

ANNEX 2
SILVOCULTURE MEASURES FOR VEGETATION MANAGEMENT



TABLE OF
 CONTENT

1 INTRODUCTION2

2 OBJECTIVE2

3 LOCATION OF PROJECT3

4 DESCRIPTION OF THE NATURAL ENVIRONMENT.....6

 4.1 CLIMATE.....6

 4.2 PHYSIOGRAPHY6

 4.3 HYDROGRAPHY.....6

 4.4 FLORA AND VEGETATION UNDER THE CATEGORY OF CONSERVATION7

 4.5 FAUNA UNDER THE CATEGORY OF CONSERVATION.....8

5 ANALYSIS OF TREE VEGETATION IN THE PROJECT AREA9

6 VEGETATION MANAGEMENT WITHIN THE RESTRICTION AREA OF THE PROJECT..... 11

 6.1 OBJECTIVE11

 6.2 CRITERIA FOR GENERAL VEGETATION MANAGEMENT IN THE AREA OF THE PROJECT.....11

 6.3 MANAGEMENT PROPOSED12

 6.4 TECHNICAL SPECIFICATIONS13

7 RESCUE OF INDIVIDUAL SPECIMENS 14

8 GENERAL PROTECTION AGAINST FOREST FIRES 15

 8.1 PREVENTION15

 8.2 CONTROL MEASURES15

 8.3 BASIC STAFF BEHAVIOUR IN THE WORK AREAS16

IN THE PROJECT "ELECTRIC TRANSMISSION LINES
MAITENES S/E – ALFALFAL
S/E, AND



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Appendix

Areas that can be pruned within the restriction strip considered for the Project.



1 INTRODUCTION2

The following document presents a number of silvocultural criteria aimed at protecting the vegetation species existing in the area of the Project "Electric Transmission Lines Maitenes S/E – Alfalfal S/E, and Central Alfalfal II Power plant – Alfalfal S/E," either in the area considered to locate the foundations of the towers as well as for those areas located within the restriction strip.

The Project consists in two 17.1km electric transmission lines that will connect the power plants, Las Lajas y Alfalfal II to the Central Interconnected Grill (SIC). Accordingly, the electric transmission system comprises two lines:

The line connecting Maitenes S/E and Alfalfal S/E, in a 110 kW, 7.6km circuit, and 30m for the restriction strip.

The line connecting the Alfalfal II power plant and the Alfalfal S/E in two 220 kW, 9.5km and circuits and 40m for the restriction strip.

2 OBJECTIVE

The general objective of this document is to establish a number of silvocultural criteria aiming to achieve an appropriate vegetation management for the vegetation present in the restriction strip and the construction area of the foundations for the Project towers.

3 LOCATION OF PROJECT

The Project will be completely developed in the municipality of San José de Maipo, Cordillera province in the Metropolitan region of Santiago.

The approximate UTM coordinates (Datum PSAD56 node 19) are as followed:

Table 1 Position Coordinates of Project lines

Tower/Crowns	Datum UTM Coordinates		Tower/Crowns	Datum UTM Coordinates	
	East	North		East	North
Line between Maitenes S/E and Alfalfal S/E			Line between Alfalfal II Power plant and Alfalfal S/E		
Tower 20	382914	6289490	Marco	385243	6287124
Tower 21	382998	6289576	Tower 1	385140	6287165
Tower 22	383211	6289546	Tower 2	384889	6287374
Tower 23	383556	6289498	Tower 3	384700	6287581
Tower 24	383916	6289657	Tower 4	384489	6287812
Tower 25	384103	6289739	Tower 5	384364	6287998
Tower 26	384332	6289840	Tower 6	384110	6288298
Tower 27	384424	6289881	Tower 7	383901	6288655
Tower 28	384684	6289995	Tower 8	383851	6288964
Tower 29	384936	6290106	Tower 9	383916	6289131
Tower 30	385214	6290135	Tower 10	384190	6289183
Tower 31	385624	6290176	Tower 11	384672	6289464
Tower 32	385807	6290346	Tower 12	384870	6289717
Tower 33	385968	6290463	Tower 13	385129	6289859
Tower 34	386199	6290703	Tower 14	385343	6289963
Tower 35	386538	6290974	Tower 15	385714	6290142
Tower 36	386718	6291112	Tower 16	385983	6290450
Tower 37	387140	6291262	Tower 17	386214	6290687
Tower 38	387381	6291356	Tower 18	386549	6290954
Tower 39	387538	6291417	Tower 19	386727	6291095
Tower 40	387782	6291541	Tower 20	387147	6291243
Tower 41	388037	6291602	Tower 21	387389	6291337
Tower 42	388292	6291664	Tower 22	387546	6291398
Tower 43	388525	6291721	Tower 23	387788	6291521
Tower 44	388841	6291771	Tower 24	388032	6291580
Tower 45	388920	6292042	Tower 25	388285	6291642
Tower 46	388961	6292391	Tower 26	388529	6291701

IN THE PROJECT "ELECTRIC TRANSMISSION LINES
 MAITENES S/E – ALFALFAL
 S/E, AND



Tower/Crowns	Datum UTM Coordinates		Tower/Crowns	Datum UTM Coordinates	
	East	North		East	North
Tower 47	389064	6292538	Tower 27	388857	6291753
Tower 48	389175	6292774	Tower 28	388940	6292039
Marco	389230	6292780	Tower 29	388981	6292384
			Tower 30	389069	6292514
			Tower 31	389194	6292631
			Tower 32	389350	6292748

Source: AES Gener S.A.

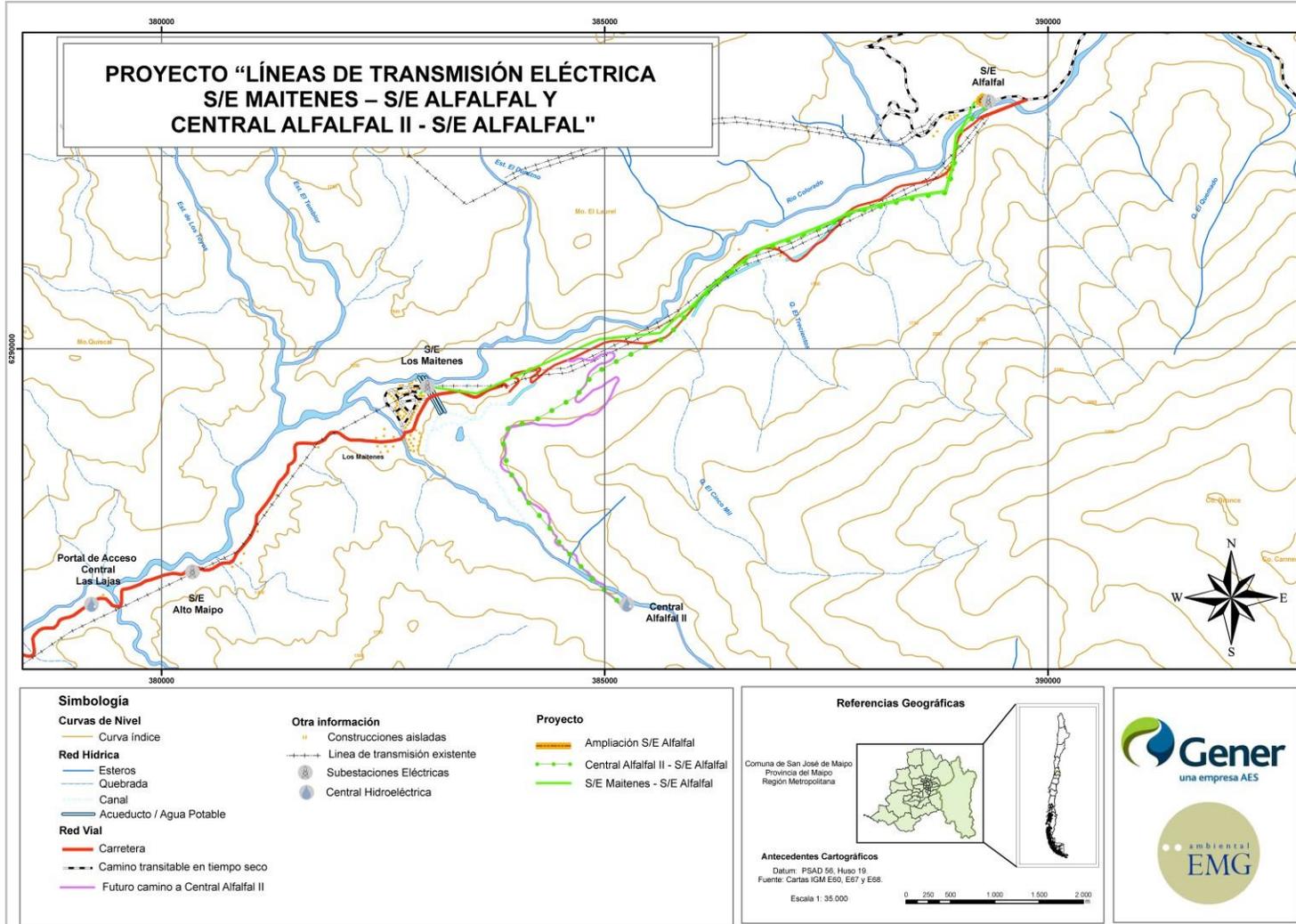
Table 2 Coordinates of Alfalfal S/E Expansion

Tower/Crowns	Datum UTM Coordinates PSAD56 Node 19	
	East	North
Crown	389261	6292827
Crown	389249	6292798
Crown	389234	6292804
Crown	389220	6292772
Crown	389317	6292730
Crown	389343	6292791
Crown	389332	6292796

Source: AES Gener S.A.

The following chart illustrates both location and layout of the Project.

Figure 1 Location of the Project



Source: In-house based on charts IGM E60, E67, and E68; scale 1:50.000.

IN THE PROJECT “ELECTRIC TRANSMISSION LINES
MAITENES S/E – ALFALFAL S/E, AND
ALFALFAL II POWER PLANT - ALFALFAL S/E”

4 DESCRIPTION OF THE NATURAL ENVIRONMENT

The description of the natural environment includes aspects referring to climate, physiography, hydrology and flora and fauna species which are in the category of conservation.

4.1 Climate

Based on Köppen classification, the analyzed zone falls under the influence of a warm temperate climate with a prolonged dry season. Average temperature in the coldest month is 3°C- 18°C while during the warmer months (December to March) average temperature ranges between 10°C- 25°C.

With regard to rainfall, annual average is 500-800mm. Rainfall comes from the winds strongly blowing the northern side of the hills.

Wind speed is 10km/h mostly from the North during January-March and from the Northeast in November and December. Relative humidity is 40% in average.

4.2 Physiography

In general, nearly half of the foundations for the towers in the Project will be located in areas with a slope equal or greater than 10° (equivalent to a 20% slope) which is considered as strong, very strong and/or steep. Nearly 40% of the towers will be located in the flatter areas of the Colorado canyon where a significant amount of material has settled.

Due to the layout of the Project most of its structures will be placed in the northern hillside at 750-1,500 masl, which is considered the Andean foothills. The section of the line to be developed from Alfalfal II power plant and Alfalfal S/E will be mainly located in areas with strong slope and which are in the slope of the hillsides of the very steep canyon of Aucayes ravine. On the other hand, the geo-morphology of the valley of Colorado river has been the result of different processes (erosion, scouring, and tectonic) that have created different holdings and separations during the different geological ages. Also, the characteristics of the current relief were originated in the process Börgel calls “fluvial- glacial-volcanic” which resulted in the current relief.

4.3 Hydrography

There are two rivers near the location of the Project. Their main characteristics is summarized as follows:

Colorado River: With snow regime and high slope with a consequent erosion power.

Aucayes ravine: With snow regime. Characterized by having natural vegetation from the area by the edges and banks of the ravine with a very clear axis as the flow rate is permanent and mostly used in the high area for human use, irrigation, and other activities. Average slope of 6%.

The following table shows the distance (in meters) between the restriction strip areas to intervene by the Project and the stream ways. The location of these areas is shown in the Appendix.

Table 3 Water Resources in the vicinity of the Project

Lot N°	Area N°	Stream ways or water mass	Time frame	Approximate distance to the area to intervene	Width of waterway (m)
1	A1	River	Permanent	55	35
1	A2	River	Permanent	100	35
1	A3	River/Brook	Permanent/Tempor	90/5	35/5
1	A4	River/Brook	Permanent/Tempor	100/5	120/5
1	A5	River	Permanent	80	35
1	A6	River	Permanent	180	35
1	A7	River	Permanent	150	35
1	A8	River/Brook	Permanent/Tempor	215/0	45/5
1	A9	River	Permanent	190	40
1	A10	River/Brook	Permanent/Tempor	120/80	35/5
1	A11	River	Permanent	120	40
1	A12	River	Permanent	150	40
1	A14	River	Permanent	320	15
1	A15	River	Permanent	230	15
1	A16	River	Permanent	200	15
1	A17	River	Permanent	0	15
1	A18	River	Permanent	75	40

Source: In-house preparation.

4.4 Flora and vegetation under the category of conservation

The area of influence of the Project has identified four species of flora and vegetation with conservation issues. These are shown in the following table.

Table 4 Species of flora and vegetation with conservation issues

Specie	Category of Conservation
Austrocactus spiniflorus	Rara
Kageneckia angustifolia	Vulnerable
Puya berteroaana	Vulnerable
Pyrrhocactus curvispinus	Vulnerable

Source: CEA Ltda.

Of the species listed only Chagual or Puya berteroaana was identified within the restriction strip of both lines. This species is preferably in the northern hillside,

specifically between towers 10 and 24 of the line of Alfalfal II Power plant – Alfalfal S/E (220 kW) and between towers 31 and 41 of the line of Maitenes S/E – Alfalfal S/E (110 kW).

Considering that the Project considers pruning of the vegetation present in the area of the restriction strip indicated in Chapter 1; this activity, along with the constructions of the foundations, will be conducted as to not produce cut, removal, destruction or grubbing up of native species under the category of conservation. In that regard, chagual will not be cut, removed, destroyed or grubbed up as during the new layout of the structures of the line areas where native species under the category of conservation are located will be excluded.

It is important to mention that a tower will cover an approximate surface area of 150 m². However, the effective surface used for construction purposes of the four foundations of a tower is even smaller: 13 m² (considering four foundations in 1.8*1.8 m corresponding to an anchored block to be set in the line between Alfalfal II power plant and Alfalfal S/E).

The "chaguales" are located around towers 11, 12, 13, and 14 of the line between Alfalfal II power plant – Alfalfal S/E (see procedure under Section 6).

Considering sampling in the areas where *P. berteriana*, is present, the density is of 134 individual species per hectare.

While the analysis has been focused on species under the category of conservation present in the restriction strip should other protected species protected by the national legislation are identified during the construction stage, these will be protected from the works as to prevent they are cut, removed, destroyed or grubbed up. Therefore, any type of intervention on this species is prohibited.

When working on the location of the structures for the line a forest engineer will participate in these activities as to provide a geo-reference of the species under the category of conservation that are present in the vicinity of the towers considered.

4.5 Fauna under the category of conservation

Seven species of fauna of terrestrial vertebrates were identified in the area of influence of the Project. These are shown in the following table.

Table 5 Species of fauna under the category of conservation

Specie	Category of Conservation
<i>Liolaemus lemniscatus</i>	Vulnerable
<i>Liolaemus nigroviridis</i>	Vulnerable
<i>Liolaemus monticola</i>	Vulnerable
<i>Liolaemus fuscus</i>	Out of danger
<i>Liolaemus tenuis</i>	Vulnerable
<i>Vultur gryphus</i>	Vulnerable
<i>Pseudalopex culpaeus</i>	Not appropriately known

Source: CEA Ltda.

Due to the characteristics of the Project and the fauna under the category of conservation, rescue of reptiles prior commencing construction is considered.

5 ANALYSIS OF TREE VEGETATION IN THE PROJECT AREA

The area of the study was restricted by using the list of coordinates of the towers from each of the lines indicated under Section 3 in this document along with the respective restriction strip and also considering drawings prepared by AES Gener S.A. (Annex 1 of the EIA) and geo-referenced aerial and orthorectified images.

With the information already mentioned and a visit to the site it was determined that the area susceptible for pruning amounts to 48% of the restriction strip, that is 28.5 ha. The area potentially affected will mostly consist of sclerophyllous native forest. The following table shows the surface area for pruning as per sections, current use, and forest type while the Appendix shows the pruning scheme.

Table 6 Tree Surface Area associated to the Project

Area	Surface (ha)	Current Usage	Forest Type
A1	1,0	Quillay, Bollen, Litre	Sclerophyllous
A2	3,8	Quillay, Bollen, Litre	Sclerophyllous
A3	2,8	Quillay, Bollen, Litre	Sclerophyllous
A4	0,8	Quillay, Bollen, Litre	Sclerophyllous
A5	0,3	Quillay, Bollen, Litre	Sclerophyllous
A6	0,3	Quillay, Bollen, Litre	Sclerophyllous
A7	0,8	Quillay, Bollen, Litre	Sclerophyllous
A8	0,9	Quillay, Bollen, Litre	Sclerophyllous
A9	0,8	Quillay, Bollen, Litre	Sclerophyllous
A10	2,7	Quillay, Bollen, Litre	Sclerophyllous
A11	1,5	Quillay, Bollen, Litre	Sclerophyllous
A12	5,1	Quillay, Bollen, Litre	Sclerophyllous
A13	0,4	Quillay, Bollen, Litre	Sclerophyllous
A14	2,7	Quillay, Bollen, Litre	Sclerophyllous
A15	0,4	Quillay, Bollen, Litre	Sclerophyllous
A16	0,6	Quillay, Bollen, Litre	Sclerophyllous
A17	3,2	Quillay, Bollen, Litre	Sclerophyllous
A18	0,4	Quillay, Bollen, Litre	Sclerophyllous
Total	28.5		

Source: In-house preparation.

The forest inventory obtained results from extrapolating 12 sampling units considering that the existing vegetation forms a forest as per the definition of the Law for Native Forest N° 20,832. This inventory took into account all forest vegetation under the axis of the line and nearby thereof mainly due to ease of access of points randomly chosen and to the homogeneity of the existing vegetation, which falls under the

the restriction strip established as an impact area for this study. These points are presented under the cartography indicated in the Appendix and are also listed in the following table.

Table 7 Sampling units of Forest inventory

Lot	Datum UTM Coordinates PSAD56 Node 19	
	East	North
1	384167	6288774
2	388771	6291837
3	387690	6291312
4	385664	6290113
5	385272	6287072
6	384960	6287389
7	388854	6291742
8	388333	6291648
9	385330	6289983
10	385346	6289965
11	385196	6289929
12	384320	6289250

Source: In-house preparation.

The 12 sampling units (rectangular lots of 20*50 m: 1,000 m²) accounted for all individual species considered as trees identified by Species, number of shoots, prominent DAP or DAP and height (of some of the specimens); using the prominent height the average quality of the site was established. The prominent slope was also determined for each area sampled.

Data from each lot was grouped by prominent species and averaged accordingly, then consolidated as to better represent the actual coverage each specie has in the formations or areas.

The following table shows the tree composition located in the layout of the line.

Table 8 Tree Composition present in the layout of the lines

Specie	N° of trees per average	Medium Height	Total Individual specimens
Kageneckia oblonga	112	4	3.205
Lithraea caustica	17	2	493
Maytenus boaria	4	4	124
Quillaja saponaria	129	11	3.684
Schinus polygamus	9	3	249
Trevoa quinquenervia	42	3	1.188
Total			8,942

Source: In-house preparation.

6 VEGETATION MANAGEMENT WITHIN THE RESTRICTION AREA OF THE PROJECT

6.1 Objective

The objectives in managing of the vegetation reflect the need to build a high voltage line consisting of 61 structures. This activity does not consider cutting, removal, grubbing up and/or destruction of tree specimens under the category of conservation that are present under the line and within the restriction strip as pruning activities will only be conducted as part of silvicultural treatment that will modify the size of the specimens.

Access points to the works will be determined as well as the direct area of influence beneath each of the structures which, as it was already mentioned, will not be larger than 150 m².

6.2 Criteria for General Vegetation Management in the area of the Project

The Project location is given by the need to transport the energy generated by the future power plants of Las Lajas and Alfalfal II property of AES Gener S.A. (which are part of the PHAM) and would inject the Central Interconnected Grill (SIC).

The final design of the layout was established as a result of a study of the different location variables in order to minimize the impacts and considering the natural characteristics of the area considered for the location of the Project. Consequently the layout was decided near the existing road and projected (future access road to Alfalfal II power plant already environmentally assessed) by leveraging the strips of land already intervened and avoiding enabling new access for the construction of the towers.

Therefore, below are the general criteria considered for the location of the Project:

Areas near the road and existing paths were preferred as well as areas intervened as to place the towers.

Location of the structures was established preferring areas without native vegetation under the category of conservation.

The following table summarizes other specific criteria of vegetation management in the area of the restriction strip and structure foundations.

Table 9 Criteria for natural resources management for clearing of the restriction strip and foundations of structures

Objecti	Criteria
Narrow down the intervention area of the Project	<p>§ Delimit construction areas for the towers.</p> <p>§ Should a foundation is projected in an area where a species under the category of conservation is present, the modification of the former will be modified (in some meters) when the ranging of the structure is done prior to the assessment from the environmental consultant.</p> <p>§ Cleaning of the ground will be limited to the area of the foundation and the land grid without affecting the tree species present in the area.</p>
Keep the existing vegetation and prevent the development of erosion processes	<p>§ Vegetation will be kept in the area considered for the restriction strip to a height as provided under NSEG 5 En 71 and under silvicultural criteria. Consequently trees and/or bushes with a lower height of any kind will be pruned thus preventing the development of erosion processes.</p>
Decrease the risk of fire	<p>§ Using fire as a clearing method or site preparation prior intervention is prohibited. By the same token, burning of any type of waste is strictly forbidden.</p> <p>§ Vegetation will be kept in the area considered for the restriction strip to a height as provided under NSEG 5 En 71; this distance prevents reducing the risk of fire associated to an electric shock.</p> <p>§ Workers will be trained in protection measures against forest fires</p>
Avoid production of waste while enabling the restriction strip	<p>§ Staff on site will not be allowed to dispose of or bury the garbage produced. This waste will be collected and transported to site facilities that are to be located in the lands belonging to Alfalfal power plant and/or adjacent to Aucayes ravine.</p>

Source: In-house preparation.

When working on the location of the structures for the line a forest engineer will participate in these activities as to provide a geo-reference of the species under the category of conservation that are present in the vicinity of the towers considered.

6.3 Management Proposed

The proposed pruning is similar to a recovery type of pruning (but not that intensive) which corresponds to cutting all green branches in the tree, including the shoot, even though this can be considered as a variation of the method of clearing under an enclosed areas which implies that cutting of shoots and sprouts will produce side sprouts that will replace the one cut while the remaining lower shoots will branch out.

Management considers high pruning of specimens located within the restriction strip which will be done during the construction and maintenance of the transmission lines in compliance with EMG Ambiental S.A.

technical specifications that are part of this Annex. CONAF will be notified of the time for the pruning. However it is considered that the end of winter is optimum for those activities as there is less activity from microorganisms, the vegetative pause and greater growth in spring time which favors the scarring callus.

In the restriction strip trees with canopies located at a vertical distance from the conductors less than the minimum required by the Superintendence of Electricity and Fuels (SEC).

Bushes with lower height as well as vegetation not considered risky for the operation of the electric system is excluded. This is intended to minimize the exposure time of barren surface, preventing erosion processes, and favoring the continuity in the formation of appropriate vegetation for traffic, shelter, and food of the fauna, as well as to minimize the deterioration of the landscape.

It is estimated that new paths or roads will not be necessary as structures will be located nearby existing roads or nearby projected roads.

Any activity developed with the existing vegetation in the place will be conducted after the corresponding authorization of CONAF is obtained.

6.4 Technical Specifications

6.4.1 About tools to be used

The tools to be used for pruning of the trees will depend on the type of intervention to conduct: low, medium or high pruning.

Scissors will be used for thin branches located at approximately 2 m while big scissors will be used for a medium size branches to a maximum of 2.5 m. When combined with a ladder big scissors can also be used for pruning at a greater height.

Saws can be used for middle height and thick branches. These can be in two kinds:

Saws without Handle: For low cutting at a maximum height of 2.5 m.

Saws with handle: Useful for pruning up to 6m high approximately. When used in combination with a ladder, saws without handle can be used for pruning at a greater height.

6.4.2 About workers and safety when pruning

In order to conduct a safe work the worker needs personal protection items such as hard hat, gloves, safety shoes, and when using a ladder, a safety harness should be used as well.

Pruning will be conducted by qualified staff and the measures to be considered when pruning include: the cut will be done beveled, flat, without leaving residues (chips) or stumps or tore bark. The above is intended as to prevent the built-up of water and the further attack of fungus. The general procedure for vegetation management is presented in Section 4.2.3 of Chapter 6.

6.4.3 About waste

Smaller size waste produced by each pruning will be cut or chipped and placed in the area where muck disposal from PHAM area as to build the material to develop the soil for that area.

7 RESCUE OF INDIVIDUAL SPECIMENS

In the event that the rescue of native individual specimens is required, the following is considered: Identification of specimens to rescue.

Communicate with the corresponding authorities upon beginning the activities (CONAMA, SAG, and CONAF).

The area will be recognized identifying the general areas for the location of the foundations. The final location will be evaluated based on the following considerations:

Vegetation: Disturbance of native species will be prevented particularly those classified under any kind of conservation category. Accordingly the area for the foundation will be identified, preferring areas lacking vegetation. In the event that a native bush species is present in the area considered for the foundation, such species will be rescued to be transferred to the vicinity of the structure. It is important to point out that this activity will be conducted avoiding cutting, removing, destruction or grubbing up of native species present under any category of conservation. Therefore no foundations will be placed in the area where this type of species are present.

Accessibility: Areas nearby existing and projected roads, such as existing trails and paths will be preferred.

With all the previous considerations the definitive area for the foundation will be identified, by marking the specimens present in that area and which will consequently be accounted for, rescued, and transferred.

It is important to point out that workers will be trained in procedures and necessary care for such activities.

Extraction of specimens will be done manually using shovels and hoes. The ground will be moved peripherally trying not to affect the root of the specimen.

The specimen will be transferred to an area to be agreed with CONAF; if the relevant authorizations are in place they can be transferred to the greenhouse the PHAM will built in the area of Los Maitenes.

Once the construction phase is completed at the Project, specimens will, when possible, be planted in the vicinity of the foundations where they were originally present or will be transferred to an area to agree upon with the authorities. The success of this activity entails evaluating the need of irrigation (particularly in summer time) during the first six months after being transferred.

These specimens will be environmentally tracked as to monitor:

Plant Health status.

Colour.

Turgescence.

Mortality vs. survival of relocated specimens.

A report will be prepared after each monitoring which will be delivered to the corresponding authorities.

The frequency of monitoring will be done as follows:

Monitoring 1: One month after relocation of the specimens.

Monitoring 2: Six months after relocation of the specimens.

Monitoring 3: One year after relocation of the specimens.

Monitoring 4: On the second year after relocation of the specimens.

8 GENERAL PROTECTION AGAINST FOREST FIRES

8.1 Prevention

8.1.1 Reduction of the risk of occurrence

The area where the intervention will take place is an area susceptible for the occurrence of fires in summer time due to the combination of low rainfall and high temperatures, therefore the vegetation is very dry. Accordingly precautionary measures will be adopted as to decrease the risk of occurrence.

During the routing or actual works of the pipeline the following measures have been considered as preventative measures.

8.1.2 Safeguard

There will be a technical inspection. Its functions include the permanent detection of unsafe actions and conditions that are taking place during the development of the works. The inspecting body/staff will communicate the deficiencies recorded to the contractor as to correct the errors and deficiencies detected.

8.1.3 Risk Control

Access to work faces from people foreign to the operations will be controlled as much as possible.

8.2 Control Measures

8.2.1 Timely Detection

Every work face will have, at least, a radio and/or a cell phone as to ensure the connection and give notice in the event of a fire as well as to receive the instructions to start the actions to control the fire when appropriate. Staff in charge of the communication equipment will have the

telephone numbers of the nearby CONAF and the Fire Department. Both institutions are informed beforehand of the works that are being executed.

8.2.2 Organization of Firefighting activities

In the event of a fire the following measures will be adopted:

The staff which is closer to the fire will immediately give notice to the person in charge of coordinating all communication and will provide all the background information necessary such as reason of the fire, resources compromised, water availability, access ways to the place, estimation of the surface area affected, topography of the place, weather conditions particularly direction and intensity of the wind and whether more staff is necessary to control the fire;

The staff that is available and closer to the fire will start fighting it immediately building the control lines that are necessary. Initially the foreman or technical person in charge of the sites arriving first to the fire will be in charge of the situation;

This person will organize his/her staff while conducting a prompt evaluation of the assets affected and will provide information over the radio or telephone;

With regard to the contractor, the person in charge of operations will immediately inform CONAF about the fire, regardless of the surface area affected, the magnitude of the fire, and more information as necessary as to make this institution acquainted with the situation from the first moment as well as to commence the necessary evaluations;

The person in charge of the communication will give first priority to those referred to the fire and will arrange transportation of staff to the place of the fire when necessary or will alert the staff to be attentive to his/her instructions; and

Should CONAF send fire brigades to the place, the contractor's staff present in the area fighting the fire will follow the instructions of the head of the brigades.

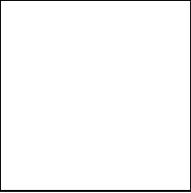
8.2.3 Staff Training

The Environmental affair person will instruct the staff conducting the works on the risks entailed of such work. Also, basic theoretical instructions with regard to behavior of the fire and forest firefighting methods; and

The person in charge of Environmental affairs will provide the staff with the basic practical instruction about forest fire fighting, ways to organize, and collectively build basic lines to control the fire as to preliminary fight any focus of fire that might reach the specialized staff from CONAF.

8.3 Basic staff behavior in the work areas

Operators and all staff in general will not be allowed to smoke in the area of the Project (including the restriction strip). The staff will not light bonfires in the area using vegetation present nearby



or when there is a risk of fire (places with significant concentration of vegetal fuel that might ignite a fire).

8.3.1 Tools and Fire Fighting Equipment

Besides equipment and tools to be used for pruning, basic items and tools will also be available for six people brigades conduct the initial fight of a fire. Each brigade will have the following basic tools: 3 forest shovels, 1 brush hook, 2 rakes, and 1 19 lt portable pump. Tools to fight the fire will permanently transported in vehicles, in safe boxes as to be immediately used in the event of any emergency.

8.3.2 Support Equipment and Machinery

Support machinery is the same machinery used at the sites, that is, trucks, mechanical shovels and bulldozers, chainsaws, water trucks, motor pumps, etc.

8.3.3 Communications

A cell phone adapted to conditions of coverage or a radio equipment will be provided to the head of crew undertaking works at the work faces as to immediately communicate of any emergency that might occur during works.