# OPENING STATEMENT TO THE SENATE STANDING ECONOMICS COMMITTEE – PERTH 2ND OCTOBER 2008

## Background

Western Australia consumes approx 1000 terajoules of gas per day.

Of this, 60% is produced by the North West Shelf group of companies; 35% is produced by Apache Northwest Pty Ltd and its JV partners and the remaining 5% is produced by BHP Billiton through the Turbridgi field of Onslow and Arc Energy Pty Ltd from both on and offshore around Dongara and pumped into the Parmelia pipeline.

The pipeline system is owned privately. The DBNGP having been sold off by the Court Liberal Government and the Goldfields Gas Pipeline was built from private investment. Regulation of the pipelines are through State institutions such as the ERA for access and economic regulation, the Gas Disputes Arbitrator for the obvious, the new Department of Commerce (DOC) under an MOU with the new Department Of Mines and Petroleum (DMP) for pipeline safety, the DMP itself currently has legislative responsibility for regulation and enforcement of island pipelines and infrastructure, the Office of Energy and Energy Minister has responsibility for applying emergency orders.

The gas distribution network is also owned privately having been sold off by the Court Government during their terms in the 1990's. Despite being an open access network and market, no retailer has ever set up in opposition to the monopoly Alinta since privatisation. Synergy is the only other major wholesale supplier of gas and does sell gas to large industrial consumers. All large industrial gas buyers such as Alcoa, CSBP, Iluka, etc, lend gas and trade volumes between themselves from time to time.

All gas delivered into the pipeline systems are already owned through long and short term contracts. There is no spare gas in the system waiting for someone to buy or be available should there be a sudden shortage. This is the same on the distribution network. There is no available gas for trading, unless a customer chooses to make some of their contracted supply available.

## The Incident

On Tuesday 3rd June, the 12 inch gas sales pipeline from Varanus Island ruptured on the beach below the Harriet Joint Venture (HJV) gas train and exploded causing a rupture in pipelines alongside and a subsequent fire that damaged the HJV train significantly. All gas supply from the Island was immediately stopped. The supply of gas into the system immediately became approximately 350 terajoules per day short.

The cause of the rupture, has been identified as corrosion on the beach crossing section of the 12 inch sales pipeline in the recent release of the investigative report undertaken by the National Offshore Petroleum Safety Authority. (NOPSA)

Pipeline safety and integrity, as indicated earlier, is regulated by three separate jurisdictions. Undersea pipelines by NOPSA, the beach crossing and island hook-ins by DMP under the Petroleum Pipelines Act 1969, contracted to NOPSA under an MOU and the onshore mainland pipelines, as stated earlier, by DOC. All pipeline regulatory responsibility will eventually be under the jurisdiction of NOPSA and DOC once final legislative changes are agreed to and passed.

## The Response

Once the fires were extinguished and it became known that no one was killed or injured a number of things took place;

Wed 4th and Thurs 5th June – Meetings and discussions held between all relevant systems regulators in an attempt to evaluate possible impacts of explosion and loss of supply:

Thursday 5th June – 2 investigators from NOPSA and 1 from DMP flew to the island to begin examination of the cause of the explosion and safety of the plant;

Friday 6th June – Minister for Energy and company fly to Island to evaluate extent of damage and timing for return of supply;

Friday 6th June – Premier calls a meeting of 24 key stakeholders to help in developing and communicating response to loss of gas. This action is in keeping with the recommendations set out in the Emergency Orders for Gas and Electricity.

Sunday 8th June – Meeting of stakeholders set out directions and responsibilities for coordinating response.

At the beginning of the following week – the Gas Supply Coordination Committee laid out the "Priority Allocation of Available Energy and Guiding Principles" which was posted up on the OOE website and was adhered to by all relevant parties throughout the period of shortage.

By the end of the week beginning 9th June, advertisements in newspapers, radio and during the following week: TV ads, were appearing highlighting implementation of the actions being taken and asking consumers to minimise their consumption:

The Actions:

Increasing production from all other sources eg: the North West Shelf and Perth Basin;

Fuel switching as many coal and gas fired power stations as possible to use diesel instead of gas and coordinating with the fuel companies to ensure a reliable supply of bulk diesel stocks;

Bringing back on line all the coal fire power stations that were out for routine winter maintenance (or in one case re-building a shattered turbine) and preparing the mothballed Muja AB power units for use, as a back up for the electricity system;

Asking people to reduce both electricity use and gas consumption – why? Because Alinta was a major customer of Apache and a significant generator of electricity. Their power stations were effectively knocked out by the shortage and Verve was picking up the shortfall. As a Government we didn't want an electricity outage on top the gas shortage.

Within Executive government, a small group of Ministers was established to help implement a cross government response to the impact of the gas shortage. For example: Jon Ford as Minister for Industrial Relations and Consumer Affairs was asked to prepare a strategy for dealing with any likely stand downs or job losses arising from the shortage.

In order to maintain consistency of messages to the public, industry and other Government Agencies, a Communications Sub-Committee of the Gas

Coordination Group was set up with key players from government departments, electricity utilities, Alinta, the CCI, CME and Media company Marketforce.

Further, a number contact lines were set up by various Departments to provide advice and assistance where possible, to affected customers and businesses.

The Federal Government also offered assistance after discussion between the Premier and the Prime Minister, particularly in the area of targeted social security and unemployment benefits to those impacted by the gas shortage.

Actions Summary

The immediate response by Government to the Varanus gas outage can be summarised:

- Establish Government, Industry, Energy Utility Group to coordinate response and actions in keeping with Emergency Orders recommendations;
- Increase available supply from upstream producers;
- Minimise use of gas burn in power generation in order to make available to industry;
- Demand manage gas and electricity consumption by households and industry in order to free-up gas and reduce pressure on the system;
- Immediately communicate to the public what has happened and the Government response and ask for cooperation in reducing energy use;
- Establish communication channels to provide assistance to those who are impacted by the gas shortage either directly or indirectly.

**Outcomes**

Did the actions set out in the Government response strategy work? I would argue strongly that they did.

Woodside as operator of the NWS, increased production and the gas flow in the pipelines, which had dropped to approx 650 terajoules, climbed back up to 750, then higher later during the shortage;

Verve energy workers excelled themselves by putting in round the clock shifts to bring the biggest coal fired power stations back on line. With Muja 7, Collie A and Kwinana B units generating, this released up to 100 terajoules of gas into the system for other industry;

Fuel companies worked extremely well with industry and power companies to ensure availability of diesel and replenishment of stocks by diverting tankers to WA and running fuel trucks around the clock;

Demand management from industry and households was magnificent. There was a real sense of working together to overcome the situation facing the State. Clearly our communications to the public and industry were working properly as electricity consumption fell consistently. From 18th June until 1st August, 28,858 fewer megawatt hours were used than expected, showing a dramatic response by both households and business to the call for energy savings. Gas consumption was also reduced over this period, but to a much lesser extent, due to some very cold days during the period.

The need for assistance to those impacted by the gas shortage was lower than expected and much lower than the figures initially thrown up in the media hysteria surrounding the explosion. From 9th June until gas resumption by Apache on 6th August, Centrelink had received 101 enquiries from people whose employment had been affected by the gas disruption. 56 of these resulted in claims for the New Start allowance or equivalent unemployment benefits. The Gas Disruption Hotline had received 71 calls over this period, 20 were employment related, 28 were non-employment related and 23 were wrong numbers or hang-ups.

One of the more difficult issues that emerged during the implementation of the actions was the supply of gas to small and some mid-sized industrial customers. Through gas swaps, industry trading and the extra gas made available by NWS and Verve, large industrial gas users kept up production, albeit in some cases at lower levels or with some product lines turned off completely, eg: the lack of CO2 and Nitrogen production from CSBP. Smaller consumers like Prime laundry or mid-sized companies such as Wesbeam, Wespine, Laminex and Pioneer Road Services had great difficulty in getting consistent volumes of gas from their supplier, Alinta.

To address this problem using a market based solution, given the whole system is privately owned and operated, I asked the Independent Market Operator, who manages and operates the wholesale electricity market in WA, to set up a gas Bulletin Board to provide some price signals and transparency to likely buyers of gas.

The Bulletin Board was up and running by 3rd July and by the end of the month had 27 registered traders in the market and had received 123 bids and offers, with 26 matches totalling 39.6 TJ.

Whilst it did not have a significant impact on addressing the gas shortage, the Gas Bulletin Board was critically important in keeping gas trades honest through visible price signals and it did help out many small customers through the establishment of a secondary board. These trades would normally not even have been considered, given the low volumes demanded and the cost of transportation to the premises. The Bulletin Boards continue on their work today.

**Issues arising from the gas shortage response**

There are a number of issues which arise from the gas shortage that may require further investigation or regulatory change:

Jurisdictional overlap in the regulation of upstream facilities and pipelines – although all government departments are working towards a solution to address this problem, the issue goes to the heart of the failure of regulations that would have required Apache to undertake the key intelligent pig inspections as identified in the NOPSA report.

More powers for the Office of Energy to demand greater transparency from the monopoly gas distributor Alinta. In particular, OOE should be able to see, with all the right commercial confidentiality provisions in place, how much gas is being bought and distributed each day by the retailer, so that complaints by smaller consumers of being overlooked or unfairly treated, can be clarified.

Further power for the OOE is necessary to examine, in detail, the transportation figures of the DBNGP and GGP. If OOE can see the volumes of gas coming down these pipelines and their final destination, advice on maximising gas demand management becomes easier and accusations of gas hoarding or unfair consumption practices can be clarified.

The method Alinta used for the distribution of gas to its contract customers. There was significant disquiet raised, particularly by small consumers about who got gas and who didn't during the shortage. The matter was raised with Alinta on a number of occasions and we were told that all available gas was distributed in a fair and reasonable manner. There are, however, no legislative

means of being able to qualify or investigate these statements and so they had to be accepted on face value.

Upon being asked, Woodside, as operator of the NWS pumped more gas into the DBNGP almost immediately after the explosion on Varanus. This was a volume of between 60-100 terajoules per day, sold on a first come first serve basis at approx $10.50 per Gigajoule. Before the explosion, one of the last traded prices for a longer term gas contract was $8.50 per GJ. At the beginning of July, Woodside withdrew the extra gas it had made available at $10.50 and indicated it could now supply up to 150TJ per day extra and this would be auctioned. Some of the auctioned gas went at prices of between $12 and $16.50 per GJ.

There have been a number of complaints about the auctioning process adopted by Woodside, when companies were struggling to survive. An issue was also raised about how Woodside was able to supply this extra volume of gas. It had been made clear to the industry for the last 18 months or more that the de-bottle necking process Woodside had used to increase the volumes of gas from its two domestic gas trains had not been successful and so extra gas was not available. Now, suddenly during this incident, significant extra volumes of gas was identified and of course given the shortage, was very welcome.

**Redundancy and reliability solutions for the WA gas system**

A number of people and political parties have raised solutions on "what Government should do to stop this from happening again"

Well firstly, let us remember this is not a Government owned system the gas in the networks is privately owned. This means that whatever answers you may come up with to try and address gas shortages such as the Varanus explosion, someone has to pay and that cost will ultimately be passed on to the consumer.

Secondly, how many times has WA been affected by incidents of this nature? Once! This is the first major outage of gas for this period of time since the network was put in place, Woodside did have a gas outage of five days in January 08, the first of its kind in 25 years. This means that whatever solution is put forward for minimising gas shortage impacts, the likelihood is that they will hardly ever be used.

Concepts raised:

Another pipeline to back up the DBNGP – During both the Woodside outage and the Varanus explosion, the pipelines were unaffected. They were not pipeline problems. The DBNGP are also proceeding with Stage 5C expansion program, which at the completion will have replicated approx 80% of the existing pipeline. Why build another at a cost of $2 Billion+ ?

Build an LNG receival terminal in Kwinana to accommodate bulk LNG deliveries during times of shortage. – This requires a receival terminal, cryogenic storage facilities and a re-gasification plant. The cost will be $1.8 Billion+ and despite overcoming all the environmental and safety hurdles, is it ever going to be used?

Storage of gas in depleted reservoirs around the Perth Basin. – this is being done now by Verve who are using reserves in the Mondarra Basin near Dongara for storage. Arc Energy is also drilling and undertaking geological tests to expand storage capacity. Despite what may become of these investigations, storage facilities are not going to be able to overcome the shortages of the size experienced by the Varanus incident. The volumes are just too big.

Expansion of the pipeline system to create a gas lateral between Perth and Kalgoorlie so that there are two separate systems linking the South West. – This is very possible but would cost in the region of $650 million+ and to be used effectively would require an expansion of the GGP pipeline capacity. This solution will inevitably raise questions of need, use and who pays. It would be scrutinised carefully by the economic regulators.

**Solutions to future gas shortages**

There are some fairly straightforward solutions to future gas shortages that are currently being put into place in WA:

Diversification of supply from upstream suppliers;

BHP is working now to bring on the Macedon gas field. There are some technical and regulatory issues to overcome but these issues are nearly resolved. Gas is planned for 2011/12

Apache/Santos is currently building the Devils Creek onshore domestic gas train near between Onslow and Dampier. This will provide large volumes of gas planned for 2010.

Chevron has announced that they will build a domestic gas plant ahead of their LNG facilities for the Wheatstone field. This is planned for 2012 or later, but the volumes of gas available will be significant. They are also planning for a domestic gas plant alongside the Gorgon LNG facility on Barrow Island.

Woodside announced that it will be supplying domestic gas from its Pluto operations in addition to LNG. This is planned for 2011 or later.

If all these plants go ahead as planned, WA will have 7 different points of supply for domestic gas by around 2012 and 9 by 2014. This provides extensive coverage should there be an incident of the type that occurred at Varanus.

There are also drilling programs underway in the mid-West and the Bussleton region for "tight gas". The volumes of tight gas in the two regions north and south of Perth are significant, notionally around 12 trillion cubic feet. If the geological problems facing the explorers are overcome, the security and competition of the gas market in WA will be resolved to a significant degree.

Other forms of alternative energies, such as wind, solar, tidal geothermal etc do not overcome the need for gas supply as demanded by our major industrial consumers.

**Francis Logan MLA - Member for Cockburn – Former Minister for Energy in WA**