

Woodside looks to extend Shelf life of gas projects

North West Shelf exploration is booming, reports **Nigel Wilson**

DON Voelte, Woodside's managing director, puts it simply.

"The gas business is all about who owns the molecules," he says in his cornhusker accent.

The native Nebraskan has made no secret of his plan to control as many of the molecules as he can.

By the end of the year Woodside and a host of other companies will be spending millions of dollars a day chasing gas molecules in what constitutes the most extensive offshore exploration drilling program in Australia's history.

In the Browse Basin, north of Broome, state-of-the-art drilling rigs, which cost up to \$US1 million (\$1.2 million) a day to operate, will be testing some of the most exciting prospects yet to be explored in Australian waters.

Australia is estimated to have around 140 trillion cubic feet of gas reserves around the coast from south of Barrow Island to north of Arnhem Land.

That's more than 100 years of supply at current extraction rates.

But if Australia achieves the plan of quadrupling exports of liquefied natural gas to around 60 million tonnes a year by 2017 — as the industry is working towards — the extraction rate will accelerate sharply.

Aside from that, the Australian Petroleum Production and Exploration Association is trying to secure government backing for a strategy that would have at least 70 per cent of all new power stations in Australia fuelled by

natural gas.

They say it is to help reduce greenhouse gas emissions but it has the extra benefit of widening the market for their product.

According to Drill Safe, the oil and gas exploration industry's safety forum, up to 18 drilling vessels will be operating in Australian offshore waters during the next 15 months.

Not all will be drilling on the Browse, but on known drilling programs there will be a huge effort close to known discoveries such as Inpex's Ichthys, which is already estimated to contain around 12 trillion cubic feet of gas.

Considering the initial Browse Basin wells were drilled more than 30 years ago the current interest is not so much a product of the immediately realisable potential of the region, but a recognition that LNG will accelerate as fuel sources decline, particularly in North Asia — Japan, China and South Korea — but also in North America and Europe.

When the discoveries were made the emphasis from the exploration industry was on oil — gas was very much a poor relation.

Today it is assumed the major oil pools around the world have been discovered and gas is coming more into its own as a fuel source.

Not only is it seen as providing for heating and cooking needs in Japan or the US, it is being promoted as a transition fuel as the world weans itself off coal as a power station fuel.

The concentration on develop-

ing gas reserves for export LNG to the exclusion of supplying domestic customers in the future was what drove West Australian Premier Alan Carpenter last October to introduce a domestic gas reservation policy.

Under this policy, LNG project proponents requiring land in WA for processing facilities are required to quarantine 15 per cent of their reserves for domestic use "if commercially viable". Carpenter has been criticised for unwarranted interference in the market place by federal Resources Minister Ian Macfarlane, who claims domestic gas reservation will ruin Australia's international reputation.

The Premier did not help his case by refusing to accept the projected domestic gas supply shortage was primarily a function of price, not of supply.

Until last year domestic gas prices in WA had hovered between \$2 and \$2.30 a gigajoule for the best part of decade.

During that time only one major gas-fired project was completed, the Burrup fertiliser plant in the Pilbara owned by the Indian entrepreneurial Oswald family at prices which represented a very sharp pencil indeed.

But the most recent domestic contract to supply gas from Santos's North West Shelf reserves to fuel power supplies around Kalgoorlie has been struck at \$5.50 a gigajoule.

The maximum capacity of the Dampier to Bunbury pipeline, for

comparison purposes, is about 770 gigajoules, of which almost half is used by Alcoa and only about 10 per cent is used domestically.

That price is thought to be well below long-term LNG supply contract prices, which are normally commercially secret but which have followed the international crude oil price curve in the past three years.

Assuming a price of around \$US5 to \$US7 a gigajoule on average, the attraction of LNG over domestic prices until recently is not surprising.

But that's not the real issue. Voelte has said that if required the North West Shelf could supply residential customers in WA at below cost.

What he's aggressively opposed to is having Woodside's shareholders subsidise those of such companies as aluminium giant Alcoa which have been protected from the vagaries of the international gas price for the past 20 years.

Alcoa is a member of the Domestic Gas Alliance, as is domestic gas retailer Alinta.

This group was formed last year in response to "serious concerns about the continued availability and competitiveness of gas supply to the WA domestic market".

The group's leader, Stuart Hohnen, is a former WA senior public servant in the Charles Court administration, who coincidentally now heads the group owning the Dampier to Bunbury pipeline, the nation's biggest. He says that urgent action is required to address current gas shortages.

"Existing gas customers are unable to secure additional gas," he says.

"Project developers are unable to secure new supplies of gas. This has critical implications for the state's ability to grow and we need urgent action to address the problem."

Hohnen says there is a concentration of supply with the Woodside-operated North West Shelf joint venture supplying around 70 per cent of domestic gas and holding more than 90 per cent of gas reserves in developed fields.



Gas: Woodside's Cossack Pioneer project

He suggests the joint selling arrangement within the NWS JV dramatically reduces the number of independent producers selling gas into the domestic market.

Inherently, Hohnen's argument is based on domestic gas being supplied as an adjunct to an LNG development.

But the 30 per cent not supplied by the NWS joint venture comes from stand-alone developments operated by companies such as Santos which have secured commercial sales at profitable prices without having to be linked to an LNG processing plant.

Woodside has consistently said it does not have sufficient reserves to satisfy new commercial demand and LNG export contracts.

But it denies supplies for residential customers in Perth are at risk.

Yet translating the large uncommitted reserves of the NWS into commercial developments is proving extraordinary hard.

For instance, one Russian hopeful was earlier this year seeking around 12tcf of gas at less than \$2 a gigajoule for a long-

term supply to fuel a steel mill.

There was certainly no gas available at that price.

But Carpenters's gas reservation policy has created another dynamic and one that was probably not intended to stimulate inter-state rivalries.

Clare Martin, the Northern Territory's Chief Minister, has long argued gas should be used to develop downstream industries such as petrochemicals in the NT.

She has the support of Macfarlane, though this seems more of a needle to prick Carpenter's political hide.

The issue for Martin is that NT's available supplies of gas are virtually fully committed or, in the case of Greater Sunrise, still locked up in an argument with East Timor on where processing facilities should be placed.

The Chief Minister recently travelled to Perth to discuss with three Browse Basin permit holders — Woodside, Conoco-Phillips and Inpex — the possibility that Browse gas could be brought into the territory and thus circumvent the WA gas reservation policy.

Piping gas from the Browse to Darwin could have an added advantage: cutting development times because of not having to go through the process of securing native title or environmental approvals for onshore sites in the Kimberley.

Onshore development in the Kimberley is shaping up as one of the great frontier campaigns for the environmental movement.

It is argued the region has a pristine ecosystem that would be destroyed by the impact of several world-scale LNG developments.

One of the reasons why the Kimberley has a virtually untouched environment is that there is no industry that can provide a market for domestic gas.

Not only is the search hotting up, so also is the LNG versus domestic gas debate.