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WESTERN AUSTRALIA

MINISTER FOR THE ENVIRONMENT

# STATEMENT TO AMEND CONDITIONS APPLYING TO A PROPOSAL (PURSUANT TO THE PROVISIONS OF SECTION 46 OF THE ENVIRONMENTAL PROTECTION ACT 1986)

| | |
|---|---|
| PROPOSAL: | HARVEY - KWINANA 330 kV TRANSMISSION LINE (050/710) |
| CURRENT PROPONENT: | STATE ENERGY COMMISSION OF WESTERN AUSTRALIA |
| CONDITIONS SET ON: | 13 OCTOBER 1988 |

Condition 1 is amended to read as follows:

**1A Proponent Commitments**

In implementing the proposal, the proponent shall fulfil the commitments (which are not inconsistent with the conditions or procedures contained in this statement) made in the Public Environmental Report (February 1988), including the SECWA Environmental Specifications for Transmission Lines (a copy of the commitments is attached).

**1B Implementation**

Subject to the conditions in this amended statement, the manner of detailed implementation of the proposal shall conform in substance with that set out in any designs, specifications, plans or other technical material submitted by the proponent to the Environmental Protection Authority with the proposal. Where, in the course of that detailed implementation, the proponent seeks to change those designs, specifications, plans or other technical material in any way that the Minister for the Environment determines on the advice of the Environmental Protection Authority, is not substantial, those changes may be effected.

The following conditions and procedure are inserted following condition 5:

**6 Decommissioning**

The satisfactory decommissioning of the project, removal of the plant and installations and rehabilitation of the site and its environs is the responsibility of the proponent.

6-1 At least six months prior to decommissioning, the proponent shall prepare a decommissioning and rehabilitation plan.

6-2 The proponent shall implement the plan required by condition 6-1.

Published on

25 JUN 1992

18th FLOOR, ALLENDALE SQUARE, 77 ST GEORGE'S TERRACE, PERTH, W.A. 6000 TELEPHONE 325 9422 FAX. 325 5621

## 7 Proponent

The ministerial conditions legally apply to the nominated proponent.

7-1 No transfer of ownership, control or management of the project which would give rise to a need for the replacement of the proponent shall take place until the Minister for the Environment has advised the proponent that approval has been given for the nomination of a replacement proponent. Any request for the exercise of that power of the Minister shall be accompanied by a copy of this statement endorsed with an undertaking by the proposed replacement proponent to carry out the project in accordance with the conditions and procedures set out in the statement.

## 8 Time Limit on Approval

The environmental approval for the amended proposal is limited.

8-1 If the proponent has not substantially commenced the project within five years of 1 June 1992, then the approval to implement the proposal as granted in this statement shall lapse and be void. The Minister for the Environment shall determine any question as to whether the project has been substantially commenced. Any application to extend the period of five years referred to in this condition shall be made before the expiration of that period, to the Minister for the Environment by way of a request for a change in the condition under Section 46 of the Environmental Protection Act. (On expiration of the five year period, further consideration of the proposal can only occur following a new referral to the Environmental Protection Authority.)

## Procedure

The conditions contained in this statement are to be complied with to the satisfaction of the Environmental Protection Authority except where they are required to be carried out to the satisfaction of either the Minister for the Environment or any other government agency.

Should the Environmental Protection Authority, other government agency and/or proponent be unable to resolve any dispute that occurs concerning these conditions and commitments, that dispute will be determined by the Minister for the Environment.

Bob Pearce, MLA
MINISTER FOR THE ENVIRONMENT

25 JUN 1992

APPENDIX A

LIST OF ENVIRONMENTAL COMMITMENTS

(i) Various arrangements of tower heights and spans will be used to provide appropriate towersittings consistent with minimum environmental disturbance and minimal visual intrusion on the landscape.

(ii) The SECWA's Properties Officers have established and will maintain contact with property owners and occupiers in order to ascertain individual requirements affecting the project.

(iii) Timing of construction activities will, where possible, take into account landholders' farming practices, so as to minimise disturbance to the farmers' use of land.

(iv) Compensation will be negotiated where farmers suffer loss of production brought about by establishment of an easement.

(v) Periodic line inspections will be undertaken in order to maintain the desired window-type "clearing profile" of the easement. (This is depicted on Figure B1 in Appendix B)

(vi) On average, every two years some vegetation maintenance work will be required along the transmission line. In these instances, the vegetation will be cut back to the minimum permissible height as defined in Appendix B.

(vii) Special attention will be given to minimal clearing through the System 6 recommended area to ensure revegetation of the easement and maintenance of vegetation within it.

(viii) Clearing activities will be restricted to tower positions, track access and vegetation which extends into the clearing profile.

(ix) Where the access track is orientated down steep gradients, precautions will be taken to divert runoff into vegetated, more stable areas while maintaining vehicle access.

(x) Steps will be taken to minimise clearing in areas of dense scrub vegetation and wetland communities.

(xi) Design studies will be aimed, where practicable, at maximising the height of the conductors in the dense scrub and wetland areas, so span lengths can be increased.

(xii) Permanent access tracks will be detoured to use existing wetland crossings, whenever practicable, enabling retention of scrub layers and other vegetation.

(xiii) The procedures to be adopted for easement clearing will result in the maximum retention of rootstock and seedstock of understorey species.

(xiv) Easement maintenance will be aimed at restricting/preventing vegetation growing into the required clearing profile.

(xv) Groundcover and a shrub layer under the transmission line will be permitted to a maximum height of 1.5 m.

(xvi) Safeguards to control P.c. dieback disease will be consistent with Appendix B.

(xvii) Staff of the SECWA will be adequately informed of their obligations under the Aboriginal Heritage Act (1972-1980) regarding disturbance of sites.

(xviii) Towers will, where possible, be located close to the edges of wooded areas and rows of trees in order to minimise the visual intrusion of structures located on cleared land.

(xix) Where road crossings occur, the following guidelines will be applied, where possible, to minimise visual impacts:

- Ideally, the crossing will be effected at right angles, but where this is impracticable, the closest possible alignment to this will be achieved.

- Towers will be located as far as practicable from the road.

- A strip of understorey shrubs up to three metres high will, where possible and practicable, be maintained for at least 10 m on either side of the road. This will depend to a large extent on the nature of the vegetation at the precise crossing location selected, and

- if little or no vegetation occurs at the crossing then appropriate roadside verge planting of local vegetation will assist in reducing the impact.

(xx) Gates will be established where transmission lines cross existing fences. Under normal circumstances, these will be kept locked.

(xxi) The construction and maintenance of access tracks will be to the minimum standard that is consistent with convenient four wheel drive access by the SECWA vehicles.

(xxii) The SECWA will liaise with the Department of Agriculture, Local Government Authorities and affected landowners in the formulation and execution of noxious weed control procedures prior to and during the construction phase of the transmission line.

(xxiii) Transmission towers will be located at least 100 metres from the Murray River.

# Appendix B

# SECWA Environmental Specifications for Transmission Lines

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APPENDIX B

# SECWA ENVIRONMENTAL SPECIFICATIONS FOR TRANSMISSION LINES

## 1.0 ENVIRONMENTAL SPECIFICATIONS

### 1.1 CLEARING WITHIN STATE AND PRIVATE WOODLAND AREAS

Clearing is the first phase of a single contract for the entire transmission works programme. Clearing for 330kV, 132kV and 66kV transmission lines is carried out according to a predetermined "clearing profile". This "clearing profile" outlines the easement width and clearance limit for the route. The limits indicate the maximum allowable height of trees, undergrowth and scrub that may, in certain cases, remain within the cleared width (Figure B1). Within State and private forests, the following criteria area followed:

- The complete removal of all trees for a distance of 30m (330kV line) or 20m (132kV/66kV) either side of the centreline of the easement.
- The removal of all undergrowth, scrub and stumps, large rocks and other obstructions up to a maximum width of 5m. This area shall be levelled and graded to form an access track suitable for four wheel drive construction vehicles to travel along the route.
- The windrowing of all timber, undergrowth, scrub and stumps which have been cleared and the preparation of this windrowed timber for flash burning. This includes the construction of all necessary firebreaks.

### 1.2 CLEARING ON PRIVATE AND NON-FORESTED PROPERTY

- The removal of all trees, undergrowth, scrub and stumps for the total easement width. However, where the property owner wishes to retain certain vegetation, lopping and trimming is to be carried out in accordance with the clearance limits.
- Clearing of the track, windrowing and burning/removal is the same as for State or Private forests, and conforms to the "clearing profile".

All holes caused during felling of trees and stump removal are to be bladed in.

Where the transmission line angles or deviates, the area around these locations shall be cleared completely for a minimum of 30m (330kV lines) or 20m (132kV/66kV lines). No windrow timber shall be stacked within this area and the access track shall clear the angle peg by a minimum of 20m in 330kV lines and 20m in 132kV/66kV lines. In wet areas, the cleared area shall be graded to prevent wash or erosion occurring.

- NB Clearing specifications for 132kV and 66kV are generally the same.

1.3 SPECIAL REQUIREMENTS FOR THE CONTROL OF PHYTOPHTHORA sp. (DIEBACK)

To minimise the risk of spreading dieback disease, the CALM Department requires the following precautions to be taken:

o All clearing operations shall be completed in the dry months, generally considered to be December-March, unless otherwise authorised by the Principal and the CALM Department.

o The CALM Department has classified some of the land under its control into Disease Risk Areas. A permit is required for entry into Disease Risk Areas. Tenderer shall determine from the CALM Department, how the route is classified.

The following hygiene requirements have been specified by the CALM Department. These requirements shall be met by the Contractor.

When working in areas not infected by dieback, the Contractor may be required to cease operations temporarily in the event of rainfall. Recommencement of operations will be subject to the approval of a Forest Officer.

All Contractor's personnel, including staff not fully employed on the contract, sub-contractor and others, shall be instructed on hygiene requirements by the CALM Department before they commence clearing the route.

The Contractor's supervisor shall liaise with the CALM Department's Office-in-Charge for the section in which he is working, so that the following items can be defined:

- o Roads and tracks which crews may be permitted to use and to gain access to the line route.
- o The location of dieback along the proposed route.
- o The locations along the proposed where all vehicles, plant and equipment must be cleaned before entering dieback free areas.
- o The necessity for a cleaning down unit to be stationed at the boundary between dieback infected areas and areas not infected by dieback, to clean vehicles and equipment as they enter the uninfected areas. Vehicles shall be raised on a platform, e.g. rubber-belting or wood ramp during the clean-down procedure.

Signs defining the boundaries between dieback free, dieback infected and uninterpretable areas will be erected by the CALM Department.

Before clearing commences on land vested in CALM, all vehicles, plant and equipment shall be cleaned to the satisfaction of the CALM Department's Officer-in-Charge of the relevant District, or such other officer as he may delegate.

The Contractor shall provide all equipment for cleaning vehicles. This may be in the form of:

- o Mobile washing unit shall consist of a tank of suitable capacity, coupled to a high pressure pump and hose with jet nozzle, all mounted on a suitable vehicle, and, compressor unit fitted with air hose and jet nozzle mounted on or part of a suitable vehicle.
- o All washing down water shall be dosed with sodium hypochlorite. The required minimum dosage shall be 250ml of chemical for 500L of water. Renew sodium hypochlorite dosage every 24 hours.

The Contractor shall submit a list of all persons who will be directly engaged in the clearing. This shall include part-time personnel, such as relief drivers, pay officers and plant maintenance personnel and any other persons who may be associated with the work. Only those persons who have been instructed in the control of dieback shall be permitted in the area of operation.

It may be in the Contractor's interest to work all the dieback infected areas and the uninfected areas separately, so as to minimise the washing of plant and vehicles. Any such proposal will be acceptable to the Superintendent, provided a consistent policy is adopted.

## 1.4 WINDROWS

All trees, undergrowth, scrub and stumps shall be stacked in windrows using a rubber tyred machine fitted with a rake blade. Windrows to be no closer than 16m (for 330kV) and 10m (for 132kV/66kV) to the centreline of the route. A clear distance of no less than four metres shall be maintained between the edge of the windrow and the edge of the clearing. Where possible, only one windrow shall be used, and it shall be placed on the side opposite to the access track. The windrows shall be tightly packed, so as to allow flash burning to be undertaken when required. No windrows shall be stacked within 35m (330kV) or 25m (132kV/66kV) of an angle peg.

Any one section of windrow shall have a maximum length of 100m. A cleared distance of 20m shall be maintained between any two sections of windrow.

The maximum allowable windrow height shall be 3m.

Burning of windrows will be done given approval from the local CALM District Office. Material in the burning windrows will be reheaped until it has been completely burnt away.

## 1.5 ACCESS TO LINE ROUTE

Entry to forest areas shall be restricted to existing access tracks that have been nominated by CALM. Any deviation from these access tracks shall require the Superintendent's approval.

The Principal will supply the Contractor with drawings which will indicate access to the line route where the line route passes through private property. The Contractor shall not use any alternative means of access to the line route without the approval of the property owner and the Superintendent.

The Contractor shall be held responsible for all damage to access routes during the clearing operation and shall make good to the satisfaction of the property owner and the Superintendent, any damage caused.

## 1.6 ACCESS ROAD

The Contractor shall construct a two-wheel drive track along the centreline of the easement. The access track shall conform to the following:

- The track shall be suitable for access by vehicles under all weather conditions.
- The track shall have a maximum width of 5 metres on straight sections and 6 metres at bends. Fill, when required, shall consist of excavated hard material obtained from pits approved by CALM.
- Water courses shall be traversed by crossings which will have pipes installed and be gravelled in such a way as to minimise disturbance of banks.

Where the route traverses cleared farmland, no further grading for an access track will be required.

## 1.7 EROSION CONTROL AND ROUTE MAINTENANCE

Work is to be carried out in such a manner that disturbance to actual ground cover and land-form is minimised. Directions as to the methods to be adopted in the execution of the work to ensure this requirement is met will be issued by the Superintendent as the work proceeds.

The Contractor will, however, be required to instruct his staff, particularly plant operators, of the need for the utmost care to be exercised in carrying out all operations in order to avoid unnecessary damage. If such damage should occur and in the opinion of the Superintendent it could have been avoided, the Contractor is responsible for all costs involved in restoration of the damage.

## 1.8 PRESERVATION OF ROOT STOCK

Clearing of the easement through bushland shall be carried out in a manner that retains in situ, the maximum amount of root stock, by setting the bulldozer blade just above soil level. Retention of root stock is an essential element of the subsequent restoration programme. It is also important to minimise the risk of damage resulting from erosion to the transmission tower footings.

## 1.9 DUST SUPPRESSION

Special measures for dust control shall not be required unless dust becomes a nuisance. To alleviate the problem measures include:

- o speed controls
- o elimination of unnecessary vehicle movements
- o water spraying (Treated water only)
- o spreading of cut vegetation or woodchips.

## 1.10 CONTROL OF PLANTS ANIMALS AS REQUIRED BY THE AGRICULTURAL PROTECTION BOARD

The Contractor and his sub-contractors shall comply with regulations and requirements of the Agricultural Protection Board (APB) at all times during the performance of the work under the Contract, in order to maintain control of plants and animals that are declared under the provisions of the Agricultural and Related Resources Protection Act (1976 and amendments).

The minimum requirements with which the Contractor is to comply, are as follows:

- o In order to control the spreading of infestations of declared plants and soil-borne diseases, maps showing the known areas of infestations will be provided to the Contractor by the Superintendent. The Contractor shall establish washing-down facilities along the route at the direction of the APB and these facilities shall enable the washing-down of vehicles and machinery with a high pressure water jet with water running into an open excavated pit which does not drain into a water system.

- Where there is a need to import construction plant, material, camp facilities and other such items from overseas or interstate, the Contractor shall notify the relevant APB officers 3 weeks in advance of the expected arrival of such goods. When interstate imports are concerned, the APB shall make arrangements at the appropriate checkpoint for a thorough inspection of all such constructional plant, material, camp facilities and other relevant items.

## 1.11 PROTECTION OF FLORA AND FAUNA

Flora: No flora shall be removed from the site except that necessary to undertake the works. The area trafficked to undertake the works shall be kept to a minimum. Exotic flora species shall not be introduced onto the site.

Fauna: No existing native species shall be trapped, killed or injured on the site or otherwise removed without prior to CALM. Firearms or other weapons shall not be brought onto the site. Exotic fauna species shall not be introduced onto the site.

Pets will not be permitted with contractors, or the workforce.

## 1.12 DISPOSAL OF WASTE MATERIALS

Waste fuels and lubricants shall be removed from the site by the Contractor to an approved disposal area.

Arrangements shall be made with the relevant Local Government Authority or a specialist contractor for the disposal of all garbage, refuse and waste fuels and lubricants.

## 1.13 STORAGE AND USE OF CONTAMINANTS

Storage of oil and other materials which would contaminate the soil if spilled, shall be confined to specially designed areas within the construction camp sites. The storage facility shall be designed to localise the effect of the spillage and prevent leakage into water courses and aquifers. Adequate quantities of suitable material shall be kept on hand to counteract spillages.

Maintenance of equipment involving the transfer of contaminants shall be conducted at specially designed facilities at the construction camp site. The maintenance facilities shall be such as to localise the effect of spillages as described above.

Maintenance of a minor nature may be carried out away from the facilities described above, provided that transfer of contaminants is not involved.

1.14 USE OF EXPLOSIVES

In addition to compliance with regulations regarding the use of explosives, the Contractor shall give due notice to adjacent landholders and users concerning his proposed use of explosives. The Contractor shall not unreasonably use explosives that will adversely affect the normal activities of the landholders or users.

Explosives shall not be used during declared fire bans.

1.15 CULVERT PREPARATION

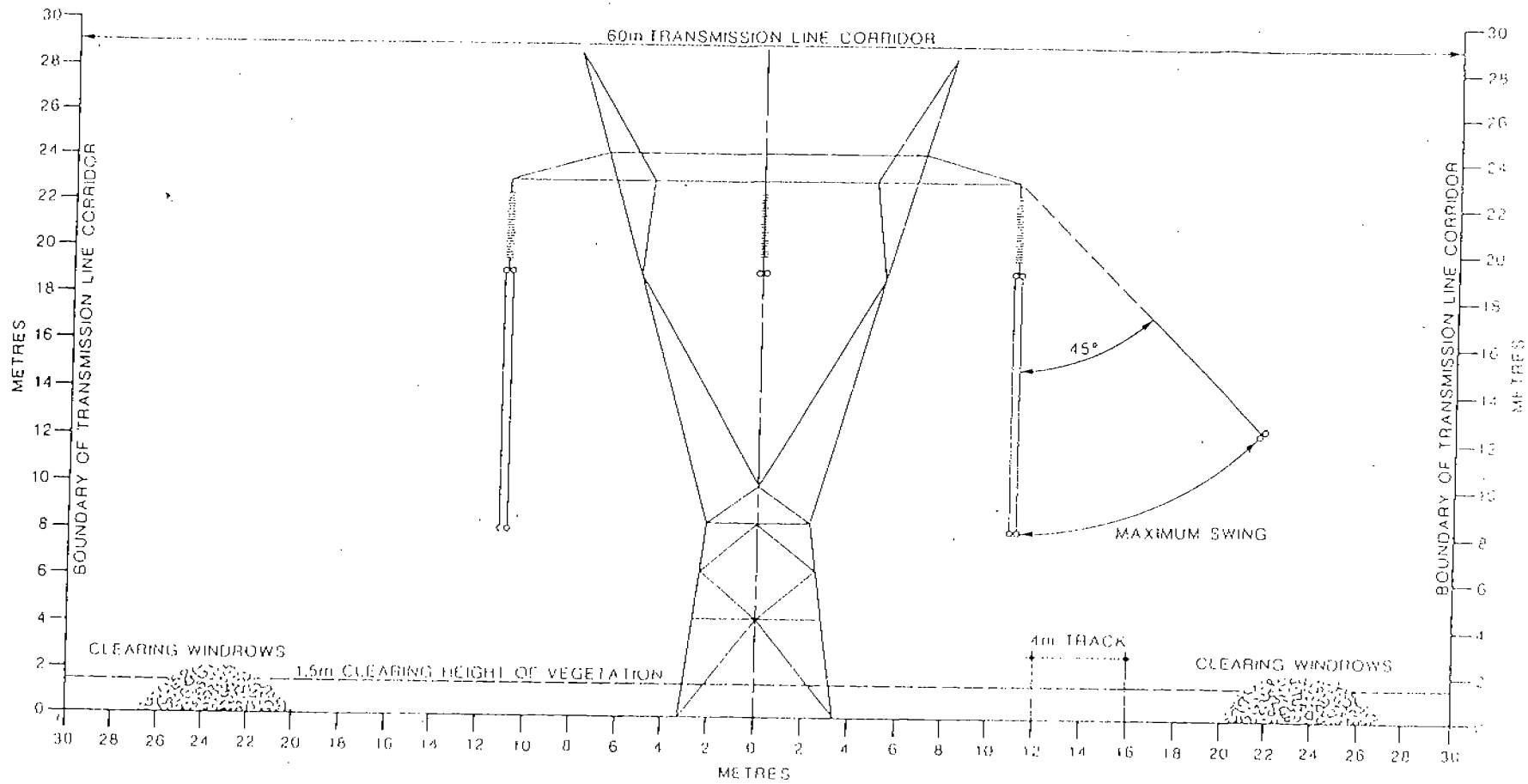
Pipes, concrete culverts or rock crossings may be installed at creeks and drainage channels.

The Contractor shall, however, clear across the creek or drainage channel removing all trees, undergrowth, and stumps, grading as close to the channel as possible to facilitate the later installation of pipes and culverts.

The creek or channel shall be left clear and tidy without obstruction to the natural flow of water.

## 2.0 BIBLIOGRAPHY

STATE ENERGY COMMISSION (1982). Specifications and General Conditions of Contract. Eastern Goldfields Project: Clearing for Transmission Line Route - Muja to Kalgoorlie, Specification CA162.




NOTE:

1.0 IN STATE FORESTS

1.1 ALL TREES WITHIN THE EASEMENT ARE TO BE MACHINE CLEARED OR, WHERE APPROPRIATE, FELLED.

1.2 REGROWTH AND SUCKERS WITHIN THE EASEMENT:
- (a) 1.5m AND ABOVE - CUT AT GROUND LEVEL AND POISON STUMP.
- (b) BELOW 1.5m - FOLIAGE SPRAY FOR SELECTED SPECIES WHICH ARE LIKELY TO CAUSE CLEARANCE PROBLEMS IF LEFT.

1.3 WHERE REGROWTH IS HEAVY, MACHINE CLEARANCE MAY BE USED:
- (a) THE MARDEN ROLLER (GENERALLY).
- (b) BULLDOZERS FOR STUMPS, ROCKS OR WHERE REGROWTH IS TOO HEAVY FOR THE MARDEN ROLLER.
- (c) SPECIAL HEAVY GROWTH AREAS (NOTABLY TEA TREE, MELALEUCA SPP., KUNZEA SPP.) A HYDROAX (LARGE SLASHER MACHINE).

1.4 ALL TREES OUTSIDE THE EASEMENT WHICH COULD FALL ONTO THE LINE ARE TO BE TAKEN DOWN IN CONSULTATION WITH THE DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

2.0 IN PRIVATE AREAS

2.1 SOME SELECTIVITY APPLIES AND STRAIGHT WINDOW CLEARING AS PER 1.0 TO BE CARRIED OUT WITH DISCRETION AFTER CONSULTATION WITH LAND OWNERS.

TYPICAL CLEARING PROFILE FOR 60m EASEMENT FOR 330kV SINGLE CIRCUIT LINE