Giving Real Energy to the Territory – Connecting to the National Electricity Grid

Your Questions – Answered

QUESTION
What is DC transmission?
ANSWER
Direct current (DC) transmission as opposed to alternating current (AC) transmission, which is what exists in the NT now. DC transmission allows for much larger transmission of electricity over the same distance and same transmission line structures, with lower costs and lower losses of energy.

QUESTION
Is DC technology new?
ANSWER
No, it has existed for 40 years or more with DC transmission lines in Europe, New Zealand, Russia, America and more recently the DC link between Victoria and Tasmania.

QUESTION
Is transmission line reliable?
ANSWER
Yes line will be built to industry standards and is consistent with AC transmission lines I.E. 99% reliability.

QUESTION
What happens for that 1% of time when line is interrupted?
ANSWER
A standby agreement is reached with PowerWater
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QUESTION
Why can the electricity price be reduced at such a discount?

ANSWER
Price is reduced on the following main parameters:

1. Energy being generated and transmitted is from grid connected power, which is cheaper than current NT gas fired generation, and will sourced from the NEMMCO power pool.
2. The Transmission line has a depreciated life well in excess of a power station hence the investor can depreciate over a longer time period and operation and maintenance costs are considerably lower than a power station.
3. Load aggregation from the North Queensland Minerals province allows for reduction. In simple terms more customers for DC for the transmission line owner.

QUESTION
How would process be handled with respect to transmission line easement?

ANSWER
The Federal Government has indicated it could assist with major project status. The OED will work with the Federal Government to ensure the project receives Major Project Status.
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QUESTION
What is the effect of a new major load that will require connection to the DC transmission line?
ANSWER
The DC transmission line could be designed and constructed to cater for a transmission capability of up to 2000MW’s, this is possible in engineering terms and economically is an incremental cost, the conversion stations are modular and are installed to cater for such load growth.

QUESTION
What will happen to PowerWater’s assets?
ANSWER
They will provide backup and generate to assist in voltage control and will obviously receive an income stream from their applied standby charge, so value should be enhanced and effective asset lives increased.

QUESTION
Why should PowerWater relinquish their customers?
ANSWER
The market has been de-regulated with customers able to select their electricity supplier.

QUESTION
Would the government force PowerWater to buy bulk energy from owner of DC transmission line?
ANSWER
Government’s responsibility is to ensure public benefit is maintained, if this can be achieved by costs savings to PWC and customers with an appropriate financial return to owner of DC transmission line that could be a logical conclusion.
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QUESTION
What is the anticipated cost of DC transmission line?
ANSWER
That is to be finally to be determined by the feasibility study but will be of the order of $1.3 billion. The eventual size of the line would determine eventual cost.

QUESTION
What impact on the projects financial viability will occur if gas is brought ashore?
ANSWER
The promoters have advised in their view the lead time for gas arrival in Darwin will be in excess of commissioning of the DC transmission line, and on current gas costs a significant discount will have to be given by the gas supplier and transportee, to become an economic alternative to what is essential grid connected generation via the DC transmission line. Our view is electricity pricing, should be driven by market forces and we encourage that.

QUESTION
What impact will it have on aboriginal people?
ANSWER
The DC transmission line will in some cases traverse aboriginal land, the promoters has assured the government they will ensure job opportunities are created during the construction period and will action commercial arrangements for easement rights.