIRMAN: What is the length of the tank in kays?

Mr Scotchbrook: Again, it varies between vehicles and I understand that it is between 250 and 350 kilometres for a passenger vehicle, with minimal loss of power. There is some difference in power, but arguably not noticeable.

The CHAIRMAN: And the tank would take up the whole boot of a Falcon?

Mr Scotchbrook: I have not seen it yet; I do not think so. Again, the technology has come a long way. It originally started in WA, obviously when the buses first started; it was looked at in 2000, but the vehicles have undergone some significant improvements.

Mr J.E. McGRATH: Just going back to the reticulation network, I am wondering where you see the future expansion of the network. A couple of specific ones I had: I was in the Mid West a couple weeks ago looking at some of the new mine developments up there. Will they be tapping into the Dampier to Bunbury pipeline? Also, with Carnarvon, for a long time they did not have access to the pipeline and they were using LPG. I believe they now tap into the pipeline. Do you do that reticulation in Carnarvon, or who does the reticulation in Carnarvon?

Mr Scotchbrook: No, we do not do the reticulation in Carnarvon. I understand that there were a couple of direct connects off the transmission pipeline; I was not aware of any reticulated —

Mr J.E. McGRATH: I am not saying that there is reticulation, so maybe there is not.

Mr Scotchbrook: I know that there is some supply into dedicated sites for Carnarvon, like a power station, for instance, would have a direct line off the transmission pipeline. Reticulation for the small use consumer or even the midsize commercial consumer comes down to an economic assessment. If we can get enough foundation load and projected usage, then it is something we will definitely look at.

Mr J.E. McGRATH: Have those miners in the Mid West expressed any interest in getting gas through some sort of reticulation from the main line?

Mr Scotchbrook: Not to us. Again, my own personal view would be that the mines usually have a relatively set project-based mindset, and you would only be putting that type of reticulation infrastructure in place if you were there for the long haul, effectively.

Mr J.E. McGRATH: And they would pay for it?

Mr Scotchbrook: Yes.

The CHAIRMAN: There is an issue about transparency of the market—about prices, buying and trading—and there has been proposed to us a number of initiatives such as a bulletin board and short-term trading market. Do you have any comments on proposals such as that, which I am sure you are across?

Mr Scotchbrook: From WA Gas Networks' perspective, where necessary if we needed to interface into those sorts of frameworks we would do so, and obviously the costs associated with that would be covered in the establishment of those arrangements, so how we participate is something that we are monitoring. In terms of the long-term benefit, we are personally a little removed; a lot of that transparency, due to the current structure of the WA market, is of benefit to the end consumer and retailer in having transparency of pricing.

The CHAIRMAN: Do you see very many swaps between people coming to your suppliers of gas and swapping gas between them, and using your pipeline?

Mr Scotchbrook: We refer to those as "churns". Again, there is no facility at the moment for contestability at the residential level. There is the framework for contestability but Synergy, which is probably the likely competitor, is restricted by other mechanisms until its market is contestable. In the commercial market there is churn, and customers appear to be looking at alternatives. We have three active retailers in the market and there is a fourth that is probably not as active. In that commercial industrial space there is significant churn for those sorts of customers.

Mr W.J. JOHNSTON: What percentage of industrial commercial customers are churning each year?

Mr Scotchbrook: I do not have that off the top of my head. I am being a bit cautious about whether I can disclose that, because it might be considered confidential; I might be disclosing the majority retailers' load base.

Mr W.J. JOHNSTON: Why do you not consider whether you can provide it by way of supplementary information, because it would be useful to us to know. It has been suggested to us that the churn rate is an indication of the effectiveness of the market, so if you are able to provide that information, it would be useful to us.

Mr Scotchbrook: Yes.

The CHAIRMAN: What I meant was not the churn, but user X not needing the gas and shipping it over to user Y. They would obviously use your network for that.

Mr Scotchbrook: Substitution to a different energy source?

The CHAIRMAN: They do swaps; if they do not need the gas, they swap it and sell it to somebody else, and it comes through your pipeline, obviously. Do you see much of that?

Mr Scotchbrook: We have had some very preliminary indications of interest on about two or three occasions where consumers have had excess gas on our network and they are looking to swap, but they have not moved any further.

The CHAIRMAN: So you have not seen much of that?

Mr Scotchbrook: No.

Mrs Evans: We would not need to, because it can be done at a different level. We just get advised of where gas is going to its outlet points and what happens with the gas supply details and the retailers.

The CHAIRMAN: But you would want it to flow through your pipeline.

Mrs Evans: Yes we do, but it is just going at the point where the gas is being consumed, so it is really between the retailers and the end users.

The CHAIRMAN: But your pipeline would be able to facilitate those swaps; in a mature, functioning market those swaps are, as I understand it, very important.

Mrs Evans: Yes, because there is nothing that we physically have to do to change; it is all happening at either the entry point into the network or the exit point.

Mr Scotchbrook: Some of those swaps would actually be managed by the retailers themselves; the people we have had expressions of interest from are new players who are looking to participate in that swap sort of arrangement, but they are not necessarily performing all the functions of the existing retailers.

The CHAIRMAN: Do you see much growth in the small to medium-size business use of gas in recent times, in numbers and volume?

Mr Scotchbrook: I would not say significant growth; there has been some growth. The industrial market has probably flattened a little, which is understandable, given the nature of those sorts of

operations. That is one of the reasons we are looking at alternative means such as things like CNG, which provide a very good method for the commercial market to reconsider gas.

The CHAIRMAN: If we wanted to get some information on the costs and otherwise of CNG, where would we get it from? Is there someone who has done a recent Perth-based assessment of this?

Mr Scotchbrook: Not a direct Perth-based assessment. Obviously we have done a little; we have worked with some partners on the east coast. I am more than happy to give you information on the equipment and maybe the conversion costs et cetera, and then there is the pricing of gas supply to the consumer through the retailer.

The CHAIRMAN: If you put CNG, you can avoid a bit of tax, can you not? If you use CNG or natural gas from your house for transport fuel, right now it does not have a transport fuel tax.

Mr M. McGOWAN: You have your own bowser in the driveway.

The CHAIRMAN: Yes.

Mr Scotchbrook: That is true; I believe there is no excise on that, though a paper has been issued by the federal government on that, and there is a degree of industry response to that paper.

The CHAIRMAN: Thank you for your evidence to the committee today. A transcript of this hearing will be forwarded to you for correction of minor errors. Please make these corrections and return the transcript within 10 working days of the date of the covering letter. If the transcript is not received, it will be assumed to be okay. New material cannot be added or introduced via these corrections and the sense of your evidence cannot be altered. Should you wish to provide any additional information, such as Mr Johnston has suggested, or elaborate on a particular point, please include a supplementary submission to your evidence. Thank you.

Hearing concluded at 10.14 am