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~~SECRET COMINT CHANNELS~~

NEW 11 KV POWER LINE, COONAWARRA

2. YOUR 060518 REFERS.

3. TESTS CARRIED OUT BY OF I.S. GROUP WRE IN OCTOBER 1965
IN VERY DRY CONDITIONS SHOWED THAT THE ELECTRICAL NOISE LEVEL
FROM THE EXISTING 11 KV POWER LINE RUNNING ALONG THE SOUTHERN
BOUNDARY OF COONAWARRA MEASURED AT A DISTANCE OF SIX HUNDRED AND
SIXTY FEET (660 FEET) FROM THE POWER LINE, EXCEEDED THE AVERAGE
NOISE LEVEL OF THE STATION BY 3 DB (AVERAGE NOISE LEVEL MINUS
25 DB RELATIVE TO ONE MICROVOLT PER METRE, NOISE LEVEL FROM LINE
MINUS 22 DB RELATIVE TO ONE MICROVOLT PER METRE MEASURED USING
3KC BANDWIDTH).

4. IN WET CONDITIONS (BEGINNING MAY 68) COULD FIND VERY
LITTLE ELECTRICAL NOISE FROM SAME POWER LINE BUT WOULD STRESS
THAT THIS WAS NOT AS RESULT OF PROPERLY CONDUCTED EXPERIMENT
AND DEPENDED ON A TRANSISTOR RADIO OF UNKNOWN PERFORMANCE.

5. IT WOULD SEEM THAT, IN WORST CONDITIONS, WE COULD EXPECT
SOME INTERFERENCE FROM PROPOSED NEW POWER LINE IF IT IS CLOSER
THAN SEVEN HUNDRED AND FIFTY (750) FEET FROM AERIALS. FIGURES
QUOTED IN PARA 3 DERIVED WHEN THIRTY FOOT MONOPOLE USED:

IF A DIRECTIONAL AERIAL (E.G. RHOMBIC) POINTED DIRECTLY AT
THE NOISE SOURCE ONE WOULD EXPECT A SUBSTANTIAL INCREASE IN THE
NOISE LEVEL (ESTIMATED UP TO 14 DB)

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6. IF THE DIRECTIONS AERIAL WHICH HAPPENED TO POINT DIRECTLY
(PLUS/MINUS TEN DEGREES) AT THE NOISE SOURCE WAS ONE IN CONSTANT
USE THEN WE WOULD NOT BE HAPPY AND WOULD SUGGEST
UNDERGROUNDING AS CLOSE AS PRACTICABLE TO CODE OF PRACTICE.
ON THE OTHER HAND, IF THE AERIAL IS NOT ONE IN CONSTANT USE
WE FEEL THAT, FROM POINT OF VIEW, COST OF UNDERGROUNDING
COULD NOT BE JUSTIFIED.

7. HOPE ABOVE IS SATISFACTORY FOR YOUR PURPOSES.
SURE YOU WILL APPRECIATE THAT WITHOUT PRECISE DETAILS OF
ALTERNATIVE ROUTES (YOUR PARA 5) IT IS ONLY POSSIBLE TO
GENERALISE.

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