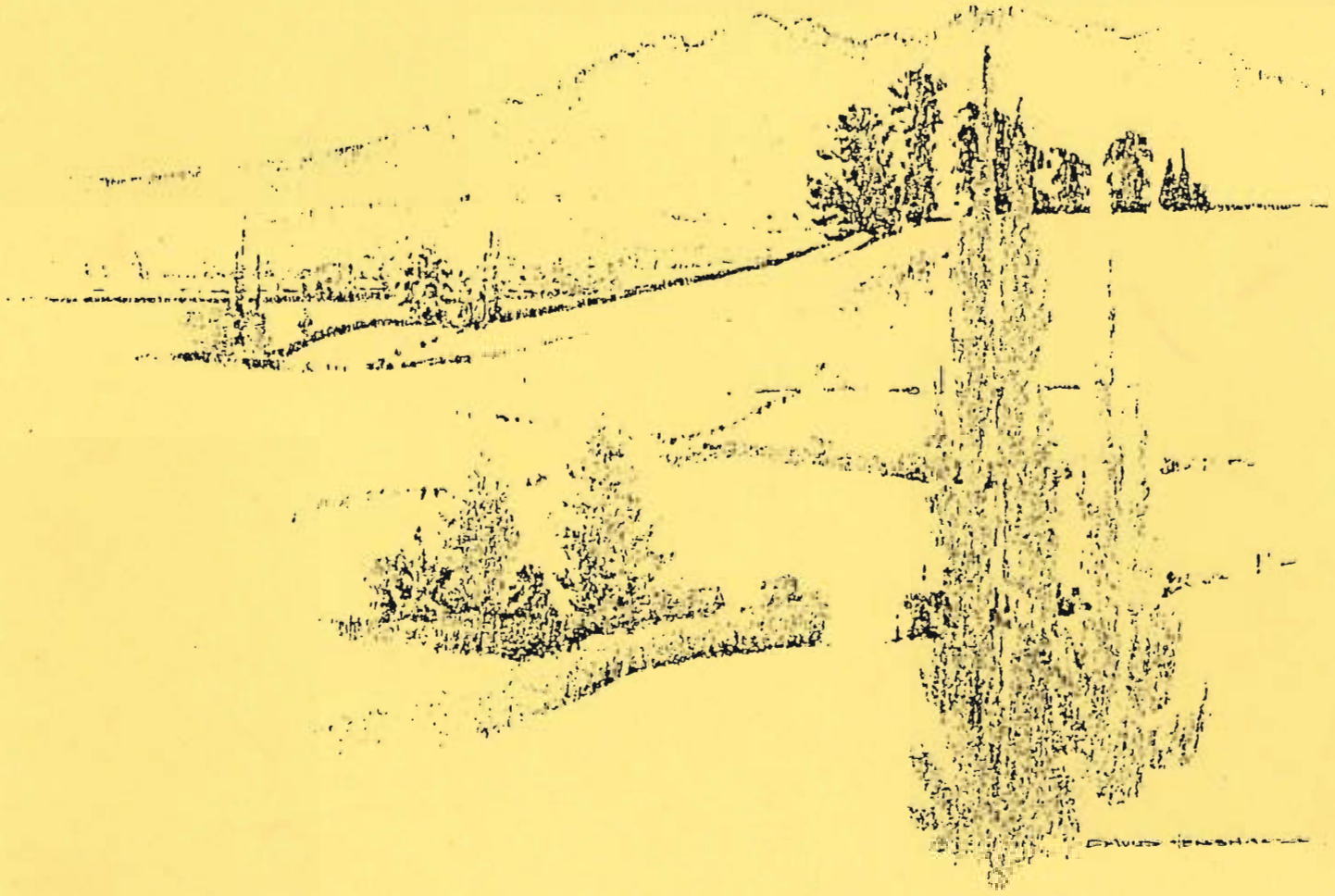
HUNTLY-STRATFORD TRANSMISSION LINE:
MT PIRONGIA AREA



LINE DETERMINATION AND COMPENSATION

A D LIVINGSTON

October 1988

TRANSMISSION LINE DETERMINATION & COMPENSATION

-HUNTLY-STRATFORD 220kV TRANSMISSION LINE

(MT. PIRONGIA SECTION)

The many contentious issues relating to determination of line route and compensation need not and should not have happened. It must not happen again.

-There were no winners.

Alan Livingston.

Acknowledgements

My sincere thanks to the Raglan County Council for the compilation of this report
and to David Henshaw for the cover drawing - View of Mt. Pirongia.

PREFACE

The events of line route determination and compensation in the contentious Mt. Pirongia region of the Huntly-Stratford 220kV transmission line has prompted me to carry out this project in the hope that it will contribute to and initiate action so that this unfortunate and unnecessary episode never occurs again.

Residing within this area in question, I have witnessed the attitudes and approaches by E.D. staff, the unity and resolve of communities to obtain unbiased evaluations, the pressure placed on individuals, families and districts by E.D.'s actions, the further resolve of landowners to refuse admittance to E.D. until they agreed to more realistic levels of compensation, and the protracted compensation settlements. In all, a protracted, costly and character testing episode.

This saga has extended over an at times strained 3 years but the resolve by relatively small groups who were sufficiently motivated and united to obtain a "fair trial", even in the face of apparently overwhelming odds, has achieved much.

There is now an acceptance of changing public attitudes to transmission lines and a need for a comprehensive review of present policies so as to provide for the rational planning of the siting of these lines.

It has also brought about a large learning curve for E.D., the valuing and legal professions, and,I hope, ultimately Federated Farmers.

My sincere thanks to those affected landowners between Tiheroa and Huntly who completed my questionnaire. Initially I planned to study aspects of compensation only, but responses from the questionnaire plus my further research, has prompted me to study the issue of line determination as well. To put this all into perspective I have also backgrounded events leading up to the line construction.

CONTENTS

GLOSSARY

E.D.	Electricity Division, now Electricorp
E.I.A.	Environmental Impact Assessment
E.I.R.	Environmental Impact Report
EMR	Electro-magnetic Radiation
kV	Kilovolts (one thousand volts)
MAF	Ministry of Agricultural and Fisheries
V.D.	Valuation Department,now Valuation N.Z.
W.U.C.	Waikato United Council
L.O.	Liaison Officer
Solatium	Compensation for disappointment, inconvenience and wounded feelings.
Wayleave	Form of licence normally used to cover the right to lay pipes, ducts, wires etc under land or carry cables or wires over land.
S.O.E.	State Owned Enterprise
T&C Planning Act	Town and Country Planning Act, 1977
P.W. Act	Public works Act, 1981.
L.V.	Land Value
NMV	Non Market Valuation

B C D E

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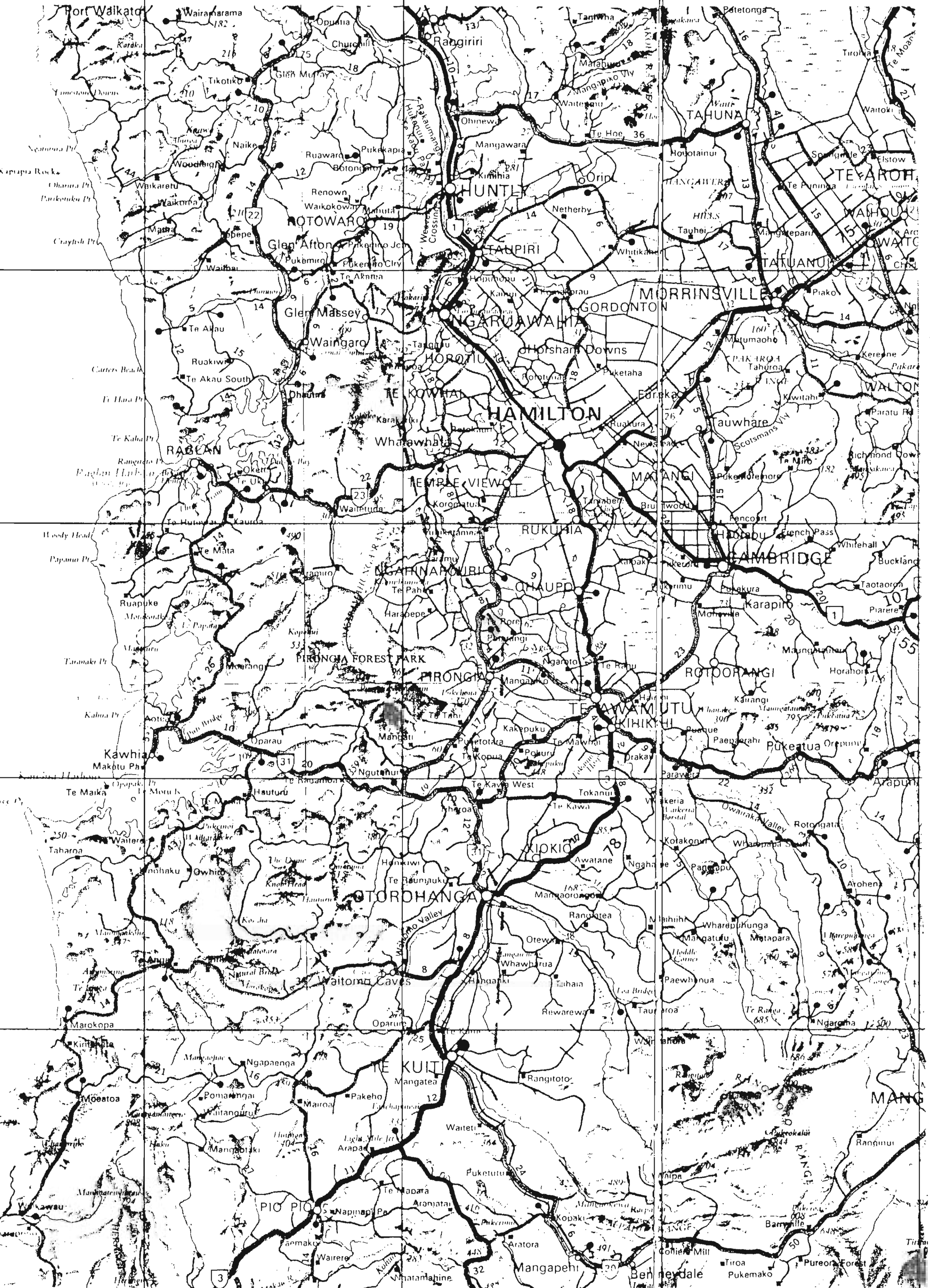

B C D E

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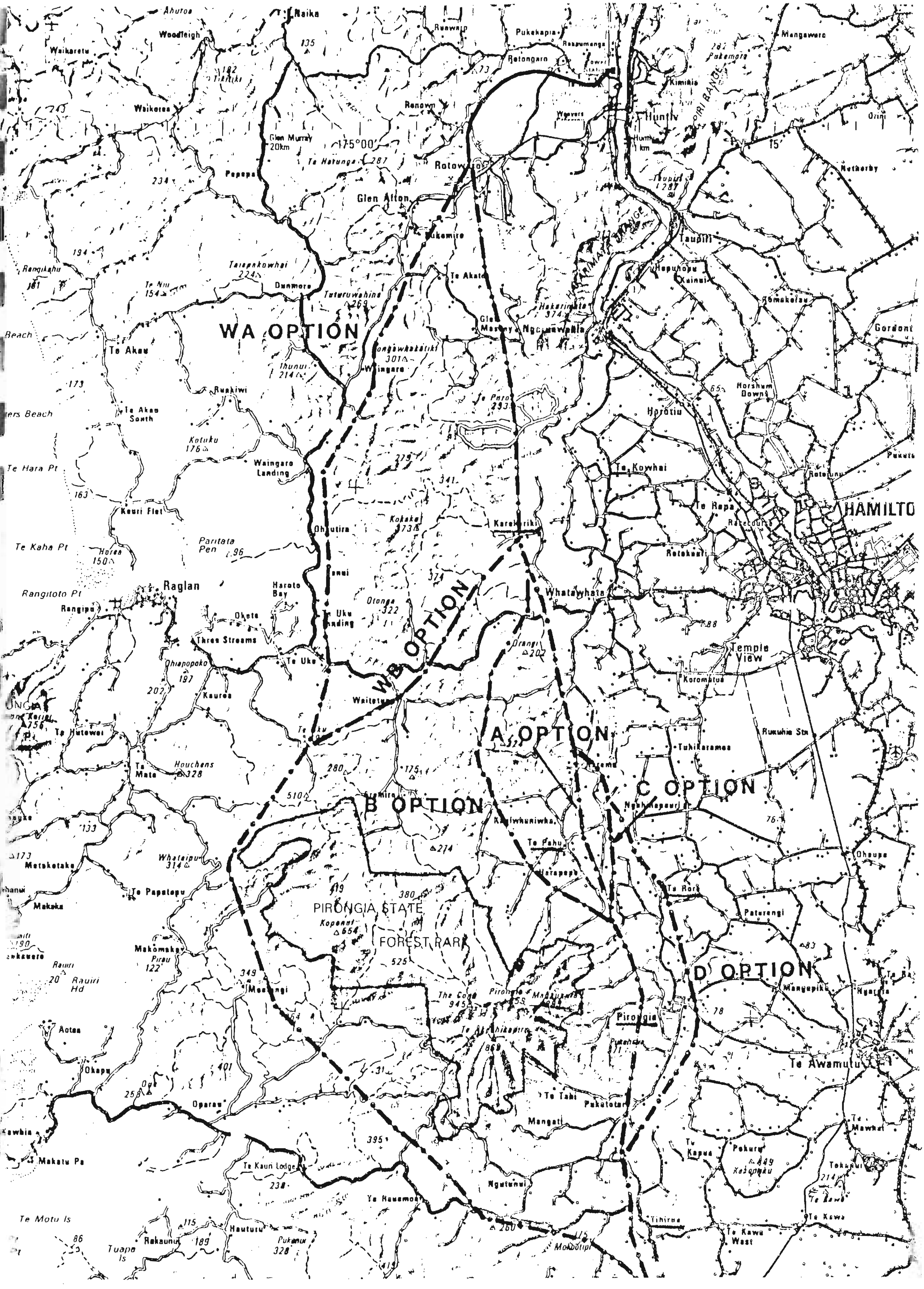


WA OPTION
WB OPTION
A OPTION
B OPTION
C OPTION
D OPTION
PIRONGIA STATE
FOREST PARK
Huntly
Taupiri
Rotowaro
Glen Afton
Pukemiro
Te Akatea
Glen Massey
Ngaruawahia
Horotiu
Te Kowhai
Te Rapa
HAMILTO
Whatawhata
Temple View
Koromatua
Tuhikaramea
Ngahinapouri
Te Pahu
Harapepe
Te Rore
Paterangi
Pirongia
Te Awamutu
Mangapiko
Ohaupo
Te Mawhai
Te Kawa
Te Kawa West
Te Tahi
Pukeatua
Mangati
Ngutunui
Raglan
Rangipu
Three Streams
Te Uku
Waitetuna
Te Akau
Te Akau South
Waingaro Landing
Ruakiwi
Dunmore
Waikaretu
Woodleigh
Waikorea
Naike
Renown
Glen Murray
20km
175°00'
Te Hara Pt
Te Kaha Pt
Rangitoto Pt
Paritata
Pen
Okete
Kauroa
Te Mata
Houchens
Whatipu
Te Papatapu
Makomako
Matakotako
Raglan
Aotea
Okapu
Oparau
Te Kauri Lodge
Te Motu Is
Hauturu
Rakaunui
Pukenui
Mohoatipi
Tihiroa
Pokuru
Kaipaki
Te Rapa
Rotokauri
Horsham Downs
Gordonton
Netherby
Kimihia
Te Akatea
Kopukutea
Keuri Flat
Makatu Pa
Tuape Is

1. SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

2.1 The Mt. Pirongia Region.

This region encompasses most factors that would influence line decisions anywhere else in N.Z. The region is in the western Waikato and is centred on the Mt. Pirongia Forest Park which held a dominant impact in the overall line determination.

Six transmission line corridors were considered with 4 in a corridor east of Mt. Pirongia, and 2 in the corridor to the west.

2.2 Chronology of Events

Events evolved over a 3 year period of pressure, frustration, trauma, time and expense on individuals and groups.

There were 2 primary reasons for the action taken by landowners

- Actions of E.D. staff, their poor public relations and method of line determination.
- Resulting determination of landowners to have all route options fully and impartially evaluated.

3. LINE DETERMINATION

3.1 The Planning Framework.

Statutory and non-statutory planning are 2 distinct parts to the planning framework for choosing transmission line routes. The statutes most applicable were the T&C Planning Act 1977, the Electricity Act 1968, and the P.W. Act 1981.

Non-statutory planning should involve local government and impacted and interested community groups.

With E.D.'s statutory "as of right" ability to construct this line, emphasis was placed on construction costings in determining the preferred route with little apparent consultation with local authorities and community groups.

With these parties not consulted in the initial stages of planning, and WUC reluctant to become involved at any point, there arose apathy and dissatisfaction at E.D. and its consultative process.

3.2 Environmental Impact Report (E.I.R.)

A comprehensive report but some additional cost to ensure extra time and research would have produced a more exacting result than that provided by this E.I.R.

The E.I.R., in parts, gives the impression of either time and/or financial constraints which meant some reports had to be either qualified or lacked confirmation. In comparing monetary values with ranking values and interpolation of rankings as monetary values created distortions that need to be rectified.

But at the same time this E.I.R. was a first for a transmission line and undoubtedly modifications and improvements will be made, taking into account Audit recommendations, if there is a need for another E.I.R. to be carried out.

3.3 Commission for the Environment Audit.

The Commission had a difficult task in that some

transmission line commitments had already been made and that it was too late to substantially assist the planning of the project.

The Audit is well presented, balanced in its approach, covers all relevant aspects and is well researched on most matters especially environmental and social issues in which the Commission has undoubted expertise. Submissions appear to have been given good consideration.

It is in the fields where the Commission has perhaps limited expertise that some shortfalls are evident. This is especially so of Land Use where results appear to have been generally accepted. Effects on Property Values provides clearly qualified rankings only but the Audit utilised these in dollar terms as did E.D. in the E.I.R.

With the use of parameters there has been a very good attempt at determining the most preferred line options. But again some doubted factors and values had a big impact on the result.

Recommendations

1. That for each subject under consideration the Commission have the services of an authority in that field who has a thorough knowledge of the region in question.
2. To carry out further study in the determining of preferred route options. Parameter rankings formed a very good basis in this calculation but further evaluation to reconcile different unit values for different parameters should be made.

3.4 The Result

A pre-Xmas 1986 cabinet decision chose route ED as the line option. Energy Minister Bob Tizard said this route gave an "equitable balance between environmental and economic considerations."

But this decision was made after submissions by E.D., Treasury and the Commission for the Environment and ir must be asked if the "least cost" route in fact prevailed.

The recent Catchment Board decision to restore the natural flow of the Wanganui River provides an interesting parallel with the value placed on environmental, intrinsic, recreational and Maori values exceeding the millions of dollars lost by Electricorp.

4. THE PLAYERS

4.1 Electricity Division (ED)

Recommendations:

1) That E.D. support a line determination process by way of a hearing under the T&C Planning Act held by Regional Councils.

2) That E.D. appreciate most affected landowners are not "willing sellers" as defined by Section 62 of the P.W. Act. E.D.'s public relations approach is most important and landowners would prefer to liaise with one person and look for honesty and integrity.

3) To offer reasonable levels of compensation that are not less than that recommended by their valuer. The "horse-trading" approach by E.D. did not endear itself with many landowners.

4) With corporatisation the public relations of E.D. will be even more important as they are a private company wishing to place their services on private land. Previously a heavy handed approach could stand behind a government department erecting a line for the national benefit.

4.2 Local Authorities

Since construction of this line commenced there have been 2 significant changes that impact local government

- Corporatisation of E.D. to form Electricorp
- Reorganisation of local government

Proposed Regional Councils should have a most important role to play in energy planning matters such as transmission line route determination. Advantages include -

a) Provide the forum for all relevant authorities to agree on the policies, implications and future rationalisation in respect of energy projects.

b) Because of large authority regions, E.D. would be dealing with fewer authorities.

c) Regional Councils should have operative regional schemes clearly defining ideal requirements for energy projects eg. transmission line corridors.

d) Impose conditions for the protection of special interests eg. avoidance of schools, screening of lines from recreational areas.

e) Within Regional Councils should be the expertise and manpower on energy and planning matters to evaluate and make recommendations.

f) Regional Councils to reach agreement with E.D. on recompense for road damage by construction traffic. This mainly applies to minor country roads.

g) This decision made by an independent authority after a public hearing should negate problems experienced between E.D. and Pirongia region landowners over the method of line determination.

4.3 Liaison Officer (LO)

Recommendations

1) Employer of the LO should be Regional Council.

2) Position should be widely advertised with specific input sought from affected landowner groups and E.D.

3) Person employed must be impartial, skilled in negotiations, able to assimilate the issues and make prompt decisions.

4) Appointment to be made by Regional Council.

5) Salary to be paid by E.D. and to be commensurate with the salary level of the appointed person.

4.4 Federated Farmers (FF)

Recommendations

1) Insist that a full and impartial investigation be carried out to determine line route.

2) Convene meetings to advise landowners, along routes under consideration, of line determination procedures and the procedures for public submissions.

Meeting to be chaired by a Provincial representative who has no involvement with the line in question, and an authority on transmission lines to be present.

3) Nominates a liaison officer after full consultation with Branches along line route. To obtain the most suitable person with no necessity that he be a member of FF.
4) Ensure that it is not directly associated with the liaison officer. FF must be able to act on behalf of its members if necessary.
5) Produce a brochure on transmission line construction and compensation including; - role of liaison officer
- define all aspects of compensation, namely injurious affection, disturbance, damages, professional expenses
- encourage the obtaining of legal and valuation advice

6) To obtain the services, on a consulting basis, of 2 lawyers who are acknowledged authorities on transmission lines.

Mr. Peter Allan
of Tanner, Fitzgerald Getty
P.O. Box 95,
Hamilton

Mr. John Faire
of Stace, Hammond, Grace
& Partners
P.O. Box 101,
Hamilton

5. COMPENSATION

5.1 Transmission Line Compensation Legislation

The main legislation covering the construction of transmission lines is the Electricity Act 1968. Under Section 16 of this Act, every person entitled to and suffering injurious affection is entitled to full compensation for loss, injury or damages suffered. In default of agreement, claims are made and determined under the compensation provisions of the Public Works Act 1981.

5.2 Market Evidence

Historic analysis of market evidence has failed to measure any price reduction caused by the presence of transmission lines. The presence of transmission lines will reduce the number of prospective buyers and may lengthen the time before a sale is made.

But the fact that the absence of any `measurable' difference in market evidence does not deny that it exists. It is simply `not measured' by the evidence.

Then other methods of quantifying the monetary loss are necessary. Each property with its particular circumstances, effects and losses must be assessed separately.

5.3 "Full Compensation"

To be fully compensated a landowner must receive his equivalent total loss which may include:- injurious affection, betterment, disturbance, legal and valuation fees and interest.

5.4 Factors for Assessment

The property is inspected to assess the impact the transmission line has on the property and to quantify, by way of

a "before" and "after" valuation, the impact in terms of monetary compensation.
Impacts on the property are considered under 2 headings
- Impacts on land use and farm operation costs
- 'Non-cost' aspects of visibility and aesthetic impact.

5.5 Methods of Assessing Compensation
Recommendation
1) That the Waikato Branch of the N.Z. Institute of Valuers hold a forum to determine factors for assessment, methods of assessing injurious affection and compensation levels as they relate to the Waikato-King Country section of the Huntly-Stratford transmission line.
2) Results and observations from this forum to be published in the Valuers Journal of the Institute of Valuers.

5.6 Periodic Compensation
Recommendation
That FF fully investigate Annual Compensation and Rental Payments for transmission lines as it applies overseas, notably U.K., so as to evaluate
- if such a method is practicable in N.Z., and
- if periodic compensation is more advantageous to all parties involved than the present lump sum payment.

5.7 Non-Market Valuation (NMV)
Recommendation
1) That if environmentally sensitive areas are in proximity to proposed transmission line corridors, that Regional Council avail themselves of expert advice on non-market valuation so as to be able to take into account the environmental values in dollar terms.
2) A N.Z. authority for information on and application of NMV is
Dr. Basil Sharp,
Senior Lecturer in Resource Economics,
Centre for Resource Management,
Lincoln College,
Canterbury.

2.1 THE MT. PIRONGIA REGION

This Mt. Pirongia region encompasses most factors that would influence line decisions anywhere else in New Zealand. It incorporates such impacts as

- construction costs
- recreation and tourism
- social and cultural
- health and safety
- land use
- future and other energy developements
- Maori concerns
- flora and fauna

- in an area ranging from isolated, hard hill country, through intensive pastoral to rural residential. The only aspect not directly impacted is that of an urban area.

The region for which the E.I.R. was conducted is in the western Waikato with the Pacific Ocean to the west, Huntly at the northern point, Otorohanga to the south, and Hamilton and Te Awamutu to the east. Central to this region is the Mt. Pirongia Forest Park which held a dominant impact in the overall line determination. (refer map)

E.D. identified 2 broad corridors; firstly to the east of Mt Pirongia incorporating 4 route options and, secondly to the west of Mt Pirongia incorporating 2 route options. (refer map)

Pirongia Forest Park 25kms south-west of Hamilton covers some 13,200 ha of indigenous forest land and, although it is one of N.Z.'s smaller Forest Parks, it plays a significant role in public recreation.

Approximately one third of N.Z.'s population resides within the Auckland-Waikato region within a distance of 150kms of the park. The demand for extensive, alternative and relatively inexpensive recreational opportunities has been placing pressure upon accessible forest areas. Pirongia Forest Park is one of the few extensive areas of indigenous forest available to people of the greater Auckland area.

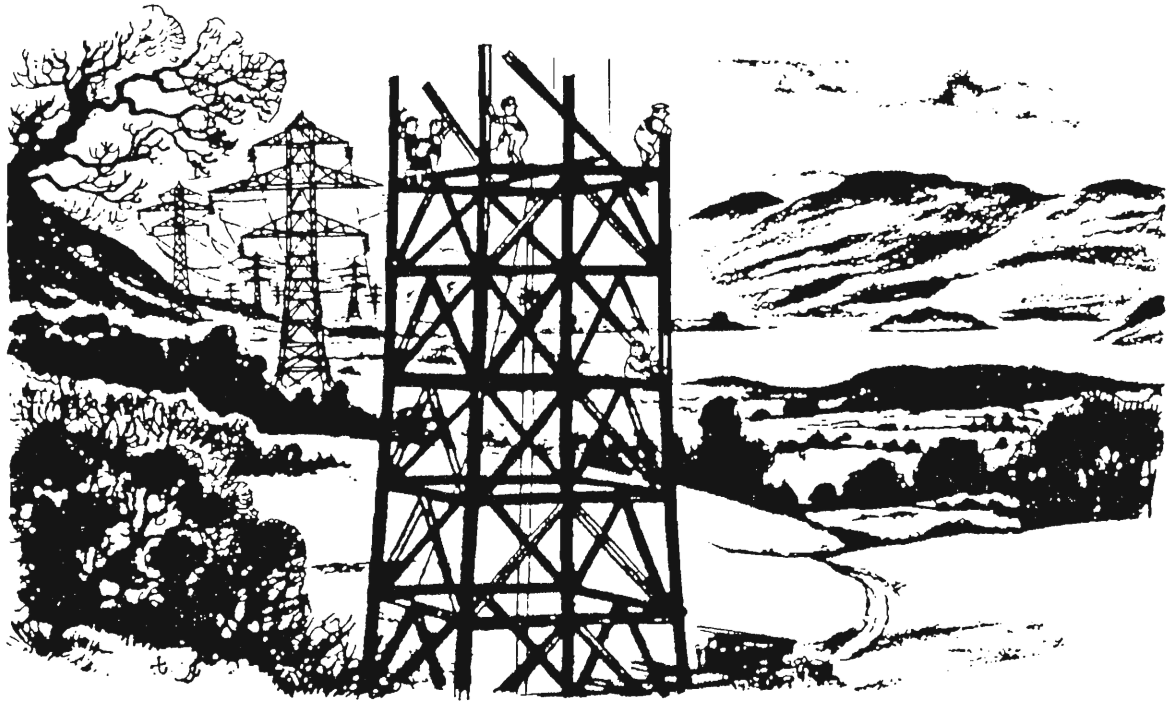
The park is a valuable resource for the tramper, botanist, bird-watcher, fisherman and photographer as well as providing interest and enjoyment for those who simply enjoy the beauty of indigenous forests.

Mt. Pirongia is important in local Maori history and mythology. (1985 Annual Report of Pirongia State Forest Park)

Visitor usage of the Park was calculated at 25,000 in 1985 with there being a steady visitor increase since 1980 and a continued increase projected.

The Western Corridor is generally sparsely settled and more isolated larger sheep and cattle properties on lower fertility soils, contour allows line to be more readily absorbed, recreation and tourism is low although Waingaro Hot Springs on the northern part of route WA is very well patronized, is an area of rural remoteness.

The Eastern Corridor is generally closely settled, high quality soils being intensively farmed, a more mature and ordered landscape with generally less ability to absorb the line. Mt. Pirongia is visually more dominant from the east from where it has a high use for recreation and tourism.



"We're very lucky, when you think about it, working in such beautiful surroundings."

2.2 CHRONOLOGY OF EVENTS - MT PIRONGIA REGION

The decision on the actual line route in the Mt. Pirongia region was made in December 1986. But this short statement belies the pressure, frustration, trauma, time and expense that was made on individuals and groups within this region over a 3 year period.

The evolving of events provides the background to this line determination and compensation levels, and clearly illustrates the changing perceptions of people to transmission lines.

1. February 1984 - notice advising that E.D. proposed to build a transmission line between the power stations at Huntly and Stratford. Route of line is to be within a corridor as shown in notices.

2. July-August 1984 - Preliminary surveys carried out within the Ngahinapouri/Te Rore/Te Pahu area. Farmer pressure and resistance results in E.D. seeking alternative routes within this area and this plus a lack of liaison results in a hardening of landowner attitudes and the refusing of property access.

3. July 1984 - Federated Farmers and an MP make representations in support of some impacted landowners. This has to be quickly nullified by other impacted districts and results in these 2 parties stating they will now not be involved in line route determination.

4. August 1984 - Landowner Action Groups formed at Te Pahu, Te Rore and Karakariki. Some groups employ lawyers.

5. September 1984 - Waikato Federated Farmers convene public meetings at which E.D. staff advise of proposed line routes.

6. October 1984 - Environmental Impact Assessment published by E.D. It states "this Pirongia region is a sensitive area and careful planning is required."

7. October 1984 - Energy Minister arranges for the Commissioner for the Environment to hold discussions with groups in the Pirongia region to attempt to resolve difficulties of access for survey. He proposes "selective survey" of all routes.

8. February 1985 - Public notices by E.D. advising of a number of alternative line routes under consideration about the Pirongia region and that an in-depth study of these options is to be made.

9. February 1985 - Landowners along route corridors under consideration advised by registered mail of the study to be carried out and that entry onto land would be required for survey purposes.

10. March 1985 - Government approves construction of a line between Huntly and Stratford.

11. June-September - Route surveys carried out other than through the disputed region where access refused.

12. January 1986 - E.D. advise landowners that entry for survey purposes will be made using the powers of the Electricity Act.

13. March 1986 - Energy Minister gives personal assurance to an Action Group that land use, sociological and environmental studies would be carried out. Action Groups then agree to access for surveying.

14. March 1986 - As part of the EIR, a farm survey questionnaire prepared by MAF is sent to all landowners along the alternative route corridors.

15. August 1986 - EIR on Pirongia section of line is published by E.D. Recommends WB and EC as preferred west and east options respectively.

Contents - Engineering Report (E.D.)
- Agricultural Impacts (MAF)
- Effects on Property Values (Valuation Dept)
- Visual Assessment (Boffa Miskall Partners)

16. August 1986 - Action Groups formed at Oparau, Waitatuna and Makomako along proposed western routes.

17.August 1986 - Commission for the Environment asks for public submissions for their Audit of the EIR. This includes visits to all Action Groups.

18. November 1986 - Commission for the Environment Audit published. Recommends WB, WA and ED in that order as the most preferred options.

19. December 1986 - Commission for the Environment holds public meetings to discuss recommendations from their Audit.

20. December 1986 - Government decides on ED as the line route. Energy Minister Bob Tizard said this route gave "an equitable balance between environmental and economic considerations."

21. January 1987 - Tihiroa Action Group formed.

22. - February 1987 - ED hold public meetings in areas affected by the transmission line.

23. March 1987 - Petition from Waipa County residents (Te Rore Group) proposing an alternative route is turned down by Energy Minister saying "no advantage would be gained from the change."

24. March 1987 - Tihiroa landowners, seeking more reasonable levels of compensation, lock gates to ED construction workers. This action is supported by other impacted Action Groups (Te Rore and Karakariki)

25. March 1987 - ED workers escorted off Tihiroa property by the landowner after they had started construction work without his knowledge. Later on the same day, when the landowner was away, workers returned with police and cut chains on locked gates. Farmers physically block access. Confrontation avoided when ED project manager agrees for his staff to leave.

26. May 1987 - Agreement reached between landowners' legal advisor and ED who state compensation payments will not be less than that recommended by their own valuers.

27. June 1987-March 1988 - Access granted, and pylons constructed and wires laid.

From all of this it must be asked why did law abiding and generally conservative citizens take these measures, extreme in some cases to the point of arrest, in support of their individual rights and respective Action Groups?

I believe there were 2 primary reasons -

i) Actions of ED staff, their poor public relations and method of line determination.

ii) Resulting determination of landowners to have all route options fully and impartially evaluated.

It would be fair to say that if landowners know that a line route has been chosen after full, accurate and impartial investigation they will accept the line, albeit reluctantly in a number of cases.

With this line, conflict was created between

a) Parties wanting all route options fully evaluated, and

b) "We don't wish to push wires onto other people but we dread the thought that they will be pushed onto us." (Submission to Audit)

The line project can proceed smoothly if ED maintain good public relations while determining exact line route and pylon sites, if there is effective liaison between ED and impacted landowners at time of construction, and compensation payments are readily settled.

Perhaps this was the first time ED's "as of right" authority was challenged and their staff seemed to have difficulty with this. On occasions ED staff were guilty of withholding information, furnishing misleading information, attempting to play off one resident against another, attempting to obtain information by purporting to be MAF staff, refusing to consider alternative route options,public undertakings by senior staff were denied by their successors, and undertakings to pay compensation of not less than that recommended by their valuers was not met.

As a result of this, the chronological events as above, gradually and painfully evolved.

3.1 THE PLANNING FRAMEWORK

The high level of opposition to this line in the Mt. Pirongia region raises a number of questions as to why this conflict emerged.

Public attitudes to transmission lines have changed considerably over the last 20 years, there was a strong measure of dissatisfaction at E.D.'s consultation procedures and trustworthiness, and this was the first time an E.I.R. was conducted for transmission lines.

It must be noted that since the construction of this line there will be 2 important changes :

- E.D. has been corporatised (Electricorp).
- Territorial local authorities have been restructured.

There are 2 distinct parts to the planning framework for choosing transmission line routes : statutory and non-statutory planning.

STATUTORY PLANNING

The statutes most applicable to this transmission line were the Town and Country Planning Act 1977, the Electricity Act 1968, and the Public Works Act 1981.

Under Section 64 of the Town and Country Planning Act high voltage lines are deemed to be a use permitted as of right. As this line was constructed by an agency of the Crown there was no right of appeal against the designation in district schemes.

The Electricity Act 1968 is the principle statute covering the erection and maintenance of transmission lines and covers procedures for entry on to land, acquisition of land and compensation.

Unresolved compensation claims are determined under the provisions of the P.W. Act (ref Compensation, Chapter 5). Statutory procedures for public submissions and/or objections are limited to compensation.

Implicit in these statutes is an assumption that the benefits of the production and distribution of electricity to the nation far outweigh the costs and inconvenience caused to individual landowners. But this assumption may no longer be valid now E.D. is a corporation operating with commercial objectives.

NON-STATUTORY PLANNING

i) Community Groups

Meetings between E.D. and these groups can cover a wide range of issues. These groups can include communities, Maori groups, , Q.E.11 Trust, Forest and Bird Protection Society, Historic Places Trust, sport and recreation groups.

But with this line E.D. appeared to take a heavy handed and almost antagonistic approach towards landowners and there was a strong measure of dissatisfaction at E.D.'s consultation procedures. There were feelings of lack of information, misinformation, deceit and the intentional pitting of neighbour against neighbour and district against district.

ii) Local Government

Within the Mt. Pirongia stretch of the line there are 3 County Councils - Raglan, Waipa and Otorohanga - and it was only natural that they made representations in the best interests of their own ratepayers. Not surprisingly, this resulted in their submissions recommending that the line be sited outside of their boundaries.

As well the Waikato United Council (WUC) encompasses this area but its input was extremely disappointing to the extent that it did not even bother to make a submission on the E.I.R.

After considerable time and insistence the WUC did formulate policies under the Waikato Regional Planning Scheme in relation to transmission lines but these are inoperative and had no influence on the line route decision.

It commented as follows:-

"The effect of development on the landscape and its control is a matter of concern for district planning. Whether the environment is held in public ownership (as reserves or Crown land) or in private ownership the same principles apply. The treatment, modification and conservation of the landscape lies in the hands of both private landowners and public authorities"

It is unfortunate that WUC was unable to act upon this statement.

SUMMARY

With E.D.'s statutory "as of right" ability to construct this line, emphasis was placed on construction costings in determining the preferred route with little apparent consultation with Local Authorities and community groups.

With these parties not consulted in the initial stages of planning, and WUC reluctant to become involved at any point, there arose apathy and dissatisfaction at E.D. and its consultative process.

3.2 ENVIRONMENTAL IMPACT REPORT (E.I.R.)

In October 1984 E.D.published an E.I.A. which acknowledged that " the Mt. Pirongia region is a sensitive area and careful planning is required." The steadfast refusal by many landowners to eastern options to provide access for survey until all route options had been fully evaluated, persuaded the Energy Minister to agree in March 1987 to the carrying out of a full E.I.R. of all 6 options - the first time an E.I.R. had been conducted on transmission lines.

The contents of this E.D. produced E.I.R. were

i)	Engineering Report	(E.D.)
ii)	Agricultural Impacts	(M.A.F.)
iii)	Effects on Property Values	(Valuation Dept.)
iv)	Visual Assessment	(Boffa Miskall Partners)

i) Engineering Report (E.D.)

This report has calculated financial costs of the 6 route options. No attempt was made to put a monetary value on non-market values to enable a complete evaluation of cost comparisons.

As E.D. has been the major builder and operator of transmission lines in N.Z., most figures and assumptions must, of necessity be taken at face value.

Cost comparison between eastern (ED) and western (WB) options:

		E.D.$,000	W.B.$,000
Physical Construction Costs	NPV@10%	14,485	16,726
Gas Pipeline Protection Costs	NPV@10%	205	-
Compensation Costs	NPV	705	482
Life Maintenance Costs	NPV@10%	205	317
Construction Delay Transmission Losses	NPV@10%	-	1,059
Total Cost	NPV@10%	15600	18584
	Variance	2,984 (19%)	

The most contentious issue was the southern realignment west of Otorohanga which would have reduced the difference in length of line between the east and west options, from 13km to 5km. The E.I.R. states " had a western corridor been considered with sufficient lead time to enable analysis without incurring significant delay cost penalties, the construction cost differential would have been reduced significantly by $1.2m"

From E.D.'s viewpoint this cost saving would have to be offset by the expenditure to date on the present alignment together with the cost of delay.

But eastern groups correctly pointed out that such a possibility of a southern alignment was acknowledged by E.D. in 1985 when construction was nowhere near this far north. By

continuing construction northwards to Tihiroa, the case of eastern routes was severely prejudiced.

ii)Agricultural Impact Report (M.A.F.)

This comprehensive report prepared by M.A.F. staff in Palmerston North was disappointing although much of this perhaps could be attributed to the limited resources and severe time constraints placed upon them. But the report was not qualified in any way, therefore it must be assumed the writers were satisfied with the quality of their report.

Much of the agricultural impacts, production levels and evaluations were derived from a landowner survey which threw up such biased and inaccurate results for some routes. as to be of little relevance. This was accentuated by the writers not even visiting the area so as to verify the authenticity of the information.

Cross referencing of results highlights a number of anomalies, and some figures were incorrectly transposed so as to provide totally erroneous results.

Yet this report with its recommendations played an important role in determining overall cost comparisons between routes and the final route decision.

On the important issue of Aerial Operations the "approach adopted was based on the hypothesis that any extra cost to aerial operations was a function of the amount of fertilizer applied by air and the length of line traversing a property . There are numerous other factors involved including siting of strips, alignment of line and property, general topography. However this study was unable to research all these details. Nevertheless it is considered that the method used will reflect the relative impacts to a sufficient degree as to allow comparison between lines to be made."

This over simplification with the use of the 2 factors that are readily measurable - amount of fertilizer and length of line - created distortions especially between east and west routes.

It seemed that the advice of local authorities was not obtained, and the writers were not familiar with the area. If advice had been sought from local authorities such as M.A.F., Meat and Wool Boards' Economic Service, Valuation Dept., Rural Bank, Landcorp, stock firms, fertilizer companies and topdressing firms these incorrect results would have been avoided.

iii) Effects on Property Values Valuation Dept)

The writers must be congratulated on the quality of this report in that they clearly defined all factors impacting

property values, they broke new and important ground with their study of property impact within a 3km corridor of transmission lines and, most importantly, they clearly qualify the results of their investigation and the constraints placed upon them.

The report categorically states "it is the ranking one relative to another that was the principal objective of this study" But a basic flow then results as E.D. has taken those "ranking" values and carried them through as compensation costs for overall route cost comparison. This E.D. error is now highlighted as actual compensation payments on the chosen ED route are far in excess of the values for ranking purposes.

Severe time constraint meant individual property inspections could not be made and the compensation assessment was subject to a +/- 20% margin of error. Also current Roll values were adopted for the same reason but current market values varied widely from these. Land along the western options had declined in value by a significantly greater proportion reflecting severe market problems of more remote hill country. The effect of this would be to generate a proportionately lower value assessment in the west, further enhancing the difference between the east and west compensation assessments provided.

The report acknowledges a wider-based community related impact by "estimating" compensation for those properties in a 3.0km peripheral corridor. It must be noted that these figures were not used in the overall line cost determination and that the Pirongia township was excluded from these calculations although within the corridor.

To complete this study, which certainly was not required in the brief of the writers, compensation should also have been valued for

- the rest of the district community, and
- the public at large.

iv) Visual assessment (Boffa Miskall Partners)

The report provides corridor assessments based on both landscape setting considerations and observer characteristics carried out over 3km sections of the route options. These sections are defined as having either strong, moderate or weak considerations.

Based on visual concerns the western corridor option is clearly preferred.

v) Summary and Recommendations

A comprehensive report but, with the large expense of preparing such a report ($.5-1 million), some additional cost to ensure extra time and research would have produced a more exacting result than that provided by this E.I.R.

The E.I.R., in parts, gives the impression of either time

and/or financial constraint which meant some reports had to be either qualified or lacked confirmation. In comparing monetary values with ranking values and interpolation of rankings as monetary values created distortions that need to be rectified.

But at the same time this E.I.R. was a first for a transmission line and undoubtedly modifations and improvements will be made, taking into account Audit recommendations, if there is a need for another E.I.R. to be carried out.

3.3 COMMISSION FOR THE ENVIRONMENT AUDIT

"Generally audits assist in improving the design and planning of a proposal to reduce environmental impacts. This Audit is unusual in that it has come about too late to substantially assist the planning of the project. Its primary function is in conflict resolution. Whatever the final route chosen for the Mt. Pirongia section, the overriding conclusion of the Audit is that planning for transmission lines must be improved" (Audit Preface)

"Ideally the EIR\audit should occur early in the planning process so the information from the EIR and the Audit can be available for any planning or statutory process that may follow. It is also desirable for the EIR\audit to occur before any decisions or commitments are made which will reduce or constrain the options available." (Audit Approach)

Considerable public concern over the line determination was expressed with the Audit receiving 86 submissions from the following

Government Depts and Agencies	9
Local and Regional Authorities	5
Environmental Groups	3
Companies and Organisations	16
Private Individuals	53

The Audit investigates all impacts, some more thoroughly than others, it presents some of the salient points from various submissions, the routes are evaluated, and preferred routes recommended.

1. ECONOMIC COSTS

"The assumptions behind these costings merit scrutiny as environmental values will be weighed against financial costs when Govt. makes a decision on the route. Since E.D. has been the major builder and operator of transmission lines in N.Z., some figures and assumptions must, of necessity be taken at face value."

The Commission does agree that E.D.'s committment to an alignment east of Otorohanga unfairly penalised the eastern options. It recommends that the $1.2m cost against the eastern routes be taken into account by Govt.

Because of the contentious nature of this line it is surprising that the Audit did not request costings for the placement of lines underground. In future this may provide a viable option in sensitive areas such as heavily populated or environmentally sensitive.

2. THE PLANNING PROCESS

This topic is covered in detail in the chapter on the role of Local Authorities. The audit recognises a change in social attitudes and the lack of community input into resource development decision making.

- Tainui Maori Trust Board inadequately consulted and left room for misunderstandings.
- Lack of consultation with water and soil agencies.
- E.D. forward planning is for 15 years when the lines will last 80 years.
- Lack of interest at an early stage by W.U.C.

Waikato Watchdog states "The fact that most of the transmission line had been constructed removes the "do nothing" option from consideration and confines public involvement in the decision making to a narrower set of "developer-defined" alternatives."

2.1. MAORI VALUES

The audit is critical of the EIR in that it does not fully address a number of Maori concerns. It did not engage the services of Kaumatua through the Tainui Maori Trust Board despite a consultancy arrangement between the Board and the Ministry of Energy. Main concerns were with desecration of wahi tapu (sacred places) and the spiritual significance of Mt. Pirongia as a tapuna (ancestor).

3. HEALTH AND SAFETY

Again the audit levels criticism of the EIR in that, while the EIR acknowledges these concerns, it is overly dismissive in its treatment of community perceptions.

3.1 MECHANICAL FAILURE

Although extremely rare, the possibly of tower collapse exists as evidenced by the recent collapse of 2 towers on Starvation Hill in North Canterbury during high winds.

3.2 AERIAL TOPDRESSING

3.3 ELECTRO-MAGNETIC EFFECTS

The uncertainty over possible effects of EMR was highlighted in a TV documentary in August 1985. There are conflicting arguments as to its effect but until these are completely refuted this concern will remain.

4. VISUAL IMPACTS

As expected the Commission deals in depth with this aspect. "Guidelines for policies on the location of transmission lines are required to limit impact on high quality landscapes and to locate lines in landscapes capable of greater absorption"

5. FLORA AND FAUNA

This identifies sensitive wildlife and protected areas close to the route options.

6. RECREATION AND TOURISM

The audit provides a full study including the Pirongia Forest Park, Waingaro Hot Springs, Scenic Reserves, and conservation and open space covenants.

7. PRIMARY PRODUCTION

Unfortunately the shortfalls and discrepancies within the EIR have not been addressed in the Audit. Within the Audit team it is questioned if there is an agricultural expert who is moreover fully familiar with this region.

The Audit correctly raises the issue of erosion but some other important aspects that are given almost cursory attention especially in investigating the findings of the EIR.

Some groups challenged the accuracy of topdressing rates in the EIR. The Audit accepted that this "was simply a mistake in the description of units for a given set of transposed figures" While this was correct the Audit then appeared to make no attempt to verify the results of the important issues of aerial topdressing and future land use that were derived solely from landowner questionnaires. Some results were either incorrect or impractable but remained unchallenged.

8. COMPENSATION AND VALUATION

Included in the Audit team is an authority on valuation and while limited attention is paid to the results of the EIR, some important issues are raised relating to compensation. The severe constraints imposed on the writers of the "Effects on Property Values" in the EIR is probably acknowledged by the Audit evaluator who is unable to make in-depth comments on the results of the report.

"More detailed inspections may well indicate greater or lesser degrees of injurious affection on individual farms. However it is unlikely that the ranking of the various alternatives would be materially affected." (Audit) Like the EIR the requirement is on ranking only with more detailed investigation to determine actual values not considered necessary. Actual compensation settlements have accentuated this with levels well in excess of calculated figures and this increase is primarily due to aesthetic impact.

Impact on Peripheral Properties - The Audit considers the impact on western routes is underestimated in the EIR but I support the methodology of the EIR and its writers who are fully familiar with the complete region. They took into account more people, closer subdivision, more intensive land use, greater number of dwellings, higher values, and more critical market considerations on the eastern routes as compared with predominantly large hill country properties, sparsely populated but higher topdressing impacts to the west.

But the Audit disagreed and altered peripheral values in favour of the western route presumably having taken into account that the Pirongia township was excluded and by using outdated property values the eastern routes were already severely penalised.

The Audit then discusses other important compensation issues, namely compensation for future potential loss, solatium payments, periodic payments, uncompensated losses, effects of Corporatisation, and non-market values. These issues are covered in more detail in the chapter on compensation.

9. ROUTE EVALUATION

The evaluation, using parameters, attempts to synthesise all of the impacts and identify a preferred route of least total impact. Interest in this evaluation is the weight of previous studies indicating the prime significance of visual impact of transmission lines on the scenic resource.

A 2 tier ranking system was devised. First tier parameters are considered important enough to influence a choice of route. Second tier parameters are not considered important enough to weight the choice of route but are worthy of consideration if no clear preference is obvious.

Parameters

First Tier		EA	EB	EC	ED	WA	WB
Compensation Costs	($,000)	659	647	672	690	390	482
Uncompensated Costs	($.000)	57	88	69	50	262	219
Peripheral Properties	($,000)	330	278	339	397	146	172
Number of Properties		89	81	88	97	65	66
Distributional Equity*		3	3	3	5	7	7
Recreation and Tourism*		5	6	4	3	5	4
Visual*		6	8	6	4.5	4	3
Number of Impacts		5	4	4	3	3	2
Second Tier							
Roads (vehicle km x 1,000)		79	117	101	68	242	220
Sensitive Sites & mitigation*		4.5	5	4.5	7	7	7

(i) * Factors scored out of 9 and then averaged.
(ii) High rankings underlined. High impacts are those that have values within a 20% margin of the highest value within each parameter.
(iii) Table presents figures of different unit values for different parameters. Some are dollar values, some numerical summations, and some rankings. They are to identify those routes with high impacts measures within those parameters.
(iv) Costs of construction and maintenance are omitted to enable an evaluation to be made on environmental criteria alone.

Parameters

From these results it is apparent that parameter rankings, other than for Recreation and Tourism, are high in only east or west options. Therefore exacting comparisons between east and west were not as critical as between the options within the east and west corridors.

Compensation costs, uncompensated costs, and peripheral properties.- These are addressed earlier in the chapter and the

various anomalies raised. As a result the extent of the amounts and the differentials between east and west is ignored.

Number of Properties - Provides a straight forward comparison but it must be asked why the number of peripheral properties was not considered a suitable parameter? This would indicate the community impact and would have a high ranking on the eastern options which are closely settled with numerous communities. These numbers were calculated by the Valuation Dept. and made available to the Boffa Miskell report (Residential Density, fig 5)

Distributional Equity - I have difficulty accepting this parameters it appears to closely parallel that of "Uncompensated Costs" which provided similar rankings.

This parameter assumes it will be generally more difficult for farmers on the western corridor to cope with extra costs and inconvenience of lines than for eastern corridor farmers. In fact the Audit significantly adjusted the EIR recommendation on peripheral properties for this very reason.

Another consideration is the effects on radio-telephone, TV and radio reception that the transmission line will possibly have. This impact is unclear and if any diminution is proved then it must be put right by E.D.

Also this parameter accounts for previous experience with state energy developments. This is a sorry reflection on energy projects and is difficult to accept that it should increase western ranking with more people impacted on the eastern corridor, a number of whom have had unfortunate dealings with E.D.

"Distributional equity considerations eccompass several of the inequitable effects that transmission lines may have on communities." (Audit) By its definition I cannot accept that this ranking for the western options is more than twice that of the east.

Recreation and Tourism - Considers visitor numbers, remoteness, dimunition of enjoyment.

Visual - considers landscape setting and integration, and observer characteristics.

Roads - These values are vehicle kilometres on unsealed roads which are more susceptible to damage.

Sensitive Sites and Mitigation - Considers wildlife habitat, covenants, amenities and erosion.

10. CONCLUSION AND RECOMMENDATION

EA, EB and EC have high impacts in 4 or more parameters including the visual parameter and are eliminated as options and also are not suitable as corridors for additional lines near Mt. Pirongia. Route WB has the least environmental impact and scores highly in only 2 parameters.

"Summing the high impacts for each route assumes that each parameter is of equal impact. Because of the inherent subjectivity in the weighting of parameters and the marginal difference between routes that scored a low number of high

rankings, ED is identified as a second route of least impact." (Audit)

It is here that I consider a degree of compromise creeps in with the recommendation of an eastern option. "ED is slightly better overall as a line route than WA and slightly worse than WB. In general for ED the first tier impacts can more readily be compensated or mitigated, and also has the lowest impact on tuurism and recreation" (Audit)

Justification for ED in favour of WB would indicate that first tier rankings are "exactly" equal and that the second tier road ranking determines the result. But the first tier rankings of ED and WA display some variances. The dollar values for ED are 30% higher (these were "ranking" values only for comp. and peripheral properties, and there are errors in the compensated costs, all weighing heavily against ED). There are 33% more properties directly impacted, and substantially more peripheral properyies involved. Distributional equity is questioned, recreation and tourism is higher for WA due in main to the Waingaro Hot Springs, but visual impact is higher on ED.

From this how could these 2 options be ranked exactly equal?

SUMMARY

The Commission for the Environment had a difficult task in that some transmission line decisions andcommittments had already been made and that it was too late to substantially assist the planning of the project.

The Audit is well presented, balanced in its approach, covers all relevant aspects, and is well researched on most matters especially environmental and social issues in which the Commission has undoubted expertise. Submissions appear to have been given good consideration.

It is in the fields where the Commission has perhaps limited expertise that some shortfalls are evident. This is especially so of Land Use where results appear to have been generally accepted. Effects on Property Values provides clearly qualified rankings but the Audit continued to utilise these in dollar terms as E.D.did in the EIR.

With the use of parameters the Audit has made a very good attempt at determining the most preferred line options. But again some doubted factors and values had a big impact on this result.

RECOMMENDATION

1. That for each subject under consideration the Commission have the services of an authority in that field who has a thorough knowledge of the region in question.
2. To carry out further study in the determining of preferred route options. Parameter rankings formed a very good basis in this calculation but further evaluation to reconcile different unit values for different parameters should be made.

3.4 THE RESULT

On 23 December 1986 Government announced it had chosen the ED route option. Energy Minister Bob Tizard said the route east of the mountain gave an "equitable balance between environmental and economic considerations. The EIR and Audit concluded that the ED route had a moderate visual impact and because it was further from Mt. Pirongia had the lowest impact on tourism and recreation.

Although this route affects the greatest area of high quality soils, most of these agricultural impacts can be compensated or mitigated."

A western route would have cost about $3.3m more than route ED. (Waikato Times 24/12/86)

The cabinet decision was made after submissions by E.D., Treasury and the Commission for the Environment. From these there must have been an undoubted preference for the "least cost" option between east and west. E.D. must prefer the most direct route over the easiest terrain and Treasury would undoubtedly prefer the cheapest option which both pointed to the eastern option. The Commission with its "ED is a slightly worse line route than WB" could not have carried anywhere near as much weight as the other 2 departments.

Landowners along ED route had good reason to feel aggrieved at this pre-Xmas decision and voiced strong dissatisfaction with reasons including:

- ED was not the preferred line option in either the EIR or Audit
- Landowners had no rights to question some inaccurate statements in the EIR and Audit
- That the $1.2m saving, if a western realignment had been made in the early planning stages, did not appear to have been taken into account. This would have reduced the cost differential to $2.1m, only 2.6% of the total line cost.
- From this it is assumed that Government was able to determine that this cost saving out-weighed the non-market values of visual, environmental, and population possessed on the eastern route.

The recent Rangitikei-Wanganui Catchment Board decision to restore the natural flow of the Wanganui River provides a very interesting parallel especially as it involves Electricorp. While Electricorp would suffer a financial loss in the order of millions of dollars as a result, the full natural flow restoration was done "in recognition of spiritual, cultural and traditional fishing value of the river to the Wanganui Maori plus it benefited stream biota, blue duck, intrinsic values, fishing and canoeing."

In support, Conservation minister Helen Clark said people were prepared to pay more to preserve some values. In this case the cultural, environmental and intrinsic values were considered of greater value than the millions of dollars forgone by Electricorp, the cost of which would ultimately be borne by N.Z.'s power consumers.

4.1 ELECTRICORP (E.D.)

"For many there exists a legacy of mistrust of E.D. with accusations of misinformation, misrepresentation and lack of consultation." (Commission for the Environment Audit)

Reasons for this attitude are covered in 2.2 Chronology of Events, but it must be asked why did E.D. staff create these unfavourable reactions, "The theoretical ideal location of a transmission line route is a straight line joining the terminal points. In practice, however, this ideal is seldom achieved." (The Survey and Construction of Electric Power Transmission Lines and Compensation Guide; N.Z. Electricity 1981)

Probably this was the first time the "right" of E.D. was seriously challenged and they appeared to have difficulty in accepting this. Some capable landowners who employed lawyers provided a strong resolve with all actions and correspondence well documented and aspects of law researched. Communities were bonded due in part to the actions of E.D.

Once the EIR was underway E.D. involvement was minimal and when the line route decision was made they could take the high ground as the decision had been made by Government after a full investigation.

Then the question of compensation was raised and again E.D. staff were involved in confrontations that further dented their image. May I quote Mr. Gordon Forgie, Project Manager for this Huntly - Stratford line; "The negotiation of full compensation is more than a matter of equity and justice for the Electricity Corporation, it extends to public relations and morality as a good corporate citizen. Yet it remains the case that the owner must make do with equivalence measured as a willing seller within the vagaries of the property market.

Finally, the negotiator must have empathy with the owner's view that it hardly seems a fair and just apportionment of equivalence when the status quo is invaded by a transmission line and their sentimental and other personal values attributed to their land is excluded from the scope of full compensation." (Transmission Line Compensation in N.Z., G.S. Forgie)

It is unfortunate that this statement wasn't followed by some E.D. staff.

Generally the impacted landowners found construction staff co-operative and land restoration work completed satisfactorily. (Refer Questionnaire), although some did comment that staff acted as though they could come onto their property as of right.

In summary, E.D. staff created a legacy of mistrust that accentuated the problems in attempting to determine the most suitable line route, and subsequently in gaining access for pylon

construction. Construction staff were generally co-operative.

But these problems are not insurmountable and E.D. with careful planning and good public relations, should avoid a repetition.

Recommendations

1) That E.D. support a line determination process by way of a hearing under the T&C Planning Act held by Regional Councils.

2) That E.D. appreciate most affected landowners are not "willing sellers" as defined by Section 62 of the P.W. Act. E.D.'s public relations approach is most important and landowners would prefer to liaise with 1 person rather than a number as in this case, and look for honesty and integrity.

3) To offer reasonable levels of compensation that are not less than that recommended by their valuer. The "horse-trading" approach by E.D. did not endear itself with many landowners.

4) With corporatisation public relations of E.D. will be even more important as they are now a private company wishing to place their services on private land. Previously a heavy handed approach could stand behind a government department erecting a line for the national benefit.

4.2 LOCAL AUTHORITIES

Since construction of this line commenced there have been 2 significant changes that impact local government.

1) Corporatisation of Electricity Division to form Electricorp.
2) Reorganisation of Local Government.

It is recognised that a transmission line route is a sensitive issue for local government because of conflicting interests. In this case WUC washed its hands of the issue despite being requested to take an active interest.

Murray North and Partners (Planners) recommended that WUC should "seek prompt preparation and adoption of policy for the siting of high tensity power lines through their region." WUC's proposed regional planning scheme makes explicit reference to involvement in energy planning and policy development stating it will "provide the forum for all relevant authorities to meet and agree on the implications, regional policies and future rationalisation that should be pursued in respect of proposals for energy projects, electricity/gas distribution and pricing." (Section 16.7).

A regional forum under the auspices of WUC could have provided an important input to the planning of transmission lines especially as it crossed 3 local authority boundaries. That WUC took the "do nothing" option by not even making a submission to the Commission for the Environment audit is a sorry reflection on the authority and its standing.

State Owned Enterprises

With this line route, E.D. as a government department had a use as of right under Section 64 of the T&C Planning Act 1977. In this case E.D. advised local authorities on a cursory basis as to the location of the proposed line route. Thus local government input as to the route decision was negligible although the impacted County Councils made representations at a later stage when various route options were proposed.

This project was in the "twilight period" as it was underway before corporatisation. Future projects will come under the jurisdiction of the State Owned Enterprises Amendment Act 1987

Amended Section 23 of this act states "where a designation under an operative district scheme is vested in a State enterprise. The designation shall remain in force until the next review of the district scheme and then shall lapse; and Sections 82 and 83 and Part Vl of the T&C Planning Act 1977."

All designations for public works now vested in SOE's remain in force until the next district scheme review and then lapse. Then SOE works must comply with the T&C Planning Act and district schemes.

While the Ministers of Finance and SOE's could authorise

designations for SOE's to continue, this power has not been enforced to date. It was intended that this provision could apply to major works eg. power stations, for which other planning provisions were not appropriate.

Local Government

With the above changes, the proposed Regional Councils should have a most important role to play in energy planning matters such as transmission line route determination.

A public hearing at a regional level would provide a co-ordinated regional approach and would identify corridor options. The decision would provide identified and designated corridors applying to their district scheme.

Conditions could also be imposed to reduce the line impact in sensitive areas.

Every endeavour should be taken to ensure that the decision is not influenced by vested political interests.

At present a problem is for a regional authority to exercise its recommendation but it is hoped that, with the changes in local government, such a body will carry substantially more influence.

Also E.D. planning attitudes would appear to be changing and this will provide added impetus to the success of regional planning. Previously they appeared to do their costings and then apply for designation but now the costings are part of the overall proposal. With changing public attitudes it is now in E.D.'s interest that a full and independent hearing be held to determine the most suitable line route.

Development Levies (Amenities Grant)

Until 31 March 1987 provision was made under the Electricity Act 1968 for the payment of amenities grants in conjunction with any project. Such grants should not exceed 1% of the estimated capital cost of the project.

The intention of the grant is to "recompense the community for any intangible loss in natural amenities or pleasantness of life which it may have incurred due to the construction or presence of the project." Applications for grants are made by local authorities with decisions made by the Minister of Energy.

With this line the total cost was calculated and the grant was divided among the local authorities on a pro-rata basis. The authorities had to identify the amenities and E.D. then paid the apportionment of the grant.

In the case of Raglan and Waipa County Councils the grant was apportioned to a sports complex, tennis courts, upgrading Pirongia Forest Park Headquarters and a new ablution block in the

Forest Park. Councils had some difficulty in defining the "affected" community and how the grant could be applied. As a result significant proportions of the grant went to amenities that are of benefit to the community at large rather than to the affected persons.

Now that E.D. is an SOE it should be regarded as a private developer subject to the Local Government Act 1974 with regard to the payment of development levy monies.

Development Levies are .5% of capital cost. If capital cost of a project exceeds $50m the United Council determines apportionment of the levy eg. regional roads, services and amenities. If less than $50m the direction of the levy is more restrictive and is generally for reserves.

An apparent anomaly with this grant as it applied to the subject transmission line was that the chosen route had the lowest dollar cost and therefore attracted the lowest amenity grant but had the greatest number of people and communities impacted. Conversely a western option with a higher capital cost but significantly lower social impact would have received a larger grant.

"The Commission (for the Environment) strongly believes that the implicit right to a publicly enjoyed landscape resides with the community. The appropriate way for E.D. to be thinking is in terms of compensation to the community for the loss of aesthetics, rather than the community paying to maintain a view which is already theirs." (Audit)

While any change to levy calculation is improbable, Regional Council should take this fact into account as part of community impact. In the case of transmission lines a more equitable way, for comparative purposes at least, would be as a % of compensation paid.

Summary

Proposed Regional Councils should have a most important role to play in energy planning matters such as transmission line route determination. Advantages include:-

1) Provide the forum for all relevant authorities to agree on the policies, implications and future rationalisation in respect of energy projects.
2) Because of large authority regions, E.D. would be dealing with fewer authorities - in this case 1 Regional Council rather than 3 County Councils.
3) Regional Councils should have operative regional schemes clearly defining ideal requirements for energy projects eg. transmission line corridors.
4) Impose conditions for the protection of special interests eg. avoidance of schools, screening of lines from recreational areas.
5) Within Regional Councils should be the expertise and manpower

on energy and planning matters to evaluate and make recommendations.
6) Regional Councils to reach agreement with E.D. on recompense for road damage by construction traffic. This mainly applies to minor country roads.
7) This decision made by an independent authority after a public hearing should negate problems experienced between E.D. and Pirongia region landowners over the method of line determination.

4.3 LIAISON OFFICER (L.O.)

Because of the history of mistrust between community groups and E.D. over this project the Commission for the Environment recommended that a liaison person be employed by an organization other than the developer.

The functions of this L.O. might include:
- establish clear lines of communication between the affected parties and E.D.
- help mediate on issues that might arise over the siting of towers, the time and nature of construction activities, the rectifying of any damages caused, and the monitoring of installation and land rehabilitation.
to convene liaison forums to ensure articulation of private and community concerns and feed these back to E.D.

The Commission in this case recommended that the Waikato United Council convene a meeting of all interested parties, including impacted community groups and E.D., to reach agreement on employment of a L.O. E.D. was to pay to W.U.C. the salary of the officer.

This recommendation was accepted by E.D. and in theory such a person could achieve much in breaking down the animosity between the 2 parties. But 3 factors contributed to reduce effectiveness of this L.O.
(a) Because E.D. was paying the officer's salary they effectively obtained the right of veto as to the appointment
(b) W.U.C. played a negligible role once the officer was determined.
(c) F.F. did not consult with their members and their nomination was not supported by a number of landowners.

As a result, the L.O. was seen by a large number of landowners as either a representative of E.D. or F.F. and his effectiveness as a liaison person was severely negated.
Reference to the Questionnaire confirms this as a high proportion had nothing to do with the officer and others were dissatisfied with his role. That some landowners thought the officer was not a "liaison" but an advocate of E.D. and/or F.F., and employed by E.D.,indicates an unfortunate lack of communication.

Despite this the intention of a L.O. is excellent and a totally independent person employed by an independent authority and totally committed to just solutions, will achieve much.

Recommendations:
(1) Employer of the L.O. should be Regional Council.
(2) Position should be widely advertised with specific input sought from affected landowner groups and E.D.
(3) Person employed must be impartial, skilled in negotiations, able to assimilate the issues and make prompt decisions.

(4) Appointment to be made by Regional Council.
(5) Salary to be paid by E.D. and to be commensurate with the salary level of the appointed person.

FEDERATED FARMERS. (FF)

The effectiveness of FF is guaged by many farmers on what it achieves on local issues eg. climatic relief measures. This applied to the subject transmission line but it is very apparent that it came out of this in poor light and which is borne out by responses to the questionnaire. Some members resigned as a direct result and a number were very disappointed at the Federation's ineffectual involvment.

At present it is a testing time for FF with numerous and varied impacts on the rural community occurring at mind boggling speed. It is striving to improve its image and performance, and I hope some constructive comments and recommendations made here will be taken into account in their formulating of a policy on transmission lines.

Involvement with line in Mt. Pirongia region

- July 1984, FF made representations in support of some landowners. This had to be nullified by other impacted districts and FF stated they would not be involved in line route determination. An inadvertant action I'm sure, but one which FF should not have made.
- September 1984, FF arranged meetings along the route corridor at a time when route determination was at a very preliminary stage. These meetings were chaired by the local branch chairman and provided a good medium for E.D. These meetings should have been chaired by Provincial representatives so as to give the meeting added authority and the chair would not be a possibly impacted landowner. There should also be FF representatives competent to convey the rights of landowners and correct procedures to be followed by E.D.
- March 1985, Government approves construction of line. On response FF's Waikato president predicted "there's going to be a bit of fun. They are going to have to arrive at some adequate compensation for the farmers as far as the route is involved. I think they will find it hard to get on to farmers' land if compensation is not settled." (Waikato Times 29/3/85)

A comment hardly befitting the seriousness of the situation and no mention of support that FF will provide to impacted landowners.

- December 1986, nominations for liaison officer called by W.U.C. Nomination made by Provincial FF who considered this was their preogative. They were almost offended that some Branches made additional nominations.
- January 1987, letter sent to a Branch saying they supported their cause.
- March 1987, Tihiroa landowners refuse access to E.D. until satisfactory compensation agreed upon. Possibility of police involvement and so pressure applied by FF in Wellington for co-operation with E.D. for the sake of peace.

These minimal associations have been FF total involvement over the 3 year period which is a poor record for this large national organization.

In summary FF displayed a lack of knowledge on transmission lines, it did not make available the necessary expertise, its limited involvement was sometimes misguided, and farmers were generally disappointed at its performance.

Recommendations:

(1) Insist that a full and impartial investagation be carried out to determine line route.

(2) Convene meetings to advise landowners, along routes under consideration, of line determination procedures and the procedure for public submissions.
Meeting to be chaired by a Provincial representative who has no involvement with the line in question, and an authority on transmission lines to be present.

(3) Nominate a liaison officer after full consultation with Branches along line route. To obtain the most suitable person with no necessity that he be a member of FF.

(4) Ensure that it is not directly associated with the liaison officer. FF must be able to act on behalf of its members if necessary.

(5) Produce a brochure on transmission line construction and compensation including:
- role of liaison officer.
- define all aspects of compensation, namely injurious effection, disturbance, damages, professional expenses.
- encourage the obtaining of legal and valuation advice.
- E.D.'s procedure for transmission line construction.

(6) To obtain the services, on a consultancy basis, of lawyers who are acknowledged authorities on transmission lines.
Recommend Mr. Peter D. Allan of Tanner Fitzgerald Getty P.O. Box 95, Hamilton.
Mr. John Faire of Stace, Hammond, Grace & Partners P.O. Box 101 Hamilton

These solicitors have had up to 4 years involvement with this transmission line. They have displayed negotiating skills,a good knowledge of the compensation process and have an understanding and the support of landowners.
They have given total personal input, co-ordinated the case for landowners and have established an important credibility with E.D.

4.5 LEGAL AND VALUATION

The legal and valuing professions played important roles in determining and achieving higher and more realistic levels of compensation.

Two solicitors, 1 acting for landowners in the Karakariki, Tiheroa and Te Pahu districts, and the other acting for Te Rore and Pirongia landowners, were an integral part of improvements to compensation levels. They had had significant dealings with E.D. staff, they knew E.D.'s methods of negotiation, and they had the benefit of acting for a number of landowners so that a comparative basis was ensured.

The dogged but diplomatic approach taken by these solicitors has been productive for all parties involved. They negotiated with E.D. and by leaving options open no party was to lose face. This did reflect in apportionment of compensation with offsetting adjustments to injurious affection and disturbance so that both parties were satisfied.

Valuers and landowners must be grateful to David Henshaw and Keith Williams, as writers of 'Effects on Property Values' in the EIR, who broke new ground by acknowledging peoples' changing attitudes to transmission lines, the aesthetic impact of the lines and the impact on peripheral properties.

Valuers were circumspect initially in assessing compensation but they then opened up and took full account of the above factors to arrive at higher and more realistic compensation levels. E.D.'s attitude also changed as they accepted these increased values.

This series of settlements will provide an important benchmark for the future.

5.1 TRANSMISSION LINE COMPENSATION LEGISLATION

1. PROJECT

a) Projects must be authorized by statute.

"Better utilization" is a reason for empowering the Crown or Local Authority for a project.

b) Central and government agencies acquire land from private citizens for projects of alleged national and local importance. Due to this there is a conflict between public interest and private right.

2. PRINCIPLE OF COMPENSATION ASSESSMENT

"compensation is the right to put, as far as money can do it, in the same position as if his land hadn't been taken from him." (Horn v Sunderland Corporation, 1941)

This is an ideal and often not reached in the Courts.

3. TRANSMISSION LINE COMPENSATION

The main legislation covering the construction of transmission lines is the Electricity Act, 1968. Under Section 16 of this Act, every person having an interest in land injuriously affected by the exercise of any powers conferred by the Act, is entitled to full compensation for loss, injury or damages suffered. In default of agreement, claims are made and determined under the Compensation Provisions of the Public works act, 1981.

Part V of the Public Works Act defines the basis of claims and rules for its assessment.

a) Section 60: Basic Entitlement to Compensation

Any land -

(i) Is 'entered' for any essential work; or

(ii) Suffers any injurious affection; or

(iii) Suffers any damage from the exercise of any power which relates to a public work

- shall be entitled to full compensation for such injurious affection, or damage.

b) Section 62: Assessment of compensation

Compensation payable under this Act shall be assessed in accordance with the following provisions:

(i) No allowance shall be made on the account of the taking of any land being compulsory:

(ii) The value of land, except as otherwise provided, be taken to be that amount which the land if sold in the open market by a willing seller to a willing buyer on the specified date might be expected to realise.

c) Section 63: Compensation for Injurious Affection Where No Land Taken

Where substantial injurious affection to a person's land is caused by the construction of a public work, the Minister shall compensate that person to such extent as the injurious affection warrants.

d) Section 64: Compensation for Injurious Affection to be Assessed by Reference to Whole Work

Where land is taken or acquired for the purpose of constructing any essential work which is to be situated partly on that land and partly on other land, compensation for injurious affection of the land retained shall be assessed by reference to the effect of the whole of the essential work on the land retained and not only to the part situated on the land taken or acquired.

e) Section 66: Disturbance Payments

The owner of any land taken or acquired under the Act for an essential work shall be entitled to recover compensation for any disturbance to his land and in particular to recover, where appropriate - Reasonable valuation and legal fees or costs incurred.

f) Section 77: By Whom Compensation May Be Claimed

A claim may be made by the owner of any land who claims to be entitled to compensation under this Act.

g) Section 78: Limitation of Time for Claiming Compensation

A claim shall not be made after a period of 2 years after the execution of the works. (completion of the construction of any portion of work where that portion in itself causes the injurious affection or damage.)

h) Section 82: Particulars to be Inserted in Claim

The claimant shall serve a claim in writing stating -

(i) Areas and descriptions of the land injuriously affected or damaged; and if the land is encumbered, leased or subject to any easement, he shall give particulars of that encumbrance, lease or easement.

(ii) Each matter of which he claims compensation, with full particulars of the nature and extent of the claim.

(iii) Total amount claimed.

(iv) Amount and date of any advance payment.

(v) If the claim for compensation exceeds $1,000 it shall be accompanied by a valuation report by a registered valuer.

With the change of E.D. to an S.O.E. it could be possible for the basis for compensation to change. Probably the powers for entry and construction will be retained and it is hoped that the present rules for compensation will continue.

While Electricorp is an S.O.E. it is in a monopoly situation and this is hopefully a reason for Government to leave present legislation unchanged. Also compensation procedures and levels would appear to have been brought to a level satisfactory to all parties and it would be unfortunate to then see them changed.

5.2. MARKET EVIDENCE

Historic analysis of market evidence of sales on which transmission lines are located has failed to measure any price reduction when compared with like properties sold at the same time without transmission lines.

It is acknowledged that the presence of transmission lines will reduce the number of prospective buyers and may lengthen the time that the property is on the market before a buyer is found.

It is essential however to identify the fact that the absence of any 'measurable' difference in market evidence does not deny that it exists. It is acknowledged that it is simply 'not measured' by the evidence.

Where sales evidence produces a nil or inconclusive result, other methods of isolating and quantifying the loss are necessary to provide a basis for comparison. Such methods are not necessarily themselves conclusive and it is essential to consider each property, its particular circumstances, and its particular effects and losses, separately.

".... to have a string of power lines strung across your property must have some detrimental effect." (Judge Archer in MOW v Scott, 1967)

The Courts have indicated that it is incumbent upon valuers and others to determine the loss by some means other than sales evidence. The Courts have not indicated as to how precisely this might be done other than to cover what is in fact lost in respect of the owner's property, and to determine some measure as to how this is likely to be reflected in property value.

".... where the dislike is likely to be of such a wide spread feeling that it will result in reduced demand by potential buyers who are likely to shy off such a property, this reaction must be taken into consideration to the extent that it reduces the residual value of the owner's land." (Land Compensation by Squire Speedy)

In the case of this transmission line I believe 4 main factors influenced the increased levels of compensation paid.

1) Date of Construction

The 'specified date' of construction was April-May 1987 at a time when farm values were depressed (moderate in the case of better quality land to extreme in the case of isolated, harder hill country). As a result a discerning buyer would be more selective and discount a property with lines to a greater extent than if the market had been buoyant.

2) Market Evidence

There was evidence, especially of rural farmlets where the impact was greater, that values and saleability were significantly impacted. Even the possibility of the line going over such a property reduced the value and number of potential buyers.

Some initial settlements were so affected and this had an influence on further settlements.

3) Attitudes to Transmission Lines

It is apparent that over the last decade there has been changing public attitudes to a greater awareness of transmission lines.

In this case it was possibly accentuated by E.D.'s method of line determination that resulted in an increased resistance to the presence of transmission lines.

4) Valuer and Legal Awareness

Valuers acknowledged these changing public attitudes and greater aesthetic values. This reflected in higher compensation levels being recommended and settled. Solicitors acting for groups of landowners fully supported the basis of these compensations in negotiation with E.D.

5.3 "FULL COMPENSATION"

To be fully compensated a landowner must receive his equivalent total loss which may include the following:-

1. INJURIOUS AFFECTION

The net loss in value of the property as a result of the construction of the transmission line. This loss is measured by a 'Before' and 'After' valuation.

2. BETTERMENT

Benefits or advantages which are simply the opposite of injurious affection ie. as a result of the construction of a line, improvements enhance the value of the land. The value of such improvements may be deducted from the total amount of compensation otherwise payable.

The onus of proof of betterment lies with E.D. Care should be taken by valuers that the cost of physical improvements for the convenience of E.D. will not necessarily add full or even part value to the value of the property eg. metalled access track to pylon, but may be poorly sited for stock or farm vehicle movement.

3. DISTURBANCE

Loss of production as a direct consequence of the construction of a transmission line. Disturbance generally occurs under the headings of damage or loss due to construction activity, temporary loss of profits and increased overheads, economic loss of forced activity and incidental expenses.

4. LEGAL AND VALUATION FEES

An owner is entitled to recover reasonable costs incurred in obtaining legal and valuation advice in the preparation of his claim for compensation and in reviewing the offer of E.D. These are exclusive of costs incurred after the initiation of legal proceedings which are for the court to determine.

In some cases E.D. will meet the costs of other professional advice eg. accountants and engineers.

5. INTEREST

To receive "full compensation" there is a need for an adjustment for inflation and true interest from the specified date of construction to the date of offer of settlement.

N.B. In assessing these above factors separately, it is important to avoid duplication.

5.4 FACTORS FOR ASSESSMENT

The property is inspected to assess the impact the transmission line has on the property and to quantify the impact in terms of monetary compensation.

The effective date of valuation must be specified.

A "Before" and "After" Valuation to determine injurious affection takes into account the following factors.

1. Location of line and towers on the property.
2. Relationship between the line and towers and any buildings on the property, with particular reference to the location of the dwelling. The aspect of the dwelling and the relationship the line has to its outlook are considered.
3. Size of property and present land use.
4. The property's - contour
   - aspect
   - soil type
5. The property's condition.

Impacts on the property can then be considered under 2 main headings

A) Impacts on land use and farm operation costs.
B) 'Non-cost' aspects of visibility and aesthetic impact.

A1. Aerial Topdressing
- Any modification to usual flying patterns required
- Any impairment to the efficiency of application
- Any increase in flying time

A2. Aerial Spraying

Are there additional costs imposed on aerial weedspraying such as for thistles and gorse.?

Are there additional costs for horticultural and crop spraying and frost control.?

A3. Airstrips

If there is an airstrip on the property does the line affect the ideal direction for take-off and landing, is the pilot's safety at risk even to the point of the strip being unusable.

A4. Loss of Production of a Permanent Nature

Loss of production due to the presence of the towers eg. cropping, supplementary feeds. (Only hay paddock on property may have tower/s).

N.B. Any loss of production during construction is a separate claim of disturbance.

A5. Land Use

Would the presence of a line have a detrimental effect on a change to other pastoral land uses?

Would the presence of a line impact on the probable subdivisional potential of the property?

B1. Health and Safety

A line passing close to the buildings, and in particular

the dwelling, may create a fear of increased risk to health and safety and so discounting the value of the property.

B2. Aesthetic Impacts

i) The "Farm" Approach

Impact of the line as you approach the property from the road.

ii) The "Residential" Impact

Impact from the dwelling/s taking into account aspect, direction of view, scope of the view, distance of the line from dwelling, number of pylons clearly visible from the dwelling (not necessarily on subject property).

iii) The "On-Farm" Impact

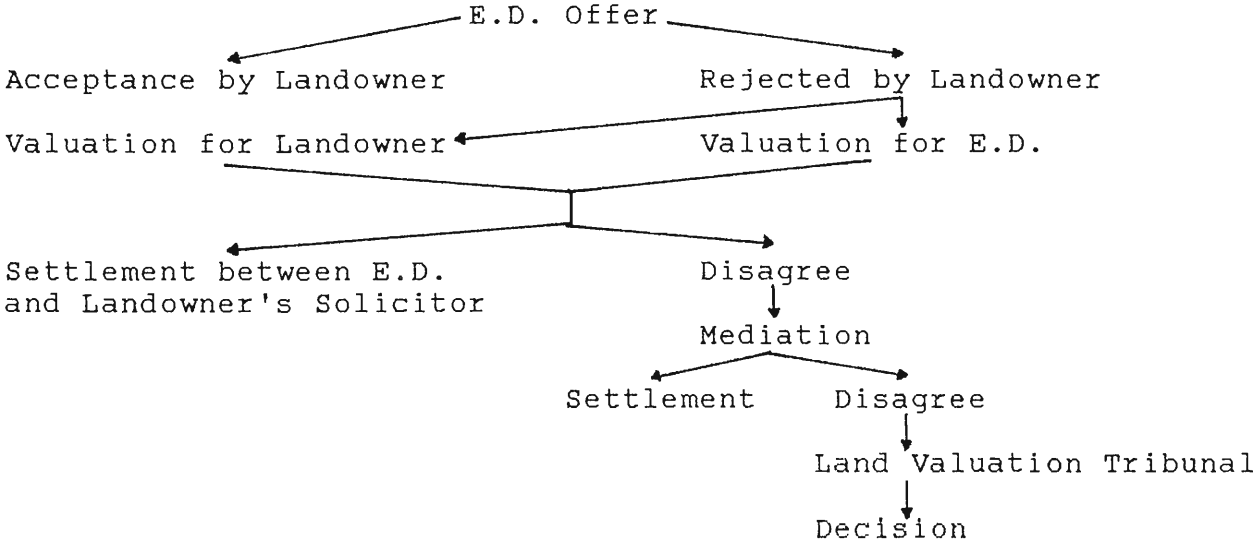
Impact of the towers and wires from parts of the farm. How well is it screened, does it impact on any natural values on the property eg. lakes, ponds, patches of native bush, or from the property eg. mountain views.

The valuer must address these factors and weigh up the combined effects of the agricultural and aesthetic impacts to assess the effect on the property's saleability caused by the presence of the transmission line.

5.5. METHODS OF DETERMINING COMPENSATION

"There is no one method of determining loss in market value; any and every method that may be helpful may be applied, or only one may be useful according to the nature of the circumstances. It is a matter for Registered Valuers to assess the loss in market value.... The Registered Valuers assessments form the basis for negotiated agreements or court settlements." (Transmission Line Compensation in N.Z. by G.C.Forgie)

PROCEDURE FOR COMPENSATION



E.D. offer - E.D. gave an undertaking that their offer would not be less than that recommended by their valuer. This was not the case in a large number of instances with the initial offer being significantly lower and probably based on a formula.

Mediation - The role of a mediator agreed to by E.D. and solicitors representing the majority of landowners. E.D. agreed to accept the recommendation of the mediator and the process avoided the lengthy and costly process with the Land Valuation Tribunal.

In the past it appears that the majority of compensation settlements were by using a formula.

THE "TWIZEL" FORMULA

An agreement reached between Federated farmers and MOW Property Division (on behalf of E.D.) for the Twizel-Lansdowne transmission line. Basis of this formula is:-

1/10 LV/ha each pylon
\+ 1/30 LV/ha of ground area over which line passes (30m wide strip x length of line)
\+ Extra cost of management resulting from line. (capitalised at 7% for 15 yrs.)

For dairy land at say $5500/ha and store sheep land at say $800/ha, injurious affection would be in the vicinity of $1500-2000 total.

This was a convenient method for generally extensive agricultural land for which nominal levels of compensation were paid.

EASEMENT FEE METHOD

This provides an administratively simple formula of determining compensation. This method applies to compensation for pipelines in N.Z. with compensation calculated at 50% of the value of the land contained in the easement. It must be noted that no easement applies in the case of transmission lines.

Injurious affection settlements on the Bunnythorpe-Wilton 220kV line were analysed to establish a comparable 50% "easement fee" width. Analysis showed a 25 metre width as an average.

Project manager Gordon Forgie stated "compensation was based generally on 50% of the L.V. of a 25m wide strip at the time work was begun, plus other aspects." (Te Awamutu Courier 19/2/87)

Again nominal compensation levels were payable.

eg. Dairy farm @ $5500/ha	Sheep farm @ $800/ha
500m x 25m = 1.25ha	900m x 25m = 2.25ha
50%LV x 1.25 = $3,430	50%LV x 2.25 = $900

plus 'other aspects'

An interesting point is made by Mr.Forgie in his "Transmission Line Compensation in N.Z." He states "The majority of claims for compensation are not supported by expert appraisal from a registered valuer despite advice to the owner that he may claim reasonable valuation fees" This would help explain why previous settlements were accepted using the above formulae.

BEFORE AND AFTER VALUATION

The rigid formula of the earlier methods should have little standing in assessing current levels of compensation. So many variables apply between properties that every property and the impact of the line and pylons on it must be assessed individually.

With this transmission line a number of Waikato valuers have acted for E.D. Compensation for this line was a first for most of the valuers and they were taking an almost advocacy role in the determination of compensation levels.

All valuers would have taken very similar factors into account in assessing compensation but methods of determining injurious affection would appear to have varied considerably.

Some valuers, after taking all relevant factors into account, have arrived at before and after valuations with injurious affection assessed as the difference between these 2 capital values.

Other valuers have applied various formulae and, while it probably assesses a level of compensation similar to a before and after valuation, it can not then be necessarily applied in the same manner to another property. Presumably any impact on land

use is built into these formulae.

2 examples of formulae used -

1) Length of line x constant 150m line width factor x average value of the area covered by the line x impact effect.

eg. 600m x 150m

= 9.0ha @ $5,000/ha	= 45,000
Impact Effect 24.5%	= 11,000
Injurious Affection	= $11,000

The constant width factor, average value of the 150m wide strip, and the impact effect factor are assessed for this particular property. One must ask if this "impact effect" is calculated as the difference between before and after valuations?

2) Pylon - 1ha per pylon x LV
+ Line Easement - Length of line x 50m width factor x 50% of average LV.

eg. 2 pylons @ $5,000 = 10,000
600m x 50m
= 3.0ha @ 50% of $5,000 = 7,500
$17,500

Undoubtedly valuers in the Waikato underwent a large learning curve in determining injurious affection for transmission lines. In the main disturbance payments were settled directly between E.D. and the landowner.

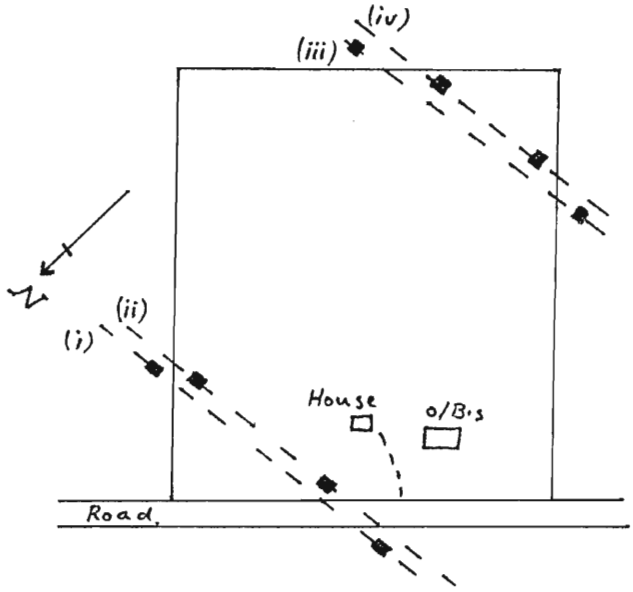
It is essential that a consistent approach to the method of assessing injurious affection be achieved and that this method plus factors for assessment and compensation levels be made available to valuers throughout N.Z.

Recommendation

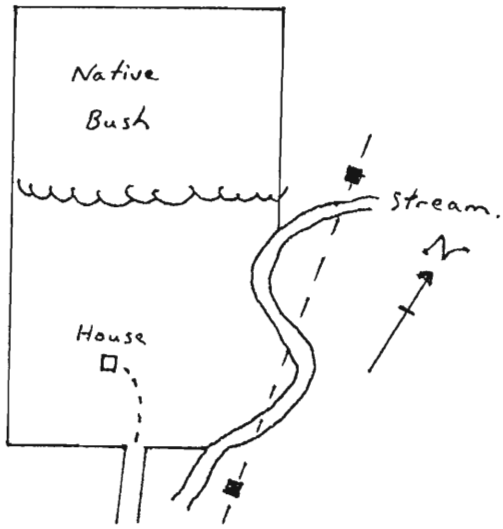
1. That the Waikato Branch of the N.Z. Institute of Valuers hold a forum to determine factors for assessment, methods of assessing injurious affection and compensation levels as they relate to the Waikato-King Country section of the Huntly-Stratford transmission line.
2. Results and observations from this forum to be published in the Valuers Journal of the Institute of Valuers.

Unlike property sales, compensation payments are not publicly available. Compensation payments vary depending on line impact on each and every property so the advantage of analysing compensation is limited unless the valuer is familiar with the properties and impact imposed. As well, the breakdown of compensation received must be clearly determined to ensure like is compared with like (net injurious affection) eg. is interest and GST excluded.

Two example properties which can explain difficulties in applying formulae.



Property - 50 ha dairy farm
Contour - All flat
(Same L.V.)
Line Length - Same (i) - (iv) [500m]
Pylons ■



Property - 20 ha rural block.
House on elevated site.
Line Length - 50m.
Stream forms legal boundary.
No pylons on property.

It will be apparent that problems will arise if calculating on a per pylon and/or length of line basis.

5.6 PERIODIC COMPENSATION

The Commission for the Environment Audit comments on this form of compensation and, while it does not apply in N.Z. at present, it warrants comment.

A common complaint in submissions was that accepting a lump sum payment deprived the property owner of compensation for any future change to a higher economic use. The audit states "this is a misconception as the Act is specific that the owner is to be compensated for the total economic loss and that loss could include the right to change to some other use. If that use is denied by the presence of the lines than by law the present value of that loss forms part of compensation due."

As a remedy it was suggested the property owner should have the right to decide whether to take a lump sum payment or periodic payments subject to review. This practice is common overseas, notably in Britain, and merits consideration here. At present F.F. preference is for periodic compensation although it is unknown how much research they have given to this.

But here in N.Z. with our relatively mobile farming community, it is likely that a farmer could settle for a lump sum payment rather than a relatively small annual payment for the life of the works. Conversely it has more appeal in Britain where the long term landlord/tenant ownership applies. Also the viability of farming was somewhat depressed at the time of this line construction and consequently a lump sum payment would have been more appealing.

I have not researched rental and compensation rates for Electricity Wayleaves in Britain but some comments can be made. In 1965 the National Farmers Union (NFU) and the Central Electricity Generating Board carried out a joint survey of the interference with farming operations and the monetary loss sustained by the farming community due to the presence of electricity poles and pylons.

The rental and compensation payment is payable annually with the scale of payments also reviewed annually.

Compensation levels to U.K. farms for the year ending 31 July 1986.

Structure	Annual rental payments to landowners	Annual Compensation to Occupiers	
	$	$	(Total)
For each tower with dimensions over concrete at ground level of		Arable Land*	Perm. Pasture
15' - 25' square	6.9	95.0 (101.9)	16.2(23.1)
35' - 45' square	13.9	192.7 (206.6)	30.8(44.7)
45' square and over	18.1	229.1 (247.2)	33.7(51.8)

N.Z. $1 = U.K. .35 Pounds
* Includes pastures of up to 5 years old.
These annual payments have increased 32% since 1973.

Additional compensation is paid in the following circumstances.
1. Intensive grassland eg. silage making.
2. Regrassing.
3. Aerial spraying.
4. Multiple lines.
5. Mechanical hedge trimming.
6. Lines crossing orchards.
7. Overhead irrigation.

U.K. compensation highlights the larger payments for higher land uses (Total for arable is 21% higher than for permanent pasture).

But there are a number of variables between the U.K. and N.Z. situations which makes the implementation of periodic compensation doubtful.
a) General difference in type and length of land tenure, as already mentioned.
b) Inherent problem in per pylon payments which also applies to lump sum payments. The financial impact of pylons and wires is not the same on any 2 properties.
c) E.D. is strongly against any change to periodic payments.
d) More extreme range of land topography in N.Z. ie. hard hill country to intensive flat land.

Recommendation:
That F.F. fully investigate Annual Compensation and Rental Payments for transmission lines as it applies overseas, notably U.K., so as to evaluate -
- if such a method is practicable in N.Z., and
- if periodic compensation is more advantageous to all parties involved than the present lump sum payment.

5.7 NON - MARKET VALUATION (NMV)

NMV methods and their use in environmental planning has not been widely used in N.Z. The techniques are often difficult to apply and the results need careful interpretation. But it has become obvious in the last decade that some form of recreational analysis is required to provide quantitive measurement of the benefits associated with recreational use.

The increased desire for outdoor recreation in N.Z. has led to a conflicting demand for the natural resources such as recreation, industry and agriculture and between those who want to develop resources and those who want to preserve them.

It must be recognised that society does have multiple goals and that decisions involving alternative uses of resources will often involve a trade-off situation. Information on the costs and benefits relating to each alternative must be identified and compared.

Uncertainty about the true costs and benefits associated with an action can only lead to controversy as has been shown in N.Z. in the past eg. "wild and scenic rivers" controversy was a confrontation between recreational use and electricity generation.

Concerns for the application of NMV in N.Z.can be classified into 3 broad areas: the need for non-market values, how the information could be used and the methods for assessing non-market values.

Valuation methods have been used for a number of studies in N.Z., principally the Travel Cost Method and the Direct Survey Method eg. Changes in Kawerau Gorge Values with Hydro Development, Recreation Demand of the Kaimanawa and Kaweka Forest Parks, Recreational Analysis of Lake Tutira.

Recommendation

1) That if environmentally sensitive areas are in proximity of proposed transmission line corridors, that Regional Council avail themselves of expert advice on non-market valuation so as to be able to take into account the environmental values in dollar terms.

2) A N.Z. authority for information on and application of NMV is

Dr. Basil Sharp, Senior Lecturer in Resource Economics,
Centre for Resource Management,
Lincoln College,
Canterbury.

6. QUESTIONNAIRE

In August-September 1988 57 questionnaires were sent to landowners between Tihiroa and Huntly who were impacted by the Huntly-Stratford transmission line. I am not aware of the total number of impacted landowners in this region (approx 80) as I had to rely on personal contact and some assistance from the L.O. to obtain the number that I did. Nevertheless the questionnaires covered all property types over the length of line.
N.B. Completion date for this project is early November 1988. But because of the delicate nature of a number of compensation settlements, I was advised to refrain from sending the questionnaires until August-September 1988.

As a result this constraint left little time for analysis of the questionnaires and the results are shown below and, other than observations, are not represented in the rest of my report.

Responses - 57 questionnaires were mailed along with a covering letter (copies attached) and a self-addressed envelope. A follow-up phone call was made early October to those who had not replied at that stage.

43 replies were received.

This 75% response was most satisfying when considering the contentious nature of the line determination and compensation, and that some landowners wished to retain confidentiality.

Questions

Q1 & 2 - Type and area of property.

Are distinct farming type regions with dairy in the north, moving south through larger sheep and cattle properties, mainly high production dairying with some rural and horticultural blocks, and on to dairying on easy hill country.

Sheep and cattle - 15 properties ranging from 82 - 2240ha. Average area of 541ha but, by excluding the 2 properties larger than 1000ha, the remaining 13 properties average 344ha.

Dairy - 23 properties with a mean of 78ha and a range of 40-237ha

Farmlets -5 properties with a mean of 31ha and a range of 13-47ha

Q3 - Number of pylons erected.

0	pylons	-	3 properties
1	"	-	15 "
2	"	-	16 "
3	"	-	6 "
4	"	-	1 property
6	"	-	1 "
10	"	-	1 "

Q4 - Length of line traversing property.

Sheep and cattle - Average length of 1238m with a range of 500 - 4000m. With the extreme case of 4km excluded, the average is 1008m.

Dairy - Average of 655m with range of 190 - 1065m.

Farmlet - Average of 378m with range of 20 - 760m.

Q5 - Distance of pylons from dwelling.
Sheep and cattle - Average of 575m, range 150m - 1100m.
Dairy - Average of 518m, range 100 - 1500m.
Farmlet - Average of 450, range 100 - 1000m.

Q6 - Number of pylons clearly seen from dwelling.
Sheep and cattle - Average of 2.6, range 0 - 5 pylons.
Dairy - Average of 4.5, range 0 - 18 pylons.
Farmlet - Average of 3.3, range 1 - 8 pylons.
Large number of pylons visible on some dairy farms is a reflection of inability to screen, and more and bigger pylons necessary over flat terrain.
This factor was acknowledged as important for compensation ie. pylons not necessarily have to be on property.

Q7 - Impact of line and pylons on view from dwelling.
Results closely correlate those of Q6.

	Nil	Negligible	Medium	Substantial
Sheep & cattle	2	3	6(40%)	4(27%)
Dairy	2	2	14(61%)	5(22%)
Farmlet			2(40%)	3(60%)

It is surprising the degree of medium-substantial impact on dwellings - this applied even to some of the large sheep and cattle properties.
N.B. An important factor that is unable to be evaluated is the number and degree of impact on dwellings on peripheral properties. On closely settled land the impact on these dwellings can be greater than that on impacted properties.

Q8 - Amount of injurious affection received.
While it is dangerous to "average" levels of compensation because of a number of influencing and variable factors, some observations provide interesting results and a guideline for compensation levels.
Dairy - While degree of impact on Huntly properties would appear similar to many other properties further south, the levels of compensation paid was noticeably less. The only significant variable was that the Huntly properties were settled by direct negotiation with E.D. and did not have legal and valuation advice.

Huntly properties - $ 4,083/ppty : $1,361/pylon

Other properties - $14,573/ppty : $9,460/pylon
N.B. Don't know if net injurious affection.

Other properties - No pylons on property = approx length of line 300m, distance of line from dwelling 200m, 2 pylons seen from dwelling, medium visual impact, average payment $8,500.

Range of compensation = $6,850 per property with single pylon and negligible visual impact, to $23,000 per property with single pylon and substantial impact.

Sheep & Cattle - Impact on land use, especially aerial topdressing, can be significant. This does not appear to be the case here other than for 1 property where the airstrip and flying patterns are severely impacted.

Another influencing factor is that all of these farms are handy to amenities and are within a County which has a district scheme encouraging subdivision.

Again levels of compensation for properties from Glen Massey to Huntly were significantly less than properties further south. And again the noticeable variable is that settlement was directly with E.D.

Glen Massey - Huntly $4,487/ppty : $2,564/pylon

Other properties $35,100/ppty : $9,682/pylon

But caution must be taken in using these figures as variation between sheep and cattle properties is significantly greater than that for dairy.

Farmlet - Observation of 1 pylon, length of line 300m, distance from dwelling 200m, 3 pylons visible from dwelling, substantial visual impact = $28,000.

N.B. Compensation levels are as provided by landowners. Caution should be taken as th whether this is injurious affection net of other compensation payments.

Q9 - Disturbance paid.

Not significant and varied from $0 - 2,500

E.D. did carry out improvements to rectify damage eg. metalling races, culverts.

Q10 - Was the difference between "compensation" and "disturbance" fully understood.

This question is somewhat ambiguous as disturbance is a form of compensation. The intention was that it be compared with injurious affection.

5 (12%0 indicated they did not understand the difference.

Q11 - Method of determining compensation.

32 (74%) obtained legal and valuing advice.

11 (26%) negotiated directly with E.D. often with L.O. involvement.

Of these, 8 were from the Huntly-Glen Massey area where action groups were not active and levels of compensation have been lower as indicated in Q8.

Q12 - Satisfaction with level of compensation received.

13 (30%) of the respondents were not satisfied with amounts received. Reasons include - simply did not want the pylons, there should be a margin paid for an "unwilling seller", treatment received from E.D., concern for rest of district.

Q13 - Factors influencing compensation.

Ranking 1. Aesthetic impact/impact on dwelling.
2. Restrictions on land use.
3. Restrictions on aerial topdressing and spraying.
4. Health risk.
5. Property has family and sentimental value.
6. Restriction on farm buildings.

Aesthetic impact was very much the most important consideration. Restrictions on land use was next with dairying while that on aerial topdressing was next with most sheep and cattle properties.

Q14 - Co-operation of E.D. staff during line route planning.

62% yes: 38% no.

Some comments were that staff were arrogant and regarded access as of right. Also deceitful with verbal agreements made but not honoured by other staff.

Q15 & 16 - Co-operation of E.D. construction staff.

A good plus for Powerbuild Division of Electricorp. Only 2 respondents considered them unco-operative during line construction.

7 (14%) considered land restoration was not satisfactorily completed - appeared to be relatively minor issues which a L.O. should have easily and quickly rectified.

Q17 - Was an Action Group active in your locality.

Only landowners from Glen massey to Huntly did not have the apparent advantage of an Action Group.

Q18 - Was use made of Liaison Officer.

54% did not use services of L.O.
10% did but considered the L.O.ineffectual.
36% made use of L.O.services.

Comments include - Thought he was FF rep., thought he was acting for E.D., and 1 did not know there was such a person. This is unfortunate as this position had much to offer.

Q19 - Should FF be involved in line determination and compensation.

54% yes : 46% no

Comments include - should ensure affected landowners are brought together to act with unity, FF never provided any assistance or support, thought L.O. was FF rep., FF not competent to assist.

Q20 - Are you agreeable to further lines crossing your property.

95% did not want another line, a lot vehemently so.

Only 2 would not object to another line but only if line determination and compensation was resolved first.

5 R.D.,
HAMILTON

July,1988.

Dear .....

In February of this year I attended the Kellogg Rural Leadership Course at Lincoln College. Part of this course requires a project to be completed and I have chosen "Transmission Line Compensation" as it is a subject I have some knowledge of and believe it is one of which most landowners have little prior knowledge.

The recently constructed Huntly-Stratford 220Kv transmission line provides an ideal opportunity and I feel that, along with your contribution as affected landowners, I can provide valuable information for any landowners affected by transmission lines in the future,and for organizations, such as Federated Farmers, to use as a basis for advising landowners.

As the base for this project I have prepared a questionnaire which I trust you will complete and I welcome any additional comments. Your answers will be treated in complete confidence.

Please find enclosed a self-addressed envelope. I feel I should point out that all research time and costs are entirely my own expense and I look forward to your co-operation in what I feel will be a very beneficial project.

Yours faithfully,

ALAN LIVINGSTON

TRANSMISSION LINE COMPENSATION QUESTIONNAIRE

1. Type of farming ☐ Dairy
   ☐ Sheep & Cattle
   ☐ Beef
   ☐ Other - please specify

2. Total area of your property ☐ ha
   ☐ acs

3. Number of pylons erected on your property

4. Estimate length of line traversing your property ☐ metres
   ☐ kms

5. Estimate distance of pylons from your dwelling ☐ metres
   ☐ kms

6. How many pylons are clearly seen from your dwelling?

7. What impact does the line & pylons have on the view from your dwelling?
   ☐ Nil
   ☐ Negligible
   ☐ Medium
   ☐ Substantial

8. What amount of compensation did you receive? $

9. What amount of disturbance was paid? $

   or property improvements

   (if "Improvements to Property" please specify, eg.tracks,culverts)

10. Did you fully understand the difference between "Compensation" & "Disturbance" YES\NO

If "No", please state your initial understanding.

11. How was your compensation determined?

- ☐ Direct negotiation with E.D.
- ☐ Advice of liaison person
- ☐ Legal advice & valuation

12. Are you satisfied with your level of compensation by,

a) your own comparison YES/NO

b) comparison with nearby landowners YES/NO

(if "no" why not, how much do you consider you should have received?)

13. What factors influenced your determining of compensation (in order of priority)

- ☐ Restrictions on land use
- ☐ Restrictions on aerial topdressing & spraying
- ☐ Impact on your dwelling
- ☐ Aesthetic impact
- ☐ Health risk
- ☐ Property has family & sentimental value
- ☐ Restrictions on farm buildings
- ☐ Other - please specify

14. Was Electricity Division staff co-operative during line route planning? YES\NO

15. Was Electricity Division staff co-operative during line route construction? YES/NO

16. Was land restoration work completed satisfactorily?

YES/NO

(if "no" to Qn's 14-16, please specify)

17. Was an Action Group active in your locality?

YES/NO

18. Did you make use of the services of the transmission line liaison officer for compensation &/or line construction?

YES/NO any comments

19. Do you consider Federated Farmers should provide the means for negotiating line routes and compensation payments with Electricity Division?

YES/NO please comment.

20. Would you have any objection to further transmission lines crossing your property?

YES/NO please comment.

21. Are there any other comments you would wish to make?