SOCIAL IMPACT ASSESSMENT MONITORING

THE HUNTLY MONITORING PROJECT

IN RETROSPECT

(VOLUME 2)

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NOTES

NOTES

Introduction

1 This question had emerged as a major theme at an SIA and Monitoring workshop, which I had convened at the 1980 NZ Sociology Conference. At the workshop specific reference was made to the EIR's prepared for the Petralgas methanol development at Waitara and the Aramoana aluminium smelter near Dunedin. The introduction of 'fast-track' legislation through the National Development Act, 1979 was also seen at that time as a move by the Government to manipulate EIA for its own purposes.

2 See for example, Habermas, 1974; Heidegger, 1962; Husserl, 1970; Popper, 1972; Sartre, 1963, 1976; and Schutz, 1945, 1960, 1967, 1970.

3 See for example, Bernstein, 1976; Burman, 1979; Entriken, 1976; Fay, 1975; Freund and Abrams, 1976; Giddens, 1976; Gould, 1979; Gregory, 1978; King, 1976; Lefebvre, 1976; Ley, 1977; Marcuse, 1972; Mercer and Powell, 1972; Olsson, 1974; Relph, 1977; Sandbach, 1980; Schrag, 1980; Smith, 1979; Tuan, 1976; van Passen, 1976; and Walmsley, 1974.

Chapter One

1 The full name for the research was the Huntly Social and Economic Impact Monitoring Project. However, it became generally known as the Huntly Monitoring Project, or HMP for short. It is the latter name and its abbreviation which will be used throughout the thesis.

2 I could not recall being aware of this document when it was later brought to my attention by Dr Natalia Krawetz, after she had interviewed senior MWD staff in 1981 as part of her evaluation of HMP (see Appendix 19).

3 From December 1974 to July 1975 I was on Study Leave and Dr Evelyn Stokes sustained the dialogue with Mr Win Gardner by writing draft research proposals. By the time the formal proposal was submitted it reflected the interests of the MWD and the University.

4 Personal communication with Mr Win Gardner, Senior Research Officer, Town and Country Planning Division, MWD, Wellington.

5 See also Krawetz and MacDonald (1982), included as Appendix 19.

6 See Victoria University of Wellington (1972), Phillips (1975), and OECD (1981).

7 This was clarified in a public statement by the first Minister for the Environment (the Hon. Duncan McIntyre):

> In New Zealand, Cabinet decisions have always been made after Treasury reports have been submitted on financial aspects. In future there will also be an environmental report on the effects of any decision, so that all decisions will be made in the light of their effects on the environment (Victoria University of Wellington, 1972:7).

It is interesting to note that Treasury's economic reports, which include benefit/cost analyses, are viewed as 'financial aspects' in the Minister's statement.

8 While details of all personnel who worked on the Huntly EIS's, and their disciplinary affiliations, are not known to me, I do know that a social scientist was not employed by the (then) NZ Electricity Department (NZED) until 1977. This person was a University of Waikato graduate, employed directly after completing his M.Soc.Sci. degree. Even though a geography graduate, he was frequently referred to by NZED staff as a 'sociologist' (pers. comm.).

9 For a consolidated review from the Government's perspective see its submission to the OECD Country Review; Commission for the Environment (1980a).

10 It should be noted that this position was reversed under the 1977 Town and Country Planning Act, when the Government agreed to abide by the terms of the Act unless it specifically invoked a section in the Act to do otherwise (see S.116 [2]). Of course, the National Development Act, 1979 altered the relationship between planning and the EPEP being discussed, by requiring an EIR. This was the first reference in an NZ statute to EIR's or the Commissioner for the Environment.

11 Dollar amounts in this paragraph are totals for the periods stated and have not been adjusted for inflation.

12 The total wage and salary bill (only) increased from $19,000 in 1976 to $70,810 in 1981. (The latter does not include the Post-doctoral salary paid to Dr Krawetz.)

13 The employment of additional research staff was achieved by reducing secretarial tasks to a minimum and using the money saved through fewer hours worked for research assistance.

14 The names of University staff were subsequently included in the formal proposal (see Appendix 1).

15 See Appendix 7 for research publications by Drs Chalmers and Stokes.

16 Dr P. Ramsay (Education) has also been working on a sociology of education topic using official pupil record cards (Form1921), with the intention of carrying out a follow-up study in 1984. No reports were written for the HMP, however. My urban and regional planning,and Ekistics qualifications also had an influence on the research project.

17 Ekistics (Science of Human Settlements) was founded in post-war Greece by C.A. Doxiadis as an inter-disciplinary approach to the problems facing urban and rural settlements. A matrix-type framework for the discussion and analysis of complex issues was developed: see Ekistics, 41 (247), June 1976.

Chapter Two

1 1971 was selected because of the availability of Population Census data for that year.

2 The source of details in this section is HMP Final Report series, Paper No.2, unless otherwise stated.

3 Source: Department of Statistics, 1981 Census of Population and Dwellings, and Huntly Borough Council.

4 The Kimihia Block was formerly 'Kimihia Farm', but the housing area is also referred to as 'the Rosser Block'

after the former owner.

5 See Table 72, HMP Final Report series, Paper No.14.

6 See Tables 72 and 73, HMP Final Report series, Paper No.14.

7 The BNSW went on to note:

* a revival in business confidence since the latter half of 1972 (the share price index reached a new peak)

* retail sales increased by 15 percent for the December year (up to $792m)

* retail stocks rose by 3 percent for the December year (up to $390m)

* registered unemployment at the end of April was 0.2 percent of the workforce

* residential and non-residential building has shown a sharp upturn (bringing with it a shortage of labour in the building industry)

* an uneven recovery of investment (factory construction lags while commercial building has been stimulated; farm investment is high but stock numbers are static)

* high prices continue to be offered for major export products (meat,wool, and dairy products)

* rate of import growth has been much slower than that if export growth (the current account surplus was increased to $286m in the year ending March)

* official Reserve Assets have increased (over the quarter) from $630m to $917m.

8 BNSW Review, March 1976:2. Graphs reprinted in HMP Final Report series, Paper No.3.

9 The New Zealand electoral system has a provision which divides the country into four Maori electorates which people of Maori descent may choose to enrol in, distinct from the general electorates.

10 See appropriate maps in Appendix 1.

11 See Tables in Appendix 1.

12 1971 Population Census data.

13 See approporiate map in Appendix 1.

14 As calculated by the MWD, Hamilton District Office.

15 Using information prepared by A.J. Byett (1981).

16 Estimated by Byett (1981).

17 Based on material written for the HMP research proposal by Dr Evelyn Stokes.

18 From the report on the 'Coal Industry of New Zealand', Appendices to the Journals of the House of Representatives D9, Government Printer, 1974.

19 See Appendix 1, p.(iv) for Table.

20 Byett (1981) also put together some interesting economic information:

> * With 54 percent of the Huntly population aged between 2,853; the actual workforce registered by the 1971 Census was 1,951 which included 31 identified as unemployed. (Males and females were equally represented in the population.)
>
> * The majority of the workforce were described in the Census as 'wage and salary earners'.
>
> * Most Huntly firms were in the retail, wholesale, and restaurant businesses,

accounting for nearly 40 percent; another 24 percent were in the service sector (e.g. motor vehicle repair, transport, hair salons).

* In the Huntly district dairying, sheep and beef farming appear as the predominant agricultural activities.

* In the 1961-71 decade employment in the local coal mines had decreased dramatically - by some 43 percent - with most of this affecting underground miners as the Pukemiro and Glen Afton mines closed, open-cast mining increased, and mechanisation increased in the underground operations. (By 1974 two more underground mines - the McDonald and Renown mines - were to close.)

* Manufacturing in Huntly was concentrated in two sectors: clothing and brick. Two firms dominated each of these activities respectively, employing 54 percent of the manufacturing workforce in 1971.

* Nineteen building and construction firms were identified by the Labour Department in 1971, employing 104 persons. (Over six years the number of firms had increased by some 20 percent while the number of people employed increased by almost 70 percent.)

* The amount of local building activity is reflected in the Borough Council's building permits: During the year ending March 1971, 120 permits were issued with a total value of $304,421. A period of slow growth followed the 1967/68 recession.

* Retail trade was based mostly on small locally owned businesses, with one or two staff. In the 1968 Census of Distribution the average per store value of total sales was $58,457 compared with a national average of $71,587. By 1973 the comparable figures were: Huntly $140,000 and New Zealand $128,100 (Vautier, 1977).

* Growth in retailing during the 1960s had mainly occurred with the introduction of national firms (Woolworths and Shoprite). Since then

most new shops were simply replacing those which had closed down.

21 Based on Byett (1981).

22 The 1981 Population Census figures were not available on this variable when these calculations were prepared by Byett.

Chapter Three

1 See newspaper cuttings, Final Report Series, Paper No.5, p.5.

2 Quoted in Waikato Times, 4 August 1973.

3 See Tables 72 and 73 in Final report Series, Paper No.14.

4 See HMP Working Paper 10, pp.2.30-2.31.

5 The two Huntly West primary schools, Rakaumanga and Huntly West, had larger numbers of Maori children on their rolls than the two primary schools across the river in Huntly East. Some children crossed town, from west to east, to attend school with fewer Maori children (pers. comm., S. Kneale, Principal of Rakaumanga School).

6 See HMP Working Paper 10, pp. 2.30-2.31, for further details on a sub-district basis.

7 See HMP Working Papers 5 and 10.

8 See HMP Internal Technical Paper Series, Nos. 15 and 23.

9 St. Anthony's was the only non-State school in the district, until it integrated with the State education system in 1981.

10 See Final Report Series, Paper No.14 (Tables 27-29).

11 See Final Report Series, Paper No.2.

12 A resolution passed at a special public meeting, convened by the Rotongaro Branch of Federated Farmers in September 1976 (see Fookes, 1976).

13 See Final Report Series, Paper Nos.1 and 4B.

14 See Final Report Series, Paper No.4A.

15 The Tainui Trust Board is a statutory body established to administer, in the Waikato region, monies paid by the Government as compensation for land confiscated in the 1860 Land Wars. Waahi Marae could, notionally at least, be considered as part of the Trust's responsibility. The arrangement is simply a legalistic device to overcome the public body requirements introduced by NZ Electricity to limit the number of claims it may have to pay out under the Electricity Act, 1968.

16 See HMP Working Paper 10, pp.2.108-2.113.

17 See HMP Working Paper 10, and Final Report Series, Paper No.15.

18 See HMP Working Paper 10, pp.2.83-2.93.

19 See Final Report Series, Paper No.2 for full expenditure data.

20 This position is confirmed by the correspondence which is a regular feature of all Commission for the Environment Audits, where questions sent by the Commission for further clarification on technical matters are unable to be fully answered. The reason usually given is that the particular design or planning work has not advanced far enough. See, for example, the Audit on the Petralgas EIR (Commission for the Environment, 1981b).

Chapter Four

1 It will be necessary in some cases to include events in 1982, but the full account does not include that year in its scope.

2 Personal communication: Win Gardner, Senior Research Officer, Town and Country Planning Div., MWD.

3 A point brought to my attention by Dr N.J.Ericksen.

4 Personal communication: F.J. Tester

5 Some references are: Merwin and Greene, 1977; Stenehjem, Hoover and Krohm, 1977; Sucov and Liang, 1974; and Willeke and Willeke, 1976.

6 Personal communication: C.A. Doxiadis, at the Athens Centre for Ekistics, 1968-69.

7 See for example: Flynn, 1976; Fitzsimmons, Stuart, and Wolff, 1975.

8 The Berger Inquiry on the proposed Mackenzie Valley Gas Pipeline (in Northern Canada) is cited as an example of the adversarial approach (Tester,1982a:24). Support for his criticism of the co-operative approach is drawn from arguments advanced by a representative of the Foothills Protective Association (Southern Alberta, Canada) (Cooper, 1982, cited in Tester, 1982a).

9 This argument was advanced in an internal MWD memorandum on the (then) proposed Commission for the Environment (Town, 1973).

10 See the National Development Act, 1979.

11 Decision by the Planning Tribunal on the Petralgas Chemicals NZ Ltd application, as reported by A. Hutchison, Commission for the Environment (pers. comm.).

Chapter Five

1 A recent survey by Memon (1981:21) found only 5.5 percent of practising planners in New Zealand had engineering qualifications. Over 52 percent were graduates in the social sciences.

2 See HMP Technical Committee Minutes for 1976 for the record of these discussions.

3 This has been confirmed by my membership of the UNESCO Sub-Commission for Man and the Biosphere (MAB), where representations were made by University Professors for grants of around $1,000 'sufficient to cover travelling and other direct costs incurred by the student' (pers. comm.).

4 This meant paying the full secretarial and related office-type expenses (e.g. xeroxing) which in other research could be 'absorbed' in the department's running expenses. In short, the HMP had to pay the full costs of the research, not the 'on top of' costs - with the exception of computing costs which were made a special

case when the contract was signed.

5 See 1976 HMP Technical Committee Minutes and HMP Steering Committee Minutes for discussion supporting the identification of this assumption.

6 See 1978 HMP Steering Committee Minutes for a report by the Project Co-ordinator on his meeting with Mr Win Gardner, MWD, on this matter.

7 See Krawetz and MacDonald (1982).

8 See HMP Steering Committee Minutes.

9 The limited role of the District Commissioner of Works (DCW) as MWD representative on the Steering Committee was clearly demonstrated at a special MWD/University administration meeting in 1977 when a commitment made by that officer was withdrawn on the grounds that he was not on the committee to exercise that role.

10 It was intended that this aspect would be part of the evaluation by Dr N. M. Krawetz (Krawetz and MacDonald, 1982) but there was insufficient time for this extended task to be completed.

11 Personal communication with the Vice Chancellor, May 1978.

12 Changes in the HMP research unit's philosophical position are in evidence in Fookes, Drury and Meade Rose (1980).

13 As part of the 1980-81 monitoring programme negotiations: see HMP Steering Committee Minutes for September and November, 1979.

14 Based on the HMP Steering Committee's discussion of Drury's draft Internal Technical Paper No.13.

15 This part of the variable review was prepared by anthropologist Ms Julie Meade Rose.

16 As the Fookes, Drury and Meade Rose (1980) report observed:

> The alternative outlined does, however, reflect both matters of philosophy as well as method. The change in the research unit's philosophical viewpoint...is reflected in the alternative presented here. The authors recognise that a concern for things philosophical may reinforce certain anti-academic prejudices in some readers. However, the authors are firm in their belief that one cannot dismiss the philosophical position of individuals or society since this provides the foundation of decision-making (Fookes, Drury, and

Meade Rose, 1980: 34).

Chapter Six

1 It is important to recognize the qualification placed on the philosophical literature review in this thesis because it does not purport to cover the literature in a comprehensive way, and explained in the Introduction.

2 The full quotation is:

> In view of the fact that there are no laws for human geographers to use and the prospects for their discovery are uncertain, the whole explanatory thesis which depends on them may well be irrelevant to human geography (Guelke, 1971:45).

3 While adopting a positivistic philosophy that did not necessarily mean the geographers understood its implications for their research.

4 See Entriken (1976) on contemporary humanism in geography, and Entriken (1979) where humanistic geography is reviewed.

5 In his use of the term 'categorical paradigm', Albrow is referring to 'the dominant methodology of Academic sociology (in Gouldner's sense).' He acknowledges the other labels-- of 'positivism', 'scientism' and 'scientific method'. However, because 'systems theory, structuralism, even ethnomethodology, share the presumptions of the paradigm also...', Albrow argues for 'categorical'. See Martin Albrow, Dialectical and Categorical Paradigms of a Science of Society, The Sociological Review (New Series), 22(2), 1974, 183-201.

6 In Leonard Guelke's 1971 paper, Problems of Scientific Explanation in Geography, Canadian Geographer, XV(1), 1971, 38-53, we find him examining the question whether specifically geographical laws are likely to be discovered. He explains that the generalizations advanced by geographers do not meet the criteria applying to laws, and that the work of statistical analysts (or spatial statisticians) remain descriptions not explanations: see Guelke, 1971:40-42).

7 Note that Smith (1979:361) presents the difference between the categorical and dialectical paradigms by explaining that the latter is 'concerned less with stability and universality than with process, change, and the emergence of the historically new.'

8 This propensity to go outside the discipline is described in the recent work by John A. Agnew and James

S. Duncan, The Transfer of Ideas into Anglo-American Human Geography, Progress in Human Geography, 5(1), 1981, 42-57.

9 Relph provides a more succinct statement later in the paper:

> Phenomenology is a philosophy in which it is assumed that knowledge does not exist independently of man, but has to be gained from man's experience of the world. From this standpoint the world can be understood only in its reference to man and only through the intentions and attitudes of man' (1970:193-201).

10 See David Harvey (1969:13-14).

11 In answering the 'How?' question Schutz saw the lebensvelt as containing 'intersubjective meaning-structures: we share the everyday world with others and share or understand many of their interpretations and experiences of it' (quoted in Smith, 1979:366).

12 Referring to social science literature published during the period of the HMP (i.e. 1975-81).

13 For the other books in his project see New Rules for Sociological Method, London: Hutchison, 1976; Studies in Social and Political Theory, London: Hutchison, 1977; Between Capitalism and Socialism, London:Macmillan, 1981.

14 See Giddens (1979:240-259).

15 In the discussion on 'shortcomings' Giddens is quick to note the indiscriminate use of the term 'positivism' and provides what he considers to be the pertinent definition with reference to the orthodox consensus; that is, 'the received model' of natural science as influenced by Carnap, Hempel, and Nagel.

Chapter Seven

1 See, for example: Bruno, Doctorow and Kapper (1981);Cook and Scioli (1972); Cunningham (1979); and Porter, Connolly, Heikes and Park (1981).

2 See, for example: Popper (1972); Nagel (1961); and Hempel (1965).

3 See Cunningham (1979) for a critical study of gravity models applied to worker in-migration on power projects.

4 See Giddens (1976:133).

5 Quoted in Albrow (1974:184) .b

6 Albrow's critical reference to March and Simon's Organizations with its listing of 196 variables, and Anthony Downs' Inside Bureaucracy 'with 15 laws and 183 lesser propositions called hypotheses', immediately brought to mind the HMP approach and the search for generalizations (see Fookes, 1979b; 1980a; 1981f).

7 This 'turning away' was not a conscious reaction to the line of thinking as presented by Albrow, but rather an intuitive action based on the feeling that we were too ignorant of just where the consequences of a project could be felt, to direct attention away from the complete 'picture' of change: 'We might just miss something' reflects the feeling. Consequently, the general model adopted as the working basis for the unit, while still reflecting a systems view, maintained an openness: that is, where change in any one parameter was potentially likely to result in change in some other parameter, and therefore a watch had to be kept on all of them.

8 See HMP Research Proposal and Research Memorandum No.3 and Nd.4. (in Appendices).

9 Personal communication from Senior Research Officer, Town and Country Planning Division, MWD.

10 See HMP Steering Committee Minutes, 13 March 1981, p.4 for a report of that discussion.

11 In some respects the MWD position was itself 'schizophrenic' because while rejecting the use of 'opinions' presented by others, they expected (that is, tried to demand) that we automatically accept their opinions or interpretations of events as 'gospel'; we were to suspend our disbelief in their case!

12 The terms 'subject' and 'object' are used here in the same sense as used by Parsons in writing:

> By 'objective'...will be meant from the point of view of the scientific view of the observer of action, and by 'subjective' from the point of view of the actor (1968:46).

13 See HMP Working Paper 2 and Research Memorandum No.4.

14 These were included in the Working Papers often in the form of footnotes in order for the contrasting views to be recorded.

15 See Giddens (1979:249).

16 See for example, the list of what were called 'general interpretations' in Fookes (1979:14-15), especially No.7.

17 See Fookes (1977; 1978; 1979b; 1980a).

18 See HMP Steering Committee Minutes, 14 March 1980, pp. 2-3.

19 See Evelyn Stokes (1977; 1978)

20 One citic of the statements being made, and the Monitoring Project's readiness to report them, even went as far to argue that they should be ignored because the source of them 'is illegitimate, don't you know!'

21 See Burton (1971); Craik (1972); Downs and Stea (1973); Saarinen (1976); Sonnenfeld (1972); Tuan (1974).

22 With Giddens' ideas as referred to in this thesis published from 1976 onwards they were not known to the research unit, which therefore, did not have the advantage of placing the empirical work in the Theory of Action framework.

23 For example refer to Town and Country Planning Act, 1977:

(a) Section 3 (Matters of National Importance) where SS(1)(g) introduces 'the relationship of the Maori people and their culture and traditions with their ancestral land' as a consideration;

(b) Section 5 (Regional Planning Committee) where SS(3) allows for a Maori representative on the regional planning committee nominated by the District Maori Council 'where in the opinion of the united or regional council there are significant Maori land holdings within its region', and this representation on the committee is permitted by virtue of SS(2)(e);

(c) The First and Second Schedules to the Act include specific references to Maori interests.

24 This happened at a Huntly Planning Forum meeting when it was decided to 'go into committee', with the Press and the HMP Project Co-ordinator asked to leave the room. By quietly taking up the matter with the Chairman, the Project Co-ordinator obtained permission to remain, but that required a certain amount of perse verance on the latter's part.

Chapter Eight

1 See Talcott Parsons (1968:11-12 and passim).

2 The extracts quoted are from K. Marx, 1857-58, (1973 edition, p. 712).

3 See Hagerstrand (1970; 1974; 1976; 1978).

4 The language and philosophical attribute of time-geography is not part of Hagerstrand's work, being developed by Pred in the paper 'Social Reproduction and the Time-Geography of Everyday Life' (see Pred, 1981a).

5 Allan Pred (1973) and Hagerstrand (1970:11).

6 'Time-geography' as a theoretical development intended for practical application appears to have been stimulated by a concern for the individual in society. In 1970 we find Hagerstrand:

> ...suggesting that regional scientists take a closer look at a problem which is coming more and more to the forefront in the discussion among planners, politicians and street demonstrators, namely the fate of the individual human being in an increasingly complicated environment, or if one prefers, questions as to the quality of life (1970:10).

7 Baker, 1979:560-570; and the rejoinder - Thrift and Pred, 1981:277-286.

8 See Pred, 1977:283. For supporting reference see Pred (1981a).

9 The use of 'could' in this sentence suggests that this is a necessary but not a sufficient condition.

Chapter Nine

1 Krawetz (1981b:2-3) explains the position as follows:

> The context of this paper (No.8, in the HMP Final Report series)...is essentially conservative. It treats as given the institutions themselves (in this case the government, particularly the Ministries of Works and Development, and Energy) and proposes that explicitly considering social variables in project planning is one way to make these institutions work better. It is a 'social engineering' approach and reflects a '...willingness to help solve social problems within the context of the status quo' (Gouldner, 1971:336).
>
> Some readers will recognise the functionalist orientation, particularly with respect to the parameters in Group Three (social processes). For those readers who are not familiar with the term, functionalism refers to a particular school of sociological thought which focuses on mechanisms in society which maintain order; that is, it assumes that existing social

> arrangements are useful to all members of society. Functionalism is not the only orientation which is appropriate. A logical alternative is conflict theory; that is, to dicuss social impact as a function of struggles for power by various groups....
>
> ...I have selected the functionalist approach as being appropriate to this paper because it assumes the status quo and because of its appearance of neutrality (although...that too is an advocacy position for the status quo, rather than for change).

2 The N Z Police, formally instituting a 'Neighbourhood Watch' scheme with a package of information and window stickers would seem to be confirming the absence of an informal process as described by Krawetz.

3 Newspaper cuttings are included on p.26, HMP Final Report, Paper No.5. For other details on the public amenities grant see HMP Internal Technical Paper No.21.

4 See p.31, HMP Final Report, Paper No.1.

5 I emphasise 'may' because this is a reconstruction of events in the light of the stratification model. I have no idea whether he did learn about this in the way described...or whether he did know prior to the decision.

6 The question of N Z Electricity's original or changing attitude to rugby league in Huntly was not an aspect of the HMP activities, which this theoretical development reveals as an important omission.

7 This was brought home to the author when senior department officers took me aside one day for a reprimand - following some activity in Parliament by Marilyn Waring M P using HMP information - explaining that 'it was their responsibility to protect the Minister.'

8 See Tables 72 and 73 in HMP Final Report, Paper No.2. Note that the MWD single mens accommodation only achieved around 30-40 percent occupancy, and the Bechtel Corporation camp (for Huntly West mine construction) was never opened.

9 In 1976 this was calculated as follows:
0-10km: 20mins/day @ Time-and-a-half + $0.50
10-19km: 40mins/day @ Time-and-a-half + $1.00
Above 19km: 80mins/day @ Time-and-a-half + $2.00
(Source: HMP Working Paper 3, p.23)

10 See pp. 30-31, HMP Final Report, Paper No.2.

11 It should be noted that the two positions referred to are not on an equal ranking, with the power station Superintendent responsible to the Electricity Division's

District Manager in Hamilton.

12 Giddens approaches the individual as a capable and knowledgeable agent, not one whose actions could be explained solely by reference to normative values. He is, therefore, approaching the subject from a different perspective to Talcott Parsons (1968).

13 See Tester's contribution to HMP Final Report Series, Paper No.13 (Fookes, Drury, Porter and Tester, 1981).

14 Support for the time-lag argument can be found with planning for the next Waikato thermal power station. The HMP research unit responded to N Z Electricity interest in advice on the content of social and planning effects by extending Paper No.5 (on public participation initiatives) and preparing Paper No.8 (on parameters). The former suggested a process of public participation and information which, it seems, is being implemented to a considerable degree (see NZ Herald, 29 April, 1983).

15 It is acknowledged that people can recognize, both consciously and sub-consciously, the positivistic and structural-functional foundations of SIA monitoring.

Conclusion

1 See Final Report Series, Paper No.11 for a description of the socio-economic information collected, and Paper No.15 for the full description of each data file.

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APPENDICES

APPENDIX 1

HMP RESEARCH PROPOSAL

PROPOSAL FOR A PROJECT TO MONITOR SOCIAL AND ECONOMIC IMPACTS OF THE HUNTLY POWER STATION

School of Social Sciences
University of Waikato

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SUMMARY

1. The aim of this project is to develop a methodological framework to identify and measure social and economic impacts of the Huntly Power Station in Huntly and its region. This has immediate utility in identifying potential problem areas early enough to take remedial action and also the longer term purpose of developing methods of monitoring and assessing the effectiveness of planning decisions in other contexts.

2. Aspects to be monitored in the project include:
   (a) Housing
   (b) Employment
   (c) Availability of material resources
   (d) Provision of services, including health, education, welfare
   (e) Problems of community cohesion
   (f) Administration and decision-making

3. University commitment to the project involves an interdisciplinary approach with participation by a number of university staff in the School of Social Sciences under the direction of the Dean of the School. One member of the staff, Mr T.W. Fookes, will be released from his teaching duties in order to work full-time on the project as co-ordinator. He will also have a full-time assistant.

4. Administration will be in the form of a small Steering Committee which has general project supervision and budget control, and a Technical Committee. The co-ordinator, as executive officer, will be principally responsible for project implementation, and will report regularly through the Steering Committee to the M.W.D.

5. The programme begins with an establishment stage in September 1975. In April 1976, the first of a series of 24 month phases begins. Each phase will comprise a "core survey", continued collection and co-ordination of existing data, and development of related special studies. The programme is designed to continue past the construction phase, 8-10 years.

6. The budget for the first 18 months is estimated to total $13,421 for the establishment stage of the project 1 September 1975 to 31 March 1976, and $26,500 for the year 1 April 1976 to 31 March 1977. These figures include salaries of the Co-ordinator and his assistant, part-time secretarial assistance, running expenses and research expenses.

1. THE CASE FOR MONITORING SOCIAL AND ECONOMIC IMPACTS

The construction of a thermal power station on the outskirts of Huntly, a long established stable community of 5,310 people (1971 Census), will bring an estimated additional 5,000 people into the Huntly region. The provision of housing and services and integration of this influx of people into an existing community will produce strains that will have a ripple effect through all the social and economic systems in Huntly and the wider Waikato region. For example, regional manpower resources will be affected if labour is diverted from other activities such as farming. The supply of strategic materials such as concrete and steel for the project could affect the construction programmes in the region and in turn have an effect on the firms and employees involved. To identify problem areas before they reach "crisis" proportions, there is a need to monitor carefully the kinds of changes that are occurring, and understand the nature of such changes. Monitoring the impacts of a development project must be a continuous, open-ended process, carried on over a long period, and past the end of the construction phase for there will be another critical period of change at this stage.

The aim of a monitoring project is to provide a means of consistently identifying and measuring social and economic changes as they occur in a region over a period of time. A well developed monitoring methodology will provide a framework for identifying potential problems early enough to ensure remedial action can be taken. It will also provide a fund of knowledge and experience which may help avoid administrative, planning, and social problems on similar projects in the future. This is particularly important if future large development projects are to be located close to existing urban areas.

It can be argued that every development project is "different". Power stations were built at Marsden Point and New Plymouth, and experience gained there is being applied in Huntly. But neither of these towns is quite like Huntly. Because there was no close, continued monitoring of impacts in either Whangarei or New Plymouth to provide a framework for comparison, it is difficult to make judgements that are much more than intuitive and impressionistic. The development of a framework for monitoring impacts in Huntly will also provide "spin-off" effects in the areas such as the development of methods of assessing the effectiveness of planning decisions. For example, studies of community development in Huntly will have implications not only for the impacts of future power station construction such

as Auckland Thermal No. 1, but also for Cromwell and Rolleston where new populations will be grafted onto existing communities.

The monitoring of social and economic impacts is therefore quite different from environmental impact assessments made for environmental impact reports. The Huntly Environmental Impact Statement has been criticised for concentrating on impacts on the physical environment such as effects on the Waikato River, disposal of ash, emissions from chimneys. The JASMaD planning exercises on Huntly can also be regarded "one-shot" affairs although they provide a useful starting point. The important distinction between these studies and monitoring is that where the former attempt to anticipate the future reality, the latter measures it, and permits a soundly based assessment of the extent to which what was desired has been achieved.

Although a good deal of data is currently collected by government departments, local bodies and others in the normal course of their operations, there is at present no means of co-ordinating this information. Thus a monitoring project will perform this additional function, as well as initiate collection of data that allows measurement of change through time in significant areas for which statistics are not at present available. An important part of the methodology here will be the development of appropriate social and economic indicators. The continued monitoring of social and economic impacts will also provide some feedback in information, and understanding of processes going on in the Huntly community, which will assist in making subsequent planning decisions.

2. ASPECTS TO BE MONITORED

The scope of this monitoring project is seen as a concern for any effects, actual or perceived, on people, their way of living and relationships with each other. In other words, this is a concern for the continuing impacts on the "human environment". The decision to locate a power station will initiate a whole series of planning decisions. Monitoring the social and economic impacts of both the initial decision to locate a power station at Huntly, and all the subsequent decisions this involves, becomes a very complex exercise. Some of it will be simply a matter of monitoring changes in the population-number, age, sex, composition,mobility etc. Related to this is the question of manpower and any changes in employment patterns, job opportunities and levels of income. Closely

related too are any changes in distribution and allocation of material resources which may affect employment patterns. Land use changes will occur and these should be monitored. These are tangible changes, some of them also visually obvious, and more easily measured. But monitoring of social and economic impacts must also be involved with more intangible qualities (which are more difficult to measure) such as community attitudes, values and perceptions. A monitoring operation must include investigations of areas of human stress, actual and perceived in the community which can be regarded as being among the effects of planning decisions. Communicating and implementing planning decisions has considerable potential for both generating and destroying community goodwill. Any decline in levels of community goodwill may generate particular difficulties on the project site, for example, in the area of labour relations.

Although the specific purpose of the project to identify potential problem areas has immediate utility, it must be considered in the context of the more general purpose of developing methodologies for measuring social and economic impacts of development projects. Bearing in mind this more general context of enquiry, some specific areas of potential stress at Huntly can be identified:

(a) Housing
(b) Employment
(c) Availability of material resources
(d) Provision of services, including health, education, welfare
(e) Problems of community cohesion
(f) Administration and decision-making.

Each of these areas will be discussed below and some examples given from lists of questions prepared to illustrate the type of enquiry that is envisaged. Because all these areas contain overlapping and interlocking problems and implications, each must be considered within the broad context of the overall impact of the power project.

(a) Housing

The provision of accommodation for all the newcomers is a basic requirement for the smooth operation of construction on the power project. Inadequate housing, a suggestion of preferential treatment for some, cause frictions that may quickly lead to other stresses both on the project site and in the Huntly community. There is already some resentment, for example

of cheaper rents charged for project housing and priorities in allocation of housing.

Example questions for investigation:

(i) Project housing: what problems have occurred in the location, timing, allocation and suitability of project housing and related services?

(ii) Impacts on existing housing: What changes have occurred in prices of land and houses, in rents and patterns of renting rather than owner occupation of houses in Huntly, the western mining settlements and other towns in the region?

(b) Employment

Many Huntly residents initially welcomed the power station proposal as a way of restoring coal mining activities, providing further employment opportunities and boosting the local economy. The extent to which these expectations are fulfilled will also have effects on community attitudes. It is also confidently expected by some that there will be spin-off effects of the project in training programmes and related activities that will provide more jobs for Huntly residents and encourage young school leavers to stay in the town. On the other hand, contact with a transient population of construction workers may encourage school leavers to leave Huntly. The provision of jobs on the construction site will divert manpower from other activities in the region such as the building and allied trades, farm labouring, and other unskilled or semiskilled jobs, particularly if working conditions and wages on the project are made to look more attractive. One such attractive factor is provision of cheap project housing.

Questions for further investigation:

(i) What local industries and trades have commenced activities or been expanded, to cater specifically for the project? Has the range of occupational choices in Huntly and the Waikato region increased as a result?

(ii) What changes have occurred in labour turnover, wage structure, wage levels and working conditions in non-project jobs in the region as a result of the project?

(iii) What training programmes are available on site for unskilled workers and what are the longer term implications of these?

(c) Availability of Material Resources

Heavy demands are likely to be placed on local construction material industries. Diversion of too great a proportion of strategic materials such as concrete and steel could have serious repercussions on development in the whole region during and after the construction period. The provision of housing and services for the extra population in Huntly is also generating extra demands on construction materials.

Example questions for investigation:

(i) What local material resources are being used for power station construction? Is there a conflict between supply of materials to the project and other major users affecting construction in the region?

(ii) What effect is the accelerated provision of housing in Huntly having on house building activities in the region? Are building materials in short supply because of this extra demand? Or is extra housing providing a welcome boost to the building trade in the region?

(d) Provision of Services

The expected influx of population will put considerable pressure on existing services. Monitoring in this area will consist largely of evaluating the effectiveness and timeliness of planning decisions.

Example questions for investigation:

(1) What pressures are being placed on existing educational, medical, social welfare and recreational facilities which may create problems such as an increase in crime rates or delinquency or demands for more pre-school and adult education programmes?

(ii) What difficulties are occurring in providing the necessary infrastructure such as communications, water, power, sewerage, etc?

(iii) What changes will occur in the central area of Huntly - will a greater range of retail activities goods and services be provided within existing shops and businesses? What will be the effects of any transport changes such as re-routing State Highway No. 1, and improvement in accessibility to other urban centres, particularly Hamilton and Auckland?

(e) Problems of Community Cohesion

Potential stress in this area can be identified in terms of the intergroup frictions that may develop in the process of incorporating a mobile, transient force of construction workers and their families into a well established, stable (some say stagnating) community like Huntly.

Example questions for investigation:

(i) Are there any distinctive characteristics of the construction community at Huntly (such as age, composition, mobility, ethnic origin etc.) which may create peculiar problems?

(ii) To what extent do the newcomers participate in existing social, recreational and welfare organisations? To what extent do they organise their own?

(iii) To what extent does the geographical location of project housing, Mines Dept. housing and older residential areas promote or reduce group identities and potential interaction or friction?

(iv) To what extent does the expansion of Huntly West toward Waahi Marae provide a comparable situation to other "urbanised maraes" such as Orakei and Mangere in Auckland or Judea in Tauranga?

(v) What specific impacts of construction activity are there on residents in close proximity to the power station from noise levels, traffic, dust nuisance etc?

(f) Administration and Decision-making

The number of authorities involved in some aspect of the Huntly Power Station is a reflection of the complexity of the situation. These include both local territorial authorities, a number of government departments and other authorities. And then there is the Huntly Planning Forum with representatives from many of the above authorities, which has no statutory authority or decision-making powers, but is a purely advisory body. Its chief function is to provide a means of communication and forum for discussion; to a limited extent it has also served a monitoring function.

With so many different bodies involved, each with varying attitudes and objectives, it is not surprising if communications break down, conflicting decisions are made and consultation is less than adequate. For many members of these bodies, the situation presented by the construction of the Huntly power station is a new and unprecedented one and they may

not have the experience or training to cope with it. Difficulties reported in the press between Huntly Borough and Raglan County Councils over servicing of the housing and power station sites illustrate this.

Example questions for investigation:

(i) What problems are created by the fragmented territorial jurisdictions of local authorities, particularly by the location of borough and county boundaries?

(ii) What adjustments are made by local authorities to cope with this unprecedented situation?

(iii) How effective have been the means of implementation and communication of decisions affecting the project and local people by various local and government authorities? How effective is the Huntly Planning Forum?

(iv) To what extent will the present Huntly population retain "control" of their town and how will their perceptions of control change?

3. UNIVERSITY COMMITMENT AND RESOURCES

One reason for preparing this proposal has been a wish of university staff to become involved in interdisciplinary research projects concerned with national and local community developments. This interest has been encouraged by similar statements by the National Research Advisory Committee, the 1974 Conference of N.Z. Universities, and the Vice-Chancellor, Waikato University.

A monitoring project of the scope outlined requires an interdisciplinary approach with people trained in various social sciences contributing. This can be provided for within the administrative framework of the School of Social Science at the University of Waikato. The operation will be therefore, a School of Social Science project led by the Dean of the School. This not only mobilises a stronger research effort, it also increases the degree of formal University commitment in the project. Furthermore, it provides the mechanism for appointing full-time research staff responsible to the Dean. Thus, long term continuity of commitment to the project can be ensured from year to year. This guarantees steady progress, uninterrupted by normal university teaching demands which so often make individual research a drawn-out process.

The Vice-Chancellor fully supports the School of Social Science in its efforts to mount this monitoring project and the following staff

have expressed their willingness to participate as an interdisciplinary team:

Professor J.E. Ritchie, Professor of Psychology
Dean of the School of Social Science
Professor D.G. Bettison, Professor of Sociology
Dr N.J. Ericksen, Senior Lecturer in Geography
Mr T.W. Fookes, Senior Lecturer in Geography
Dr M.D. Hills, Lecturer in Psychology
Mr J.K. Kenward, Lecturer in Sociology
Mr R. Te K. Mahuta, Director, Maori Studies Centre
Mr P.D.K. Ramsay, Senior Lecturer in Education
Professor W.T. Roy, Professor of Politics
Dr Evelyn Stokes, Senior Lecturer in Geography
Mr D.A. Swain, Lecturer in Sociology
Dr D.R. Thomas, Lecturer in Psychology
Professor J.T. Ward, Professor of Economics

The university also has an important resource in its students. Undergraduate students could be used for certain kinds of surveys which would be incorporated into existing field programmes. Several of the staff members listed above have indicated their willingness to do this. Senior students will also be employed on more specific projects in vacation periods. Graduate students will be encouraged to seek thesis topics in the Huntly area. There are already three graduate students in sociology working on theses in the region. In geography, one thesis has been completed on the mining settlements of the Rotowaro area, some graduates are working in a group project concerned with perception of flood hazards, and some of these students have expressed an interest in doing their theses in the area.

Data processing facilities are available to the project through the University Computer Centre, on-line to the Burroughs 6700 at Auckland University. The project is amenable to a suggestion that use be made of the M.W.D. computing facilities through the terminal in the Hamilton Distric Office, if this is seen as a more desirable arrangement.

Accommodation for a central project establishment is available on the campus but it is proposed that some office space also be arranged in Huntly to facilitate communication between the research team, power project staff, and the Huntly community. Normal university technical services will be available to the project.

4. ADMINISTRATION AND PERSONNEL

A two-tiered administrative structure, comprising a Steering Committee and a Technical Committee, is proposed, recognising the desirabil

of maintaining formal university involvement at a senior level and a government supervisory and contributory role through the Ministry of Works and Development. In addition, while recognising the need to keep the organisation from becoming unwieldy, representation is provided for from the Huntly area and contributing staff from the School of Social Sciences. The Dean of Social Sciences will represent the university and his role will include chairmanship of the Steering Committee and responsibility for the Co-ordinator. The Co-ordinator's role is outlined after the explanation of the administrative structure which is as follows:

a) The Steering Committee

Membership: The Dean of Social Sciences representing the University; a nominee of the Ministry of Works and Development representing the Government; a nominee from local authorities in the study area representing the Huntly area; the Co-ordinator as Executive Officer.

Functions: (i) budgetary control
(ii) general project supervision
(iii) publication approval

Chairman: The Dean

b) The Technical Committee

Membership: The Co-ordinator; Social Science staff representatives; Ministry of Works and Development representatives.

Functions: (i) to handle technical details and support the Co-ordinator
(ii) to recommend items of expenditure to the Steering Committee
(iii) to advise on research proposals submitted to it
(iv) to consult with other persons as required with the power to co-opt technical personnel where appropriate

Chairman: The Co-ordinator

c) The Secretariat

Staff: The Co-ordinator (full-time); Co-ordinator's assistant (full-time), secretarial assistant (part-time)

Functions: The daily organisation and running of the project including servicing the committees (eg. convening meetings), maintaining regular monitoring services (eg. updating data from government and other

sources), mounting the core survey at two yearly intervals, preparing project reports, and co-ordinating individual research projects (graduates and staff).

The Co-ordinator's Role:

The Co-ordinator will be the person principally responsible for project implementation on a day to day basis, supported by the other Secretarial staff and the Technical Committee. His role will be to carry through the functions assigned to the Secretariat (above) and maintain the programme detailed in Section 5. In addition to the regular administrative-type of work which such a project involves, the Co-ordinator is seen as the person who will maintain regular liaison between individual staff and graduate researchers. This will include identifying problem areas which should be monitored and synthesising research results.

The position requires a person of proven research competence who also has experience in working with government and planning authorities. In order to ensure continuity of the project, the Co-ordinator should be appointed for an initial period of three, preferably five years. He would need to be appointed at a sufficiently senior level for him to be able to work with others in the university and supervise senior students. It is proposed that sufficient funds be made available so that the university can release a member of the academic staff from teaching duties to take up this position. Full project funding of the Co-ordinator's salary will make the position a full-time one, an aspect which is crucial for the efficient running of the project, including uninterrupted research and reporting.

A suitable member of staff is available in the person of Mr T.W. Fookes, Senior Lecturer in Geography. In addition to his academic position in geography, Mr Fookes is a qualified urban planner with a Diploma in Town Planning (Auckland) and a Certificate of Higher Studies in Ekistics (Athens). His background includes appropriate experience in interdisciplinary planning teams while employed by the Auckland City Council and Doxiadis Associates International Ltd, the latter in Europe and North America.

Co-ordinator's assistant

The tasks specified above require a further staff member to provide daily technical support. It is envisaged that the assistant will have specific tasks delegated to him, such as assembling data and updating central information files, general survey preparation, and report drafting. Consequently the position needs to be filled by a person with some research experience and familiarity with data organisation, including EDP. It is believed that an appointment to this position should be at the Junior Lecturer level with commensurate salary if a person of sufficient calibre is to be attracted.

Secretarial assistant

Heavy demands on university secretarial services make the inclusion of a secretary-typist in the project secretariat an essential staffing feature if the organisation is to operate smoothly. This position is included as a part time appointment.

Reporting Procedures

The Co-ordinator will be responsible for compiling regular reports on progress of the project, at 6-monthly intervals for the first 18 months, and then annually. These reports will be first submitted to the Steering Committee for approval and then forwarded to the Ministry of Works and Development. The reports will cover such matters as: areas in which regular monitoring has been carried out; an outline of studies completed and under way in the reporting period with some assessment of their quality and suggestions for further development; adequacy of resources available, such as finance, manpower etc., and any other matters relevant to the continued smooth running of the project.

5. PROGRAMME

To realise its full potential this monitoring project should be a relatively long-term operation, therefore it has been designed to span not only the construction stage for the power station but also a suitable post-construction readjustment period; say 8-10 years in total. However, it is considered unrealistic to request a funding commitment of this duration and magnitude and, consequently, the life of the project has been programmed as a series of 24 month phases, including a progress review

and a decision on further funding.

Phase 1 is to begin with the 1976 financial year. Initially however, a project establishment stage is proposed beginning September 1975. This is to enable the central secretariat and controlling committees to be assembled, and background methodological studies undertaken, ready for the start of phase 1 in April 1976.

The tentative programme through to March 31, 1978 is:-

(1975) September:
(1) establish central secretariat and supervisory committees
(2) initiate methodological studies, existing data collation, and core survey preparation

November:
(1) methodology report presented
(2) core survey purpose and objectives presented to Steering Committee for ratification

(1976) December to February:
(1) Planning of special studies including co-ordination with graduate and staff research
(2) complete preparations for core survey

March: begin field staff training for core survey

(PHASE I)

April:
(1) core survey completed
(2) analysis started

July: analysis completed

August: first report submitted to Steering Committee (for publication)

September: preparation for annual updating of base data first assembled Sept-Oct 1975

October: updating operation started

November: updating operation completed

December:
(1) report on updating results completed
(2) discussions on feedback from first report on core survey
(3) evaluation report on project progress completed

(1977) January-March:
(1) assembly of graduate research theses, collating of relevant material, and assessment for publication
(2) planning of special studies including co-ordination with graduate and staff research

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(PHASE II) April-July: carry out programme of special studies

August: second annual project report submitted to Steering Committee (for publication)

September-December: (1) repeat as for 1976

(2) evaluation report on project progress completed

(1978) January-March: preparation of first repeat core survey

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(PHASE III) April: Core survey completed - repeat programme as for Phase I.

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6. BUDGET

Funding estimates are as follows:

(1) Establishment period, September 1975 to March 31, 1976 (12 month estimates in brackets)

Salaries		
a. Co-ordinator*	$5,837	(10,000)
b. Co-ordinator's assistant (Junior Lecturer level)	3,792	(6,500)
c. Secretarial assistant (part-time duties)	1,458	(2,500)
	11,087	(19,000)
Running expenses		
a. Co-ordinator's expenses (mainly travel)	292	(500)
b. Office expenses (stationery,postage etc)	292	(500)
	584	(1,000)
Research expenses		
To finance the core survey and other special research projects	1,750	(6,500)
Total	13,421	($26,500)

(2) Phase 1, April 1, 1976 to March 31, 1977:

Total expenditure as per allocations above: $26,500

(3) Phase 2, April 1, 1977 to March 31, 1978:

Estimation difficulties suggest that this figure be held over until expenditure patterns in Phase I make the exercise more feasible. The expectation is that the breakdown will be on a similar basis to Phase I, although totals may vary.

* Annual increments and other adjustments payable by the University of Waika

APPENDIX A:

HUNTLY AND THE WAIKATO REGION: BACKGROUND PAPER

This paper has been prepared to provide some background material on certain aspects of Huntly and the Waikato region which may contribute to understanding the complexity of social and economic impacts of the construction of the Huntly Power Station.

Discussion is organised under the following headings:

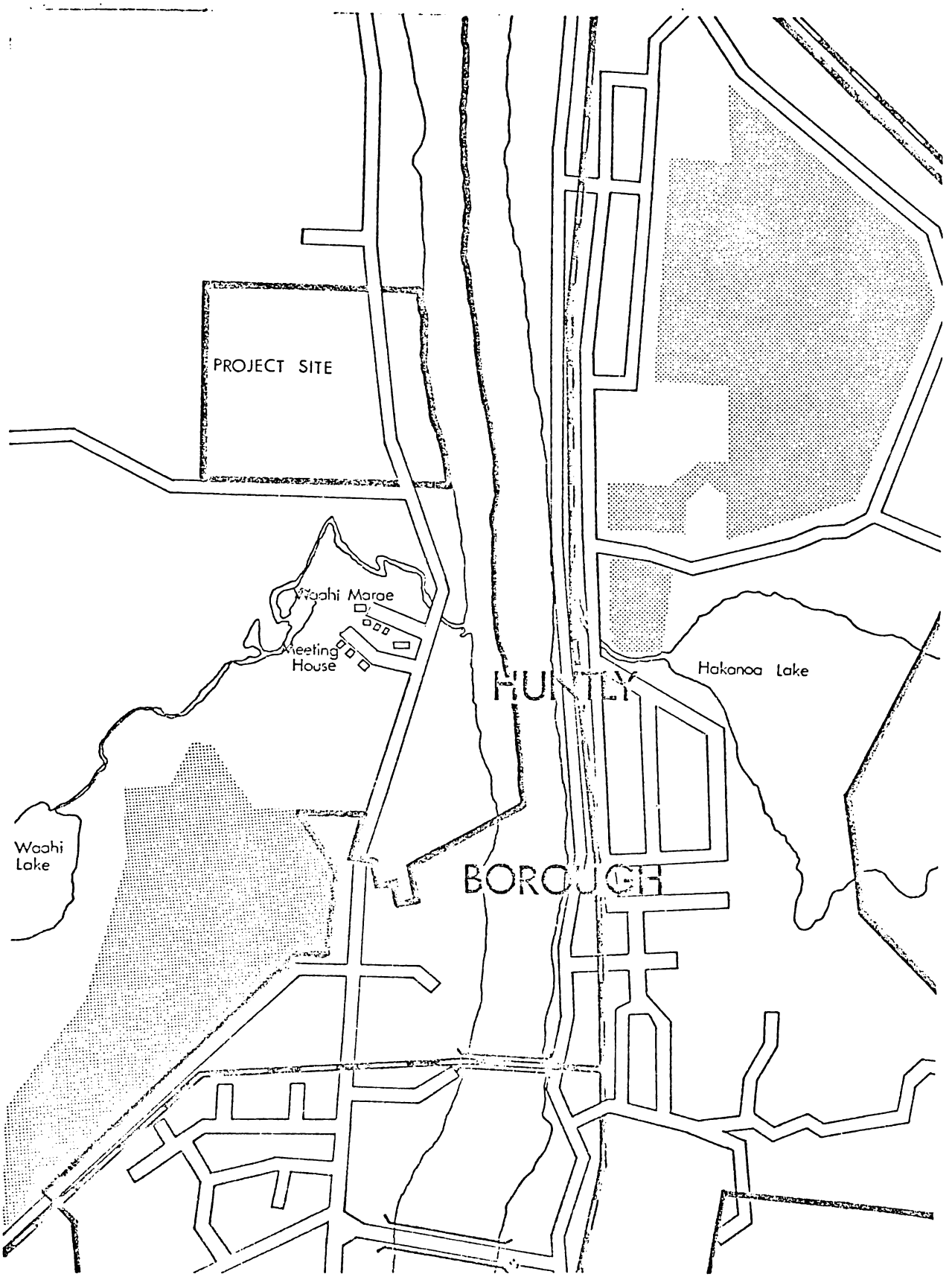
1. Huntly Borough
2. The Construction Community
3. The Maori Community
4. The Coal Industry
5. Settlement Systems of the Waikato Region

1. Huntly Borough

In general, Huntly can be described as a well balanced, stable, long established small town, the sort of description that could be applied to several other Waikato towns of comparable size which provide the usual service functions for their immediately surrounding rural farming areas. On the other hand, Huntly is quite distinctive among Waikato towns for coal has been mined commercially in the area since the 1870s although most of the important mines were opened after 1918. This coal mining heritage is an important element in Huntly society, which will be discussed further under the Coal Industry. Over the last 20 years Huntly, like other small Waikato towns, has shown a steady rate of growth but some declines have occurred over the 1966-71 intercensal period. In Huntly, this was due to the closing of several coal mines in the district, Te Aroha and Morrinsville also declined over the same period but the reasons are less clear. Cambridge and Ngaruawahia, because of increasing dormitory functions for Hamilton showed increased growth. Perhaps Huntly would have declined further if it did not provide labour (to the extent of 250 people in 1972) travelling daily to jobs in Hamilton. Growth also occurred at Matamata, with some influx from the Kaimai Tunnel project, and Paeroa, which seems to be evolving as a regional manufacturing and service centre. Some selected population figures are shown below but, with the exception of coal mining, there is little indication of any substantial variation in Huntly from the pattern of development of comparable small Waikato towns outside the immediate "pull" of Hamilton.

	1951	1966	1971	Percent change 1966-71
Huntly	3815	5401	5310	-1.7
Cambridge	3020	5926	6435	7.9
Matamata	2127	3810	4057	6.5
Morrinsville	2824	4497	4452	-1.0
Ngaruawahia	2124	3769	3995	6.0
Paeroa	2590	3129	3431	9.7
Te Aroha	2667	3212	3200	-0.4
Te Awamutu	3878	6719	6929	3.1
Thames	4651	5599	5780	3.2

The site of Huntly itself poses some peculiar problems. Huntly West is separated from the main part of the town to the east by the Waikato River. The only road link is the Tainui Bridge which is now carrying all the traffic to the power station site. Further divisive factors are the Main Trunk Line and railway yards and State Highway No.1 which runs through the central business district of Huntly. Even without the extra traffic generated by the construction project, congestion is severe on this narrow road flanked by shops and offices where through traffic must compete with parked vehicles and miscellaneous pedestrian and commercial vehicle activities. The question of a Huntly by-pass and the best route for it is the subject of a study by JASMaD Planners who in their first report have found that the highway question cannot be separated from other social and economic aspects of the power station construction.



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Of the nature of the inhabitants of Huntly Borough some information was obtained from a Community Development Survey conducted in September 1970 by the local Jaycee Chapter and sociologists of the University of Waikato. In spite of the limitations of the survey and the small number in the sample (48 males and 52 females), the following remarks extracted from the conclusion to the report are probably indicative of what Huntly was before the power project:

> What did the survey reveal about Huntly? It has a good central location and is adequately supplied with various services and facilities; although street lighting and roading - particularly a by-pass for the main highway - could be improved. In general one can say that it is a pleasant town wherein the needs of most are taken care of.
>
> Huntly could be considered a one class town with most people being lower middle class when classified in terms of education, income and occupation. Few have pursued their education beyond two years' secondary, most having left school by the age of 14 or 15 years. Incomes are not high and most fall in the range $40-$70 per week. Finally, the main occupation categories in the town are those of skilled and unskilled or manual work. In comparison with the whole of New Zealand, the population is old with an average age five years older than the national average. Present in it are large numbers of retired people and widows, and a relative lack of young people.
>
> The town has, in many ways, a unique character. Its age, occupation, and class structure combined with the presence of a large proportion of British immigrants give it a character all its own. Now, after a long association with coal mining, the town is in the process of an industrial decline...there is a felt need for more industry and more employment opportunities, while there is no apparent desire by the people to leave the town. We could therefore hypothesize that an air of insecurity hangs over the town as to its economic future. In which case the establishment of more industry in the town could be beneficial, not only from the point of view of retaining existing population and developing the town, but in order to give members of the community greater peace of mind.
>
> The survey further shows that the family is definitely the central and most important social institution in the town; although other primary and secondary social groups are also well developed. The data show that the typical Huntly family conforms to the stereotype of the family in New Zealand, it consists of a husband and wife in their mid-thirties, two or three children of primary school age, and perhaps an uncle, aunt or grandmother. The mother generally does not work and it is unusual for the children to go outside Huntly for their schooling.
>
> Television has probably had considerable impact on family life, watching T.V. being the main weeknight activity. It

> has led to the family spending more of its time together at home, rather than the children going to the Y.M.C.A., mother to her local '500' club, and the father to his 'local' or Working Men's Club.
>
> But despite television's impact, attending meetings, engaging in club activities and the like are still important leisure activities. Ties with kin and friends are also still strong, with 'visiting friends and relatives' being the second most important week-night activity.
>
> Huntly cannot be called an apathetic community if figures on voting are any guide, most people vote in both local and national elections. They also appear to have a good knowledge of local affairs and politics. It is a community based upon the family where people and social interaction are important.
>
> (Jones and Arnold, The Huntly Report, 1972, 38-40)

The economy of Huntly in the late 1960s was stagnating. Building activity declined 31 percent between 1961 and 1969 compared with a national increase of 47 percent. Retail turnover increased by only half the national figure of 81 percent. Between 1966 and 1968 employment, wages and production declined (Armishaw, 1972).

	Huntly	North Island
Employment	-6.3 percent	0.0 percent
Wages	-4.1 " "	+6.6 " "
Production	-8.5 " "	+3.6 " "

This was a period of national recession, but the effects in Huntly were more severe.

The table of employment structure in Huntly in 1970 records the occupations held within the borough. Employment in mining does not show up for most of the 400 miners living in Huntly in 1970 worked in mines outside the borough. The high representation of the transport subgroup is also related in the coal industry. In 1970 there were 15 cartage firms with approximately 40 trucks operating out of Huntly alone; 16 trucks were concerned with moving coal. Of 630,000 tonnes of freight handled by Huntly Station, 610,000 tonnes were coal. When the families of coal and related employment workers are considered, it was estimated that between 40 and 45 percent of the people of Huntly borough depended on the coal industry.

Administrative and professional services are under-represented, reflecting perhaps the importance of Hamilton in supplying legal and medical services for example. The Huntly hospital is restricted to maternity cases and any illness or injury requiring specialist attention is handled in Hamilton. Employment in manufacturing was dominated by two clothing firms (79 workers), and Huntly Brick Company which employed 85 of the 90 workers in the category of building materials and furnishings. Engineering and metalworking was a more diverse category, the largest firm employed only 25 of the 205 workers. Building and construction was not surprisingly under-represented.

EMPLOYMENT STRUCTURE: HUNTLY BOROUGH 1970

Group	Number	Huntly % of Total	New Zealand % of Total
1. Primary (Forestry, Logging, Mining, Quarrying)	5	0.40	1.65
2. Manufacturing			
i. Food, Drink, Tobacco	18	1.45	2.46
ii. Textiles, Clothing, Leather	79	6.37	5.91
iii. Building Materials, Furnishing	90	7.26	4.50
iv. Engineering, Metal Working	205	16.53	11.48
v. Miscellaneous	6	0.48	5.39
Sub total	398	32.09	29.64
3. Power, Water, Sanitary	14	1.13	2.01
4. Building/Construction	91	7.34	9.29
5. Service Industries			
i. Transport/Communications	195	15.73	10.56
ii. Commerce/Finance	266	21.46	20.46
iii. Administrative/ Professional	125	10.08	16.81
iv. Domestic/Personal	146	11.77	5.04
Sub total	732	59.04	52.87
6. Others not adequately described	0	0	4.54
Total of all industries	1240	100.00	100.00

Source: Dept. of Labour, quoted by Armishaw, 1972

For many years Huntly has functioned as a small service centre with an important element dependent on the coal industry. The power station is already changing this picture, for there are now over 500 men employed on the site.

2. The Construction Community

The estimated influx of some 5000 people, related in some way to the construction of the power station at Huntly, amounts to the grafting of a new town onto an old one of similar size. Hitherto, New Zealand's "new towns" have been industrial boom towns which have developed around a large single enterprise. Two related types can be distinguished: Hydrotown and Timbertown. Hydrotowns include temporary construction towns associated with hydro-electric power projects such as Roxburgh Hydro, Otemata and Twizel. Mangakino began in this category but has survived

and evolved into a small country town of 1,753 people in 1971. Turangi, which accommodated over 7,000 people at peak, is planned as a permanent town of about 3,000. The development of timber towns was based on the exotic forests of the Volcanic Plateau and include Murupara, based on logging, and Tokoroa and Kawerau, both based on large pulp and paper mills. All these towns were developed over a short time as self contained communities of several thousand people, established in more remote areas where there was little or no existing urban centre. There was no immediately adjacent settlement when Meremere power station was built. Thermal power stations have been built at Marsden Point and New Plymouth, but both centres are very much larger than Huntly - Whangerei 30,746 and New Plymouth 34,314 (1971 Census).

Experience with construction communities indicates that their populations are characterised by youth and masculinity. Of the married workers, the majority have young families. There is also a large body of single men. And there are relatively few workers over the age of 40 years. As a group, both married and single, they are geographically mobile and ethnically varied. There is now something of a tradition of construction workers with special skills developed on other projects who are prepared to migrate at regular intervals to where the jobs are. Already workers from Turangi and Twizel have been hired at Huntly. The construction workers are a mobile, transient population and their integration into an old, stable (some say stagnating) community like Huntly is going to pose peculiar problems. Much more information needs to be collected on the nature of the work force in the construction community, and how best to maintain a pool of skilled labour for use on other construction projects.

One of the biggest problems facing a new town is the development of a community identity. There is a high potential for social disruption in a rapidly growing town with a transient, multicultural, immigrant populati In this situation the slow wisdom of traditional community life is not possible, for a construction town is largely a synthetic community. Its inhabitants have had to adjust very rapidly, perhaps too rapidly for some. There may be stimulating variety in such a heterogeneous environment, and a pattern of status and prestige which is more fluid than in most traditional communities. A premium may thus be placed on openmindedness, initiative and talent. But there are also many hazards. The social casualty rate measured in terms of loneliness and apathy, whakamaa (a compound of shyness, shame and lack of confidence) and frustration, is probably higher than in older communities. To what extent these characteristics of the construction community can be offset by the existence alongside of the old, stable Huntly community is not known. To what extent will the relatively short period of residence in the town of many construction families, and therefore limited stake in town activities, result in inactivity, political and social? To what extent will Huntly suffer social and welfare problems that have been identified in the new towns because of the youth of the population, the many young children, a large group of single men, distinctive ethnic and immigrant groups? In any case, for some years now Huntly is going to be dominated, physically, economically and psychologically, by the presence of a single large enterprise, the construction of the power station.

3. The Maori Community

From time to time, Maori concern about the impacts of the power station have been voiced in the press. It is claimed that Maori families have been relocated and kinship groups broken up; Maori land is in demand and further loss of land is feared; there is unrest in the Maori community fear of further social upheaval, loss of morale and undermining of traditional patterns of leadership. These charges are indicators of Maori attitudes, which may not be unique to Huntly, but deserve objective investigation to prevent further friction developing.

Waahi Marae and its associated houses, and the related settlements of Te Kauri and Rakaumanga, are immediately adjacent to the power station site but outside the boundary of Huntly Borough. It is an area that is flood prone and has already been prevented from developing further, particularly in the provision of new housing, until Waikato Valley Authority flood control schemes are completed. These schemes have put pressure on the community as the stop banks required involve some relocation, and physical and psychological separation of the marae from the Waikato River which is regarded as both a key economic resource for traditional food as well as "the physical embodiment of tribal mana and spiritual prestige."

The appearance of Waahi Marae - a meeting house, an old hall, some tumble-down houses and a bit of grass - belies its importance to the Maori community and the Waikato tribe in particular. And the emotional reaction to suggestions of any further land requirements in the area must be understood in terms of the history of the Waikato tribes. After the wars of 1863-64, large areas of land were confiscated from the Waikato and their allied tribes. But Waikato people suffered most heavily, losing all their best lands in the areas of what are now Ngaruawahia, Pirongia, Te Awamutu, Cambridge and Hamilton. Waahi became the central focus of the Maori King Movement after 1864 and is still the home marae of the Maori Queen. Turangawaewae at Ngaruawahia, which was the centre of the King Movement before 1864, was only re-established as a ceremonial centre in the 1920's under the guidance of Princess Te Puea Herangi. Although a monetary payment was begun some years ago to the Tainui Trust Board as a form of compensation for the confiscated lands, resentment of what is seen as forcible alienation from traditional tribal territory is still very much alive. What may seem an illogical, irrational reaction to the Pakeha, seems a very reasonable reaction to the Maori, whose traditional attachment and spiritual ties to his tribal land are much stronger. And the Pakeha regularly fails to comprehend the role of a marae. Although the number of Maoris residing near Waahi is barely 300, the number of people whose kin and tribal ties bring them back from the places where they have migrated for better job opportunities (mainly Auckland and Wellington) to participate in family and tribal rituals - wedding, tangi etc. or simply to renew spiritual and tribal associations in a rural setting away from urban pressures - has been estimated at approximately 2,000 people.

A solution to the Waahi situation is not simply (in Pakeha terms) a matter of relocating 300 people, or a proportion thereof, even if they are all given brand new State houses. The issues are very much more complex and may impose impossible strains on race relations in the area. There seems to be a comparable situation too in the relationship between Waahi and the Huntly Power Station and Waiuku Pa and the proposed site of Thermal No. 1 on the Manukau Harbour.

A further issue within the Maori Community is the relations between Maori workers on the project who have no tribal affiliations with Waikato tribes or the King Movement, and the local people of the Waahi area.

4. The Coal Industry

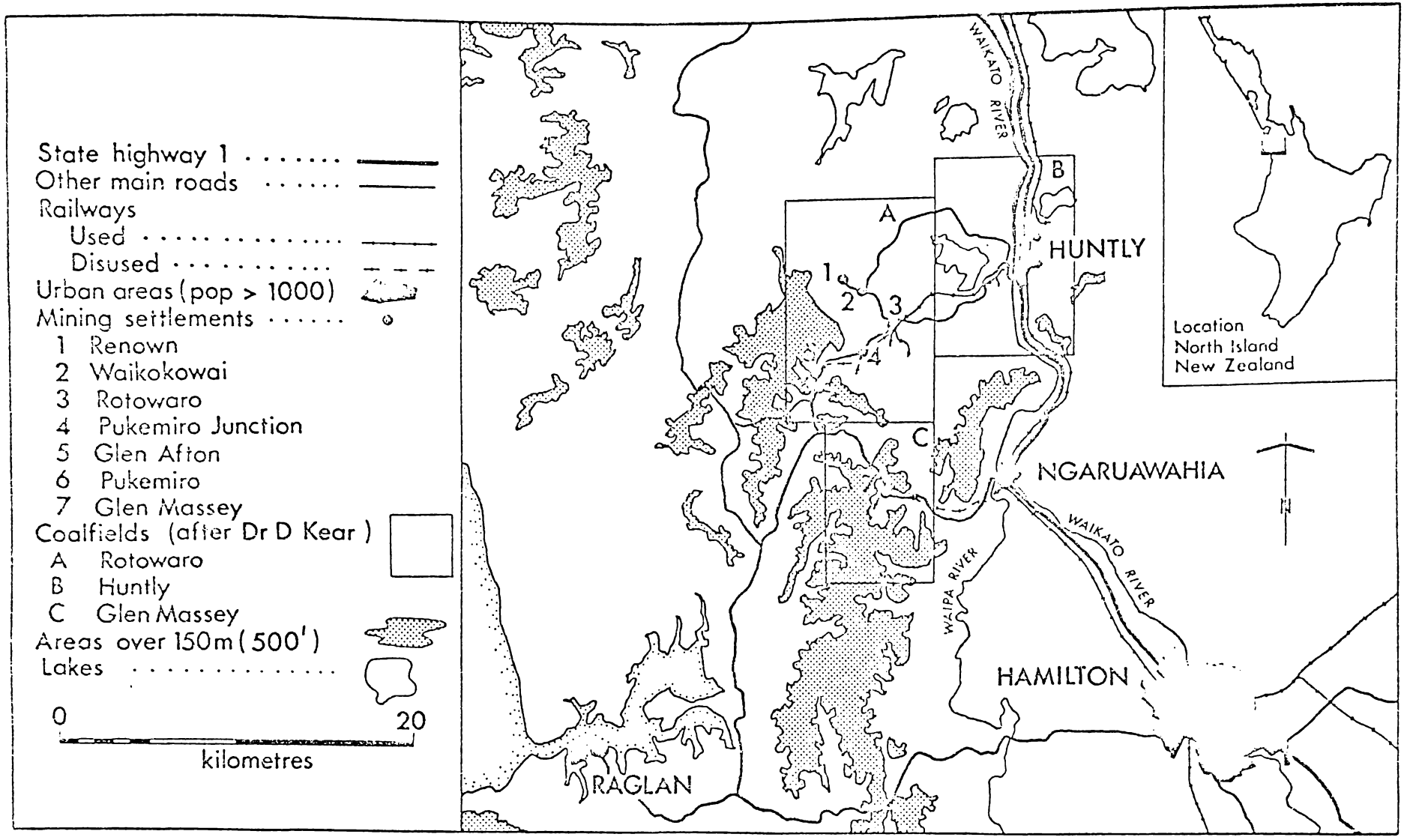
The Huntly area has a long tradition of coal mining, both underground and opencast, and the Huntly coal field still produces one-third of New Zealand's coal, in particular 45 percent of all subbituminous coal. The main coal measures, between Huntly and Rotowaro, also contain carbonaceous siltstones, known locally as fireclays, the basis for the Huntly brick industry. Two related trends in the coal industry in recent years have had important socio-economic effects on Huntly and the smaller mining settlements to the west: the decreasing demand for coal through substitution of electricity or natural gas in homes and factories and diesel engines on the railways; and the increasing mechanisation of underground mines and more emphasis on open-cast mining using bigger machinery producing lower labour requirements in the industry. The effect of this has been the closin of several underground mines in recent years so that employment in mining has decreased but total and per capita productivity has increased. The following figures refer to the Waikato-Taranaki District of which the Huntly mines comprise a substantial proportion. In 1952 there were 1,642 men in the mining labour force, but only 602 in 1973, representing 37 percent of the 1953 figure. Over the same period production increased from 1,107,000 tons to 1,554,000 tons..

On the Huntly-Rotowaro coalfields the labour force involved in underground mining decreased from 1,297 in 1950 to 625 in 1970. Three long established, privately-owned, high production mines have closed - Pukemiro (1967), Glen Afton (1969) and McDonald (1971) -and the State-owned Renown Mine in 1972. The McDonald employed 135 men and Renown 144 in 1970. The decline in population in Huntly Borough over the 1966-71 intercensal period can be attributed directly to the decline in employment in the coal industry. The following figures show population change in the four main mining settlements west of Huntly:

	1956	1966	1971
Glen Afton	464	325	260
Glen Massey	372	225	194
Pukemiro	262	158	176
Rotowaro	642	485	481

Pukemiro Collieries and Pukemiro Junction, with 110 and 201 inhabitants respectively in 1956, were not listed as settlements in the 1971 Census and have mostly disappeared into the scrub and fern. In the four settlements listed above, many of the old houses have been purchased cheaply by people from outside - retired couples, occasionally Aucklanders wanting holiday homes in the country, some families prepared to commute longer distances in return for cheaper houses and low rates. These communities have survived, but their character has changed. However, the housing stock is under utilised, often because vacant houses are in poor condition. But it has been suggested that alternative housing for project workers could be found in these settlements. Some sections were recently offered for sale in Glen Afton with this in mind.

SETTLEMENTS AND COAL FIELDS OF THE HUNTLY AREA



Source: Robinson, 1973

Some of the reduction in the labour force in coal mining has been achieved by a policy of not replacing miners who left or retired, and providing assistance for mining families who wanted to move. But miners have traditionally suffered from a geographic inertia, a reluctance to move from the district or change to other occupations. Those who have changed occupation have often preferred to live on in the same area and commute. Some of the Huntly miners have been absorbed in the mining labour force elsewhere, but many have had to seek alternative employment such as in the Horotiu freezing works south of Ngaruawahia. The mining labour force also tends to be older. In 1974, of the total mining force 46 per-cent were in the 40-60 age range and this would seem to apply as well to the Huntly area.

Prospects for the coal industry have changed in the last two years. Higher prices for petroleum and a need to reduce electricity consumption have increased the demand for coal, particularly for domestic use. There was a change in government policy in 1973 designed to revitalise the industry and this has meant the abandonment of the earlier policy of reducing the labour force. In the Huntly area, the New Zealand Steel Company plant at Glenbrook has become a major consumer since 1969, and the Meremere power station remains a regular, though variable consumer. The Huntly power station will also become a major consumer. The Mines Department proposals to develop mines to the west of the Waikato River for the power station and to the east of the river for commercial markets means an input of 200 additional miners into the coal mining community. Most of them will live in Huntly, although some may commute from Rotowaro when the mines there are worked out in five or six years.

The report on the Coal Industry of New Zealand (AJHR D9 1974) comments on future mining in the Waikato region:

> The future for this region is very encouraging with the construction of the Huntly power station and the anticipated expansion of New Zealand Steel Ltd.
>
> The demand for coal from North Island resources should increase by 772,000 tons per annum by 1978, principally from increased demands for steel making and electricity generation, and by a further 490,000 to 1,370,000 tons by 1985 to supply increased demands from the same market.
>
> Most of the existing Huntly mines will approach the end of their reserves within a few years. For example, the remaining 2,300,000 tons recoverable underground reserve at Rotowaro is likely to be worked out within 5 years. There is therefore, a need to develop further underground, and opencast resources. This is a need which the State coal mines recognises with its proposals to develop three fully mechanised underground mines to produce 600,000 tons per annum of coal by 1978, and 1,400,000 tons of coal per annum by 1985, and also to develop further opencast mines with an average annual output capacity of 450,000 tons by 1980.
>
> Together with the coal which will be available from other sources (such as the Kopuku opencast), it is considered that

the development plans for increased production from mines will enable likely market demands to be satisfied and Government has agreed that they should be proceeded with.

The proposals allow for some spare mining capacity which is important in case -

(a) Maui gas for the second unit at Huntly is late; or
(b) the mechanised underground mining plan is over optimistic.

5. Settlement Systems of the Waikato Region

The region is dominated by the rapidly growing urban centre of Hamilton City, with 74,784 people in the 1971 Census, and a growth rate of 18.7 percent over the 1966-71 intercensal period, one of the highest in the country. Around Hamilton is a network of smaller towns ranging from Otorohanga with just under 2,000 people to Te Awamutu with nearly 7,000. Many of these settlements are aligned along the Main Trunk Line. And scattered across the landscape in between are many smaller centres providing basic goods and services for their immediate areas.

Patterns of population growth are summarised in the following table:

Geographic County	Total Pop. 1971	% Growth 1966-71	Rural Pop. 1971	% Growth 1966-71
Hauraki Plains	5,309	-6.5	5,309	-6.5
Piako	19,163	-3.2	11,511	-4.8
Raglan	9,366	-8.4	7,827	-10.3
Waikato	27,231	1.8	14,894	-1.0
Waipa	100,073	13.4	13,510	-1.9
Matamata	38,392	10.8	13,364	-4.8
Otorohanga	9,980	-0.7	7,783	-1.3
Waitomo	11,261	-11.1	5,837	-19.6

When the population of the towns is deducted from county totals a general decline in rural population is evident. This trend is particularly strong in the hill country counties of Raglan and Waitomo. The areas where population is increasing are obviously the urban areas, but some towns - Huntly, Morrinsville and Te Aroha - have shown decreases over the 1966-71 intercensal period and Te Kuiti and Otorohanga show only minimal increases. The timber town Tokoroa has grown rapidly at a rate of 35 percent 1966-71 to over 15,000 and is not a typical Waikato town. Growth in Putaruru is also related to forest development. Te Awamutu, Cambridge,

Central Place	Population 1971	Types of Functions	Number of Functions
Te Awamutu	6929	66	326
Cambridge	6435	66	263
Huntly	5310	61	179
Putaruru	4585	62	233
Morrinsville	4452	64	264
Matamata	4059	66	254
Ngaruawahia	3995	57	144
Te Aroha	3200	64	287
Kihikiki	1217	31	46
Raglan	1058	36	56
Tirau	694	32	44
Taupiri	670	17	31
Matangi	598	8	10
Horotiu	586	11	14
Gordonton	498	7	9
Rotowaro	481	6	6
Pirongia	348	9	13
Ohaupo	338	15	24
Whatawhata	282	6	6
Glen Afton	260	5	5
Glen Massey	194	5	6
Pukemiro	176	4	5

Sources: Population figures 1971 Census; data on functions collected by geography students, University of Waikato, 1970-71

Ngaruawahia, Paeroa and Matamata have maintained steady growth as service centres for their farming hinterlands, although Matamata's population has been augmented by workers engaged on the Kaimai Tunnel project. Cambridge and Ngaruawahia are increasingly assuming the role of dormitory towns for Hamilton and Huntly also fultills this role. In 1971 Cambridge provided approximately 500 commuters for Hamilton, and Ngaruawahia and Huntly, 200 and 250 respectively. The growth of Hamilton accounts for growth in the adjacent Waikato and Waipa Counties; the population of the Hamilton Urban Area was 80,812 in 1971. With further consolidation of farm sizes, and increased mechanisation on farms, rural populations may continue to decrease.

The pattern of settlement in the Waikato is a network of inter-dependent central places linked by transport routes, (see the accompanying maps of the region). The mesh of this network is much closer on the lowlands where farms are smaller and population densities higher than in the surrounding hill country. There is also a hierarchy of these central places, related to the size of population and number of functions each serves. The largest central place is Hamilton, with a greater variety of goods and services and employment opportunities, and a hinterland, or sphere of influence, ranging from Te Kauwhata in the north, to include Te Aroha and Matamata in the east, south to Tokoroa and Taumarunui, and west to the coast. Next in the hierarchy is the group of towns with a population ranging from 3,000 to 8,000, providing a more limited range of functions and serving smaller spheres of influence. And then there is a large number of smaller communities, some with special functions, some with several hundred people, some little more than a cluster of buildings at a crossroad. The table of selected central places and the number of types of functions as well as total number of functional units illustrates this.

All these settlements are interdependent, providing complementary services and demands. A change in one, such as the closing of a dairy factory because of tanker collection of milk and centralisation of factory operations, will affect other settlements. The departure of the factory workers and their families may so reduce the local market that some shops can no longer remain in business. When the shops close, the remaining inhabitants are forced to travel further to obtain the same goods and services. Likewise, any change in real or perceived accessibility and attractiveness of neighbouring central places will induce changes in regional patterns of interaction. Patterns of circulation will be affected by the opening of the Kaimai Tunnel, for example, which will provide direct access to port facilities at Tauranga and Mount Manganui and perhaps divert some traffic from Auckland. Hamilton will continue to be the focus of the Waikato region and generate most interaction. But Hamilton, in turn, is contributing to a larger network beyond the region focused on Auckland. Huntly is located almost halfway along a corridor between Hamilton and Auckland, two major growth points in the North Island where rapid growth can be expected to continue.

The sudden doubling of Huntly's population as a result of construction of the power station can be expected to have longer term effects in changing patterns of interaction within the system of settlement in existence in the greater Waikato region. Long term monitoring of the ripple effects of the Huntly power station through all the social and economic systems of Huntly and the Waikato region will provide a picture of the role of a large construction project in local and regional development.

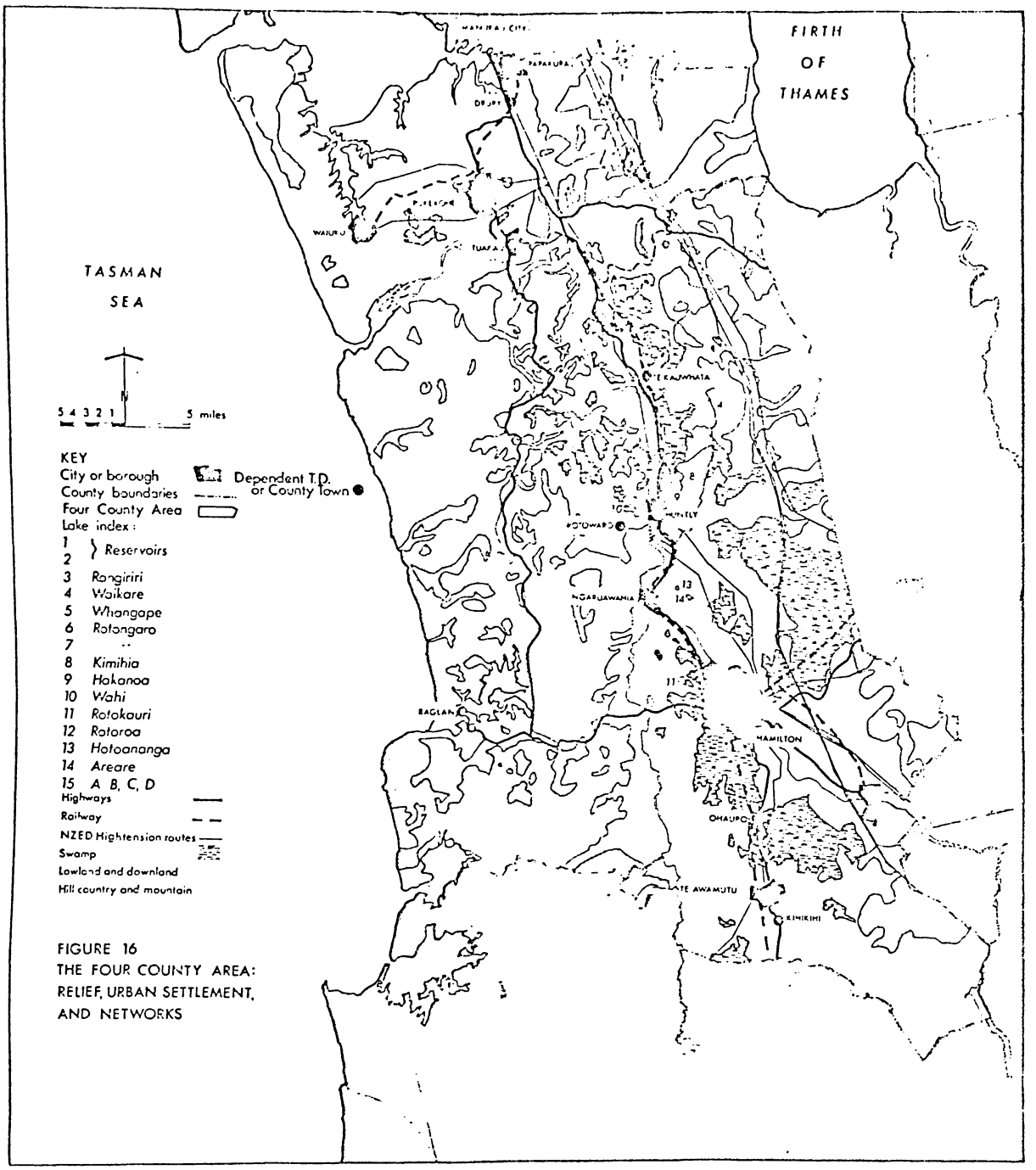
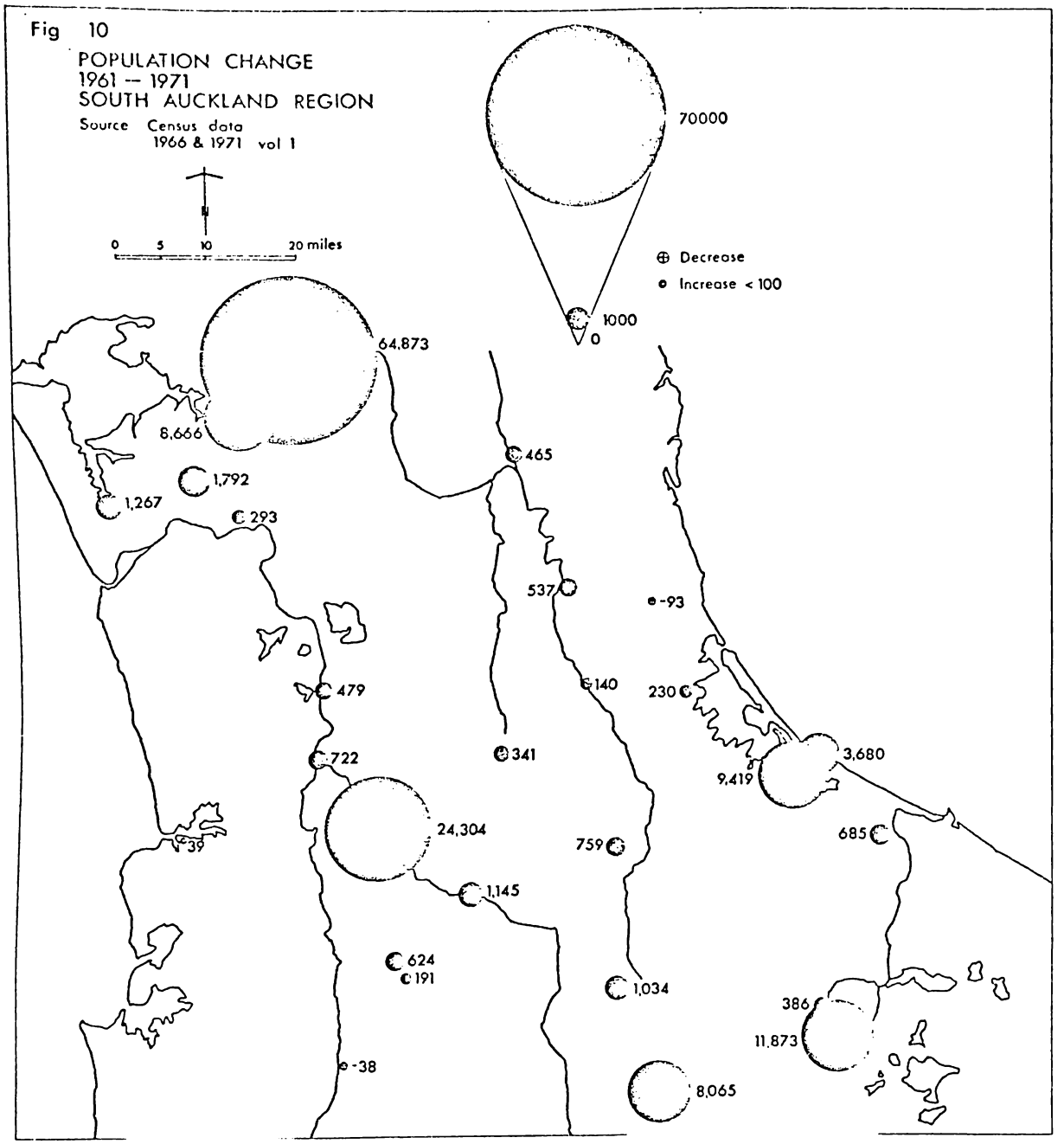
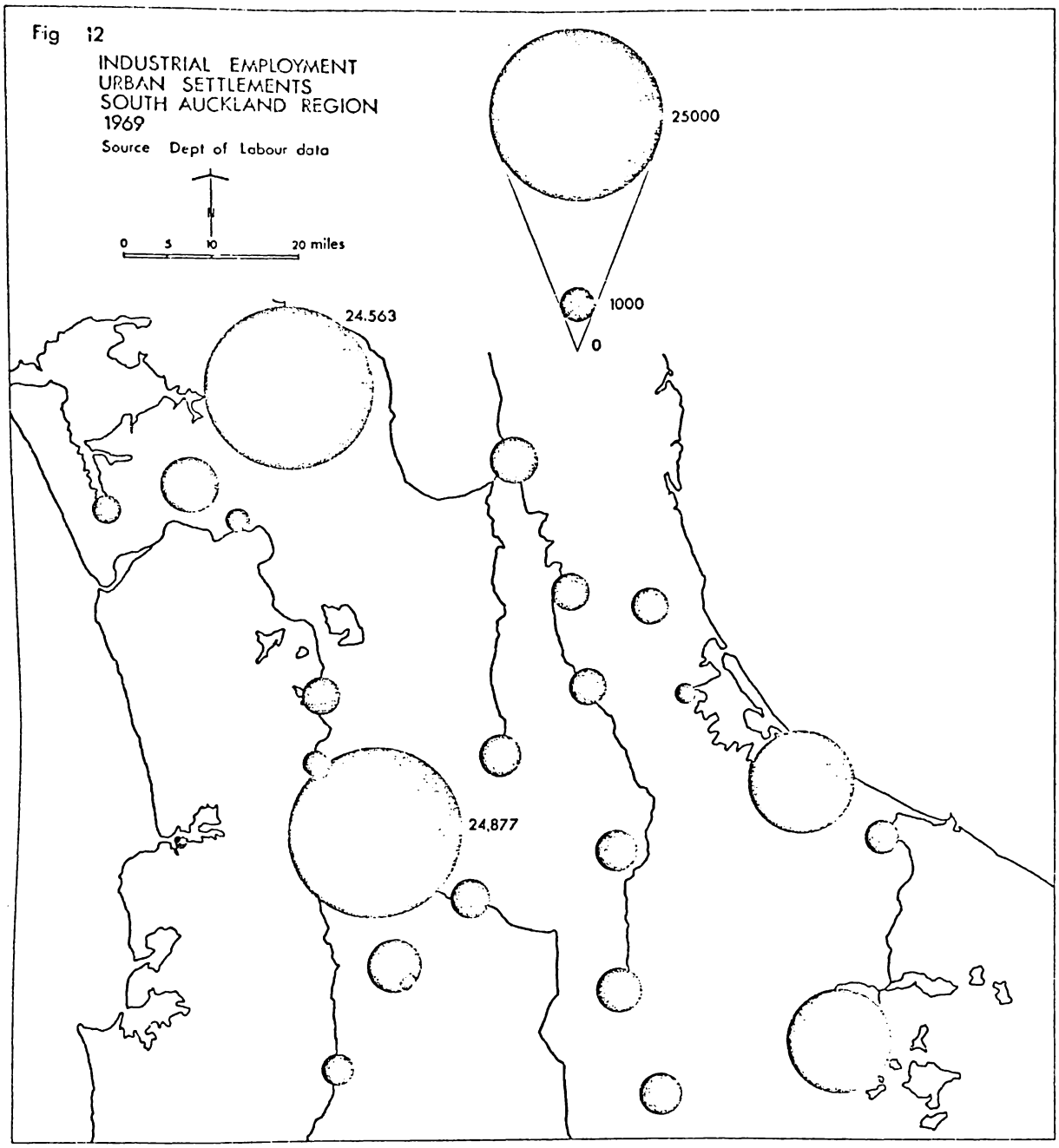


FIGURE 16
THE FOUR COUNTY AREA:
RELIEF, URBAN SETTLEMENT,
AND NETWORKS

Source: Fookes, 1973



Source: Fookes, 1973



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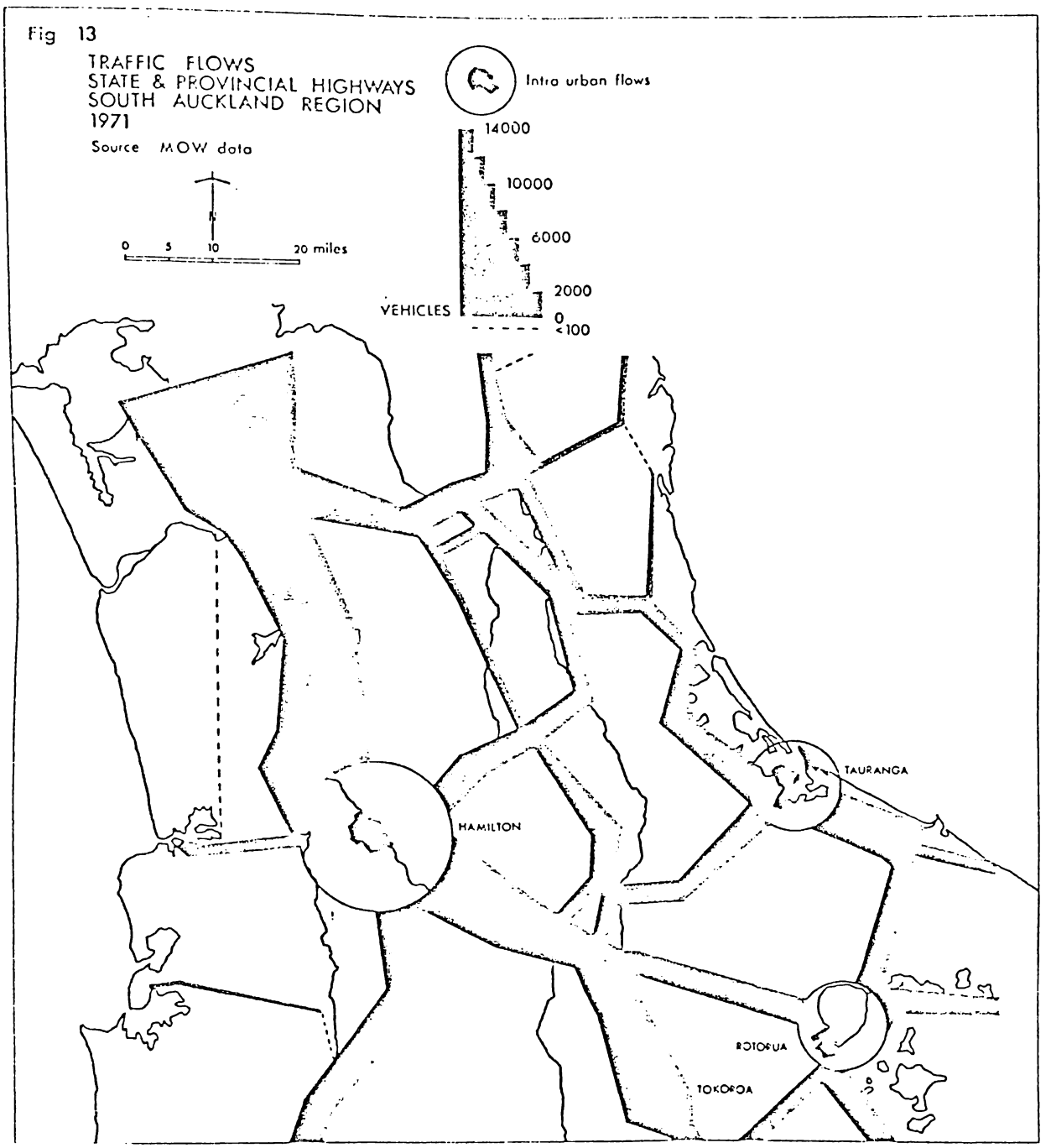

Source: Fookes, 1973

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APPENDIX B

SELECTED BIOGRAPHICAL DETAILS
ON STAFF INVOLVED IN THE PROJECT
TO DATE

J.E. Ritchie MA DipEd PhD(NZ) FBPsS FNZPsS FAAA
Dean of Social Sciences and Professor of Psychology

Professor James Ritchie has research experience of community development in North America and New Zealand. This includes co-ordination of studies in the Murupara area (the Rakau Studies) which researched the effect of technological development on a N.Z community. He has served as a consultant to various institutes of the East-West Centre (Hawaii), to the Government of Micronesia and of Papua-New Guinea and to the South Pacific Commission on aspects of modernisation.

D.G. Bettison MA PhD(Rhodes) FAAA Professor of Sociology

Professor David Bettison has research experience of urban development and community processes in South and Central Africa, Papua-New Guinea and Western Canada. He is the author of several publications on these regions. His most recent book is The Politics of Canadian Urban Development, University of Alberta Press, Edmonton, 1975. He was Professor of Anthropology at Simon Fraser University, Vancouver, Professor of Anthropology and Sociology at the University of Lethbridge, Alberta. He was formerly at the Australian National University's Institute of Advanced Studies.

N.J.Ericksen MA(Cant.)PhD(Tor.) Senior Lecturer in Geography

Dr. Neil Ericksen has research interests in the field of behavioural geography with particular experience in the United States and Canada with work on human perception of natural hazards and adjustment types and choice processes in selecting loss-reducing strategies. His current research is on evaluating the cognitions of various public, decision-maker, and expert groups on the risks, benefits and alternatives to adopting the nuclear option for electric power in N.Z., and their implications for a national nuclear energy policy.

T.W.Fookes MA(Cant.) CertEkistics(A.C.E.,Greece) DipTP (Auck)
Senior Lecturer in Geography

Mr. Tom Fookes has research experience of urban and regional planning. His research interests include studies of settlement systems, urban recreation, holiday homes and coastal planning, impact of development control methods, and planning for the elderly. His DipTP thesis examined future urban growth in the Auckland-Hamilton Corridor.

M.D. Hills MA(Well.) PhD (A.N.U.) Lecturer in Psychology

Dr. Michael Hills has research experience in the field of cross cultural psychology. His particular interest is in the area of attitude measurement, especially studies of ethnocentrism, and the generation gap. His doctoral research was on stress between parents and adolescents in immigrant and host society families in the context of Australia.

J.K.Kenward MA(S.Fraser) Lecturer in Sociology

Mr. John Kenward has research experience of urban development and community processes in Western Canada and New Zealand. He is an author of The Politics of Canadian Urban Development, University of Alberta Press, Edmonton, 1975, and has published other papers on socio-political aspects of urbanisation. Mr. Kenward is currently completing a DPhil (Waikato) on the processes of urban development as they occur in the City of Hamilton, New Zealand.

R.Te K. Mahuta MA(Auck.) Director, Centre for Maori Studies and Research, University of Waikato.

Mr. Robert Mahuta has had a longstanding interest in the impact of the power station on the Maori people. As well as the personal input possible because he was born on the Waahi marae, he is a member of several important related bodies, including the Tainui Maori Trust Board. Mr. Mahuta is particularly interested in any effects the power station may have on the social and economic development of the Waikato tribes in general and Waahi in particular.

P.D.K.Ramsay MA DipEd(Well.) Senior Lecturer in Education

Mr. Peter Ramsay has research experience in the sociology of education, with specific areas including the relationship between social patterns and school location, and the special problems of pupil mobility and immigrants in schools as reflected in school performance and behaviour. His research forms part of his recent book The Family and the School in N.Z. Society, Melbourne Pitmans, 1975.

W.T. Roy MA(Lucknow) Professor of Politics

Professor Roy's interests lie in the areas of political socialisation of immigrant groups including cleavages that may arise in situations such as promise to obtain in Huntly during the period of construction of the Power Station. One of Professor Roy's current research interests is the political socialisation of Indian immigrants in New Zealand, while publications by Professor Roy report his work on N.Z. immigration policy and Ugandan Asian immigration to New Zealand.

E.M.Stokes MA(NZ) PhD(Syr.) Senior Lecturer in Geography

Dr. Evelyn Stokes has research interests which include the evolution of settlement patterns. Particular interest is in patterns of colonisation and settlement, and Maori land issues in the Waikato-Bay of Plenty. She also has some experience in editorial work and is currently Editor of the New Zealand Journal of Geography.

D.A.Swain BSc(London) Lecturer in Sociology

Mr. David Swain has research interests in the field of family sociology, particularly the transition to parenthood and parent education. He supervised the Sociology Department's community studies of Tokoroa and Huntly and was employed for two years by Unilever (UK), in the area of market research and computer systems. Mr. Swain adds a wealth of experience on electronic data processing, especially software systems for data and file handling.

D.R.Thomas MA(Well.) PhD (Q'ld) Lecturer in Psychology

Dr. David Thomas has research interests in the field of environmental psychology, social change and social issues. Specific research subjects include the effect of building design, social stress and noise pollution on behaviour patterns, social change and relationships between Maoris and Pakehas, teacher behaviour and school characteristics influences on the educational attainment of Maori children, and the effect of participation in community organisations and reduction in anti-social behaviour

J.T.Ward BSc(Econ)(Lond.) BLitt (Oxon) PhD(Lond) Professor of Economics

Professor John Ward has research experience in the area of project evaluation and cost-benefit analysis. He is also interested in the wider regional economic implications of major construction projects, and has published on the impact of industrial and urban development on agricultural land.

APPENDIX C INITIAL LIST OF VARIABLES AND A MODEL FOR TECHNICAL COMMITTEE EVALUATION

(a) List of variables

LABOUR SUPPLY AND EMPLOYMENT

Number of advertised vacancies per month by principal industrial category

Percentage of economically active population unemployed

Percentage of economically active population in total population by sex

Distribution of economically active population by principal industrial and occupational categories

Ratio of power project employees to total economically active population by principal industrial and occupational categories

Percentage of economically active population whose last job was in a primary industry

Number of people gainfully employed per household (project and non-project)

ECONOMIC

Average net household income

Wage index

Cost of living index

Ratio of wage level to cost of living

Overtime ratio (number of hours worked in excess of 40 as a percentage of total hours worked)

Growth of savings deposits

Percentage change in retailing turnover (six monthly)

Percentage of man-hours lost in work stoppages

Absentee rates by principal industrial categories

Percentage change in land prices (by section categories)

HOUSING

Percentage increase in housing stock (by type)

Percentage public housing (by categories: project, Housing Corp., others)

Average number of persons per room (by type)

Average number of habitable rooms per dwelling (by type)

Average rent and mortgage payments per month (by type)

Percentage net income spent on providing accommodation (by occupation category

SOCIAL WELFARE

Percentage households with solo parent

Percentage households receiving social welfare benefits (excluding child benefit)

Crime rates for various age and crime categories

DEMOGRAPHIC AND POPULATION

Average size of households

Percentage increases: households and individuals

Sex ratio

Marital ratio

Ethnic ratios

Dependency ratio

Age ratios and index of ageing

Population origin and mobility

HEALTH

Inhabitants per physician

Inhabitants per hospital bed

Inhabitants per dentist

Paramedical ratios

EDUCATION

Pupil/teacher ratio (by school type)

Number on Pre-school waiting lists

Ratio children at Pre-school to those of Pre-school age

Secondary school enrolment as a percentage of age group 15-19

Percent of age group 15 and over with:

a. at least two years of secondary school education
b. three to four years " " " "
c. five or more years " " " "
d. at least one year of higher education (including trade training)

COMMUNICATIONS

Daily newspaper circulation per 1,000 population

Telephones per 1,000 population

Television receivers per 1,000 population

Private motor vehicles per 1,000 population

RECREATION

Hectares of parks, playgrounds and sports fields per 1,000 population

Hours spent on active sports by youth 15-25 years per capita per week

Hours spent watching TV and/or movie films by youth 15-25 years per capita per week

Books read per 1,000 population

COMMUNITY ACTIVITY

Number of voluntary organisations (by type) per 1,000 population

Percentage of women in public representative bodies

Percentage of young people (under 30 years of age) in public representative bodies

Percentage of population belonging to at least one voluntary organisation

Percentage of power project employees belonging to at least one voluntary organisation

Percentage of power project employees dependents' belonging to at least one voluntary organisation

MATERIALS AND RESOURCES

Percentage increase (numbers and quantity) of building and construction materials use (by type)

Production of local sources of building and construction materials (by type)

Number and quantity of unfilled orders for building and construction materials (by type)

Change in the number and quantity of orders for building and construction materials placed outside the region (by type)

PROVISION OF SERVICES

Percentage change in floorspace (by land use categories)

Percentage change in the number and value of commercial building permits

Waiting list numbers for various services (eg. telephones) per 1,000 population

Number of available sites unserviced (by type eg. water, sewerage etc)

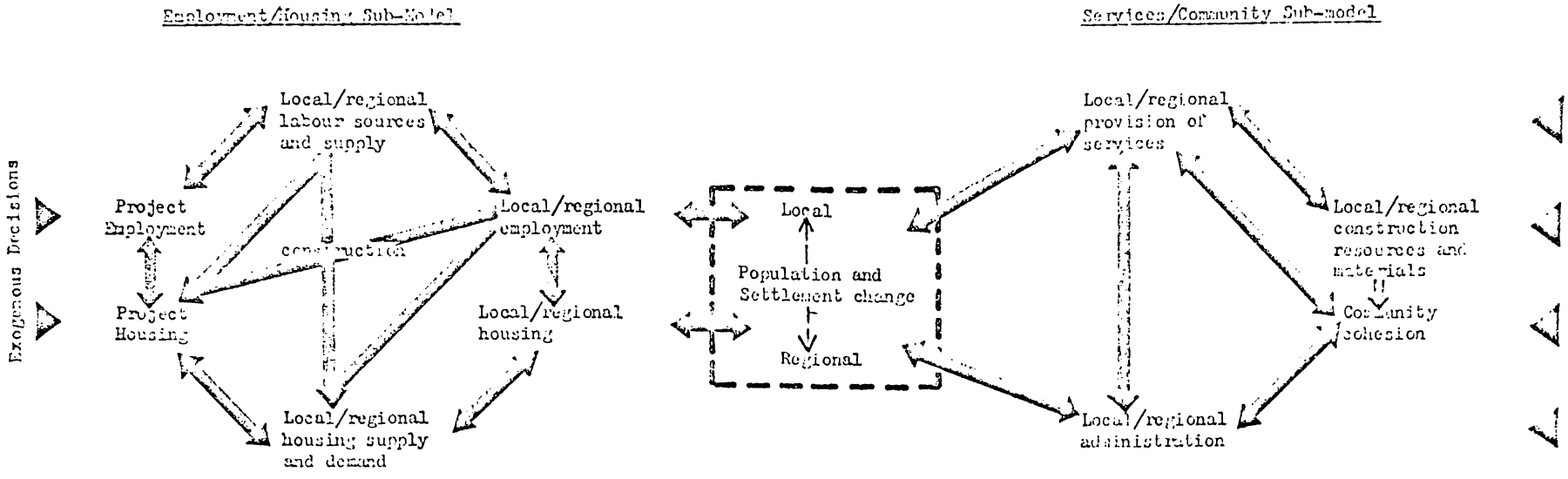
Ratio of unsold serviced to unserviced sites

Ratio between finance budgeted by local authorities for services and finance required to meet the demand

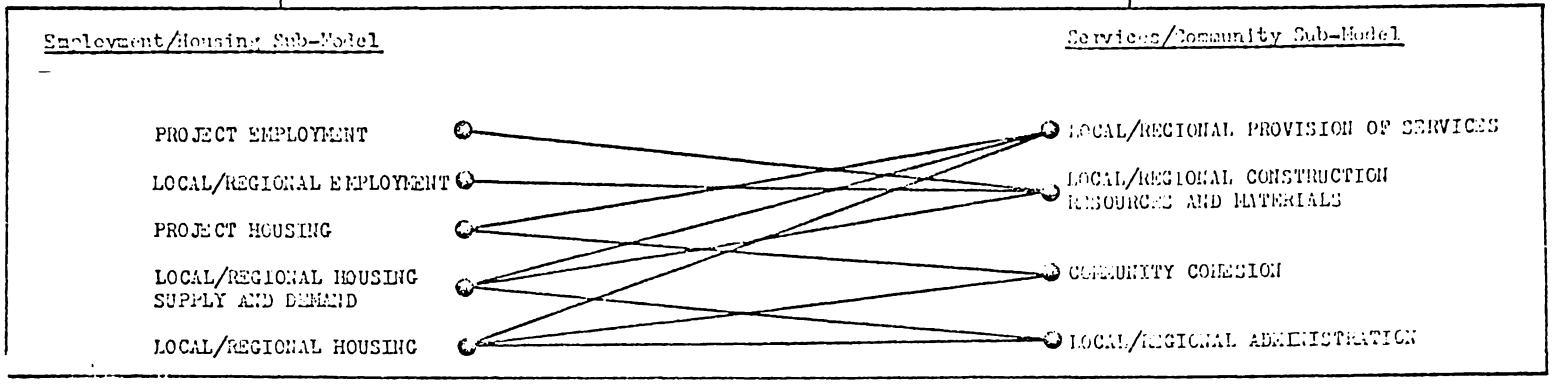
POPULATION AND SETTLEMENT CHANGE (U.F.C)

Population mobility rate
Change in building permits issued (all categories)
Number of new subdivisions approved (#) (by land use type)
Percentage of new subdivisions sold
Percentage of new subdivisions developed
Percentage of total properties vacant (undeveloped)
Percentage of total floorspace vacant (by land use type)

APPENDIX 3 (1) A MONITORING MODEL FOR INITIAL DISCUSSIONS BY THE TECHNICAL COMMITTEE



APPENDIX 3 (2) SUB-MODEL INTERRELATIONSHIPS NOT SHOWN IN MAIN MODEL



APPENDIX 2

RESEARCH CONTRACT

Ministry of Works and Development

Head Office, Vogel Bldg., Aitken Street
Box 12 041, Wellington North
Telephone 729 929 Telex NZ 3844

Inquiries to

Date 13 December 1978 Ref TP 148/137/11

The Vice-Chancellor
University of Waikato
Private Bag
HAMILTON

Dear Sir

HUNTLY SOCIAL AND ECONOMIC MONITORING PROJECT - CONTRACT 1 JUNE 1978-1 January 1979

Following discussion with the Huntly Monitoring Project Steering Committee and representatives of the university, I am pleased to offer a new contract in the terms set out below.

1 The study is to involve an assessment of the social and economic effects of the construction and operation of the Huntly Thermal Power Station as set out in the terms of reference contained in Schedule 1.

2 The contract is to commence and operate from 1 June 1978 and will continue in full force and effect until 31 January 1979.

3 The Ministry will pay to the university the sum of $29,860-00 for the period from the commencement of the contract to 31 January 1979. Any portion of the sum paid by the Ministry which has not been spent at 31 March 1979 in respect of expenditure approved and incurred on or before 31 January 1979 will be returned to the Ministry. In the event of an excess of expenditure above that agreed between the Ministry and the university, then that excess will be a charge on the university except for wages and salary increases associated with increases in the cost of living. The Ministry will also approve up to $1,000 for cost of living increases other than for salaries and wages. These provisions will not prejudice the right of the university to negotiate with the Ministry on unforeseen but legitimate expenses in excess of the amount paid to the university by the Ministry under this contract.

4 The receipt and disbursement of the contract funds by the university will be made only in accordance with the allocations and approvals made by the Steering Committee, and, at the same time, in accordance with this contract.

5 The sum to be paid to the university is to be allocated by the Ministry in two portions, one for research expenses and the other for salaries and running expenses, which will be clearly separated in all statements of accounts, and the amounts allocated to each may be varied only by the Steering Committee.

6 The salaries and running expenses portion of the sum may be used for the following expenses necessary for carrying out the Monitoring Project:

a the employment of non-teaching staff of the Monitoring Unit,

b postal and duplication charges and the purchase of equipment, stores, stationery and other materials and services except such standard furniture and office equipment as would normally be supplied to university staff, and

c travel expenses, fares, daily allowances and mileage allowances for the staff of the Monitoring Unit, at ruling university rates.

7 The research expenses portion of the sum may be used for expenses involved in core surveys and other research studies which are not covered by the salaries and running expenses portion and which are necessary for carrying out the Monitoring Project.

8 The sum to be paid for the contract period is to be allocated as follows:

a $29,585 will be the portion for salaries and running expenses, and

b $275 will be the portion for research expenses.

9 Payment of the sum by the Ministry will be made before 31 January 1979.

10 Items of capital equipment costing over $500 will remain the property of the Ministry and should be clearly identified as such. The contract funds may not be used for the purchase of any motor vehicle unless specifically approved by the Ministry; nor may the contract funds be debited with any part of the salary of any permanent member of the university staff other than those employed in the Monitoring Unit; nor may the contract funds be debited with salary or other payments for annual, special or study leave of any member of the Monitoring Unit staff in excess of 20 working days each year of completed employment in the Monitoring Unit.

11 The university will undertake to:

a carry out the project in accordance with the contract and under the direction of the Steering Committee,

b select and employ the staff of the Monitoring Unit under such conditions as this contract and its schedules provide and under such additional conditions as the Steering Committee directs, but otherwise as the university sees fit,

c provide accommodation for the Monitoring Unit together with cleaning services and normal maintenance, including heating and lighting and such standard furniture and office equipment normally supplied to university staff,

d provide data preparation and computer processing facilities (other than when the B6700 computer at the University of Auckland is used) for the work of the Monitoring Unit,

e make available for the Steering Committee such details of receipts and payments under the contract as the Steering Committee may from time to time require, and

f supply the Commissioner of Works with a detailed statement of account of receipts and expenditure on termination of this contract.

12 The following three schedules form part of this contract and each is to be read together with the other parts:

a Schedule 1: Terms of Reference

b Schedule 2: Steering Committee

c Schedule 3: Monitoring Unit

13 On termination of this contract, the university will take such steps as are necessary to ensure access by bona fide researchers to the data collected in the course of the monitoring project, and to ensure that the conditions under which that information has been given are respected, and to recover from recipients of the information such costs as it considers appropriate and reasonable. The Ministry will be consulted on these matters when the contract terminates.

If the terms set out are acceptable to you would you please acknowledge this by signing these documents and returning two copies to this office. Of the other three copies, two are for your records and one for the senior officer of the Monitoring Unit. On receipt of this acknowledgement arrangements will be made for payment of the sum due under the contract.

Yours faithfully

N C McLeod
Commissioner of Works

Per J J Chesterman

The terms of the research contract set out above and in the attached three schedules are accepted. Signed on behalf of University of Waikato

_____

Date: _____

Encl

SCHEDULE 1 : TERMS OF REFERENCE

To measure, assess and report periodically on the social and economic effects of construction and operation of the Huntly Thermal Power Station on Huntly Borough and its immediate environs and on the Waikato Region including the area encompassed by the extreme boundaries of Raglan, Waikato and Waipa Counties and Cambridge Borough, and, in particular, to examine the effects on:

a Housing

b Incomes, employment and manpower availability,

c Availability of material resources,

d Provision of services, including health, education and welfare services,

e Community cohesion,

f Administration and decision-making, and

g Any other matters that either the Steering Committee or the Commissioner of Works consider should be examined,

In order to:

a Identify potential problems early enough to take timely remedial action,

b Provide information relevant to the planning of future development projects, and

c Develop effective and efficient procedures and methods suitable for the future monitoring of major development projects,

And in particular, to prepare for the Commissioner of Works, the following reports:

a A summary list of the social, economic and administrative issues, problems or difficulties associated with the Huntly Power Project and potentially relevant to other development projects,

b A popular report for administrators, politicians and laymen and others not closely associated with the project on the findings of the project to date, and

c A report setting out the options available for future information gathering or monitoring for the Huntly Power Project.

SCHEDULE 2 : STEERING COMMITTEE

1 The three voting members of the Steering Committee will be:

a the Vice-Chancellor of the University of Waikato or in his absence, his nominee,

b a nominated representative of the territorial local authorities in the study area or in the absence of this representative, his nominee, and

c the Hamilton District Commissioner of Works or in his absence, his nominee.

2 In the event of the resignation or death of the local authority representative, the Chairman of the Steering Committee will notify the local authorities in the study area of the vacancy and request that it be filled. Until the vacancy is filled his nominee will remain as a voting member.

3 Three voting members will form a quorum.

4 All substantive decisions to proceed with any proposal will be made on a basis of unanimity of the three voting members present at the meeting when the decision is made.

5 The chairman of the Steering Committee will be the Vice-Chancellor of the University of Waikato or, in his absence, his nominee.

6 The senior officer of the Monitoring Unit will act as the executive officer of the Steering Committee and may participate in the discussion of the Steering Committee but will exercise no vote.

7 A regular meeting of the Steering Committee will take place not later than two months following the previous meeting and at least two weeks notice will be given of each regular meeting.

8 Any voting member may call an extraordinary meeting of the Steering Committee for any reason and such a meeting will be held within three days of the call if so requested by any voting member.

9 Participation of non-members of the Steering Committee in its discussions may take place as the Steering Committee sees fit and may be on an ad hoc or continuing basis. Such non-member participants will have no vote.

10 The responsibilites of the Steering Committee will be to:

a Exercise control over the Monitoring Project to meet the terms of reference set out in Schedule 1 of the contract with the university and within all other conditions set out in the contract with the university,

b Decide on the allocation of funds provided for the Monitoring Project and approve or decline expenditure,

c Consider and decide all research proposals which involve the use of financial or manpower resources of the Monitoring Project, with or without modifications and under such conditions as the Steering Committee sees fit,

d Consider the progress being made on each approved research proposal and decide whether it should be terminated, or, alternatively, whether the support of the Monitoring Project should be withdrawn,

e Consider and decide for each report resulting from a research proposal approved by the Steering Committee whether it should be published under the aegis of the Monitoring Project and under what conditions and in what manner,

f Decide for each report of the results of research wholly financed through the Monitoring Project or carried out by the Monitoring Unit whether it should be published or not and under what conditions and in what manner,

g Maintain an information release policy in accordance with Schedule 3 of the contract with the university, modify the adopted policy as it sees fit from time to time, and exercise general supervision over the administration of the policy by the Project Coordinator,

h Exercise control over the Monitoring Unit as constituted in Schedule 3 in the contract with the university, and

i Make recommendations to the Commissioner of Works on the future of this Monitoring Project.

SCHEDULE 3 : MONITORING UNIT

1 The staff establishment of the Monitoring Unit will be:

a the Project Coordinator who will be the senior officer of the Monitoring Unit and responsible for its effective and efficient operation,

b a technical assistant, who, when the Project Co rdinator is away on leave, will be the senior officer of the Monitoring Unit, and

c a part-time secretary-typist.

Variations from this establishment may be made only with the approval of the Steering Committee. No member of the staff of the Monitoring Unit will undertake regular lecturing or demonstration duties although short courses in a staff member's speciality may be approved by the Steering Committee.

2 The Monitoring Unit will be responsible for the administration of the Monitoring Project on a daily basis to meet the requirements of the terms of reference set out in Schedule 1 of the contract with the university in accordance with the policy and directions set down by the Steering Committee. Particular responsibilities are set out in the following paragraphs.

3 The Monitoring Unit will service the Steering Committee in preparing or processing all documents required for each meeting of this committee, attending meetings as required, taking minutes, distributing documents in accordance with the requirements of the committee, and preparing reports at its direction.

4 The Monitoring Unit will develop a strategy for the Monitoring Project and within this context devise a programme together with a description of the broad methodology and resources by which the programme is to be achieved. These will be referred for the consideration of the Steering Committee, as appropriate.

5 The Monitoring Unit will liaise with persons or agencies who have an interest in the Monitoring Project and promote through this liaison, wherever appropriate:

a Active and positive participation in the Monitoring Project,

b Integration of social and economic research within the study area,

c An understanding of the objectives and methods of the Monitoring Project,

d An appreciation of the relevance of the results obtained through the Monitoring Project to existing or potential problems and to future planning, and

e Cooperation to facilitate carrying out the Monitoring Project.

In particular, liaison will be maintained with:

a The staff, students and administration of the University of Waikato,

b Central government departments and other agencies of central government which indicate an interest in the Monitoring Project or from which cooperation will be sought in execution of the Monitoring Project,

c Agencies directly associated with the construction or operation of the Huntly Thermal Power Station,

d Local territorial and ad hoc authorities in the study area,

e Commercial and voluntary organisations in Huntly Borough or in its immediate vicinity, and

f The Huntly community.

6 Approval may be given by the Steering Committee for Monitoring Unit staff members to attend any conference or seminar as part of their official duties where this attendance is likely to directly benefit the Monitoring Project through new knowledge or to promote a better or wider understanding of the Monitoring Project's objectives or methods.

7 The Monitoring Unit will, in accordance with the research programme and projects approved by the Steering Committee, collect, maintain and document all information in an efficient and orderly manner. Having due regard to the quality of data sought, the least costly available means of data collection will be used. Sources of existing data will be used wherever possible.

8 A principle which must be followed in the publication of statistics collected through the Monitoring Project is to arrange wherever possible, statistical tables in such a manner as to prevent any particulars published in the tables from being identifiable by any person (other than by the person by whom the particulars were supplied) as particulars relating to any particular person or undertaking, unless the person or owner of the undertaking has consented to their publication or the information is available to the public under any Act or public document. This provision must apply whether the users of the data are staff of the Monitoring Unit or others to whom data is released. It will be the personal responsibility of the Project Coordinator to ensure that this provision is met in accordance with the conditions set out in this schedule and in accordance with the Steering Committee's information release policy.

9 Where information is requested on individual schedules for bona fide research this may be supplied by the Project Coordinator, wherever possible in a form convenient to the requesting researcher, whether it be magnetic tape, punched cards, disc copy or in printed tabular form, subject to the names and addresses or any other publicly known identifier being deleted from the released records. In releasing information in this form the Project Coordinator must be satisfied that:

a The information is to be used solely for research or statistical purposes,

b The security of the information is not and will not be impaired, and

c The published results meet the provisions of paragraph 10.

What is bona fide research will be at the discretion of the Project Coordinator guided by the information release policy of the Steering Committee, but the Project Coordinator may make such additional conditions as he sees fit in any individual case. The Project Coordinator may require a declaration signed by the recipient of the information to the effect that conditions imposed will be met, and that if not, the information will be surrendered to the Monitoring Unit. While every effort should be made to release data for bona fide research where the security conditions are able to be met, any past violation of the conditions of release will be sufficient to refuse release to any person or organisation who has not met these conditions. An additional condition of release will be that the Monitoring Project be acknowledged in any publication where the released data is used. Only the Project Coordinator will be able to approve the release of data and he will keep a register or file showing what data has been released, to whom and under what conditions and in accordance with the Steering Committee's release policy.

10 Information may be disclosed in the form of an index or list of names and addresses of individuals or undertakings but no additional information is to be attached to each individual or undertaking. Such lists are only to be released for bona fide research or statistical purposes.

11 The Project Coordinator is to ensure that the security and confidentiality of information held by the Monitoring Unit is maintained, including information held on computer records.

12 The Project Coordinator may accept information under such conditions as the supplier of that information may see fit and it will subsequently be the personal responsibility of the Project Coordinator to ensure that these conditions are met.

APPENDIX 3

LETTER TO COMMISSIONER OF WORKS

25 September 1974

The Commissioner of Works and Development,
Ministry of Works and Development,
Private Bag,
WELLINGTON

Dear Sir,

Monitoring the social and economic effects of development projects

I have suggested to some colleagues at the University of Waikato that there is a need to establish a project to monitor the social and economic effects of both the Maui Gasfield and Huntly Power Station development projects. I have written to Shell, BP & Todd Oil Services Ltd, in New Plymouth, to ascertain their interest in such a project as it affects the Maui programme. I also wish to raise the matter with the Ministry of Works and Development.

I understand that there has been a suggestion made along similar lines within the Ministry in relation to the Huntly Power Station and I believe that the Maui and Huntly projects could be linked and made the subject of one study. Certainly, the projects would have many aspects in common, especially in the organisational areas of manpower, as well as computer hardware and software. Individual members within the School of Social Science have expressed interest in the idea and the University's Environmental Studies Unit is also interested.

I am acting on my own initiative and at this stage there is no commitment by the University of Waikato, as no details have been discussed. However, what I have in mind is a project where sets of data on a range of social and economic parameters would be assembled and a series of computer files updated at regular intervals. For example, this could be a six monthly process scheduled to fit in with the existing Department of Labour and Employment surveys. Following each input phase, analyses of change in the parameters would be carried out and reports prepared. Special aspect studies may also be requested, while the accumulated data could also be made available to graduate students and staff for personal research, not to mention the research staff of Government departments.

It is clear to me that if such a project is to be of value it must be carefully established and the co-operation of a number of government departments obtained. I also believe that this is an appropriate project for a University and welcome your reaction to, and comments on, the proposal.

Yours faithfully,

T.W. Fookes
Lecturer in Geography

APPENDIX 4

MWD IN-HOUSE HUNTLY PROPOSAL

IMPACT EVALUATION OF HUNTLY POWER PROJECT

INTRODUCTION:

This paper provides a basis for discussing the proposal that studies be carried out to assess the social impacts of the Huntly power project on the surrounding area. The evaluation studies would have three principal purposes:

(a) to provide identification of the problems and information on their nature so that appropriate remedial action can be taken;

(b) to build up a fund of knowledge to assist in the future avoidance of administrative, planning and social problems associated with similar projects; and

(c) to build up an appropriate methodology for the evaluation of the impacts of future major projects.

Already, the Development and Programming Branch has initiated a study to assess the impacts of the Huntly power project on material and labour resources.(1)(2).

For a number of reasons, including changes in the availability of different types of energy resources, major power projects of the future are more likely to be placed closer to existing urban areas than in the past. As a result it will become increasingly important to evaluate the social consequences of planning for these projects and to eliminate associated problems before they arise, or, where problems are unforeseen or unpredictable, as they arise.

The scope of possible problems should be viewed in the broadest perspective. Consideration should not be limited to problems effecting the expeditious and economical completion of the power project. Both the transitory and long-term effects on the population living

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(1) The methodology for doing this has been fully resolved but it is envisaged that this will be sorted out during the coming months.

(2) For general background See Appendix II.

in the surrounding geographic area should be matter of concern in designing the means of project execution and in the provision of facilities associated with the project. But the social effects of planning for the project are particularly difficult to foresee or predict with confidence and, in considerable part, will only be capable of timely remedy if continuous and objective monitoring is carried out on the spot.

THE SCOPE OF THE STUDIES:-

Geographic area to be studied:

Ideally, the geographic area to be covered by the studies should coincide with that envisaged for the labour and material resources study - that area enclosed by the boundaries of the Waikato, Raglan and Waipa Counties including the urban centres of Huntly, Ngaruawahia, Hamilton, Cambridge and Te Awamutu. In the studies proposed here, however, it may not be feasible to cover an area of this size. Because of this it is recommended that the area of primary concern should be Huntly Borough and its immediate environs including, of course, the sites used in connection with the project for construction and residential purposes. This is the area in which the major impacts are likely to take place and the most striking effects should be seen. This approach is also more likely to permit the study of a greater range of possible problems in depth, but where it is feasible, the wider region should be examined in relation to any particular problem.

The time dimension:

An important ingredient of the proposal is the study of the ramifications of the project over a period of time - tentatively, the duration of the project. This will require the generation of time series data relevant to the potential problem areas to be investigated. An associated aspect of the investigations will be the determination of causes of problems. However, if the study is limited to one area it is difficult to tell whether any change over time is due to the project or whether change has taken place in spite of the project. This raises the question of whether a 'control town' is necessary, and this will require closer examination when research design is gone into in depth.

Problems, causes and policies to be studied:

The range of social problems which could possibly arise are numerous and it is unlikely that all could be examined.

The following list indicates areas in which problems could arise:-

Housing
Family cohesion and stability
Health
Education
Standards of living
Productivity and production
Occupational choice
Recreational opportunity
Transport and communications
Community idenficiation
Inter-group relations
Community administration and control
Availibility of consumer goods and services
Environmental pollution
Delinquency and crime
Welfare services
General satisfaction

A list of questions, relating to specific aspects of these potential problem areas, is attached as Appendix I.

Major sources of possible problems would appear to be:-

(a) changes in the size and composition of the population;

(b) changes in the aggregate income level within the geographic area and changes in the distribution and levels of individual incomes;

(c) community facility requirements;

(d) material requirements; and

(e) labour requirements.

It will be necessary to link such factors causally to each potential problem area examined to obtain an understanding of how problems arise.

Intervening between the problem sources and the problems themselves is the planning function (carried out by a number of Government departments and the local authorities). The objectives of this planning will determine:-

(a) the nature of the policies to be operated within the study area;

(b) the timing of implementation and realisation of policies; and

(c) the location of provisions associated with the realisation of policies.

These factors will also have to be linked into the casual chain if we are to understand how policies have realised or failed to realise their objectives.

A good deal of the research should be devoted to the evaluation of policies and assessment of the problems to which they relate and this will initially involve analysis of those policies and the developing of measurement methods to determine their effectiveness. Nevertheless, there will still be a need to cover areas of significant concern where specific policies have not been drawn up for action, e.g. on the adequate supply of general medical practitioners. This will be necessary to ensure, on the one hand, that special action is not necessary and, on the other, to assess possible unintended side-effects of policies, provisions and designs.

Which specific policies of potential problems should or can be investigated requires consideration in depth and extended consultation with the people and authorities likely to be involved in or affected by the project. Two criteria will affect the decisions on what information should be collected:

(a) the possible usefulness of any particular piece of information in indicating whether action has to be taken or what the nature of that action should be in problem solving; and

(b) the feasibility of collecting any particular piece of information given both technical and resource constraints.

Before research in the field is initiated it will be necessary to develop a research design and programme. But within this framework the overall study should have sufficient flexibility to permit additions and alterations to be made as the need arises. As the studies proceed we will gain a greater awareness of what needs measuring. And as problems of special importance or topicality arise concentrated research in these areas will be justified or necessary.

Historical perspective:

As a part of overall project evaluation it would be valuable to compile a critical historical analysis of the progress of the project from its initial conception to completion. Such a history could be compiled off the files and from discussions with involved personnel. This should provide an assessment of the adequacy of the timing of decisions and whether the appropriate problem areas were investigated at the right stage in such a manner as to be properly related to other aspects of the project. For example, did the siting of the station take into account the town planning implications for the Huntly Borough and were the environmental impact reporting procedures well integrated or out of phase with the rest of the decision-making process.

Right now would be an appropriate time to do such an analysis up to the stage of commencement of excavations. This might be best done by a planning officer of the division. Such an analysis, properly executed, would be useful for avoiding the problems revealed in relation to future projects.

DATA SOURCES:

There would be three principal data sources for the studies:

(a) administrative sources, i.e. information collected as a by-product of continuing operations;

(b) special purpose surveys mounted by the research team; and

(c) participant observation; i.e. informal but problem-oriented observations by the research team.

The second two sources, particularly when used in conjunction with each other, will probably be the most revealing and fruitful. However, the information obtained from source (a) will not only be useful in its own right but will also provide an important contact point with all the organisations involved in or affected by the power project. For special purpose social surveys it will probably be necessary to hire interviewers within the local district.

RESOURCES REQUIRED:

Critical for the mounting of the overall study will be the availability of suitable researchers who would be likely to stay on the work for a minimum of three years to provide the necessary continuity. A minimum of two researchers would be necessary to do the job in any way adequately and they must be stationed in Huntly Borough itself or as close as possible to it, after a period of familiarisation at head office. These two researchers should be additions to current establishment. Some clerical support would be required from time to time but full-time support is not seen as necessary at this stage. Taking into account salaries, computer time, accommodation, transport, and social survey costs it is estimated that the overall study would cost up to $35,000 a year or approximately $300,000 over the eight year project period. This $300,000 represents 0.1% of the total estimated cost of the Huntly power project.

ADMINISTRATION:

During the initial period of familiarisation and research design and programming, the researchers should be part of the Town and Country Planning Division Research Section. When, however, the researchers are in the field there would be a number of possible administrative arrangements, each with its own advantages and potential difficulties, which will have to be looked at in detail.

Researchers in the field, in addition to carrying out research in the areas investigated by this paper, might also be regarded as field agents for the labour and material resources studies of the Development and Programming Branch and as data collection co-ordinators for the various interested organisations.

TIMING:

Although it might be feasible to initiate the historical study in the near future (given available personnel) it is unlikely that field studies will be able to be commenced before either late this year or early next year. Several months of planning will be required to ensure that the basic research designs are soundly conceived and are on potential problem areas of significance. This is seen as probably giving better long-run benefits that a totally ad hoc approach which would be able to be put into the field sooner.

PROJECT DURATION:

The research project is at this stage conceived as running for the full length of the power project construction period - approximately eight years. However, the value of the research should be assessed on an annual basis and a decision made at that stage on whether to terminate or continue. At the end of the construction period there could well be a case for continuing the research for a year or two longer (perhaps on an intermittant basis) to review the aftermath of the power project.

RECOMMENDATIONS:

(1) That the concept of impact evaluation of the social effects of the Huntly power project, as outlined above, be adopted.

(2) That further development of the research up to the point of initiating full-time field work be permitted to proceed.

(W. Gardner)
Senior Research Officer

13.5.74

APPENDIX I

AS A DIRECT OR INDIRECT RESULT OF THE HUNTLY POWER PROJECT:-

Will the demand for private housing in the surrounding area increase or decrease?

Will there be significant changes in the prices of land and housing?

Will the location of project housing have a bearing on the friction or lack of it between the Huntly and project communities?

Will school leavers and young people be more or less likely to leave their families and Huntly?

Will there be changes in the age specific mortality and morbidity rates especially in new births and those aged 65+?

Will there be a significant relative increase in traffic accidents?

Will undue pressure be placed on doctors, dentists, dental clinics, hospital beds, etc?

Will the quality of local education be reduced through changes in the staff/pupil ratios and excess pressure on school facilities?

Will the range of local education opportunities increase?

Will there be an increase in the number of adult education opportunities?

Will the standards of living of the local population increase at a more rapid rate?

Will pressure be placed on goods and services so as to increase prices?

Will the range of goods and services available locally increase or decrease (because of demand or excessive demand)?

Will the range of retailing facilities expand to meet additional demand?

Will retailing profitability increase or decrease during the project period and what will be the effects on long-run profitability?

Will there be undue pressure on professional and tradesmen's services?

Will there be undue pressure on communication facilities?

Will accessibility to other towns increase (e.g. Hamilton) through the upgrading of roads, better bus servicing, etc?

Will there be an increase in traffic congestion?

Will the influx of new population increase or decrease the identification of Huntly people with the Huntly community?

Will the people of Huntly tend to be alienated from their surroundings?

Will there be disruption or takeover of local clubs or societies?

Will there be a greater range of social and recreational opportunities?

Will undue pressure be placed on recreational and social facilities? (Libraries, movie houses, churches, halls, swimming pools, etc.)

Will noise levels significantly increase?

Will air and water pollution levels significantly increase?

Will there be marked adverse effects on the perceived quality of the aesthetic environment?

Will the range of temporary and permanent occupational choises increase?

Will labour demands in occupational areas not required directly for the project increase significantly as a 'spin-off' of the project?

Will the age and sex specific labour participation rates of the present Huntly population change significantly?

Will the labour turnover in jobs not strictly part of the project increase?

Will there be changes in the local wage structure and wage levels?

Will there be changes in the overall pattern and level of crime and delinquency?

Will there be a higher level of crime and delinquency amongst the existing residents?

Will undue pressure be placed on social welfare services?

Will the control which the present Huntly population have over their town continue, or be increased, or will the de facto control be in the hands of the project controllers?

Will local rates increase disproportionately?

Will water and sewage facilities be adequate to meet demand?

Will the overall satisfaction of the local Huntly community change in an upward or downward direction?

Will the influx of population promote or reduce inter group frictions and prejudices? (project/resident differences, racial and cultural differences, wage level differences, housing differences, etc.)

Will the public relations of the Ministry have a significant effect on the attitudes of the Huntly population towards the project or particular aspects of the project?

Development & Programming Branch,
Head Office.

4 December 1973

The Commissioner of Works,

THE DEMAND FOR BUILDING RESOURCES IN THE WAIKATO REGION DURING THE CONSTRUCTION OF THE HUNTLY POWER PROJECT

Approval has been given for the construction of a 1000 MW thermal power station on the outskirts of Huntly Borough. The station, with its associated mining, transport and accommodation works, has a construction budget of the order of $260m spread over the period 1973 to 1982. Of this $260m approximately $150 will be spent in New Zealand with a planned peak expenditure of about $38m in the financial year ending March 1977.

A project of this magnitude will make a significant impact on the Waikato region, and the following notes represent the results of a preliminary investigation of this impact. It is likely too that the social effects of the construction and the long-term activity associated with the power station operation on the Huntly community will be significant, but so far no assessment has been made of this.

The attached diagram presents the planned expenditure for the project imposed on a projection of the "normal" construction activity in a region defined by the boundaries of Raglan, Waikato and Waipa counties during the years 1973 to 1981. This projected normal activity is based on the current Works Programme, Local Authority Capital Survey returns and similar information combined with regional population forecasts made by Town and Country Planning Division. Until a more detailed analysis of likely construction activity can be made, this diagram can only be considered as illustrative of the possible relative magnitudes of activity.

The project will impose demands on regional resources in three major areas:-

(i) Labour:

It is anticipated that the peak on-site labour force will be 1000, of which approximately 500 will be recruited locally. Towards the end of the construction period there will be a gradual build up of permanent N.Z.E.D. and Mines Department staff which will total about 500 when the station is fully operational. It is likely that only a few of the permanent staff will be recruited locally.

The Labour Department employment survey of April 1972 indicated a regional labour force of about 50,000 of which 4,500 were employed in the construction sector. While these figures require more detailed enumeration, they give an indication of the possible drain on regional labour resources represented by the projects on-site labour requirements.

There are, however, a number of factors which could influence this situation, and which will require further investigation. Among these are:-

(a) the regional labour force could well be considerably larger than the present figures indicate, particularly when rural labour is taken into account;

(b) the region from which local labour could be drawn may well be larger than anticipated here. Experience with N.Z. Steel at Glenbrook indicated that workers were prepared to commute far greater distances than were allowed for originally, and a similar situation could arise with Huntly where daily commuting from the South Auckland area is a possibility;

(c) actual labour demands may be less than anticipated, as happened at New Plymouth, if the actual construction period is longer than planned at present;

(d) the construction of the Rangipo and Auckland Thermal No.1 projects may well tie down experienced construction labour which would otherwise have moved to Huntly.

(ii) Locally Produced Construction Materials:

Heavy demands are likely to be placed on the local construction material industries. So far this area has not been investigated in any depth, but it appears that at least two strategic materials, concrete and steel, will be in great demand and diversion of too great a proportion of these from normal regional construction activity to the project could have serious repurcussions on the development of the region, during and after the project construction period.

(iii) Community Services:

Huntly Borough has a population of about 5,000 and it is clear that the rapid increase in both temporary and permanent residents associated with the power station construction and operation will place considerable demands on local power and water supply, sewerage, education and other community facilities. These demands will themselves generate additional construction activity which will need to be assessed and added to the total additional load on the regions resources.

From the work carried out so far, it is clear that a more detailed investigation of the likely impact of the project on the region is warranted. This investigation will require the active participation of N.Z.E.D., Ministry of Works (Power, Town and Country Planning and Housing Divisions at least), Mines Department, Labour Department, Statistics Department and possibly the Department of Trade and Industry.

Recommendations

(i) That an Officials Committee be established under the Chairmanship of the Director of Development and Programming to co-ordinate further detailed investigations of the resource demands of the Huntly power project.

(ii) That work on the investigations be given high priority with the groups concerned so that a detailed assessment of the situation can be made by the end of March 1974.

J. F. WIGHT
Director of Development and Programming

per: I M Carrie
(I. M. Carrie)

Encl.

APPENDIX 5

RESEARCH MEMORANDUM NO. 6

UNIVERSITY OF WAIKATO SCHOOL OF SOCIAL SCIENCES
HUNTLY SOCIAL AND ECONOMIC IMPACT MONITORING PROJECT

RESEARCH MEMORANDUM

Number 6: 28 April 1976

Subject: SOCIAL AND ECONOMIC EFFECTS ANTICIPATED BY GOVERNMENT SOURCES AND PUBLICLY REPORTED: 1972-73*

Introduction

The third in a series which documents some of the background material as it relates to anticipated social and economic effects from building the Huntly Power Station, this *Research Memorandum* reviews statements by Government Ministers and departmental officials as reported in the Press or published in reports available to the public prior to the beginning of construction. Any Press reports which contain misquoted statements, or other errors, and which were not subsequently publicly corrected, have now become part of the public record. In these cases, while regretting the further replication of that error, the responsibility must remain with the source and not the Huntly Monitoring Project. However, a request to amend the record will be expedited through a further *Research Memorandum*.

A Note on Sources

The only official report publicly released prior to the announced start of construction (28 September 1973) was a volume issued under the name of the New Zealand Electricity Department (NZED) and including (i) an environmental impact statement (EIS), (ii) a supplementary EIS, and (iii) the Report of the Officials Committee for the Environment (as submitted to the Minister for the Environment). The volume overall is not dated but newspaper reports on the public release of the EIS appeared on 6 June, 1973. The EIS itself is dated October 1972, the Supplementary EIS, March 1973, and the Officials Committee report, 7 May 1973. The publication was issued by the New Zealand Government Printer through Government Bookshops.

Newspaper sources quoted are *The New Zealand Herald (NZH)*, and *The Times* (Hamilton)(*T*). In most cases the papers were reporting public meetings and

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*Research for this memorandum was assisted by Mr G. Pollard, Graduate student in Geography, University of Waikato. Information is as reported until 28 September 1973.

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Postal Address: Huntly Monitoring Project, University of Waikato, Hamilton, New Zealand

therefore,the range of statements will necessarily be incomplete. However, from these reports public attitudes were shaped, as the majority did not attend the meetings.

The EIS and Report of the Officials Committee

A necessary Preface to this section is the qualification that the Huntly Environmental Impact Statement (EIS) was the first prepared for a power station New Zealand based on a format suggested by the Officials Committee for the Environment. It was a new skill to be learned. Since that time a Commission for the Environment has been established with the brief to audit environmental impact reports prepared for Government works. The passage of time has meant that experience has been gained by the authors of impact reports, and it could be argued that any deficiencies in the early EIS was in part a function of its timing. However, the overall impression presented by the environmental impact documents prepared between October 1972 and May 1973 is that attention was focussed primarily on physical environment impacts with a more limited assessment of social effects. A crude measure of this emphasis is that the following extracts were taken from a document consisting of 105 pages. The EIS was also prepared on the basis that, "the effects of the operation of the station over a 25 year period would be of greater importance than those which would occur during the construction of the station. These major impacts are:

1. Chimney emissions, primarily of particulate matter.
2. Coal and ash handling procedures.
3. Depletion of existing coal reserves.
4. Waste heat discharge to the River.
5. Visual impact of the buildings, conveyors and Transmission Lines" (NZED, 1972, 1).

This memorandum documents anticipated social and economic effects but in some cases a physical effect may have a social or economic implication. Where feasible these effects have also been included.

The extracts have been arranged under headings as follows:

Loss of agricultural land

"Since the majority of the area in the vicinity of the proposed site is presently in use as pasture, there will be some loss of available pasture as a result of the station itself, the construction and assembly areas required during construction, the coal storage area, the coal conveyors and the transmission lines. The total amount of land used would be approximately 40-60 hectares

(100 to 150 acres) although not all this land would be permanently lost as pasture" (NZED, 1973: 6).

Increase in road traffic

"The transportation of construction materials and station equipment to the site may require improvements to the existing roads in the area and temporarily increase local traffic during the construction "(NZED, 1973: 9).

Places of Cultural Significance

"Because of the proximity of the proposed site to the Wahi Marae and to Maori land occupiers generally in the area, a particular point was made in the early stages of planning, of letting the Maori community know of the proposal. The Department's District Manager held discussions personally with Dame Te Atairangikaahu, the Maori Queen, and the District Office of the Maori Affairs Department has been consulted and has given useful advice.

The only concern expressed was in regard to the Rakaumanga School just to the north of the site. It would seem that this school is regarded locally as a "Maori" school and the wish of the elders is to keep it so.

In fact, the school does not have any special designation as there are no longer any Maori schools, other than some private schools and the Education Board have, for some time, been planning to relocate the school further to the south nearer a new housing area. This will probably mean that it will then have a higher proportion of European pupils. The Board's plans to make this change are quite independent of the proposals to build the power station" (NZED, 1973: 7).

Historical and Archaeological Sites and Objects

"The New Zealand Historic Places Trust has been advised of the proposed location of the station and has agreed to investigate the site and inform the Electricity Department if an opportunity for excavations by them would be required. If it is necessary, such excavations or investigations could be carried out before construction was started" (NZED, 1973: 7).

Scenic Views and Vistas

"The station and the required coal storage area would be visible from a considerable distance due to the size of the station and chimney and the coal which would be stored on site. The station will be visible from the main road and to the residents of Huntly. Careful consideration of site layout and

architectural design of the station can aid in reducing the magnitude of this impact. No detailed architectural design or layouts have been made at this time" (NZED, 1973: 6-7).

Transmission lines

"A definite route for the transmission lines has not been selected. Studies of possible routes will be made during the station design period to determine the magnitude of the effect on the existing environment" (NZED, 1973: 9).

Chimney as an obstruction

"The Civil Aviation Division has been consulted about the proposed chimney height and anticipates no interference with air traffic in the area" (NZED, 1973: 9).

Noise level

"There are houses to the north of the site, the Wahi Marae to the south and residential areas directly across the river which could be affected by noise levels during construction and operation of the station. The western areas are not as densely populated but could be affected by the construction and operation of the coal conveyor system depending upon its routing. Noise during construction would be limited to daylight hours. Noise from the station operation will be minimised by enclosing the main station plant, e.g., boilers and turbo-alternators. The maximum allowable noise levels from station equipment may be specified as a part of their performance characteristics. Further information will be obtained on expected or maximum allowable noise levels from the station during the detailed design of the station and this information related to the existing residential areas in the vicinity to better estimate the magnitude of this effect" (NZED, 1973: 8).

Employment and income levels

"This factor should be beneficial to the region due to the employment opportunities during construction of the station, the requirements for operating staff at the station and the increased employment in coal mining operations in support of the station. The permanent station staff level would be approximately 300. The staff required during construction would be approximately 1000 with an estimated 50% who could be locally recruited. It is estimated that 200 additional people would be required for mine operations association with the station" (NZED, 1973: 8).

Population distribution and density

"Increases in local population would be expected as a result of the construction staff and permanent station staff as outlined above. The overall effect would depend upon whether a permanent station village is established. In the long term there would be approximately a 20% increase in population association with the station staff and their dependants.

The requirements for staff housing and for increases in community services associated with the increased population will be discussed with local bodies in order to ensure co-ordination with present plans for the development of the region.

An interim report* has been written by the Town and Country Planning Division of the Ministry of Works dealing with the expected effects of station construction and operation. This has been forwarded to the Power Division of Ministry of Works for their consideration during the planning of station construction" (NZED, 1973: 8-9).

Economy, national

"The increase in electric power capacity is necessary for the national economy to ensure that forecasted power demands can be met. The results of preliminary studies indicate that the use of locally available coal in lieu of imported oil would result in a minimum fuel cost and would reduce the offshore expenditures associated with providing the power required" (NZED, 1973: 9).

Economy, local (in addition to previous items)

"The effects on the human environment naturally include the above effects (see NZED, 1973: 1) but also include a generally positive effect of a stimulation to industry, particularly coal mining, as well as an increase in requirements for goods and services due to the construction staff and the permanent station staff" (NZED, 1973: 4).

It also appears that the location of the station at Huntly would have a favourable effect on the economy of the region. At present Huntly is suffering a decline due to reductions in local coal-mining activities" (NZED, 1973: 18).

Atmosphere, quality

"Due to the friable nature of the Huntly coal, it will be necessary to ensure that coal dust generated as a result of mining, storage and conveying the coal does not become airborne. The conveyors are to be completely enclosed and all handling points will also be enclosed and fitted with dust extraction facilities" (NZED, 1973: 11).

*Not publicly released; contents confidential.

Atmosphere, quality

"Ash handling facilities must be constructed so that the possibility of fine ash from the electrostatic precipitators becoming airborne by wind action is minimized" (NZED, 1973: 11).

Placing of tailings, spoil and overburden

"Since the majority of the mining operation will be sub-surface the amount of tailings or spoil should be small. The ash generated by the station will amount to approximately 200,000 tonnes per year. This ash could be used in land reclamation in areas of abandoned open cast mines. There is also a possibility of commercial uses such as building material once an assured supply exists" (NZED, 1973: 11).

"Care must be taken in the transport, storage and emplacement of ash from the station to ensure that the fine ash is not carried into any local water courses thereby creating a silting or suspension problem. Care will also be needed to ensure that there is no possibility of chemicals being leached out of the ash by surface water if it is used in land reclamation. Tests can be made on ash collected during proposed pilot precipitator tests to determine if there will be a chemical leaching problem" (NZED, 1973: 11).

Waste heat discharge

This impact was closely studied, with the investigations including additional reports submitted as a Supplementary Environment Impact Statement (NZED, 1973). The specific aspects examined included river flow and profile effects, water quality and temperature, effects on aquatic life and waste disposal. The need for a Water Right, under the Water and Soil Conservation Act, before the NZED could take and discharge water led eventually to an appeal to the Town and Country Planning Appeal Board, with further NZED/MWD documentation as a result. This is too extensive to summarise here and, in any event, focuses principally on the physical effects. However, there are some parts of the Officials Committee report which it is useful to include as follows:

"Officials consider that whereas most of the impacts identified in the Statement can be suitably mitigated in the course of further design and development, some impacts on the Waikato River require further study before they can be fully assessed. These are:

Effect on river stability

4. The diversion from and restoration to the river of the large flow required to condense the steam could have a major influence on river stability, not only locally but possibly for considerable distances downstream. Officials note that the river in this region has a history of instability and resultant difficulties with training, and the Waikato Valley Authority is now engaged in the Huntly area with costly flood control works. These may be affected by the power station. In addition there is considerable pressure for a Government commitment to deepen a channel from north of Huntly to the sea. The power scheme could, if it affects river stability, become implicated in such other proposals or works, with possible financial costs to the Government.

5. Officials consider that any river stability problems can be resolved, in the careful design and siting of the cooling water structures, to meet the reasonable requirements of the Waikato Valley Authority.

It is noted that special model studies are to be undertaken by the Ministry of Works of the river bed and diversion structures with the object of minimising instability effects due to the station. Such studies will extend also to consideration of dissipation of heat into the river.

6. New Zealand Electricity Department has stated that it is prepared to meet the costs of maintaining the channel's stability if any adverse effects are shown to be attributable to the station.

Effect on the river of discharging warm water

7. The effect of the discharge of heated water on the biota and ecology of the river is largely unknown and has been the subject of detailed examination by the Officials....full load operation, which is unlikely in the summer months, would have the greatest effect. Operation could decrease the dissolved oxygen content below acceptable levels, and possibly create conditions favourable to the growth of algal blooms, with resultant taste and odour effects for other users and potential users such as the Auckland Regional Authority which is likely to use the Waikato River as a future water supply for Auckland.

Added heat could also affect, to a degree as yet unknown, the fish and young eel population, the latter supporting a fast growing industry.

8. Restoration to the present average dissolved oxygen-content of 6 grams per cubic metre would depend on improvement of the quality of effluents reaching the river or, alternatively, reduction of the heat discharges. Such improvements of effluent quality is both difficult to obtain and costly. The Water and Soil Division of Ministry of Works emphasised that it is concerned to upgrade the river's pollution classification and does not consider the station should obtain an unrestricted claim to the river's capacity to oxidise effluents.

9. However in examination of these factors Professor Chapman in his report concludes that subject to control under stated conditions, which appear to be attainable the discharge of heated water would have no detrimental biological effect on the river.

10. Officials noted that a critical situation combining minimum river flows, high temperatures, and full load running of the station would be an unlikely event. In this respect New Zealand Electricity Department have advised that as one of the four generating machines must be taken out of service each summer for overhaul it was most unlikely the station would ever be running at more than three-quarter load at that time. Moreover, with diversion of additional water to the Waikato River now realised as a result of the Tongariro Power Development, and the greater flexibility of operation offered New Zealand Electricity Department by future development of the North Island power system, low flows comparable with those previously experienced may be expected to be rare.

11. Notwithstanding the above, studies are required in any case to determine the effect of the proposed scheme on the biota and ecology of the river under all operating conditions and these will take up to 18 months, and involve Power Division Ministry of Works, Water and Soil Division Ministry of Works, Fisheries Management and Fisheries Research Divisions of the Ministry of Agriculture and Fisheries, and Department of Scientific and Industrial Research. These studies are to be undertaken as development proceeds" (NZED, 1973: 98-99).

Other Matters: Officials Committee

"The Officials have noted certain other environmental matters requiring further assessment. These are the impacts of:

(a) Mining operations. No environmental report from the Mines Department is yet available to consider with New Zealand Electricity Department's statement.

(b) Borrow and/or disposal areas associated with station earth-works, e.g., recovery of sand filling from the river which would impinge on river training studies.

(c) Ash disposal with respect to drainage patterns, toxicity of seepage liquor, water quality and wild life. It was noted that disposal into swamp lands could create severe problems for wild life and affect environmental amenity.

(d) Population increase (due to construction force) on the Huntly Borough sewage treatment and river protection schemes, about to be constructed.

(e) Discharge of residual dust in chimney gases. The proposal includes electro-static precipitators whose performance is considered critical to acceptability of the proposal. New Zealand Electricity Department advised that the performance could be improved reasonably easily if necessary.

(f) Siting of the station, temporary and permanent staff accommodation, transmission lines, and coal transport; on the Huntly Community.

(g) Station structures on the visual scene. The need for general landscaping and screen planting to conceal the less attractive elements of the station was noted, and also the desirability of making early planting of screen trees.

(h) Dispersal of stack effluents and assessment of extent and degree of air pollution" (NZED, 1973: 101-102).

Implications and Risks: Officials Committee

"If a decision is made to proceed immediately with the development as proposed, there will be certain implications and risks unless safeguards recommended by the Officials are followed. These implications and risks are:

(a) It is noted that provision for the power station proposal should be made in the Raglan County district planning scheme. While such provision is not appropriate until a firm decision to proceed has been taken, nevertheless once a decision is made, early action under the provisions of the Town and Country Planning Act 1953 is desirable. The station, its ancillary operations, its construction and permanent staff requirements, and the transmission lines from the station, must have a very great influence on the future economic and

community development of Huntly Borough, and this action would provide local authorities and citizens with a right of objection and appeal on matters which affect their interests. Officials are aware that some overlap of appeal grounds can occur, this could be time-wasting, and should if possible be avoided. Negotiation with affected local authorities regarding co-ordination of appeal action would help to resolve this problem.

(b) It would only need a critical water quality situation to develop in the Waikato River as a result of other factors, for heat dissipation from the station to cause a significant fish kill and promote extensive algal blooms. The effect of this on other water users could be serious. While this risk could be reduced by superior mixing methods, it could not be avoided unless the New Zealand Electricity Department was prepared to accept limits on the use of the station in critical periods. If the occurrence of such a situation is as rare as anticipated, limitation of use will be of comparatively minor significance to New Zealand Electricity Department. Nevertheless it is considered that operation aspects should be designed flexibly to avoid this type of critical situation.

(c) If improvements in established effluent standards were required of other water users as a result of the station, the Government could be involved in grants to these bodies.

(d) It has been suggested that insofar as the station as proposed might be operated outside any agreed rules to the river's detriment in conditions of (say) national emergency, provision of means for supplementary cooling should be a condition of environmental clearance. Officials believe however that the river's condition will be adequately safeguarded if any operation rules governing discharge of heat are included in a Water Right which is issued under procedures including public objection and appeal" (NZED, 1973: 102-103).

Public Statements by Government Ministers and Departmental Officers

A report dated 22 March, 1973, following a visit to Huntly by the Minister of Electricity, Mr McGuigan, included the following: "...Mr McGuigan gave assurances that any disruption caused would be minimised and that henceforth the community would be kept informed on the matter....Mr McGuigan said the Electricity Department was satisfied the site was the best available. No land was required for the site although some might be temporarily during construction. Answers to a list of questions put to the Minister were:

Every step would be taken to prevent detrimental effects to the nearby Waahi Pa and marae, the house pa of Queen Te Atairangikaahu.

There would be no adverse effect on the Waikato River.

Noise, dust, and thermal pollution from the station would be under control.

No historical or sacred places would be touched.

Rakaumanga School was not affected by the station. The Education Department had already decided to "phase the school out." Departmental officials said major projects were being successfully carried out without serious social disruption. They quoted the Kaimai Tunnel project and the New Plymouth power station....Mr McGuigan said he felt disruption was being "over emphasised". "It boils down to this. Do you want a power station in Huntly or don't you?" (*T.* 22 March, 1973)

Another report on the same meeting (*NZ Herald*) attributed the following to Mr McGuigan: 'The station would employ 300 people and the mines would require 200 more men. While the station was being built there would be a construction force of 1000. Many staff would be recruited locally. The station would cost $200 million and wages paid out during construction would be $20 million. He felt speakers were over emphasising the nuisance that would be caused during the construction period of 10 years'. "You can't make an omelet without breaking eggs," he added. "There has to be some disruption" (*NZH*, 8 June, 1973).

The Minister for the Environment, Mr Walding, according to a report dated 8 June, 1973, intended to "delay making a recommendation to Cabinet on the Huntly Power Station until he has had a full report on the station's environmental impact" (*NZH*, 8 June, 1973).

A report on statements by departmental officers attending a Huntly meeting called by the Huntly Progressive Association on 1 August 1973 included the following:

"Assurances were given by Mr Jones (NZED) that smoke from the station's 500-foot high chimneys would be well within Department of Health guidelines. Mr Jones also said that land would not be confiscated for the station under the Public Works (Act). The station, Mr Jones said, would be made to look as respectable as possible through landscaping and although the station would be noisy, all possible measures would be taken to muffle sound and alleviate nuisance to residents. Recalling his experience as project engineer at New Plymouth, Mr Williams (MWD) said residents need have no fears about undesirable social effects of a large band of single men coming into town to work on the project....About 60 per cent of the work force would be married and assuming the size of the average family was four, some 3000 people would be looking to the project for sustenance during construction and 1500 people permanently as the station would have a permanent staff of about 320. In addition, 120 more miners would be needed to keep the station supplied with 550,000 tons of coal a year, and about 110 men already living in Huntly could find work on the station. Mr Williams said the average pay packet of men employed on the project would be from $90 to $130. (The impact of this sudden gain in population on Huntly schools and medical services was also raised.) The Minister of Education, it was pointed out, had said a new intermediate school would be built in Huntly West within the "next few years". The station would have a resident nurse and, if extra demand proved too much for the local doctors, Mr Williams said, then the Electricity Department would arrange for help from the Department of Health" (*NZH*, 3 August 1973).

NOTE: The Press reported further meetings after the date the Minister of Works announced construction would begin immediately (28 September 1973). These will be the subject of a later memorandum.

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Reference

NZED 1973. *Huntly Power Station Environmental Impact Statement; Supplementary Environmental Impact Statement; Report of Officials Committee for the Environment*. (No Publisher, no date.)

T. W. Fookes.

APPENDIX 6

NWASCO CONTRACT

PLEASE QUOTE

74/13/0

NATIONAL WATER AND SOIL CONSERVATION ORGANISATION

WELLINGTON, NEW ZEALAND

TELEPHONE 729 929
Address replies to
THE DIRECTOR
OF
WATER AND SOIL CONSERVATION

MINISTRY OF WORKS & DEVELOPMENT
P.O. BOX 12041
WELLINGTON NORTH, N.Z.

25 February 1981

APPLICATIONS FOR WATER AND SOIL CONSERVATION RESEARCH GRANTS

Applications, closing on 24 April 1981, are invited for research grants under the National Water and Soil Conservation Authority's university annual research contract scheme to promote university involvement in working on problems of specific concern to this organisation. Reference to our "Research and Survey Annual Review 1978" (Water and Soil Technical Publication No. 16) will give a guide to the areas of research and survey with which this organisation is concerned.

In accordance with the National Authority's policy for the scheme, priority will be given to proposals in which the study is of significance to the responsibilities of the National Water and Soil Conservation Organisation, and where there is an involvement in postgraduate student training and direct working relationships with individual university departments are established.

Each application for a research grant is to be accompanied by three copies of the proposed research project in accordance with the following format.

A SYNOPSIS OF PROPOSED PROJECT

A covering page giving a synopsis of the project proposal under the headings of:

(i) TITLE
(ii) SUBMITTING ORGANISATION
(iii) INVESTIGATORS ie names, qualifications and positions held of persons to be involved both part or full time in research work.
(iv) ABSTRACT ie objectives and brief description of components of the project.
(v) DURATION
(vi) AMOUNT REQUESTED

B DETAILED PROJECT PROPOSAL

In detailing proposals applicants are to bear in mind the necessity to show they have carefully reviewed the ways and means of studying the problem and that, given the assistance sought from this organisation to complement the resources provided or arranged on their own account, they can achieve the study objectives by the nominated completion date. Applicants are requested to provide adequate details so as to reduce if not eliminate the need to seek clarification on any part of the application.

Details are to be given under the headings of:

(i) TITLE

(ii) INVESTIGATORS
List persons to be involved in the research and for what sectors they will be responsible.

(iii) REASONS FOR THE PROJECT
This section should commence with a background statement clarifying the needs which gave rise to the proposal. It should also provide an assessment of the situation, including the concepts which need to be clarified, together with any information necessary to interpret the system which it is proposed to study.
The statement should be put against a general background of planning, operational developments or other requirements of NWASCO.

(iv) REVIEW
This should cover existing relevant knowledge both national and international. It should also contain a good literature review, a well balanced assessment of the implications revealed by the review, and any other information available.
The adequacy of this section provides an indication of the effectiveness of the proposer's preliminary investigation and hence the likely quality of his work.

Care should be taken to include the following

(a) a clear statement of the problems;

(b) documentation of any arguments advanced on both sides of the issue (if applicable);

(c) a summary of the pertinent information and relevant data;

(d) a full description of the area concerned, illustrated with maps and diagrams of relevant features, e.g. topography, land use, geology, pollution discharges in sensitive areas, etc.

(v) THE OBJECTIVES OF THE PROPOSED PROJECT
Against the background of the statement of the overall reason for the project and the review of existing knowledge, these should state the objectives of the project and how they will contribute to the interests of NWASCO.

(vi) METHOD AND TECHNIQUES
This section should set out in considerable detail how the project is to be carried out and should include location, experimental design, techniques used for gathering data and for evaluation of it, analysis techniques in chemistry, bacteriology and the type of equipment used, etc. This needs to be accompanied by a commentary indicating how it is considered that the use of the approach proposed will achieve the objectives stated in the proposal.

(vii) PROGRAMME SCHEDULE
The starting and completion dates of stages of the study and the person(s) responsible are to be identified.

(viii) COST ESTIMATE
This is to be itemised on an annual basis for the duration of the proposed study as follows:

Period ..... to .....(see note (a) below)

Expenditure Groups (see note (b) below)	Grant sought	Contribution by Proposing Organisation	Item Total
Salaries/Wages			
Travel			
Materials & Supplies			
Equipment			
Maintenance of Equipment			
Other Operating Expenditure			
TOTALS			

NOTES: (a) Cost estimates are to be given in terms of the government financial year which opens on 1 April and closes on 31 March of the following year. For a proposal commencing and/or concluding on other dates part financial year cost estimates need to be given.

(b) Under each of the expenditure headings there is to be an itemised breakdown, e.g.

Salaries: By each person involved.

Materials and Supplies: Chemicals, glassware etc.

Equipment: Items over $100 to be listed separately.

Under "other operating expenditure" include and list such items as computer time, analytical service charges.

(ix) CONTRIBUTIONS FROM OTHER ORGANISATIONS
This section should set out the nature of involvement of any other organisation in terms of manpower, equipment, expertise etc. It should define who are collaborators, what services are being provided from various organisations, and clarify the status of the arrangements established with those organisations. It should include a statement of anticipated publication arrangements and sharing of authorships etc where other organisations are acting as collaborators as distinct from providing a direct service.

(x) PUBLICATION AND REPORTING
The responsibility arrangements of the project leader and associates are to be defined. The research contract terms will require at least annual reporting to this organisation and for reports and/or papers for publication arising out of the contract work to acknowledge the grant assistance. The annual report is to include an assessment of how well progress and results to date support the approach used to achieve the objectives and, when necessary, comment on whether the original objectives remain relevant or what changes, if any, need to be made to the original proposal.

(xi) COMPLETION DATE

The completion date and anticipated arrangements for final write-up and reporting should be outlined. This should be accompanied by proposals for forwarding a draft write-up or a report on the project as a whole, plus the manner in which it is envisaged it will be published or otherwise disseminated.

Each application will be acknowledged. In early September the National Authority will consider comment and recommendations from the Reasearch and Survey Committee, the Water Resources Council, and the Soil Conservation and Rivers Control Council and make its decision on all proposals. Applicants will then be advised of their success or otherwise in obtaining grant assistance and their university will be offered contract terms shortly thereafter. An example of the contract format is attached. The contract offered will be written specific to the nature of the work involved. Contract terms are always negotiable although in such negotiations there must be due recognition given to the need to have similar sets of contract terms in which the basic contract principles and conditions are applied to each contract without discrimination.

We will be pleased to receive and answer any questions you may have on this circular or research contracts generally.

A W Gibson
Director of Water and Soil Conservation

per M E Yates

M E Yates

Encl.

AGREEMENT made this day of

BETWEEN HER MAJESTY THE QUEEN acting by and through the Minister of Works and Development (hereinafter referred to as "the Minister") of the one part and the UNIVERSITY OF (hereinafter referred to as "the University") of the other part.

Now it is hereby agreed by and between the parties hereto as follows:

1 IN this agreement "the Director" means the Director, Water and Soil Division, Ministry of Works and Development, Head Office, Wellington together with any officer of the Ministry of Works and Development legally acting on his behalf.

2 THIS agreement shall be read in conjunction with the proposal (hereinafter known as "the research") submitted by of the Department of at the University in a letter dated and additional details submitted in a letter dated .

3 THE main objectives of the research shall be:

(a) ;

(b) ;

(c) .

4 THE research shall be carried out at or from the University according to the procedures and schedules submitted in accordance with clause 2 of this Agreement.

5 MODIFICATIONS to the objectives and procedures may be

desirable as the research proceeds and results are obtained. Such modification shall be subject to the mutual agreement of the University and the Director.

6 THE Agreement shall be for a period of from the date on which it becomes operative in accordance with clause 11 provided that:

(a) The financial statements required to be submitted in accordance with clause 16 are to the satisfaction of the Minister;

(b) The progress report required to be submitted in accordance with clause 17 indicate to the satisfaction of the Minister that adequate progress towards achieving the research objectives is being made.

7 FORthe purpose of this clause a year shall commence on 1 April of one calendar year and end on 31 March of the following calendar year. The Minister shall provide to the University a grant in accordance with this clause for each of the periods specified in this clause to be used solely for the purposes set out in clause 13 of this agreement.

GRANT	PERIOD
Up to $	Year 1 - being the year in which this agreement commenced in accordance with clause 11 of this agreement
Up to $	Year 2
Up to $	Year 3
Up to $	Year 4

8 THE supervision of the research shall be the responsibility of the head of the Department of at the University.

9 THE research shall be carried out by a student as part of a study (hereinafter referred to as "the student").

10 THIS Agreement is made subject to a suitable student being available to commence the research within two years of the date of signing of this Agreement.

11 THIS Agreement shall become operative when the University notifies the Director of the name of the student and forwards his curriculum vitae to provide evidence of his being of a suitable standard and the Director confirms that the student is acceptable.

12 WITHIN one month and 13 months of the date of this Agreement, if this Agreement has not by then become operative in accordance with clause 11, the University shall advise the Director whether or not it anticipates having a student of good standard available to commence the contract

in the following year.

13 FOR the purpose of this clause a year shall commence on 1 April of each calendar year and end on 31 March of the following calendar year. Money payable to the University in accordance with clause 7 may be used only for:

(a) Salary for the student employed specifically on the research to be paid each year at a rate not exceeding that of a University Grants Committee Postgraduate fellowship and shall be reduced proportionately to the period of employment for that year to any year during which the student is employed for part of the year;

(b) Wages for a field assistant(s) up to a total of $;

(c) Travel expenses of the student and field assistant(s) relating specifically to the research at ruling University rates;

(d) Helicopter hire up to a total of $;

(e) Purchase of materials and supplies and equipment required for the research.

14 THEstudent shall not undertake regular lecturing or demonstrating duties, though there is no objection to his giving short courses of lectures in his own speciality or as prescribed as part of his study course. The Director may

give a dispensation provided the University certifies such dispensation will not be to the detriment of the research.

15 THE University shall provide accommodation (office, laboratory, etc), cleaning, heating and lighting services and normal maintenance for the student.

16 NOT later than 10 April of each year the University shall furnish to the Director, Attention Research Director, a detailed statement of receipts and payments under the contract and estimates of finance required for the coming financial year. Surplus finance at 31 March in each year may be carried over into the succeeding financial year. Surplus finance at in the final year of this agreement shall be refunded to the Minister.

17 NOT later than 10 April of each year the University shall furnish to the Director, Attention Research Director, a progress report on the research and the proposed programme of work for the coming year. Not later than in the final year of this Agreement the University shall forward, as above, a final report on the research and a copy of the student's thesis as soon as this is available.

18 REPORTS, thesis and any publications arising out of work or using data collected under this contract shall acknowledge that the work was funded by a contract with the Minister which aimed to provide information to meet a need of National Water and Soil Conservation Organisation.

19 RESULTS and conclusions of the research are to be forwarded by the University for publication in a previously

agreed journal, after they have been presented to the Minister.

20 COLLABORATION with other departments of the University and with other organisations in the use of facilities established or operated to carry out the research is welcomed and to be encouraged. However, to ensure there is proper understanding of mutual responsibilities the mutual agreement of the University, the Director and all other approved participants shall be obtained before any other agency or person can come in as a co-operator or work on the research facility established under this contract. Each application under this clause shall be accompanied by:

(a) A detailed study of research objectives, methodology, reporting procedures and responsibilities in relation to approvals for initial publication of data and results from such work;

(b) An agreement to give a clear acknowledgement of the role of the Minister in setting up and supporting the research.

21 ANY Notice or consent required under this Agreement may be given on behalf of the Minister by the Director.

The Common Seal of the
University of
was hereunto affixed in
the presence of

Signed on behalf of the .
Minister pursuant to
delegated authority

APPENDIX 7

HMP PUBLICATIONS

APPENDIX 7: PREVIOUSLY PUBLISHED REPORTS

Three publication series were developed as a way of communicating the Research Unit's thinking and results as they came to hand: (1) Research Memorandum series, (2) Internal Technical Paper series, (3) Working Paper series. Additional publications were also prepared to meet specific requests. The full list of publications from which the final report papers have been developed is set out below. (Unless otherwise stated the author is T.W. Fookes). A full reference set of the Internal Technical Paper series is held by the National Library and the University of Waikato Library.

Research Memorandum

No. 1.	Social and Economic Impact Monitoring (19 November 1975)
No. 2	Feedback on the New Plymouth Power Station for Huntly Research (14 January 1976)
No. 3	Background Notes on the Huntly Power Station (11 March 1976)

No. 4 Social and Economic Impacts Feared by the Maori Communities at Huntly 1972-73 (1 April 1976)

No. 5 Huntly and District Views on the Power Station - 1972-73 (26 April 1976)

No. 6 Social and Economic Effects Anticipated by Government Sources and Publicly Reported 1972-73 (28 April 1976)

No. 7 Perspectives on Impact Monitoring (20 April 1976)

No. 8 Monitoring Variables - Initial List (3 May 1976)

No. 9 Fairbanks, Alaska - Monitoring Social and Economic Impacts of the Construction of the Trans-Alaska Pipeline. (By Evelyn Stokes: 6 December 1976)

No. 10 When the Big Man Comes to Town (By David G. Bettison: 12 September 1977)

No. 11 A General Bibliography of Social Impact References held by the University of Waikato Library (14 September 1977)

No. 12 Huntly Power Project Workforce Mobility and Related Traffic Characteristics - Introduction (6 January 1978)

No. 13 Traffic Volumes and Characteristics (12 January 1978)

No. 14 Mobility of Huntly Power Project Workforce (25 January 1978)

Internal Technical Papers (Limited circulation)

No. 1 Monitoring the Economic Effects of the Huntly Power Station (July 1976)

No. 2 Project Expenditure Analysis (July 1976)

No. 3 Huntly - the Genesis and Development of a Coalmining Community 1976-1914 (P. McLaughlan: August 1976)

No. 4 Power Project Traffic Generation Study Proposals (September 1976)

No. 5 Changing Dwelling Prices as an Indicator of Economic Impact of the Huntly Power Project (A. I. Chalmers: April 1977)

No. 6 Housing and Commuting Patterns of Huntly Power Project Employees (Evelyn Stokes: May 1977)

No. 7 Use of Community Facilities by Huntly Power Project Employees Resident in Huntly (May 1977)

No. 8 Geographical Locations of Residents of Power Project Personnel (September 1977)

No. 9 An Analysis of the Demographic Characteristics of the Power Project Population Resident in Huntly (Roslyn Brien: December 1977) Draft only

No. 10 Huntly Population Census Comparison 1971-76 (Barrie Cook: May 1978) Draft only

No. 11 Monitoring Price Change in the Private Dwelling Market: A Test Case within the Huntly Monitoring Project (A. I. Chalmers: May 1979)

No. 12 Construction Employment Multipliers - What Happened at Huntly (T. W. Fookes: June 1979)

No. 13 The Huntly Power Project and Regional Unemployment (R. G. Drury: August 1980) Draft only

No. 14 Government - Community Interaction for the Huntly Power Project (Claire-Lucia van der Beek: January 1980)

No. 15 Crime Statistics for Selected Stations in the Huntly Monitoring Project Study Area (L. L. M. van der Beek: January 1980)

No. 16 Monitoring Social and Economic Effects...Huntly (T. W. Fookes: February 1980)

No. 17 Huntly Voting in the General Elections with Reference to Power Project Influences (Claire-Lucia van der Beek: February, 1980)

No. 18 Policy, Planning and Public Participation Generalizations from the Huntly Monitoring Project's Findings to Date (T. W. Fookes: June 1980)

No. 19 The Approach, Experiences and Methodological Issues of Monitoring the Social and Economic Impact of the Huntly Power Project (T. W. Fookes: June, 1980)

No. 20 Intentions and Practice of a Social and Economic Impact Monitoring Project (T. W. Fookes, R. G. Drury and J. Meade Rose: November 1980)

No. 21 Huntly Community Organisations and the Power Project (Julie Meade Rose: April 1981)

No. 22 Huntly Power Project Liaison Committee Review (Sian Robyns, Michael Eyes and Joanna Paul: April 1981) Draft only

No. 23 Review of variables in the "Community Welfare" and "Education" files (J.M. Stirling: August 1981)

No. 24 Changes in Selected Regional and Local Economic Variables 1971-81 (A.J. Byett: November 1981)

No. 25 The Maori Community and the Huntly Power Project (Julie Meade Rose: 1980)

Working Papers

No. 1 Graham C. Scott: A Brief Review of Regional Economic Development: Analystical Methods and Policy (1977)

No. 2 T. W. Fookes: Social and Economic Impact of the Huntly Power Station: First Year Progress Report (1977)

No. 3 Kerrin M. Vautier: The Huntly Economy and its interaction with the Huntly Power Project (1977)

No. 4 N. J. Goddard: The Impact of a Power Project on Local Service, Transport and Construction Firms (1977)

No. 5 T. W. Fookes: Social and Economic Impact of the Huntly Power Station: Second Year Progress Report (1978)

No. 6	B. G. Marshall: Waikato Building Firms, Tradesmen, and the Huntly Power Project (1978)
No. 7	Evelyn Stokes: Coal Mining in the Waikato Region (1978)
No. 8	Evelyn Stokes: Huntly Coal Miners (1978)
No. 9	Evelyn Stokes: Coal Mining Settlements of the Huntly Region (1978)
No. 10	T. W. Fookes: Social and Economic Impact of the Huntly Power Station: 1978-79 Progress Report (1980)

Other Reports

-	T. W. Fookes: Monitoring Social and Economic Impact: Huntly Case Study (1979)
-	Summary Conclusions of Monitoring Results up to December 1977: A Guide for Engineers and Planners of Construction Projects (1979)

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APPENDIX 8

EASTON EXTRACT

8: *The 1970s: The Way We Were*

(The following is an extract from A New Zealand History, *by Keith Oliver and Bill Sinclair, 13th edition, 2079.)*

By almost every economic measure, the 1970s was a disastrous decade. Consumer prices trebled while real output increased by a fraction over 10 per cent per person - and even this growth was the result of a major overseas borrowing programme of $5,000 million. The figure would have been greater but for the fact that during the last two years of the decade importing was reduced by increasing unemployment to a post-war record. The economic performance of the 1970s compares best with that of the 1920s and 1930s rather than the prosperous three decades in between.

It was easy enough at the time to explain this poor performance as being the result of the 20 per cent fall in New Zealand's terms of trade (the price of exports relative to the price of imports) which took place in 1967, but more pertinent was the failure of the economy to adapt to the new situation.

Too many institutions failed to respond to a changing world and a changed New Zealand society. North Atlantic political and economic leadership was being challenged by the industrial growth of East Asia, by the oil resources of the Middle East and by the increasing sophistication of the Third World, while fragmentation within the communist 'bloc' (as it was then called) heralded the beginning of a multilateral, rather than bilateral, ideological debate. Resources such as oil and phosphate, on which the growth of the New Zealand economy had depended, were becoming more expensive. New Zealand was being squeezed out of the traditional export markets for its meat and dairy produce, while new markets required different products or variations of old ones.

Internally, the country was becoming rapidly more urban, with two thirds of the population concentrated in the seven main centres. (The urbanisation of the Maori population was the most spectacular; 30 per cent of Maoris lived in urban centres in 1951, compared with 80 per cent by 1981.) Yet for most of the 1970s farmers made up about half of the Cabinet (although only seven per cent of the adult population). At the local decision-making level, there were almost 1,000 local authorities. Even the main centres were controlled by a motley of local councils, with insufficient power, overlapping functions and illogical boundaries.

New Zealand was moving from its traditional social conformity into a variety of lifestyles. The rugby, racing, and beer syndrome no longer dominated. The traditional family structure was giving way to less formal and more personally rewarding arrangements. Opportunites for women were opening up, and the men who accepted their changing role were also benefiting from a richer life. With greater education, overseas travel, and exposure to international culture via television, music and magazines, New Zealand's cultural horizons were broadening.

Indeed, if the poor economic performance and accompanying social distress are ignored, the 1970s was a creative period for this country. The arts flourished, with painting, pottery, theatre, cartooning, and fiction, children's and humorous writing all attaining new peaks. Sporting achievements included Olympic gold medals for rowing and hockey, and the All Blacks' first 'grand slam' in international matches in the British Isles. The environmental preservation lobby and the women's liberation movement were leading to a more balanced view of society.

There was considerable progress even in many areas of social policy. The most successful was social security, with the introduction of National Superannuation, a new income-tax system favouring families, accident compensation, the domestic purposes benefit for partnerless parents, and several changes giving women equal status. In retrospect, the 1970s is comparable with periods of the first Liberal Government in the 1890s and the first Labour Government in the 1930s as one of the great periods of creative social security innovation. There was less path-breaking in other social policy areas, but in housing, justice and medicine the same trend was evident.

The paradox of progress in some areas, stagnation in others and regression in the remainder is best seen as the first stage in a process of modernisation. The rigidity of structures and attitudes could delay or even prevent change in some areas, but not everywhere. The growing gap between institutions designed for the 1920s and 1930s (and reinforced by success in the 1940s and 1950s) and the world of the 1980s was creating tensions in society which could be relieved only by radical transformation of many of those institutions.

The language of modernisation was not consciously used until the early 1980s, but by the late 1970s calls for such transformation were being made across the political spectrum, although there was less agreement on what was required. But overshadowing these demands was the possibility that too much damage had already been done to the economy by the excessive borrowing, the loss of skills through migration and the failure to adapt. It was all too easy to write scenarios predicting further economic failure and collapse in the 1980s. Perhaps the modernisation would be too late.

Thoughtful New Zealanders celebrated the end of the 1970s with a questionmark next to the viability of their country.

22 Dec., 1979

An extract from: Brian Easton, Economics for New Zealand Social Democrats. McIndoe, Dunedin, 1981

APPENDIX 9

KRAWETZ NINE STEP SIA PROCESS

Source: Final Report Series, Paper No. 10

The SIA process involves nine stages: scoping; problem identification; formulation of alternatives; profiling; projection; assessment; evaluation; mitigation; monitoring (Wolf, 1980).

Stage One: Scoping is a preassessment stage in which the boundaries of the impact assessment are established. This involves three steps. One is: establishing the boundaries of the assessment, that is, whether or not it is to be dealt with at the policy, program or project level. Although SIA can be conducted at any or all three of these levels, unfortunately it is usually conducted on a project level, for example, on the possibility of locating a power station near Huntly (which is project-specific), rather than on the Ministry of Energy's plan for using coal-fired power stations to meet electricity demands (that is, a program), or on coal use policy in general. Another step is: establishing the geographic area included in the assessment (e.g. site-specific, regional, national, international). A third step is: establishing the time horizons to be considered, especially in terms of forecasts (e.g. until project construction is over, 50 years hence, the year 2000). In short, scoping involves setting the boundaries of the impact assessment in terms of the level at which it is undertaken, the geographic area considered and its time horizon.

Stage Two: Problem identification is exactly what its name implies, that is, identifying the problem. This is a bit more complicated than it appears because "the problem" has to be considered from a number of viewpoints. For example, suppose "the problem" is that energy demand exceeds energy supply. One view may be that there is a need to increase supply in order to meet demand. Another view may be that there is a need to reduce demand so that it corresponds to supply. Both needs merit consideration to determine how effective their being met will be in solving "the problem".

Stage Three: Formulation of alternatives involves, as it implies, developing alternative ways of solving "the problem." If we consider the two needs mentioned above (in problem identification), obviously there are only two types of alternatives in that example: those which increase supply and those which reduce demand. Specific alternatives might include: a series of power stations of various sizes, configurations and in various locations; a public education program on energy; and/or tax incentives to reduce the use a private vehicles. Although a "reasonable" set of alternatives is to be considered, in many cases, only two alternatives are given for an SIA -- for example, a 1000 MW coal-fired power station at location X, or no project. This is a very narrow range of options. In some cases, there is a somewhat broader range of options (e.g. a 500 - 1000 MW coal-fired power station somewhere in region X) but even this is considerably more narrow than what is intended by the term, "formulation of a reasonable set of alternatives" -- which refers to considering a reasonable set of types of alternatives. In this step, it is obvious that SIA theory differs from SIA as commonly practised.

Stage Four: Profiling involves preparing a baseline description of the communities and populations of concern. This includes establishing the categories of impact, selecting appropriate indicators of that impact, and then taking measurements of these indicators before impact has occurred. For example, suppose an SIA was conducted for a 1000 MW coal-fired plant in location X. One category of social impact could be population change in the community (in which the plant would be located). Indicators of population change include: changes in size of population, number of males compared to females, distribution of people across age, occupational or educational categories. At the profiling stage then, one would measure and record the current (and perhaps historical) population size, number of males and females and distribution of people across various categories,

for the community (or communities) in question. Profiling is a description of the present state.

Stage Five: Projection involves preparing forecasts, that is, a description of the future state(s). They include the same categories of impact and indicators used in profiling. Here, they are used to project into the future. For example, suppose an SIA was conducted for a 1000 MW coal-fired plant at location X. Using the example of population change (mentioned in profiling), forecasts would be prepared, say, for population changes at peak construction, at operations and 50 years hence, and on what the community would be like, over time, without the project.

Stage Six: Assessment is the stage at which the projections made in the previous step must be carefully appraised. Because projects involve a great deal of uncertainty, projections can be very unreliable. This does not only apply to SIA, but also to budget estimates of project costs as well. (For a discussion of uncertainty see Denver Research Institute, 1979.) In an effort to assess how responsive the social system (on which the projections were made) is to varying conditions, sensitivity analysis is undertaken. In this way, those aspects of the social system which are most sensitive, that is, for which small variations in condition result in large effects, can be determined. This is important because, in some cases, seemingly minor changes in conditions can alter projections significantly; whereas, for other factors, even large changes may result in little alteration of projections. Another aspect of the assessment stage is to determine cumulative and higher-order (i.e., in addition to direct, or first-order) impacts.

Stage Seven: Evaluation involves identifying the preferences that the various parties at interest (e.g. proponents, local publics, regional interest groups) have for the alternatives considered in the SIA. In many cases, as previously

mentioned, only two alternatives are considered: "project" or "no project." Because preferences are value-based, the participation of diverse public interest groups is increasingly encouraged. Ideally, this participation is grounded in mutually shared information about the project and the social system, with room for negotiation and compromise. In practice, participation is often a post hoc exercise, separated from the SIA and begun once the narrowest set of alternatives is being considered, leaving little room for negotiation and compromise by any of the participants. The most common form of public participation is at the public hearing on a specific proposal. NOTE THAT THE EVALUATION STAGE IN SIA REFERS TO IDENTIFYING PREFERENCES, AND SHOULD NOT BE CONFUSED WITH "EVALUATION RESEARCH" (WHICH INVOLVES COMPARISONS OF ACTUAL AND PREDICTED OUTCOMES).

Stage Eight: Mitigation refers to plans which are designed to moderate adverse (or negative) impacts. In the case of the 1000 MW power station previously referred to, one adverse impact may be the deterioration of roads due to heavy loads being hauled to the plant site during construction. Mitigation of this deterioration could involve the project proponent giving money to the roading authority to refurbish the roads, the proponent building its own roads, or shipping loads to the site by water.

Stage Nine: Monitoring is the final stage and involves systematic and periodic updating of projections (called reforecasting), based on the measurement of the actual outcomes of the project. It differs from profiling because it occurs after a project has started whereas profiling occurs at the pre-project stage. It differs from projection because it measures actual as opposed to predicted outcomes of a project. Because monitoring involves such comparisons, it is a form of evaluation research (again, not to be confused with the evaluation stage of SIA). Not only does monitoring involve the measurement and collection of data on actual

outcomes, but also it includes comparing these outcomes with those that were projected; and, in SIA, it involves recommending courses of action to decision-makers based on comparisons of actual and predicted outcomes, in concert with reforecasts of future outcomes depending upon whether or not the action is taken. Monitoring is seldom undertaken because it is usually not required by legislation or by special terms and conditions relating to a specific project.

APPENDIX 10

KRAWETZ MONITORING PROTOTYPES

1

COMPLIANCE

Source for Appendices
10-16 is Final Report Series,
Paper No.10

TABLE A:

PROTOTYPIC CONDITIONS RELATED TO MONITORING FOR COMPLIANCE

OBJECTIVE: COMPLIANCE	CONDITIONS
CHARACTERISTICS OF THE SITUATION	- established, well-defined, passive
ORGANIZATIONAL ELEMENTS	- bureaucratic
- commitment to objective	- explicit policy to protect human health and welfare)
- commitment to monitoring	- varies with enforcement; legislated standards and explicit programme; or terms and conditions capable of being enforced
- relationship of parties-at-interest	- adversarial (emitter versus controller); legislated to co-operate (if necessary, by force, in the public interest)
MONITORING APPROACH	
- scope of data	- narrow; highly specific; univariate; method and frequency of collection and reporting often specified
- other essential characteristics	- hard (quantitative) data
	- establish a data base for each facility or situation
- basis for assessing change	- "cause" is known and defined change measured by comparing data to legislated standard
- basis for assessing the significance of change	- deviations above standard constitute noncompliance; that is, they are significant
- personnel	- largely technicians; often highly mechanized, administrative
EXAMPLES	- any air quality or water quality monitoring programme undertaken by government
	- Tennessee Valley Authority (1980, 1979, 1978) as example of SIA monitoring for mitigation compliance
NOTES	- usually sponsored by a regulatory agency or industry (because of a regulatory agency)
	- can be undertaken in conjunction with monitoring for credibility, as long as compliance standards are accepted.

APPENDIX 11

KRAWETZ MONITORING PROTOTYPES

2

KNOWLEDGE

TABLE B:

PROTOTYPIC CONDITIONS RELATED TO MONITORING FOR KNOWLEDGE

OBJECTIVE: KNOWLEDGE	CONDITIONS
CHARACTERISTICS OF THE SITUATION	- passive, nonreactive, remote
ORGANIZATIONAL ELEMENTS	
- commitment to objective	- little support, usually undertaken pre-policy
- commitment to monitoring	- high
- relationship of parties - at - interest	- varies
MONITORING APPROACH	- documentation; descriptive emphasis
- scope of programme	- varies depending on what want to know
- scope of data	- varies
- other essential characteristics	- relies on established data bases and/or ability to collect primary data
- basis for assessing change	- deviations from baseline (fraught with methodological difficulties); sometimes control groups used
- basis for assessing the significance of change	- none; not part of monitoring programme
- personnel	- any interested party
EXAMPLES	- Longitudinal study by Centre for Urban and Regional Analysis (Thompson, 1979); Impact Information Center in Fairbanks, Alaska (Fison et al., 1977)

APPENDIX 12

KRAWETZ MONITORING PROTOTYPES

3

SHORT-TERM MANAGEMENT

TABLE C:

PROTOTYPIC CONDITIONS RELATED TO MONITORING FOR SHORT-TERM MANAGEMENT

OBJECTIVE: SHORT-TERM MANAGEMENT	CONDITIONS
CHARACTERISTICS OF THE SITUATION	- dynamic, uncertain, urgent, pragmatic
ORGANIZATIONAL ELEMENTS	
- commitment to objective	- high; explicit acknowledgement of responsibility and role
- commitment to monitoring	- high; seen as necessary for justifying mitigation
- relationship of parties-at-interest	- minimum required is developer and community
	- relationship based on mutual need and urgency; therefore cooperative, and supportive (as long as mutuality of need and urgency remain); level of (equality in) participation can be problematic
	- responsibilities of each party well-defined, but territoriality can be problematic
MONITORING APPROACH	- interventionist
- scope of programme	- one project, with project and community (study area) well-defined
- scope of data	- emphasis on hard (quantitative) data
	- limited to those on which action can be taken
- other essential characteristics	- relies on established data bases available in appropriate form and accessible; but must be able to generate own data base as required
	- free flow of information between parties
	- timeliness crucial in terms of frequency and turnaround of data

TABLE C: (Continued)

	- user-oriented
	- trend to using the minimum number of indicators to yield the maximum amount of information
	- reforecasting capability important
	- requires monies for mitigation
- basis for assessing change	- depends on variable; notion of causality important to justify impact by demonstrating project as cause/causal agent
- basis for assessing the significance of change	- once causal agent identified: combination of professional experience and consensus of parties at interest, in addition to whether or not action can be taken
- personnel	- administrative with input of appropriate decision-makers
	- community-based
EXAMPLES	- Ontario Hydro's monitoring programme (Hancock and Walker, 1979; Hancock et al., 1980; Walker, 1979); Tennessee Valley Authority (1978, 1979, 1980); see also Leistritz and Chase (1981)
NOTES	- usually sponsored by developer with community consent and cooperation
	- similar in approach to monitoring for project control, except with emphasis on aspects of direct concern to community as affected by project.

APPENDIX 13

KRAWETZ MONITORING PROTOTYPES

4

PROJECT CONTROL

TABLE D:

PROTOTYPIC CONDITIONS RELATED TO MONITORING FOR PROJECT CONTROL

OBJECTIVE: PROJECT CONTROL	CONDITIONS
CHARACTERISTICS OF THE SITUATION	- dynamic, uncertain, urgent, prgamatic
ORGANIZATIONAL ELEMENTS	- administrative, can be bureaucratic though less entrenched in the organization
- commitment to objective	- explicit policy (e.g. to be on time and on budget, if possible)
- commitment to monitoring	- high, because of urgent need
- relationship of parties - at - interest	- usually only one party
	- if more than one party, relationship based on mutual need and urgency; therefore cooperative and supportive (as long as mutual need and urgency remain); level of (equality in) participation can be problematic
	- responsibilities of each party well-defined, but territoriality can be problematic
MONITORING APPROACH	- interventionist
- scope of programme	- specified variables for project or several projects in an area
- scope of data	- situation-specific depending on need (e.g. particular labour force characteristics)
- other essential characteristics	- hard (quantitative) data
	- timeliness is crucial
	- emphasis on establishing own data base rather than relying on existing sources
	- user-oriented
	- reforecasting capability important
- basis for assessing change	- comparison of supply and demand

TABLE D: (Continued)

- basis for assessing the significance of change	- demand exceeding supply
- personnel	- largely administrative
	- requires funds to mitigate (e.g. travel allowance for project workers to relieve community housing shortages)
EXAMPLES	- almost any project has some such form of monitoring; however an SIA example is ITAT (Zainhofsky, 1979)
NOTES	- sponsor usually the project itself (or its developer)
	- if variables relate to labour force, approval of unions usually required
	- similar in approach to monitoring for short-term management except that emphasis is on aspects of direct concern to project's own welfare (e.g. availability of labour force, working housing, supply of project's goods and services)

APPENDIX 14

KRAWETZ MONITORING PROTOTYPES

5

FUTURE PLANNING

TABLE E:

PROTOTYPIC CONDITIONS RELATED TO MONITORING FOR FUTURE PLANNING

OBJECTIVE: FUTURE PLANNING	CONDITIONS
CHARACTERISTICS OF THE SITUATION	- long-term; reflective
ORGANIZATIONAL ELEMENTS	
- commitment to objective	- varies based on interest in potential long-term gain and resources (party with interest must be able to mobilize resources)
- commitment to monitoring	- high to the activity, though not necessarily to use of its results
- relationship of the parties - at - interest	- interested party defines its role and that of monitors; passive cooperation required in terms of permission to monitor
MONITORING APPROACH	
- scope of programme	- varies; several projects and communities both varying in type; or one project in its community and a "control" community
- scope of data	- those necessary for understanding the situation (project-community relationship)
- other essential characteristics	- hard (quantitative) and soft (qualitative) data
	- establish a data base across facilities/communities
	- timeliness not important
	- use established data bases available in appropriate form and accessible and/or establish own data base
- basis for assessing change	- deviations from baseline (fraught with methodological problems); sometimes control group

TABLE E: (Continued)

- basis for assessing the significance of change	- combination of professional experience and consensus of parties at interest, in addition to grounding in retrospective studies and multiple case comparisons
- personnel	- usually a research team
EXAMPLES	- Huntly Monitoring Project
NOTES	- usually sponsored by developer
	- usually a residual objective of monitoring programmes established for short-term management

APPENDIX 15

KRAWETZ MONITORING PROTOTYPES

6

RESEARCH AND DEVELOPMENT

TABLE F:

PROTOTYPIC CONDITIONS RELATED TO MONITORING FOR RESEARCH AND DEVELOPMENT

OBJECTIVE: RESEARCH AND DEVELOPMENT	CONDITIONS
CHARACTERISTICS OF THE SITUATION	- long-term, "top secret" (i.e. proprietary, at least until fully developed); product-oriented; uncertain, fluid
ORGANIZATIONAL ELEMENTS	
- commitment to objective	- varies, based on interest in potential long-term gain and resources (party with interest must be able to mobilize resources)
- commitment to monitoring	- high, to test and refine new data and methods
- relationship of parties - at - interest	- in-house division in organization or consultants; contractual
MONITORING APPROACH	
- scope of programme	- varies, data can be collected and/or methods tested with or without a project, under various conditions
-scope of data	- theoretically the widest, depends on what the data or methods are being designed to do
- other essential characteristics	- hard (quantitative) and soft (qualitative) data
	- helpful to know strengths and limitations of existing bases, but not limited to them
	- usually focus on what is ideally necessary or ideally appropriate and then devise methods and data; or can examine what is available and develop data or methods to improve it
- basis for assessing change	- open; may focus on attempting to define change or causality

TABLE F: (Continued)

- basis for assessing the significance of change	- depends, see above
- personnel	- researcher or team
EXAMPLES	- Addiction Research Foundation's participation in Ontario Hydro's monitoring programme (Hancock et al., 1980); Huntly Monitoring Project; see also Rothman (1980)
NOTES	- usually a residual objective of a monitoring programme emphasizing another objective

APPENDIX 16

KRAWETZ MONITORING PROTOTYPES

7

CREDIBILITY

TABLE G:

PROTOTYPIC CONDITIONS RELATED TO MONITORING FOR CREDIBILITY

OBJECTIVE: CREDIBILITY	CONDITIONS
CHARACTERISTICS OF THE SITUATION	- when compliance fails
ORGANIZATIONAL ELEMENTS	
- commitment to objective	- high
- commitment to monitoring	- high
- relationship of parties - at - interest	- tripartite (emitter, controller and watchdog); adversarial; cooperation based on mistrust and mutual need
MONITORING APPROACH	
- scope of programme	- univariate or several variables within one facility or project
- scope of data	- very specific
- other essential characteristics	- hard (quantitative) data because of necessity to appear objective
	- emphasis on establishing own data bases
- basis for assessing change	- comparison with established standard (if all agree to the standard as valid), or consensus
- basis for assessing the significance of change	- contravention of standard and adverse and continued public reaction
- personnel	- technicians; often highly mechanized; plus tripartite committee of decision-makers
EXAMPLES	- EARP recommendation upon application of Eldorado Nuclear Limited to build an uranium hexafluoride refinery at Port Granby, Ontario, Canada
NOTES	- emphasis is on re-establishing trust
	- as long as regulatory standards are basis of assessment, can be undertaken in conjunction with monitoring for compliance.

APPENDIX 17

NRAC REPORT

NATIONAL RESEARCH ADVISORY COUNCIL

WELLINGTON, NEW ZEALAND

All correspondence to

Telephone 725 639

Executive Director
National Research Advisory Council
P.O. Box 12240
Wellington

17 April 1979

The Minister of Science and Technology

HUNTLY SOCIAL AND ECONOMIC IMPACT MONITORING PROJECT

1 A special meeting of the Council's social sciences committee considered comments received from members unable to attend the meeting together with the attached submissions from the Social Development Council, NZ Planning Council, Commission for the Environment, NZER & D Committee and the DSIR. In addition the committee had a lengthy discussion with the co-ordinator of the project, Mr T W Fookes and representatives from the Town and Country Planning Division, of the MWD and the Electricity Division of the Ministry of Energy.

Discussion with Mr Fookes

2 The Huntly Social and Economic Impact Monitoring project was initiated by the School of Social Science, University of Waikato in 1975 under a 3 year research contract from the MWD at the cost of $30,000 p.a. The aims of the project were :

i. to identify potential problems;

ii. to gather information to assist planning for future development projects;

iii. to devise methods for future monitoring of major development projects.

3 By monitoring some of the changes in the socio-economic system as well as researching some specific problems the Research unit has been able to measure some of the assertions made before the work began on the power station e.g. higher rates of employment, greater volume of road traffic, increased business turnover, increased pressure of services. The work

carried out so far has shown that some of the predictions made had been fulfilled, although not always negatively. In addition the expected consequences have been mitigated by a number of unforeseen considerations such as the housing and travel allowances adopted and the national economic slump.

4 Mr Fookes confessed it was very difficult to assess whether the results of the project had been directly applied to other projects. This was partly because he was not privy to the decision-making process and was unable to judge whether the results had been incorporated. However, the Huntly Borough Council had drawn upon his personal expertise considerably and he had also acted as a point of reference for some government departments e.g. statistics and local groups such as kindergartens. In addition the information had been of use to planners for the Kapuni and Broadlands projects. The project had also created considerable interest outside New Zealand particularly in the USA.

5 The project had demonstrated what a longitudinal study could do but because it was too ambitious in its objectives and the manpower resources inadequate insufficient information had been obtained about the first and third objectives and effort has been concentrated on the second. In addition the project had been criticised by certain organisations because of the "slowness of turnaround" i.e. the speed and flow of information to and from government departments. However Mr Fookes maintained that some lessons had been learnt from the experience - e.g. community expectations should not be pitched too high and should be monitored - difficulties with obtaining access to data.

6 Mr Fookes suggested that there were three options in considering the future of the project :

i. to expand the project to beyond description into the area of explaination at a cost of $100,350;

ii. to maintain the project at its present level $52,698;

iii. to terminate the project at the end of 1979 $27,486

The Research unit was anxious to adopt option 1.

7 To date only the construction phase of the project had been monitored and while some results have been obtained the effects of having a permanent population (which would occur when the commissioning stage of the project was initiated) are unknown and some of the socio-economic findings to date could change. In addition, if the project was expanded it would allow the data already obtained to be analysed in depth by recruiting sociologists and economists. This would also broaden the expertise of the research unit. As the original intention was to document what happened at Huntly and to provide a full case study, it would seem illogical to stop half-way.

Comments by other departments

MWD

8 MWD considered only one objective i.e. the collection of data had been satisfactorily met largely because the project had been too ambitious and had lacked sufficient resources of manpower and money to fulfill the other 2 objectives. Nevertheless the Ministry did not consider that up to date the project had been a waste of money although it had not produced alternative methods of monitoring nor a detailed design about the kind of analysis to be carried out in the future.

9 It was agreed it was difficult to transfer results of the Huntly project directly to other major projects as each was unique and peculiar. However in the past MWD had not documented its own experience and the project filled a gap in knowledge. The success of the project depended to a degree on what use other organisations made of the data. It was admitted there were diverse views within MWD about the value of such monitoring projects.

10 Ministry officials maintained that, if for no other reason, the work of the Huntly project had been valuable in that it had highlighted and documented the weakness of local authorities in handling the situation. The Ministry would be prepared to continue finance until the end of 1979, but considered expansion of the project beyond that date was not warranted unless new information was forthcoming or unless directed to do so.

11 Whatever the outcome of the investigation the data obtained so far would be accessible to any organisation which expressed interest in it.

Electricity Division, Ministry of Energy

12 It was emphasised the division had not been involved with the project since its inception, but it had sympathy with its aims and could see some merit in continuing it. The division depended on MWD for technical advice, but it was prepared to assist the MWD funding for the project for the next and subsequent financial years.

Discussion

13 The committee was most impressed by the enthusiasm and competence of the project co-ordinator. It considered that as the project itself was a pioneering effort in the field of social science research and the first of its kind in New Zealand it warranted support. Likewise the committee was very conscious of its role in promoting and encouraging the development of social science research in New Zealand.

14 The committee could see considerable value and merit in continuing the monitoring and data collection exercise beyond December 1979. Otherwise the work of the project would be incomplete and its value could be lost.

15 However bearing in mind the comments of MWD and drawing on its own expertise the committee expressed reservations about the extent to which it should expand. Members considered insufficient data analysis and interpretation had been carried out to date and further collection and analysis would reveal the "other half of the graph".

16 The committee saw the project as a very valuable training ground for social science researchers and that a determined effort had been made to use the project as a resource for both universities and government departments and a number of undergraduate, graduate and post graduate students together with other officials had already used the project in this way. By modifying the project as recommended this would meet any objections the Waikato University may have to merely providing a data collection service.

Recommendations

17 NRAC recommends :

a. that the project be continued for a further 2 years, i.e. until December 1981;

b. that greater emphasis be given to the interpretation of the data already collected and the data to be collected in future, and to the lessons in research design etc. to be learned from the project;

c. that MWD and MER (Electricity Division); contribute $30,000 each toward the cost of the project in 1980 and 1981 (a total of $60,000 p.a.);

d. that departments such as MWD and MER should be encouraged to undertake the routine data collection;

e. that departments such as Maori Affairs, Labour, Social Welfare and Education should be encouraged to make greater use of the resources of the project;

f. that the universities be encouraged to continue to support the project (e.g. finance from UGC Research Committee, contributions from individual university research committees; and by directing social science students to work for the project as part of their practical training (and as a source of manpower));

g. that the project unit staff be encouraged to seek extra funding from other sources to carry out analytical work (e.g. from UGC, research committees, government department contracts, local authorities, trusts and foundations etc.)

APPENDIX 18

ORGANIZATIONAL ELEMENTS RELATED TO HUNTLY MONITORING PROJECT - IDEAL AND ACTUAL CONDITIONS

Source: Final Report Series, Paper No.10 page 22

TABLE ONE:

ORGANIZATIONAL ELEMENTS RELATED TO HUNTLY MONITORING PROJECT

-- IDEAL AND ACTUAL CONDITIONS

ORGANIZATIONAL ELEMENTS	SHORT-TERM MANAGEMENT OBJECTIVE		FUTURE PLANNING OBJECTIVE		RESEARCH AND DEVELOPMENT OBJECTIVE	
	Necessary Conditions	HMP Conditions	Necessary Conditions	HMP Conditions	Necessary Conditions	HMP Conditions
COMMITMENT OF PARTIES - AT - INTEREST	High, minimum needed is developer and affected community; based on interest in and acknowledged responsibility for mitigation	Low; no responsibility or active commitment to mitigation, though interest	Varies based on interest in potential long-term gain and resources (party with interest must be able to mobilize resources) thus likely to involve developer, senior gov't or academics	Yes, commitment was present in terms of interest	See "Future Planning" Column	Yes, conditions met
COMMITMENT TO MONITORING ACTIVITY	High because it is a step to mitigation	see above	High to the activity though not necessarily to use of its results	Yes, conditions were met	See "Future Planning" column	Yes, conditions were met
COMMITMENT TO MITIGATION	High and active, must acknowledge responsibility and have resources to take appropriate action	No such commitment	N/A	-	N/A	-
ROLE OF PARTIES - AT - INTEREST	Mutually defined in terms of responsibilities to mitigation; participation and cooperation essential (based on mutual need and conditions of urgency)	No, conditions not met	Interested party defines its role and that of the monitors; passive co-operation required in terms of permission to monitor	Yes, conditions were met	See "Future Planning" Column	Yes, conditions were met

APPENDIX 19

KRAWETZ AND MACDONALD REPORT

A MANAGEMENT REVIEW

OF

THE HUNTLY MONITORING PROJECT

A report prepared for Dr D.R. Llewellyn, Vice-Chancellor, University of Waikato and Chairman, Huntly Monitoring Project Steering Committee

by

NATALIA M. KRAWETZ, PH.D.

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13651 - 108 Ave
Edmonton, Alberta
Canada T5M 2C7

January 1982

University of Waikato
PRIVATE BAG : HAMILTON : NEW ZEALAND : TELEPHONE 62-889

12 February 1982

Dear

HUNTLY MONITORING PROJECT EVALUATION STUDY

Thank you for participating in our study. Our report is now completed and a copy is enclosed. We found it a fascinating exercise, but because of severe time constraints the resulting report is short on in-depth analysis.

We pared our own conclusions down to six, and they are as follows:

1. the budget was inappropriate for the Project's scope;

2. the Steering Committee played a key role in ensuring the Project's continued survival;

3. the clients continue to develop their commitment to the social sciences;

4. expectations for faculty collaboration and participation in the Monitoring Project were unrealistic at the time; and the University is not better prepared at present to support inter-disciplinary research in the social sciences;

5. the University's reward system is not appropriate for people engaged in contract or interdisciplinary research;

6. the issue of where academic freedom ends and responsibility to the client begins, is critical to contract research in a university setting.

The rest of the report is a compilation of paraphrases from the actual interviews -- suitably masked to protect the anonymity of the respondent.

We believe the paraphrases show the complexity of the study we were prepared to undertake, and the diversity of interests in and views about the Huntly Monitoring Project. While our study could have benefitted from feedback seminars in Hamilton and Wellington to check the validity of what we found, this was unfortunately not possible. In addition, several topics are not mentioned because they would have required more analysis than we had time for. So the report itself may be somewhat imbalanced.

Should you have any comments or want further information, please feel free to contact us at the following address after May:

13651 - 108 Ave
Edmonton, Alberta T5M 2C7
Canada

(We leave for Australia this month and will be out of touch for a while).

Again, thank you very much for making this study possible.

Sincerely yours,

Natalia M. Krawetz

Natalia M. Krawetz, Ph.D.
Postdoctoral Fellow

William R. MacDonald

William R. MacDonald, Ph.D.
Consultant

Encl.

OPENING REMARKS

This report stems from our interest in the process of project management. Having experienced both sides of the contracting fence -- as clients and consultants -- we have found that most problems with research projects stem from the way in which they are organised and managed. Things like unrealistic expectations, hidden agendas and a naive understanding of the contracting process contribute as much, if not more, to project failure than do personality clashes or poor research design. Ironically, very little has been written about this process and the factors important to its success. This elementary report is a minor contribution towards filling this gap.

How This Study Came To Be

I* was awarded a nine-month Postdoctoral Fellowship by the University of Waikato. Initially, the intent of this award was to evaluate the Huntly Monitoring Project in the international context. After reflection and discussion with the Project Coordinator, four tasks were outlined: (1) a small sociological study of Huntly; (2) an evaluation of the Project's findings; (3) an evaluation of its research design; and (4) an evaluation of its contracting process, management and organisation. Final Reports 48 and 10 fulfilled items 2 and 3, respectively. As time progressed, another task (Final Report 8) came into being, and it was obvious that I could only fulfill one of the two other original intentions in the time remaining. So this report reflects my choice, and is as close as I came to evaluating the Project's contracting process.

Limitations

There were two constraints on this project -- time, which was the major factor, and money. We estimate that this study cost 0.1% of the cost of the project it evaluates.

Initially I taperecorded interviews; but after spending two days transcribing the first interview, I realised that the exercise was too labour intensive for the time available. So I asked my husband to assist in taking notes, and because of his experience in research management, he became the co-author of this report. The added benefit was that his services were complimentary.

We interviewed 38 people, all associated with the Monitoring Project in some way. They are listed in the Appendix. People generously gave of their time -- from one hour to six. I

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* refers to Krawetz

particularly remember one man who sandwiched our interview in between frequent interruptions resulting from a crisis. In spite of the pressure he was under, he insisted on spending an hour with us! Every civil servant we talked with was gracious and frank, and very interested in our study. The people we talked with at the University varied considerably in their receptiveness to the interview.

In addition to interviews, we read various documents -- all the contracts, Steering Committee reports, and all the minutes of the Steering and Technical Committees, as well as relevant Project files from both the clients and contractors.

I had anticipated about 10 or 12 weeks to be available for this management analysis. With the exception of a week in Wellington, the interviews and reading and absorbing the material took five weeks -- all sandwiched amongst other Monitoring Project tasks. As the Monitoring Project came to an end, the office was a flurry of activity and our hoped-for five more weeks to study the data and write an in-depth report collapsed to only two. On the one hand, this loss of time has been frustrating and somewhat disappointing. On the other, we had to ruthlessly prune our comments and this may have resulted in a more readable report.

We believe our study could have benefitted from feedback seminars in Hamilton and Wellington with the people interviewed -- not only as a courtesy to them, but also to check out the validity of what we found. Also, transcribed taperecorded interviews would have been an improvement over hastily scribbled notes. Unfortunately a lack of money eliminated both. Lest we sound too despairing, we would like to acknowledge the contribution of some $300 from the Huntly Monitoring Project (for our interviewing trip to Wellington), and to the University of Waikato for providing services like word processing (associated with this report).

Format

Our resulting report is short on in-depth analysis. Our own conclusions are at the front. The rest is a compilation of paraphrases from the actual interviews, suitably masked to protect the anonymity of the respondent. We believe the paraphrases show the complexity of the study we were prepared to undertake, and the diversity of interests in and views about the Huntly Monitoring Project.

Several topics are not mentioned because they would require more analysis than we had time for -- such as:

- lack of management expertise
- staff turnover

- stress over the uncertainty of Project closure (during the first three months, during the year the Project continued on the promise of funds, during renegotiation)
- lack of awareness by the Project team of the client organisations
- administrative requirements
- misconceptions about finance and Project scope.

Needless to say, we feel that all the topics deserved fuller treatment.

Because there were none of the previously mentioned feedback sessions, our treatment of particular topics may be imbalanced.

We hope you will find this report readable and useful -- for we found the contracting process associated with the Huntly Monitoring Project fascinating.

N.M. Krawetz, Ph.D.

W.R. MacDonald, Ph.D.

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SECTION I:

CONCLUSIONS

1. THE BUDGET WAS INAPPROPRIATE FOR THE PROJECT'S SCOPE

In the initial stages of project development, both parties underestimated the real costs of the Project. This was alleviated by some additional funds from the client and the participation of a second funding source following contract renegotiations in 1978-79.

Preliminary estimates by the University were higher than the final budget agreed to when the Project started. The final figure requested (about $26,000 per year) was based on rough estimates of costs, but more importantly was tempered by a realisation that planning projects over $20,000 were unlikely in New Zealand, and that the client* was more favourably disposed to the above figure. Notwithstanding this, the University did not realistically assess costs, because the research scope was not detailed and because administrative costs were ignored: the University was inexperienced in this area.

Yet the client expected that the University could do the job cheaper than in-house research, and accepted the University's budget analysis. The client was constrained, however, because the Project's budget was a large part of its own funds -- 30% - 50% of Town and Country Planning Division's Research Section's budget, depending upon who we talked to.** This meant that the division sponsoring the project was making a major commitment, despite the insignificance of the Project's costs in the context of the Ministry or the Huntly Power Project budgets.

As a result of these constraints, the University continued to ask for more funds, although this was inappropriate in the client's context. The Project survived because another funding source (New Zealand Electricity Division, Ministry of Energy) came to the party -- but not without considerable lobbying by several interests.

Despite the insufficient level of funding, the budget, both initially and over the life of the Project -- some $300,000 -- is large even today, by New Zealand standards. So the Monitoring Project has made a significant advance in raising the accepted level of costs for social sciences research.

Given the funding situation, the other alternative would have been to reduce the Project's scope; this was not really put into place for two reasons. First, the client could not offer specific direction, especially since there were diverse agency interests. Second, the University did not know what priorities to place on data. Moreover, the comprehensive framework developed by the Project was appropriate to a pioneering effort;

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* Town and Country Planning Division, Ministry of Works and Development

** Development and Programing Branch also contributed $5,000 on a once-only basis.

but it hinged on two assumptions -- a high level of inter-disciplinary participation and an adequate, flexible budget. When these assumptions were violated, the framework continued to be one where equal priorities were placed on all data. At renegotiation, the broad objectives were priorized. However, one of them was unachievable because of institutional factors (see Final Report 10).

2. THE STEERING COMMITTEE PLAYED A KEY ROLE IN ENSURING THE PROJECT'S CONTINUED SURVIVAL

This Committee worked well as the protector of the Project -- even against members of its host organisations, and many Committee members spent considerable effort (particularly during contract renegotiation) lobbying on the Project's behalf. The amount of ownership of the Project by the Committee may have been unintended, because views of its role ranged from having the real decision-making power to being merely an administrative formality.

Many of its administrative responsibilities were relatively trivial and short-term in focus (e.g. deciding on the clarity of graphs in reports or authorising trips by the Project Coordinator). Indeed, no one seemed in charge of looking at the long-term implications of the Project or the Committee's administrative decisions. Some duties, such as publication rights, were major.

Members cited the pleasant personalities of their colleagues as the reason the Committee worked so well. However, we believe four other factors were critical. First, the kind of people involved were senior managers. So each was experienced and had a broader outlook (than the technical expert). Second, each was powerful in his own organisation. So such views carried weight, particularly in Wellington. Third, each power base was at relatively the same level in its respective organisation, thereby reducing the potential for competitiveness and power plays. Fourth, each member had a vested interest in making the Project work -- whether it be ensuring value for money or saving face.

The level and size of the Committee was excessive for the size of budget being administered (about $300,000 over six years). However, the Committee was appropriate given that the Project was a pioneering venture for all parties, that there were considerable differences of opinion within the client agencies about the Project's value, and the highly political situation in which the Project was embedded.

Whether the roles played by the Committee were appropriate will not be discussed here. Suffice it to say, its existence was a key factor in the Project's survival.

3. THE CLIENTS CONTINUE TO DEVELOP THEIR COMMITMENT TO THE SOCIAL SCIENCES

For most people in the client group, the Monitoring Project was their first exposure to social science. Many senior staff have been involved in reviewing Project reports, and some remarked that because of such exposure they developed more realistic expectations of what social science can produce. Even those who take exception to certain interpretations in the Project reports did not deny the increasing role of the social element in their organisations. In fact, they were very articulate about the social implications of their operations. The major controversy appears to be how such implications should be incorporated -- through public participation, the political process or other means.

People cited that their agencies have had to become more aware of the public because more of their operations are near urban areas, and the current political trend is toward incorporating the social dimension into planning via the hearings process. Compared to its former role in these agencies, say 20 years ago, social science is very much in vogue.

While there is no interest in either client agency for another monitoring project of Huntly's scope, there is interest throughout in the social element. Because the Monitoring Project has served as the introduction to social science for several senior people in these agencies, we believe that it has encouraged a climate of opinion that looks upon social science in general (rather than monitoring in particular) with a more empathic eye.

4. EXPECTATIONS FOR FACULTY COLLABORATION AND PARTICIPATION IN THE MONITORING PROJECT WERE UNREALISTIC AT THE TIME; AND THE UNIVERSITY IS NOT BETTER PREPARED AT PRESENT TO SUPPORT INTERDISCIPLINARY RESEARCH IN THE SOCIAL SCIENCES

The Monitoring Project was borne on the basis of an ideal: that an interdisciplinary research project could be successfully completed by the School of Social Sciences. To translate ideal into reality meant facing enormous difficulties. In the Project's case, they were insurmountable for several reasons.

First, there was a lack of supportive infrastructure in the University itself. Although it had been organised originally with the intent of encouraging interdisciplinary studies, internal and external pressures forced it to revert to a standard departmental focus, within the first three years of its being. Second, many faculty were already overcommited. At the time the Project was coming forth, the University was still growing, several staff were relatively new and were studying to further their own education; inevitably potential participants were each wearing too many hats. Third, sufficient appropriate personnel were lacking. Most academics who participated in the Technical Committee meetings told us that the Project was not of direct interest to them either as a topic of study or because their expertise was not suitable. The major sources of project labour were thesis students, P.E.P. workers, and students hired through Labour Department employment schemes -- with disappointing results. They required training, close supervision and carefully defined tasks; and, since each was available for only a few months at a time, continuity was problematic. They were neither qualified nor experienced enough to make the senior level contribution expected of the Project. Labour supply and quality are critical, particularly since social science research tends to be labour intensive. Yet, many of the academics we talked with were equally naive. They assumed that undergraduate and graduate students can be used to do senior level research; and that training and supervision would be minimal. Fourth, the Technical Committee was unable to form a team. Because the Project originated with one individual, who also acted as a main participant in developing it, there was a strong tendency to consider it as "Tom's project" or at best, "Geography's project", not "A School of Social Sciences project". Moreover, there were differences of opinion about research method which were never worked out. So after the first couple of Technical Committee meetings, general interest waned and a few, key individuals were left on their own. Moreover, few of the potential participants had previous experience with team research and the difficulties it poses. Fifth, funding was insufficient to allow the Project to buy much senior level talent. And sixth, the Project Coordinator was powerless to coerce participation -- not that coercion is necessarily appropriate. As a result, the Project Coordinator became the prime researcher. So if the Project is considered to

be interdisciplinary in any way, it is because of the broad brush approach adopted by the principal researcher.

We believe these six mitigating circumstances would be sufficient to predetermine the outcome of any interdisciplinary project, not just the Huntly Monitoring Project.

The traditional structure of any university is inimical to interdisciplinary research.* The University of Waikato is not unique in this respect.

We have no evidence that the future of interdisciplinary, social science research looks any better at the University of Waikato. Another attempt at such a project, the Rotorua Lakes Study, coped with a shaky existence and extreme difficulties. Academics are discouraged from participating in such projects (other than in a minimally committed, advisory capacity) because the system offers no rewards. In fact, some Heads of Departments "punish" any such participation. So, again, the active participants are students and Visiting Research Fellows. The Environmental Studies Unit, while having some formally recognised existence, has no guaranteed finances from the University's coffers and no staff of its own.

This situation is unlikely to improve, given the increasing financial constraints under which the University itself is operating.

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* This is a major conclusion of one of the author's (MacDonald) in his report, "The Management of Interdisciplinary Research Teams: A Literature Review" (prepared for the Departments of Environment and Agriculture, Government of Alberta, Canada, January 1982).

5. THE UNIVERSITY'S REWARD SYSTEM IS NOT APPROPRIATE FOR PEOPLE ENGAGED IN CONTRACT OR INTERDISCIPLINARY RESEARCH

The University traditionally rewards scholarly activity on an individual basis, not teams undertaking contract or interdisciplinary research. The criteria for individual promotion are: participation on committees, teaching and -- most importantly for senior positions -- the number of publications in refereed (and preferably international standard) journals. The following comments apply to the Project Coordinator position, regardless of the incumbent.

According to people interviewed, work on such a project, at best marginally improves the incumbent's status and chances for promotion. Some believe that this kind of position allows the incumbent to regress rather than advance, for two reasons: contract publications are not seen to be on par with those in refereed journals; and there is jealousy and antagonism of other academics toward full-time secondment to a project because it releases the incumbent from teaching duties. The benefits of contract experience for a Project Coordinator were cited as international contacts, a better understanding of government and personal growth -- those which have no direct relevance in the University's reward system. Therefore to ask someone to assume a Project Coordinator position is to request a career sacrifice that few would be willing to make.

Ironically, the Project Coordinator position was originally conceived of as an administrative one -- coordinating the input of other faculty and staff. The University's traditional performance evaluation criteria were inappropriate under these circumstances. Only because the lack of faculty participation forced the Project Coordinator into an active research role, were these performance criteria relevant.

The infrastructure and support system for such positions is unclear. The reporting structure is a form of matrix management, with the Project Coordinator having five bosses: the client Liaison Officer at Head Office; the Steering Committee; the Dean of Social Sciences; the Technical Committee; the Head of Department (at the University). If the first contract had been cancelled, it would have been the District Commissioner of Works.* Exactly who was responsible for the Project Coordinator position, and in what way, remains ambiguous.

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* In paragraph 4 of the first contract, the Ministry of Works guaranteed payment of the Project Coordinator's salary for the intended length of the contract, even if the contract was cancelled. Upon cancellation, he would have become a full-time employee of the Ministry's Hamilton Office, until 1 February 1978. During the course of the Project, much of the client liaison role was incorporated by the Steering Committee, and the Technical Committee folded, leaving three bosses.

In terms of promotion and performance evaluation in the University, the traditional link is through one's Head of Department. This was followed with the Project Coordinator's position, although the incumbent had been seconded on a full-time basis. So, ironically, the person with the least contact with the Project is the one whose evaluation of the incumbent is key to rewards within the University structure.

For the most part, positive evaluation of the incumbent's performance was seen in terms of silence, i.e. the absence of negative criticism. It was assumed that the Project Coordinator understood that this constituted praise. In our opinion, the University administration is responsible for advising the incumbent about who evaluates performance and on what basis.

6. THE ISSUE OF WHERE ACADEMIC FREEDOM ENDS AND RESPONSIBILITY TO THE CLIENT BEGINS, IS CRITICAL TO CONTRACT RESEARCH IN A UNIVERSITY SETTING

Preamble

In Western societies, the process of tenure was developed to guarantee academics freedom of thought without fear of reprisal, that is, of being fired. By tradition, tenured academics are entitled to say what they think, conduct research as they feel is best done and interpret the results unrestricted by vested interests. The importance of the right to publish stems from this and is the basis of the intellectual's power -- to persuade. While no one would argue that this freedom does not require the individual to act responsibly, academic freedom is likely to clash with client notions of responsible behaviour in a contract research situation.

Contract research involves a legal agreement to produce a specific product for a client. As a result clients expect to have a reasonable amount of control over the contracting process and attention paid to their particular interests. Concerns about confidentiality stem from this. However, what constitutes "a reasonable amount of control" and "particular interests" depends upon interpretation, thereby setting the scene for conflict.

The Issue and the Project

In terms of the Monitoring Project, disagreements related to this issue occurred under several guises:

- a report was seen to reflect negatively on the client's image or interests;
- a printed statement was controversial (e.g. potentially libellous);
- political sensitivities were involved;
- there were inaccuracies in a draft report;
- a report was seen as irrelevant;
- the Monitoring Project appeared to be in an advocacy position, against government interests;
- there were differences of opinion regarding interpretation, though everyone agreed about the facts.

Some dozen disagreements were brought to the Steering Committee's attention, since it had the power to determine what would be published under the Monitoring Project aegis. In this sense, it was a very powerful committee in both client and University eyes. Resolution of disagreement took many forms:

- further discussion was encouraged and a compromise reached (the most common form of resolution);
- the report was not published by the Monitoring Project, and either became an Internal Technical Paper for limited circulation (quotation and citation only with written permission) or was published through the University itself;
- the academics held their ground and the client gave in.

There were two cases of major disagreement. In one, a client representative alluded to the possibility of having the contract cancelled (during its first year), so the document was published by other means over a year later.* In the other, the client commissioned two Monitoring Project documents for publication under its own (client) aegis. However, some members of the client organisation took issue with one of the reports, and the client refused to publish it. The University then decided to publish it itself, and gave it wide circulation, especially internationally. While the points of contention were obviously important to the parties involved, they hardly affected the outside reader. I recall one conference in America where the report was distributed to some 30 consultants and academics, and no one noticed anything particularly controversial!

A Note on the Review Process

Client review of the Project's draft documents involved several senior staff throughout both organisations. Usually Review was at arms length, that is, a draft was sent to a client contact who then selected reviewers. Comments were returned to him for editing and compilation, and then forwarded to the Project Coordinator for consideration. Later on (particularly with the Final Report) some reviewers replied directly.

The advantages of the arms length process are: administrative ease (one contact and collection point) and blind review. The disadvantages are that: the resulting review presents a far more homogeneous picture of the agency's views than is actually the case; the client contact has the power to decide who reviews the reports and which comments are sent back; there is no

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* The publication delay can be attributed to the need to validate the report with the members of the community about whom the report had been written.

opportunity for direct discussion between reviewer and author to clarify the report's intent, etc. Because of this process, the only way reviewers know their comments have been taken into account is if their suggested changes were actually made. If the contact edited out the reviewer's comments or if the author had other reasons for not changing the text, the reviewer would never know. Many told us that reviewing the reports was frustrating -- "we never get heard" -- and blamed this on the Monitoring Project. We feel that the process is at fault, not the particular people.

For various reasons those reviewers who were most opposed to the Project and take exception to its reports have never had the opportunity to directly confront the authors on a one-to-one basis. In fact, the Monitoring Unit was unaware of the extent of this negative feeling until a Project seminar in Wellington.

An alternative is two-way review and feedback. For example, when I was writing one Final Report, I sent a draft to a reviewer directly. When his comments came back, it took me a day to calm down, admit that some of the comments were valid, and decide what to incorporate into the paper. I then spent another morning carefully compiling a letter to him -- indicating those changes I was not prepared to make and my reasons. To my surprise, I received a letter back, agreeing with most of my points. However, more importantly, the reviewer was pleased to know that his comments had been carefully weighed. This is a very labour intensive process and it, too, can be frustrating; but I believe it preferable to arms length, one-way review which allows hurt feelings and bones of contention to fester, unknown to the other party.

Towards a Solution

Obviously, the question is: how to develop the contracting relationship to ensure that researchers are accurate in analysis and interpretation, without imposing undue restrictions on their operation. To some, this is impossible to resolve, and is the basis for being opposed to academic contract research. For those academics who wish to pursue contracts, the issue involves negotiation and both parties need to work out the ground rules early, particularly since they may differ depending upon the client, the researcher, and the research area. Items such as the right to publication, confidentiality, data access and report review should be negotiated before the contract proceeds -- to minimize unpleasant surprises.

In the Project's case, the University seemed to have the upper hand, for even if the Project had been cancelled, it could have published its reports. However, the ultimate cost of this action (i.e. the potential cancellation of all government contracts) would likely be a strong deterrent to such a step.

SECTION II:

PARAPHRASES

ON

SELECTED TOPICS

THE CONTRACTING PROCESS

In General

Academic Views*

"There is a distrust of academics."

"The University's primary responsibility is educating the students, not doing contracts."

"If we can get contract work, we have the skills, knowledge and potential staff to do it."

"There is a basic gap between the public servant and the academic. Requests that are reasonable in the government framework may be unreasonable in the academic."

On the Notion of Time

Client Views**

"The university is not on a tight time line. We are."

"Academics are unable to meet deadlines."

Academic Views

"You shouldn't be rushed into translating principles into operation. The client expects it the next day."

On Academic Ignorance of the Contracting Process

Client Views

"The university is far more difficult to deal with than a consultant because of inexperience and rigidity in the university administration."

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* Academic views were those expressed by members of the University of Waikato and the National Research Advisory Council.

** Client views were those expressed by members of government agencies.

Academic Views

"The administration of contracts is difficult inside the university. Academics are hopeless administrators. They never get things done."

On Client Ignorance of the Contracting Process

Academic Views

"There is a tendency to look to the university for cheap research. They have no idea of the commitment required by the university and the department."

"Not all government departments are particularly well-equipped to oversee contracts. They can be manipulated."

On Focus

Client Views

"Academics research has a place, but at times it's got to be monitored to ensure that the line of research is on practical grounds."

"Government has a very short-term focus. This is not necessarily amenable to research."

"We're interested in the end product. We concentrate on getting the job done. Method is of no interest to us."

Academic Views

"The Ministry of ... was always asking for tangible evidence. They felt they must have something to convince the Minister."

On the Need to Sell a Research Proposal

Client Views

"Draw up a very clear case about the work and its benefits. I'll support it if I feel it's worthwhile. Give us a good case, as specific as possible. We've got to see some end result, some benefit."

"Adapt your proposal to the sponsor's interest. A 'take it or leave it' presentation is not on."

Academic Views

"There is no real advantage to the university unless we're breaking new ground. If it's merely service research, to hell with it!"

On Control and Responsibility

Client Views

"It's harder to keep academics (than consultants) within the terms of reference and the budget."

"Sometimes a researcher disappears before the contract is completed."

"I've tried to use professors but haven't been very successful. They are prepared to advise and criticise but won't do the real work. They may be interested but they won't follow through."

Academic Views

"The biggest problem is that government departments are very controlled. They see things as personal attacks on themselves."

"The university should be reflective, sit back and think with no obligation to anybody. It may not necessarily produce any results."

On Academic Freedom

Client Views

"Academics have this thing about academic freedom with no responsibility."

"When you get information, who gets it? Who controls it? Information is power."

On the Huntly Monitoring Project reports: "There is a genuine difference of opinion on what the situation is. I don't know the source of the discontent. I only saw the reports. The conflict isn't continuing, but old wounds haven't healed yet."

On the Huntly Monitoring Project reports: "We were never able to get heard. I felt if we pointed it out, they'd ignore it."

Academic Views

"A university should not get into a position of advocacy for a client. An agency can provide views but it should not alter the analysis or findings."

"You should clarify, recognise and negotiate access to data, its ethical implications and the mitigation thereof."

"Academics will say what they think. If they tread on certain corns, you must accept it."

ATTITUDES TO THE PROJECT

In General

Client Views

"The project was almost killed before it was born."

"I have yet to have it demonstrated that people in social science will do better than engineers at this."

The Potential Fundors

Client Views

"No one in Town and Country Planning Division was against it. There was no real opposition in the department (Ministry of Works and Development), just a lack of enthusiasm. Money was available elsewhere in the Ministry. Power Division felt it was up to New Zealand Electricity.* Other divisions were not very much involved."

"No one was ever adamant that it not go ahead. State Coal Mines was anti. The Commission for the Environment and the Social Development Council were pro. That was crucial in getting approval."

"New Zealand Electricity had a strong feeling not to have anything to do with it. There were lots of differences of opinion and lots of anti feeling."

Academic Views

"I expected that since it was a Ministry of Works project, everyone would collaborate."

Reasons for Being Opposed

Client Views

"New Zealand Electricity was reluctant from the start, especially Design and Construction Division (the largest division) -- because the power project was already underway. It was a natural reaction; they couldn't see any practical significance in it."

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* Power Division of the Ministry of Works is funded by New Zealand Electricity Division (Ministry of Energy).

"There was suspicion and skepticism about an external contract. In-house would have been fine. It was viewed as inspection and a waste of money."

"The Huntly Monitoring Project has been a pain in the bloody neck from day one ... it imposed itself on the organisation. Maybe we were too sensitive or defensive about the way the Monitoring Project worked -- threatened. Maybe it stemmed from the times."

Academic Views

"He told me not to distract his boys from building the power station, or else it would jeopardize the (Monitoring) Project."

On Attitude Change

Client Views

"The attitude change of New Zealand Electricity was very important."*

"During the contract review, we had to make sure the Design and Construction people were happy, but they could see some logic to having it (the Monitoring Project) completed."

"The Monitoring Project is like a biological phenomenon. It affects all the people in it and they change (their attitudes) as they go."

"I had no strong feelings at first. It seemed interesting but what would we get out of it? Things have changed. I have a greater appreciation of the value of the project and the information it has provided."

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* New Zealand Electricity Division (Ministry of Energy) co-funded the project after renegotiation (1979).

EXPECTATIONS

Terms of Reference

From the Original Contract

"To measure, assess and report periodically on the social and economic effects of construction and operation of the Huntly Thermal Power Station, on Huntly Borough and its immediate environs and on the Waikato Region ... and, in particular, to examine the effects on: housing; incomes, employment and manpower availability; availability of material resources; provision of services ...; community cohesion; administration and decision-making; and ... other matters ... in order to:

(a) identify potential problems early enough to take timely remedial action;

(b) provide information relevant to the planning of future development projects; and

(c) develop effective and efficient procedures and methods suitable for the future monitoring of major development projects."*

General

Client Views

"I don't expect quick, easy answers but rather the creation of a climate of opinion through long-term exposure."

"Clear answers to a set of queries about construction impacts."

"It will mostly be in general terms rather than in quantitative detail. I'm not opposed to that in principle."

"None -- just confirmation."

"Quite frankly, I don't think any of us had any."

"I'm concerned that the results, good or bad, are available and the exercise is completed."

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* At the renegotiation (1978-79), these objectives were priorized as (b), (c) and (a) and reworded slightly.

Academic Views

"There are enormous expectations built into contracts."

For the Future

Client Views

"Relate the findings to future stations -- not just power stations -- but industrial development on a small community in general."

"Try and tell us what we have to worry about."

"Build up methods and theories for elsewhere."

Academic Views

"I hope it sets the stage for things to come."

About the Reports

Client Views

"A summary of findings in one place and cross-referenced."

"I wouldn't expect more than an updated, enlarged version of the Popular Report."

Specifics

Client Views

"Guidance on public participation."

"Understanding of the vulnerability of a local authority."

"A quantitative formula to establish the distance people are willing to commute."

"Advice: Should we consider siting power stations closer to the city? How much is that worth?"

Academic Views

"I hope it will be sufficient to guide the Ministry of Works about small towns."

OTHER REASONS FOR ENTERING INTO THE CONTRACT

Client Views

"The Ministry had the feeling it was the right thing to do."

"It was good for public relations."

"We felt something should be done for the local area."

Academic Views

"In the early '70s, Muldoon started saying things about the uselessness of universities. I always had the feeling that the administration seized on the Monitoring Project as part of its jitters about the implications of the National Party becoming the government -- rather than seeing it as a way of implementing the aims of the university."

"Public relations. The University was keen to establish itself in the research field."

"It started as a sop to the natives."

"We wished to capitalize on the University's advertised interest in interdisciplinary studies."

FUNDING

On Budget Formulation

Client Views

"There were lots of problems with the budget. We wanted to keep the budget low to increase the chance of getting approval. I really thought the University could do it cheaper (than we could do it in-house)".

Academic Views

"We made a list of things we thought we needed money for and costed them. It came to $40,000. We got a response back that it was too high. The Hamilton Regional Planning Authority was giving contracts for growth studies around $20,000. I had the feeling that once we exceeded that, it added a different dimension. We were hazy on running costs."

Budget in the Overall Context

Client Views

"We are always short of funds."

"You never give anybody the money they want to do the job the way they want to do it."

"The money was reasonable in the New Zealand context."

Academic Views

"In the early '70s, no money more than $1,000 was ever spent on social sciences in New Zealand. The scale of the Huntly Monitoring Project is astronomical in this context."

"It was naive to think that the Huntly Monitoring Project could be done on a 'pennies in the marmite jar basis'."

Budget in the Fundors' Context

Client Views

"The money compared to the (Huntly Power) Project was very small; but it was more than had been spent previously -- which was zero."

"Town and Country Planning Division was the only one prepared to fund it. It was a big decision as it was a large proportion of a small research budget -- about 50%."

Academic Views

"The bucket it dipped into was too small. So any attempt to get the budget increased was in terms of tiny overall funds."

On Renegotiation

Client Views

"Money tightened; the project's results were not shattering and there was pressure to abandon it. Fortuitously, the Minister of Energy persuaded New Zealand Electricity to fund it. This took the pressure off Town and Country Planning Division whose allocation had been frozen and exacerbated by inflation."

"The costs weren't so excessive that the exercise shouldn't be completed."

Academic Views

"All the way through we seemed to be fighting for existence. We were always begging for money."

CRITICISMS OF THE PROJECT'S CONTRACTING PROCESS

Unrealistic Expectations

Client Views

"The user hadn't decided what it wanted out of it. They said, 'Go ahead and produce and we'll see whether we like it or not'."

"There was a fantastic diversity of interests and high expectations for payoff."

"The client and the contractor needed a clear idea of expectations and the means by which they will deal with situations."

Academic Views

"We stopped asking, 'What do you want the project to do?' They couldn't say. After an initial hassle, we established that the clients had no clear conception of what they wanted."

"You should assume that behind the facade are hidden agendas. Take it for granted that you're a pawn in somebody's game."

An Inadequate Brief

Client Views

"The brief should have been more carefully prepared. It was too ambitious in terms of the resources available."

"They should have given out general guidelines in the brief and then get more focused as they proceeded."

"You should ensure a complete understanding of the brief with the client."

Unachievable Objectives

Client Views

"The remedial action objective is 'for the birds'. The 'die is cast' too soon for that sort of thing."

"Every community is so different that monitoring makes no useful future planning contribution."

Difficulties with Data Access

Client Views

"They had a lot of unnecessary trouble getting the data. They should have put a monitor on staff and sell the project to the Minister of Energy. He then could get other Ministers to direct the cooperation of other departments and the unions."

"Some of the information they asked for was not readily accessible. We could have done it if it had been pre-planned or if we had a sophisticated information system, but we must know the needs from the start -- before the management system is set up for the site."

Other Criticisms

Client Views

"The idea of information is good, but in getting the data, the community took greater priority than the people coming in to build the power station."

THE VALUE OF THE MONITORING PROJECT

A Pioneering Effort

Client Views

"The Huntly Monitoring Project was worth doing even if it produced no useful results. The sort of funds committed to the power station justified money spent on examining the effects of the project on Huntly -- as a pilot, because it hasn't been done before. So whether it is directly relevant to (us) is not important."

"It is a pioneering effort -- worthwhile as consciousness raising. We can learn from the process itself."

On the Value of Documentation

Client Views

"I have read the reports and criticised them. I have taken heed but I don't always agree. Lots of the results have confirmed my own feelings and predictions. Some are quite interesting, though not unexpected."

"You think of course, I knew that all along -- meaning I should have known that. It's useful as a consolidated reference."

"There is an advantage to recording what has happened. We are spread thin here. Information is buried in files and in peoples' heads and experience."

Future Planning

Client Views

"Historical information gives you an idea of how to steer things the next time around."

"Irrespective of the findings, will anyone take any notice of it?"

Public Relations

Client Views

"It was a public relations exercise. The money may be better spent to buy your way out."

"Their neutrality cooled things."

Academic Views

"The University took on Huntly as an exercise in public relations -- to front up to community responsibility and be seen to be doing good -- to demonstrate our utility to the taxpayer."

Legitimizing Social Science

Client Views

"It might influence the government to take social scientists in in-house investigating teams."

"It highlights the importance of social planning for a scheme like Huntly."

"My own ideas are too concrete. I'm learning that with social science you can't get hard answers. So now I have more realistic expectations."

Academic Views

"It will help to further legitimate social science."

"Little Things"

Client Views

"I'm now conscious to give out information cautioning local people (about high expectations from a project) -- not that they take any notice."

"The data handbook is a good thing."

"The work on commuting patterns was spectacular."

"Based briefs for Turangi on the Monitoring Project."

"Used their assessment of the Liaison Committee to decide on its (the committee's) future."

"It's methods and conclusions are used by consultants and planners. Not thoroughly, but in the form of citing conclusions."

"It was helpful on Maori dialogue."

"It gave guidance on participatory procedures."

"It brought out the issue of stress on local bodies (authorities)."

"Used its information about housing and accommodation for Broadlands geothermal." (Ohaki also cited).

Academic Views

"It provided no overall perspective. It can't provide the big answer, but (maybe answers to) many little things."

Other Views

Client Views

"It is a necessary evil but I recognise its role."

"Its use is indirect, through using Tom's (Fookes) advice on Waikato number two."

"I'm not prepared to judge it until I've read the final reports."

"Its lack of generalizability is good because then the misinterpretation (in the reports) doesn't count."

Academic Views

"It's better than consultants' drivel."

"Its value is still ephemeral."

THE STEERING COMMITTEE

On Its Success

Client Views

"It worked reasonably well. It was a good arrangement for running it."

"It was a major commitment. Its members devoted a lot of time and effort to it."

Academic Views

"It was the one part of the project that got bonded and committed. It was invaluable."

"It was an important way of involving people affected by the Huntly Monitoring Project. It also had an unintended, stabilizing influence."

On Its Role

Client Views

"Our biggest involvement was making sure they (head office) funded us."

"I advised the Crown on the Monitoring Project. I also convinced the doubters that all will be well."

"We stopped some papers from publication."

"The project would get off on a tangent and we needed to keep it on track. We gave overall guidance, never strong direction."

Academic Views

"It was really the Correcting Committee. The Technical Committee did all the work. That was the real Steering Committee."

"It was called the Steering Committee and it steered alright. There was no question of bucking the system once it got going. Nobody was a free agent. Tom (Fookes) was like the manager of a factory, not a peer."

"A support base for Tom (Fookes)."

"A good buffer against Wellington."

"It had no reflection on the long-term. Its focus was on trivia."

THE TECHNICAL COMMITTEE

On Its Formation

Academic Views

"The proposal went around saying that the Huntly Monitoring Project was getting off the ground, and if we had any interest contact Tom (Fookes). So my name was put on the list."

"We just shoved in anyone who came to the meeting into the proposal."

From a member: "I was never on any committee."

Problem: Lack of Participation

Academic Views

"By the second meeting, we still got nothing constructive. It (the Committee) wasn't going to work psychologically or technically. Then our vulnerability hit me, and him (Tom Fookes) too, I think."

Problem: Identification with Geography

Academic Views

"It was clear it was a Geography enterprise. It came out of Geography."

Problem: Inability to Get Staff Resources

Academic Views

"There was no way any of us could have come in and make a name for ourselves. It was always an adequate show, but Tom's show."

"Tom (Fookes) had no power. He could only ask and hope that people would cooperate."

Problem: Divergence of Interests

Academic Views

"All sorts of ideas came up but it was quite obvious it was impossible. The enthusiasm could have only been sustained if everyone had had their pet theory applied."

"By the proposal, a fundamental schism was already emerging between those who wanted to do a descriptive study and those who wanted to study power."

"My own interests were peripheral to the Monitoring Project at the time. A lot of people were in a similar position."

Problem: Lack of Commitment

Client Views

"I wasn't surprised that the University didn't come across. That's why it's important to get the full-time commitment of one person. A group doing it in their spare time would be highly unlikely."

Academic Views

"I was dismayed at the nonresponse of my colleagues to the Monitoring Project. They were always sniping. The support wasn't there."

"I had no formal commitment to the Monitoring Project. I wanted to be involved but I had other commitments."

"In their view, we let them down. We let Tom (Fookes) down by not being feeders of personnel and grant funds. We probably should have helped, but Tom never came around and asked. And we never felt it was necessary. It was a contract job anyhow."

CRITICISM OF THE PRODUCT*

The Future Planning Objective

Client Views

"Whether the project is generalizable other than in the Waikato, I don't know."

The Method Objective

Client Views

"We won't get anywhere near the methodological development and answers expected."

"It focused too much on monitoring, as opposed to the types of monitoring necessary in different circumstances."

The Remedial Action Objective

Client Views

"There was no imaginative attention to the question of remedial action."

Lack of Policy Implications

Client Views

"The project seemed restricted by an inability of the planning and decision-making process to use the data."

The Reports

Client Views

"There was a practical difficulty with the material. We could never find what we needed as there was too much information."

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* Prior to release of the project's final reports.

Bias

Client Views

"Their own views have come through rather than representing the views of the community."

"You've got to be careful how they get information and what use they put to it. They had a tendency to an attitude that there must be problems. They'd dig deep enough for them to happen. They put words in people's mouths. People felt they stirred the community up -- created rifts."

Inappropriate Research Approach

Academic Views

"There was a lot of energy put into data collection, but not on analysis."

"I respect the collection and storage of data but still don't see that it has any necessary implications or significance."

Other Criticisms

Client Views

"How much was found out which wouldn't have been found out anyway in the normal course of events?"

"I'm a little unsure whether it is completely meeting the requirements."

"They didn't contact a group of users to help concentrate on specific areas and find out what information a regional economist would want."

A P P E N D I X

PEOPLE INTERVIEWED FOR THIS STUDY

The Steering Committee

D.R. Llewellyn (Vice-Chancellor, University of Waikato) Chairman
B.C. Atwool (Assistant Registrar - Academic, University of Waikato) Secretary
D. Burton (District Planner, Ministry of Works and Development) observer
B.J. Butcher (District Commissioner, Ministry of Works and Development) member
P.W.P. Chapman (District Manager, New Zealand Electricity, Ministry of Energy) member
R.E. Hermans (former District Commissioner, Ministry of Works and Development) former member
R.A. Wright (Mayor of Huntly) member

The Technical Committee

J.E. Ritchie (Dean, School of Social Sciences) Chairman
D.J. Bettison (Professor, Department of Sociology)
A.I. Chalmers (Lecturer, Department of Geography)
N.J. Ericksen (Senior Lecturer, Department of Geography)
M.D. Hills (Senior Lecturer, Department of Psychology)
R. Te K. Mahuta (Director, Centre for Maori Studies and Research)
P.D.K. Ramsay (Senior Lecturer, Department of Education)
W.T. Roy* (Professor, Department of Politics)
E.M. Stokes (Reader, Department of Geography)
D.A. Swain (Senior Lecturer, Department of Sociology)
D.R. Thomas (Professor, Department of Psychology)
J.T. Ward (Professor, Department of Economics)

The Research Unit

T.W. Fookes (Project Coordinator)
R.J. Drury (Assistant Project Coordinator)

Other University Personnel

G.S. Lamont (Assistant Registrar - Academic)

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* Contacted but unable to be interviewed

Other Government Personnel

Commission for the Environment

A. Hutchinson* (Investigating Officer)

Department of Social Welfare

T. Gallen (Chief Executive Officer, Development)
R. Ketko (Director, Social Work Development)

Ministry of Energy

J. Malcomson (Principal Design Engineer, New Zealand Electricity Division)
S. McDonald (Power Project Coordination Engineer, New Zealand Electricity Division)
B. McGlinchy (Senior Power Development Engineer, New Zealand Electricity Division)
S. Wong (Chief Development Engineer, New Zealand Electricity Division)
L. Wright (Development Division Sociologist, New Zealand Electricity Division)

Ministry of Works and Development

C. Crothers (Senior Investigating Officer, Social Planning, Town and Country Planning Division)
J. Gardenier (Senior Engineer, Development, Town and Country Planning Division)
W. Gardner (Senior Research Officer, Town and Country Planning Division)
V. Hatrick (Chief Development Engineer, Power Division)
C. Moore (Engineer, Programming and Development Branch)
H. Robertson (former Chief Power Engineer, Power Division)
J. Stewart (Divisional Planner, Development, Town and Country Planning Division)
T. Town (Director, Town and Country Planning Division)
M. Williams (Chief Power Engineer, Power Division)

National Research Advisory Council

G.S. Fraser (Chairman, Committee D)

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* Contacted but unable to be interviewed

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APPENDIX 20

TELEXES CONCERNING
DRAFT WORKING PAPER

D79 HO HN 13.3.80 TP148/137/11

TOWN PLANNING - HUNTLY MONITORING PROJECT - COMMENTS ON WORKING PAPER 10.

ATTN MR D BURTON

WOULD YOU PLEASE PRESENT THE COMMENT BELOW AT THE STEERING COMMITTEE MEETING ON FRIDAY. TOM FOOKES IS AWARE THAT IT IS COMING.

''REFERENCE PAGE 1.7, PARAGRAPH COMMENCING 'THERE IS NO DOUBT....'

POWER DIVISION IS CONCERNED THAT THE PARAGRAPH DOES NOT PUT THE PROJECT SITUATION WITH RESPECT TO ACCOMMODATION FAIRLY AND THAT BY SO DOING THE POSITION OF GOVERNMENT AND OFFICIALS HAS BEEN MISREPRESENTED. A POSSIBLE STATEMENT FOLLOWS:

'AT THE OUTSET OF THE PROJECT IT WAS NECESSARY FOR THE GOVERNMENT TO DECIDE WHETHER TO PROVIDE HOUSING IN HUNTLY FOR THE WORKFORCE OR WHETHER TO RELY MAINLY ON PEOPLE FINDING THEIR OWN ACCOMMODATION, AND CONSTRUCT A MINIMUM NUMBER OF HOUSES. IT WAS EXPECTED THAT CONTRACTORS ON SITE WOULD NOT PROVIDE HOUSING AND WOULD PAY TRANSPORT ALLOWANCES AND TRAVELLING TIME IN LINE WITH CURRENT INDUSTRIAL AGREEMENTS IN THE REGION. STATE WAGE FIXING PROCEDURES WOULD ENSURE THAT STATE RATES PARALLED PRIVATE SECTOR RATES ON THE SAME SITE. ECONOMICALLY PAYMENT OF ALLOWANCES TO ENABLE EMPLOYEES TO PROVIDE THEIR OWN ACCOMMODATION WOULD BE LESS COSTLY THAN PROVIDING HOUSING. IN THE EVENT IT WAS NECESSARY ONLY TO PROVIDE PERMANENT HOUSES TO MEET NEW ZEALAND ELECTRICITY AND MINES DEPARTMENT FINAL OPERATING REQUIREMENTS, 125 RELOCATABLE HOUSES FOR KEY WAGEWORKERS, AND A CAMP AND HOSTEL FOR SINGLE WORKMEN AND STAFF.

THERE IS NO DOUBT THAT SOME LOCAL PEOPLE HAD UNREALISTIC EXPECTATIONS ABOUT HUNTLY'S BOOM-TIME (SEE FOOKE'S, 1979). RETAILERS NEGATIVE REFERENCES TO TRAVEL ALLOWANCE PAYMENTS AT THE PROJECT (PAGE ..) AND ITS EFFECTS ONPOTENTIAL BUSINESS FOR HUNTLY FORM PART OF THIS PERCEPTION PROBLEM.

THESE ATTITUDES MAY HAVE BEEN UNWITTINGLY FOSTERED BY GOVERNMENT PUBLICISTS SEEKING TO GAIN ACCEPTANCE OF THE PROJECT IN THE TOWN. ON THE OTHER HAND GOVERNMENT COULD HARDLY BE EXPECTED TO CREATE FAVOURABLE CONDITIONS FOR HUNTLY BUSINESSMEN AT THE COST OF THE PUBLIC AT LARGE. PERHAPS THE AVOIDANCE OF A POST-CONSTRUCTION ''BUST'' WILL BE ACCEPTED AS A POSITIVE EFFECT''.

WIN GARDNER
0840AV

SUBJECT - HUNTLY MONITORING PROJECT

- - - URGENT - - -

PRINTING DEADLINE PREVENTS FULL CONSIDERATION, BUT SOME COMMENTS ON SUMMARY OF DRAFT WORKING PAPER 10 ARE AS FOLLOWS:-

1. SELECTED VIEWPOINT USED AS FRAMEWORK FOR SUMMARY DETRACTS FROM OBJECTIVITY OF REPORT, BUT DOUBT IF IT IS PROFITABLE TO COMMENT GENERALLY ON THE STRUCTURE OF THE REPORT.

2. WE CONSIDER CONTENTION THAT CONSTRUCTION WORKERS WOULD HAVE BEEN ENCOURAGED TO BUILD OR BUY HOUSES IN HUNTLY BY THE NON-PAYMENT OF ACCOMMODATION AND TRAVELLING ALLOWANCES IS INVALID. THIS COMMENT AND SUPPORTING REASONS HAVE BEEN PREVIOUSLY MADE. IT IS DISAPPOINTING THAT THE REPORT DOES NOT EXPLORE THE SOCIAL DYNAMICS, INCLUDING BEHAVIOURAL ASPECTS, OF ATTEMPTING TO INDUCE A WORKFORCE TO RELOCATE IN HUNTLY FOR THE LIMITED DURATION OF PROJECT CONSTRUCTION, AGAINST COMPETING AND ESTABLISHED SOCIAL NEEDS.

3. PAGE 1.7 SECOND PARAGRAPH SUGGESTS THAT PAYMENT OF CONSTRUCTION ALLOWANCES HAS REDUCED THE REQUIREMENT FOR PERMANENT ACCOMMODATION. THIS IS INCORRECT. PERMANENT ACCOMMODATION REQUIREMENT IS DETERMINED BY STATION OPERATIONNG AND MINES DIVISION PERSONNEL, WHO ARE NOT PAID ACCOMMODATION/TRAVELLING ALLOWANCES.

4. IT SHOULD NOT BE ASSUMED THAT THE DEVELOPED OR DESIGN CAPACITY OF THE KIMIHIA SUBDIVISION EQUATED TO THE FORESEEN HOUSING REQUIREMENTS OF THE PROJECT, AND PARTIAL DEVELOPMENT ONLY OF THIS SUBDIVISION TO DATE IS NOT A RESULT OF THE PAYMENT OF ACCOMMODATION ALLOWANCES TO CONSTRUCTION WORKERS.

5. STANDARD HOUSES HAVE ONLY BEEN BUILT IN THE NUMBERS REQUIRED, AND LONG TERM MINES DIVISION REQUIREMENTS ARE ESSENTIALLY UNCHANGED.

6. PAGE 1.7. IT IS CONSIDERED THAT GOVERNMENT'S WISH TO USE MAUI GAS IS BY NO MEANS ESTABLISHED.

7. PAGE 1.9. IT IS INCORRECT TO ATTRIBUTE HIGH RATING LEVELS IN HUNTLY TO PROJECT-RELATED COSTS. UPGRADING OF BOROUGH SERVICES WERE REQUIRED REGARDLESS OF PROJECT CONSTRUCTION, AND INDEED THE CAPITAL CONTRIBUTIONS THAT HAVE BEEN MADE BY THIS DIVISION TOWARDS THE UPGRADING OF BOROUGH SERVICES HAVE ENABLED THIS WORK TO BE CARRIED OUT AT LESS COST TO RATEPAYERS THAN THEY WOULD OTHERWISE HAVE INCURRED.

8. IN VIEW OF DIFFERENCES IN SERVICES PROVIDED, WE CONSIDER A RATES COMPARISON BETWEEN HUNTLY AND NGARUAWAHIA OF NO PARTICULAR SIGNIFICANCE.

9. ON THE SUBJECT OF HOUSING DEVELOPMENT, GIVEN THAT THE CONSTRUCTION OF PROJECT HOUSING HAS PROVIDED OPPORTUNITY FOR THE LOCAL BUILDING AND CONTRACTING INDUSTRY, THE MAIN EFFECT OF CROWN DEVELOPMENT HAS BEEN THE LACK OF OPPORTUNITY FOR SPECULATIVE PROFITS FROM PRIVATE RESIDENTIAL DEVELOPMENTS.

10. WE CONSIDER CONCLUSION THAT PROJECT HOUSING HAS NOT AFFECTED VALUE OF HUNTLY HOUSES, ONE WAY OR THE OR OTHER IS CORRECT. PEOPLE SHOULD NOT EXPECT HAMILTON PRICES FOR HUNTLY HOUSES. REPORT SHOULD NOTE GUARANTEED CROWN REPURCHASE PROVISION FOR HUNTLY OPERATORS HOUSES, WHICH WILL PROTECT HUNTLY PROPERTY VALUES GENERALLY

S. MACDONALD

APPENDIX 21

KRAWETZ SOCIAL PROCESSES

Source: Final Report Series, Paper No.8

Group Three:
Social Processes Affecting and Affected by the Interaction of Community and Project Characteristics

This section deals with social characteristics that are much more abstract than those listed in the previous two sections. While these parameters are less easily discerned than those listed previously, they play a role in shaping the likely social impacts of a project and are, in turn, shaped by that project.

15. Differentiation in the Community

Differentiation refers to the number and complexity of institutions in the community. With increasing differentiation there is increasing specialization and more complex and formal linkages between the various 'specialties' (within the institution). In Paper No. 4B (in the section, The Unforeseeable: Perhaps the Most Insidious Effect), I described structural aspects of the community in terms of the number of roles, the number of people occupying those roles, and the definition of the role. Consider the institution, local government, and the role of Mayor, in a very small community. The same person may very well have another job (in addition to being Mayor) because there is not enough work to make being Mayor a full-time occupation and/or because the salary is too low for it to be one's sole income. A Mayor in this type of community may be assisted by a part-time council and a clerk. Other communities do have full-time Mayors (with full-time salaries); and, in addition to a council, have a more specialized staff of considerable size to assist (e.g. secretaries, clerks, planners, executive assistants). In the first case, the position of Mayor may cover a broad area with relatively few people to whom tasks can be delegated. The day-to-day operations may be so straightforward that

little delegation is required. In the second case, while the position of Mayor covers a broad area, there are many people to pursue specialized aspects, and indeed, the administrative tasks often function quite separately, though interdependently, from the Mayor -- in the same way that the civil service of a government department has a separate functional existence from its Minister and continues regardless of who occupies the ministerial position; however, the two are interdependent, not independent, the civil service being responsible to the Minister and the Minister needing the back up of the civil service.

Differentiation refers to all community functions and roles, not just those of government. For example, a community whose medical care consists of the local pharmacist is considerably less differentiated (in terms of medical services) than one which has nurses, general practitioners, specialists, pharmacists and laboratory technicians.

Rationale/Importance: As a community (or organization) grows, differentiation tends to increase. The community becomes more specialized and interdependent, and as consequence, becomes more formal, professional and bureaucratic. When growth occurs over a relatively long period of time, differentiation is gradual and more easily managed. In communities experiencing rapid growth (say, because of a new project), the number of community institutions that may be increasing their differentiation at the same time (e.g. health care, protection, government) can make the rate and amount of change extremely difficult to manage.

Communities (and organizations) which (prior to the project) are more differentiated tend to be more able to cope with change. However, note that as the amount of

differentiation increases so do problems with integration (see next item).

References: Cluett et al. (1979); Cortese and Jones (1977); Dixon (1978); Fookes (1980b, p.5-6; 1978, p.4.3,#7); Ministry of Works and Development (1979, p.4-5); Thompson and Branch (1980).

Community Integration

Integration refers to the ways in which relationships among people are connected and coordinated. In Paper No. 4B (in the section, Costs: The Project as a Financial Surprise), I described one such mechanism, community watchfulness.

Watchfulness refers to the things that people in small communities do to keep an eye on one another and their property. In small, stable communities people do a pretty good job of watchfulness (Freudenburg, no date). For example, if the Smiths are away and Mrs Brown, their nextdoor neighbour, sees someone coming out of their house at night, she is bound to switch on her light and find out who it is (and if they should be there) or call the police. Mrs Brown may not think of herself as a police officer, but merely as someone doing what anyone else would do in that situation. Yet she is acting as an unpaid police officer, in a sense. In these kinds of communities, the number of paid police officers is really not a true indication of the total amount of protective service available (because the community is full of watchful citizens).

Watchfulness is only one such integrative mechanism. Freudenburg (no date) outlines others (e.g. helping mechanisms, caring mechanisms).

In larger communities such mechanisms are more formal. For example, instead of the informal watchfulness mechanism there is more formal police protection including probation officers, elaborate court systems, jails. This more formal arrangement is designed to do essentially the same function(s) as the informal watchfulness mechanism. However, the formal protective services are more differentiated.

Rationale/Importance: As communities grow and become more differentiated, the informal integration mechanisms begin to break down. And as they break down, they are replaced by more formal arrangements. Ironically, these more formal mechanisms do the job less effectively than their less formal predecessors (see Paper No. 4B, section called, Weighing the Benefits and Costs: The Weak Become Weaker).

To show how this breakdown occurs, let us return to the example of community watchfulness. This informal system works well on one condition: that everybody knows everybody else. When a town grows rapidly this system falls apart because its foundation (that is, everybody knowing everybody else) has changed. As more and more strangers come into the town, it becomes impossible to tell who belongs and who does not. As this happens, crime increases -- not because longtime residents are no longer watchful, but because with so many new faces, it becomes impossible to tell who is rightfully doing something and who is not. If your nextdoor neighbour changes every few months, then it is harder to tell whether or not people taking furniture from the house and putting it in a van are movers hired by the occupants, or robbers. Also, as the watchfulness system breaks down, more longtime residents commit crimes as well. It becomes easier for both newcomers and longtime residents to commit (some kinds of) crime, when there are more and more strangers in an area.

Therefore, when the community grows rapidly, crime tends to rise rapidly, as well (more rapidly than could be accounted for by the population increase -- for example, a population increase of 20% could result in a 50% increase in crime). Under rapid growth conditions, many community services which were previously provided for on an informal basis break down and need to be replaced; hence an increase in formal services, far in excess of what would be anticipated solely on the basis of the number of new people moving into an area.

References: Cortese and Jones (1977); Davenport and Davenport (1979); Dixon (1978); Fookes (1978, p.2.3,#11; p.4.51-4.56); Freudenburg (no date, 1980a); Thompson and Branch (1980); West (1977).

17. Community Stratification

Stratification refers to the levels of rank in a community or society. Everyone has a particular location, or social position, in a community, at a particular level; and these levels are ranked. For example, a person who is Governor-General has a higher rank than one who is a coal miner. The higher the rank, the more access a person has to social rewards such as privilege, power and prestige. Stratification is important because different strata have different access to resources in a society for meeting their needs. For example, an unemployed, unskilled person is less able to feed a family well, than a highly-paid professional. The criteria for rank differ in different societies or parts of societies. For example, in South Africa, colour is a criterion; so a black professional has lower status than a white person of similar qualifications. This means the black is likely to earn less money and have less prestige. Other criteria for rank include: economic (wealth); political; religious; educational.

Rationale/Importance: A new project introduces change in a community, and one group of social changes associated with a new project are changes in community stratification. There are three types of such change.

First, there are changes in the distribution of status (rank) within the community. For example, in some towns the Project Engineer becomes more powerful and prestigious than, say, the Mayor. In this case, the highest political rank has been redistributed, with a consequent downward shift in the Mayor's rank.

Second, there are changes in the distribution of occupations in the community (see Paper No. 2). New projects offer new (and often different kinds of) employment opportunities than may have existed previously in the community. In some cases, long-time residents advance in occupational rank; however, often newcomers assume the more highly skilled (and thus more highly paid) and prestigious positions.

Third, there are changes in status inconsistency. This refers to lack of fit among the criteria used to assign an individual's rank. For example, people who are more highly educated are usually more highly paid; in this case, the educational and economic criteria for the professional rank fit. However, if a scientist is unemployed then there is a lack of fit between these criteria (one being of high status, the other low). Status inconsistency is stressful to the individual, and can be one of the consequences of social change.

References: Cortese and Jones (1977); Dixon (1978); Freudenburg (1980b); Fookes (1980a, p.2.39-2.40, p.2.101; 1979; 1978, p.2.2,#5; p.4.12,#14; p4.13,#16); Thompson and Branch (1980).

18. Extra-local Linkages

Every community has links to the larger society outside and vice versa. Examples of such links are: political -- between a local authority and higher levels of government; economic -- between suppliers and markets; familial -- between relatives.

Rationale/Importance: Linkages change with new projects. For example, as a result of energy projects, a community establishes and/or increases its links with energy organizations (i.e. becoming more interdependent). If the community's economic links are based solely or in large part, on a particular industry, then the community's future is highly vulnerable to changes in that industry. The classic examples are single industry resource towns which die when the industry shuts down. Increased vulnerability implies an increasing dependence on the extra-local links and a loss in local autonomy or self-determination.

References: Cortese and Jones (1977); Dixon (1978); Fookes (1980a, p.2.74 + foll.; 1978, p.4.2,#5; p.4.34,#16,#17; p.4.40,#1,#2; p.4.44-4.46; p.4.59-4.61); Murdock and Leistritz (1979); Peelle (1979); Purdy et al. (1977); Shields et al. (1979); Thompson and Branch (1980); Vautier (1977, p.15,#16).