# Worsley Alumina's Submission to the Office of Gas Access Regulation re Epic Energy's proposed Access Arrangement for the DBNGP

11 February 2000

#### Summary

- 1. Worsley contends that Epic is required by the Code to offer a Reference Service equivalent to the T1 service under the GTRs.
- 2. Worsley requests the Regulator to require Epic to offer Reference Services corresponding to any other contracts for "significant" parts of the market.
- 3. Adopting the T1 service as a yardstick Worsley contends that the proposed Firm Service unreasonably and unnecessarily constrains users in their management of their usage of the pipeline.
- 4. Worsley contends that some of the Non-Reference Services offered are included in GTR contracts and are likely to be included in many transitional contracts. As such, and to the extent appropriate, they should be included in the Reference Service.
- 5. Worsley contends that the Code requires that a Reference Service should include a minimal basis set of Non-Reference Services included in existing contracts.
- 6. Worsley requests the Regulator to require Epic to offer a tariff for Non-Reference Services calculated by considering the demand for these services in aggregate across all users and covering only the operating, maintenance and other noncapital costs incurred in providing these services
- 7. Worsley contends that the "metering information service" should be a free service, at least for users in Zone 10.
- 8. Worsley contends that the proposed Secondary Market terms and conditions are restrictive and do not promote the efficient use of the pipeline.
- 9. The Queuing Policy does not appear to guarantee continuity of access for existing users.
- 10. Worsley requests the Regulator to require Epic to offer a Reference Tariff for each Reference Service and that the tariffs be calculated to recover the proportionate shares of the total cost of providing all Services in aggregate.
- 11. Worsley requests the Regulator to require Epic to include the DAC and DORC values in its submission.

- 12. Worsley contends that the purchase price is not a suitable basis for determining initial Capital Base (ICB).
- 13. Worsley contends that for so long as there is not forecast significant market growth the Code does not allow for a "deferred recovery account".
- 14. The 'deferred recovery account' is an artefact of an ICB that is too high to allow depreciation to be recovered in the tariff. Worsley contends that the ICB should be such that a 'deferred recovery account' is unnecessary.
- 15. Worsley contends that the Initial Capital Base, being a 'capital cost', can not be a Fixed Principle.
- 16. Worsley contends that the evaluation of ICB is problematic and should be subject to review for each Access Arrangement period.
- 17. Worsley contends that the proposed incentive mechanism does not provide for a reasonable sharing of benefits between Epic and pipeline users.
- 18. Worsley requests the Regulator to enquire as to Wesfarmer's obligations with respect to exit pressure, the necessity for CS10 and the equitable share of costs between users in Zone 10 and Wesfarmer's LPG facility.
- 19. Worsley contends that the Zone pricing method does not recognize the true nature of the pipeline and does not produce an equitable result across all users. Worsley requests the Regulator to consider an alternative and more equitable tariff structure.
- 20. Worsley contends that net revenue from rebateable services, less an appropriate portion as incentive to Epic, be rebated to shippers.
- 21. Worsley requests the Regulator to investigate what is an appropriate 'incentive'.
- 22. Worsley requests that the Regulator require that the Schedule 1 charges be based on cost of service (including an incentive to Epic to promote efficient use of the pipeline).

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# [Section numbering follows that of OffGAR 'Issues Paper']

# 3.2 Services Policy

### (a) Reference services

S3.2 of the Code requires that:

"The Services Policy must comply with the following principles:

- (a) The Access Arrangement must include a description of one or more Services that the Service Provider will make available to Users or Prospective Users, including:
- (i) one or more services that are likely to be sought by a significant part of the market; ..."

A 'Service' contains a number of elements covering such things as receipt and delivery of gas, allowable peak capacity and interruptibility. The Firm Service offered by Epic appears to be a minimal basis set of elements that may make up a Service.

What Services are likely to be sought by significant parts of the market? In 'Proposed Access Arrangement Information s6.4: Annual Capacity and Volume Forecasts by Pricing Zone' Epic states that "No new demand for transportation of significant quantities of gas can be assumed with any confidence during the Access Arrangement period". Therefor there are <u>no</u> significant Prospective Customers to whom a Firm Service can be offered and the entire market (for the Access Arrangement period) consists of the existing transportation contracts. With respect to these contracts, however, Epic proposes in 6.1(b)(ii) to offer Non-Reference Services: "Non-Reference Services also include services provided by Epic Energy under contracts entered into prior to commencement of the Access Arrangement Period."

A part of this market that is by any test "significant" is covered by GTR contracts. Worsley contends that Epic is required by the Code to offer a Reference Service equivalent to the T1 service under the GTRs.

Worsley requests the Regulator to require Epic to offer Reference Services corresponding to any other contracts for "significant" parts of the market.

The proposed Firm Service is less flexible than a T1 service. Flexibility is likely to be required by industrial users who are shippers as they balance the 'take or pay' pipeline contract against the inconstant demand at their prime delivery point. Specific differences of concern to Worsley include:

- Restricted relocation of capacity between delivery points. [Long term flexibility]
- Imbalance reduced allowance. [Flexibility day by day] The non-reference 'Park and Loan' service may offset this reduction but details are lacking and it will be at a cost.

- Reduced peaking allowance. [Flexibility within the day] Again, 'peaking' is offered as a non-reference service but details are lacking and it will be at a cost.
- Restricted renomination times. [Flexibility within the day]

Adopting the T1 service as a yardstick Worsley contends that the proposed Firm Service unreasonably and unnecessarily constrains users in their management of their usage of the pipeline.

#### (b) Non-Reference Services

Epic lists eight non-reference services that it may offer. Worsley contends that some of these are included in GTR contracts and are likely to be included in many, if not all, transitional contracts. As such, and to the extent appropriate, they should be included in the Reference Service.

The Reference Service offered by Epic appears to be a minimal basis set of services that may be required by new or existing users. As Epic has forecast no new users during the Access Arrangement period Worsley contends that the Code requires that a Reference Service should include a minimal basis set of "non-reference services" included in existing contracts.

The cost of providing some of the non-reference services offered, e.g. the seasonal and peaking services, can best be calculated by considering the demand for these services in aggregate across all users. Pricing these services separately for individual users can give rise to monopoly rent. Worsley requests the Regulator to require Epic to offer a tariff for these services to the extent they are not included in the Reference Service.

As Epic is using the "Cost of Service" method for calculating Total Revenue (following s8.4 of the Code) it is only entitled to the cost of providing these non-reference services, being the operating, maintenance and other non-capital costs incurred in providing these services, as the return on capital is already recovered in the Reference Tariff.

Worsley contends that the "metering information service" should be a free service, at least for users in Zone 10. At the boundary of Zones 9 and 10 the liquids are stripped from the gas in the Wesfarmer's LPG plant. The gas south of this plant can be "dry" or "wet" depending on the operation of that plant. Because the nature of the gas delivered is variable the information about that gas should be made available as a matter of course. The difference between "wet" and "dry" is significant in many applications and knowledge of this is arguably part of the gas being 'fit for purpose'.

### 3.5 Trading Policy

Worsley contends that the proposed Secondary Market terms and conditions are restrictive and do not promote the efficient use of the pipeline. The terms are effectively for a Firm Service for one day. It is 'take or pay' for the day and not interruptible. Under the GTRs the AT3 service was 'pay for what you get' and interruptible.

# 3.6 Queuing Policy

The Queuing Policy does not appear to guarantee continuity of access for existing users. Projects that require gas for the long term require continuity of supply but, in the face of uncertainty in their own markets, only enter 'take or pay' contracts for the minimum term that balances the risk between the user and the pipeline owner. Existing users should be able to expect 'right of first refusal' over their contracted capacity but this does not appear to be acknowledged in the queuing policy. Note that this policy refers to 'existing and new' users collectively.

# 3.9 Reference Tariffs

Worsley requests the Regulator to require Epic to offer a Reference Tariff for each Reference Service and that the tariffs be calculated to recover the proportionate shares of the total cost of providing all Services in aggregate. That is, where Services differ in some elements, say, peaking, the marginal cost of this element needs to be calculated not as the cost of providing this element for this contract in isolation but the cost in the context of the aggregate of Services offered across all users.

# (a) Initial Capital Base

Section 8.11 of the Code recommends that the ICB should lie within the range of the depreciated actual cost (DAC) and depreciated optimized replacement cost (DORC). Epic has asserted [Proposed Access Arrangement Information: s3.1 Asset Values] that "The competitive bidding process through which Epic Energy acquired the DBNGP removed the initial capital base from within the indicative bounds of Section 8.11 of the Code." Worsley has taken advice from Arthur Robinson and Hedderwicks that this assertion is not correct in law and that the ICB should lie in the range bounded by DAC and DORC.

Worsley requests the Regulator to require Epic to include the DAC and DORC values in its submission. Without these values it is not possible to assess the reasonableness of the proposed Reference Tariff.

Epic proposes that the Initial Capital Base (ICB) is the purchase price paid by Epic for the DBNGP plus acquisition costs less adjustments after purchase. The 'cost of service' method of determining the Total Revenue required includes a return on and depreciation of the Capital Base. The return on 'purchase price' rewards overpayment on purchase and transfers the business risk in the competitive bid process from the purchaser to the pipeline user.

Depreciation of an inflated ICB guarantees that pipeline charges remain higher than they ought to have been and discourages the efficient utilization of gas resources.

Worsley contends that the purchase price is not a suitable basis for determining ICB. If the competitive bidding process provides any information at all with respect to the 'value' of the pipeline then to the extent that the Code seeks to replicate the outcome of a competitive market the correct bid price to use is the lowest bid price. If all bids were intended to produce a tariff capped at the regulated tariff as at 1/1/2000 then the lowest bid is the price at which a party is prepared to provide the pipeline service. Worsley is of the view, however, that the purchase price covers more than simply the capital assets that form part of the covered pipeline and includes the value to Epic of business opportunities and synergies that lie outside the Capital Base (in the sense of

s8.4 of the Code) and hence the purchase price is not a meaningful guide to ICB for the purposes of s8.10 of the Code.

# Alternative valuation of ICB [s8.10(c)]

An alternative valuation method that recognises uncertainty in forecasting is to allow a pipeline residual value at the end of the Access Arrangement period. Worsley believes that the best estimate of residual value for this purpose is the projected DORC at that time. The Reference Tariff is then calculated from a financial analysis over the Access Arrangement period rather than the full life of the asset. This allows the "asset value" of the pipeline consumed in delivering the Services during the Access Arrangement period to be recovered during that period. This will prevent the cost of over-investment in the pipeline being borne by the users in that period but allow the full economic value to be recovered over the pipeline life. This approach should not result in under-investment in the pipeline as s8.15 et seq. allows for investment in new facilities during an Access Arrangement period. This approach is consistent with the "price path" approach that Epic has chosen. Implicit in this arrangement, however, is that the Initial Capital Base at the beginning of the Access Arrangement period is the DORC for a pipeline sized according to the projected gas volumes for that period. Any excess capacity, and any excess price paid for this, is speculative investment that should not be recovered in the tariff for that period.

### Other matters relevant to s8.10 of the Code

Worsley wishes to provide the Regulator with the following information that the Code suggests should be taken into account in determining the ICB.

# S8.10 (e)

Worsley operates in the world alumina industry and the price of energy is a major factor in its international competitiveness. Worsley is currently undergoing an expansion that will lift its output from 1.8Mt to 3.1Mt of alumina per year. The decision to expand was taken when the pipeline charges were falling and the expected price was to be \$1/Gj by 1/1/2000. If Worsley's gas were carried under a Firm Service rather than its existing contracts then the additional cost to Worsley would be \$2M/yr. The new cost if the existing contracts are maintained can only be found by negotiation but the exposure, based on Epic's proposed Schedule 1 charges for excess peaking etc., is \$6M/yr. The proposed Access Arrangement offers no additional benefit to offset this additional cost. As Worsley's Access Agreement was negotiated in the transitional regime, and hence Epic had full knowledge of the terms, the proposed Access Arrangement represents a reallocation of risks and rewards that is inequitable between shipper and pipeline owner.

Increasing costs of gas transport also reduce the attractiveness of the south west of WA as the site for future expansions of the alumina industry.

# S8.10 (g)

Worsley had "reasonable expectations" with respect to pipeline tariff from the Minister for Energy's second reading speech in connection with the 'Gas Pipelines Access (Western Australia) Act' in which he stated that "Firm full-haul tariff at 100per cent load factor will fall from \$1.19 per gigajoule to \$1.00 per gigajoule by the year 2000".

Worsley's expected pipeline charge at 1/1/2000 was \$1/Gj of which more than 70% would be fixed and less than 30% escalated at less than CPI. Worsley anticipated that it would not pay any more than this under an approved Access Regime.

Note that the service provided was "full-haul" where this was defined to be 'capacity at an outlet point located downstream of the compressor site known as Compressor Station 9'.

### S8.10 (h)

The steam and electricity used in Worsley's refinery are currently generated in its coal-fired powerhouse. [Gas is used in the calcination phase of the refining process.] As part of its planning for the expansion Worsley investigated alternative ways of generating additional steam and power. In comparing the economics of additional coal-fired plant and a Gas Turbine / Heat Recovery Steam Generator [GT/HRSG] the delivered price of gas was a major consideration. Worsley's decision to source steam and power from a GT/HRSG (owned by South West Cogeneration JV) was based on a projected pipeline charge of \$1/Gj at 1/1/2000. The pipeline charges under Epic's proposed Access Arrangement would have had a material adverse impact on Worsley's decision to base its expansion on gas-fired steam and power.

# (e) Economic Depreciation of Assets (Return of Capital)

### **Deferred recovery account**

Worsley can find no place for the "deferred recovery account" in the Code. Section 8.33(a) of the Code allows for a portion of depreciation to take place in future periods, "... particularly where the calculation of the Reference Tariffs has assumed significant market growth and the pipeline has been sized accordingly." However, Epic has stated that there are no additional users anticipated during the Access Arrangement period. Furthermore, Tables 6.3 and 6.4 of the Proposed Access Arrangement Information show that capacity and capacity utilization remain approximately constant over this period. Clearly there is no "significant market growth" forecast in the Access Arrangement period. As such, the pipeline does not need to be sized for market growth within this period and "future depreciation" is not warranted. In the absence of information about market size beyond this period there is no basis for knowing whether "future depreciation" may be warranted or whether the pipeline is correctly sized or not. In the event that market growth does not materialize the effect of the "deferred recovery account" will have been to transfer the cost of overcapacity (if any) from the pipeline owner to the users. Worsley contends that for so long as there is not forecast significant market growth the Code does not allow for a "deferred recovery account". Note that the alternative valuation method put forward under s8.10(c) eliminates the need for this account.

The 'deferred recovery account' is an artefact of an ICB that is too high to allow depreciation to be recovered in the tariff. Worsley contends that the ICB should be such that a 'deferred recovery account' is unnecessary.

### ICB as a Fixed Principle

In s7.15 of Epic's Formal Submission it states that the Initial Capital Base is a Fixed Principle for the purposes of s7.12 [s8.47, 48?] of the Code. However, s8.48 states that "... A Market Variable Element can not be Fixed Principle..." and a 'Market

Variable Element' means "... a factor that has a value assumed in the calculation of a Reference Tariff ... any costs in the nature of capital costs." As such, Worsley contends that the Initial Capital Base, being a 'capital cost', can not be a Fixed Principle.

Even if the ICB is a Fixed Principle for the Access Arrangement period Worsley contends that it should not be a Fixed Principle beyond that period. S8.48 of the Code allows for a Fixed Period to be for all or part of an Access Arrangement period. The Code does not appear to allow for a Fixed Principle to apply across all subsequent Access Arrangement periods. If the ICB was to be a Fixed Principle then it must be invariant with respect to time, technology etc. If the ICB is determined from an economic valuation such as DORC then it will vary with changing market conditions and technology. The principal recognised valuation method that meets the 'invariance' criterion is DAC (assuming constant accounting standards for depreciation). If the ICB were to be a Fixed Principle then the ICB must be the DAC! Worsley contends that the evaluation of ICB is problematic and should be subject to review for each Access Arrangement period. [Note that this occurs in the suggested alternative valuation method detailed above.]

#### (f) Incentive Mechanisms

The proposed escalation rate (67% of CPI) is more than double the implicit escalation rate (<30% of CPI) under the previous tariff structure. As the bulk of the cost is capital recovery, and hence fixed, Worsley contends that the proposed incentive mechanism does not provide for a reasonable sharing of benefits between Epic and pipeline users.

### (g) Determination of Reference Tariffs

The tariff structure follows "user pays" principles that are superficially attractive but of limited application in this pipeline service. The vast bulk of the gas is delivered to Zone 10; to all intents and purposes it is a "Dampier – Zone 10" pipeline. The average tariff rate (at 100% load factor and including the Delivery Point charge) is \$1.03/Gj in Zone 9 and \$1.09/Gj in Zone 10 if treated separately but \$1.08/Gj if Zones 9 & 10 are combined. The previous definition of "full haul" was "to a delivery point south of CS9", i.e. Zones 9 & 10. The introduction of Zone 10 and the separation of "Delivery Point charge" have allowed a headline tariff if \$1/Gj to be achieved in Zone 9 but have disguised the reality that the vast bulk of users (by volume) will pay \$1.09+/Gj.

The new Zone 10 commences not at a compressor station, as with other zones, but at Kwinana Junction. This breaks down the strict "user pays" principle in that users on the Kwinana West and Rockingham laterals pay compressor capacity and fuel charges for a compressor operating on the Pipeline South. The arbitrariness of this zone boundary definition reinforces the idea that the zoning system is designed to achieve a target price in Zone 9 rather than an equitable sharing of costs across all users.

The flip side of "user pays" is the "free ride" that is enjoyed by users taking delivery in Zones 1-9 when gas volumes to Zone 10 are increased. That is, increases in gas volumes delivered in Zone 10 reduce the unit cost of transport in all zones and hence the charges to all users. The bulk of the increases in volume both in the access

arrangement period and, more particularly, in the recent past have been for delivery in Zone 10.

The initial structure of the pipeline and the original definition of 'full haul' did not appear to contemplate a tenth compressor. Presumably, the gas pressure on exit from the Wesfarmer's LPG plant was to have been adequate for gas delivery south of Kwinana Junction. Effectively, the LPG plant acts as a pressure reduction station on the pipeline. As such, users in Zone 10 ought to be able to expect that the pressure on exit from the LPG plant should allow delivery in Zone 10. Worsley requests the Regulator to enquire as to Wesfarmer's obligations with respect to exit pressure, the necessity for CS10 and the equitable share of costs between users in Zone 10 and Wesfarmer's LPG facility.

Worsley contends that the Zone pricing method does not recognize the true nature of the pipeline and does not produce an equitable result across all users. Worsley requests the Regulator to consider an alternative and more equitable tariff structure.

#### **Rebateable Revenue**

Section 8.40 of the Code allows that an appropriate portion of the revenue from a Rebateable Service be used to provide the Service Provider with an incentive to promote the efficient use of capacity. Worsley can find no basis on which 40% of the rebate can be applied to the deferred recovery account.

Worsley contends that net revenue from rebateable services, less an appropriate portion as incentive to Epic, be rebated to shippers.

Worsley requests the Regulator to investigate what is an appropriate 'incentive'.

#### Schedule 1 Rates & Charges

Epic has stated that the charges for a number of services are \$15/Gj. This is presented without any substantiation. Worsley requests that the Regulator require that these charges be based on cost of service (including an incentive to Epic to promote efficient use of the pipeline).