

CSIRO DIVISION OF RADIOPHYSICS

22KV ELECTRICAL INTERFERENCE AND THE AT

G.J. Nelson

21.10.85

Recent interference measurements made by Rod Kennedy (AT/15.5/039) reveal that both the proposed 22KV/415V transformers and to a lesser extent the existing 22KV lines at Culgoora are important sources of low frequency interference. Nevertheless the decision has been made to adopt the cheaper 22KV option proposed by Warren Payten (AT/15.6.3/004, & 005) rather than the safer but more expensive and non-standard 3.3KV option. This decision has been made with the understanding that improved RFI screening of the transformer housings may be required at a later date. In addition it may also be necessary at a later date to make some or all of the following modifications to the 22KV overhead lines to both the eastern end of the array and to the 6km site:

- (a) Terminate overhead line further from array and run underground cable to the current termination points.
- (b) Use surface leakage insulators on a further section of 22KV line to minimise corona on damaged insulators.
- (c) Instal an electrical interference monitor under the transmission lines to detect fault conditions before data is badly contaminated.

DISTRIBUTION:

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	RHF <i>[initials]</i>
	DNC <i>[initials]</i>
	TAC <i>[initials]</i>
	GWS <i>[initials]</i>
	AJW <i>[initials]</i>
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