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Employment Contracts

A Pocket Guide for Valuers

Introduction

The obligations which an employee and an employer owe to each other are to a certain extent regulated by statute and common law. These factors are outside the control of the employer or the employee. Both parties, however, determine what will exist in the contract of employment which primarily defines the relationship between them. A contract of employment can be either of an individual, or of a collective, nature. An individual employment contract, an "IEC", is between the employee and employer only, and "individual" in that sense, notwithstanding the fact that many employees may be contracted under identical IEC's. An IEC may be in writing, but if not reduced to writing then the agreement between the parties will be what has been agreed orally, together with any terms that may be implied or arise by virtue of custom and practice. In the absence of agreement to the contrary, many terms will also be deemed by statute to be included for example minimum provisions relating to annual holidays and grievance procedures.

A collective employment contract, a "CEC", is an agreement between one or more employers and any or all of their employees. Unlike an IEC, a CEC must be in writing. If the parties agree, then an authorised representative of the employee, such as a Union, may even become a party to the contract. A CEC must have an expiry date and, if not renegotiated, the employees who are parties to the CEC will, from the date of expiry, be deemed to be employed pursuant to IECs based on the terms of the expired CEC.

If the parties desire, then additional terms in respect of individual employees can be contained in an IEC "on top of" the CEC, provided these additional terms are not "inconsistent" with the CEC. For example, while all the employees of an employer might be parties to a CEC, the employer might wish to offer a senior employee an additional bonus scheme. This could appropriately be contained in an IEC.

When drafting a contract, whether an IEC or a CEC, an employer should either be familiar with the various Acts of Parliament relating to employment law as well as the common or "Judge-made" law, or seek assistance from an appropriate specialist, to ensure not only that none of the "bare minimum requirements" of an employment contract are missed, but also to ensure that the contract is drafted with consideration to recent Employment Tribunal and Employment Court decisions. It can very much be a case of "a stitch in time saves nine".

Some issues that need to be considered are:

The Nature of the Contract

Consideration should be given by both parties to whether the circumstances are appropriate for a permanent, part-time, temporary, or fixed-term contract. When determining this, regard should be had to the duties involved, the period for which the duties will need to be performed, the number of hours per week needed to perform them, whether the position is seasonal or otherwise, any employment history between the parties, the current employment market for positions of a similar nature. While a "fixed-term" contract, for example, has some advantages, it also carries with it some disadvantages. These have to be weighed.

Determining this issue at the beginning of the employment relationship is important and can allow real advantages to both parties. For example, if a contract is genuinely of a temporary and short term nature then it is possible for the parties to agree that, holiday pay be on a "pay-as-you-go" basis, provided that this arrangement is expressly agreed to by the parties. This is often administratively convenient and mutually desirable, but it is not lawful to pay holiday pay this way to an employee who is considered permanent, whether a "fixed-term", "full-time" or "part-time" employee.

If a contract is to be of fixed-term nature, then an employer must be careful to ensure that the entire contract is consistent with this concept. For example, the treatment of special leave, annual leave, and other time-related entitlements in the contract must be carefully considered. While the Court of Appeal has recently held that a fixed-term contract may be enforced as such and that simply to allow what is genuinely a fixed-term contract to expire does not necessarily amount to a dismissal, the Tribunal or Employment Court will still look carefully at any situation where there is a genuine expectation of on-going employment, or the fixed-term nature of the agreement is a mere sham. Both of these factors might be heavily inlfuenced by the provisions of any written employment contract.

But even before this decision can be made, an "employer" must determine whether the relationship will truly be one of employment, or whether it will be one of principal-contractor. While a principal will not owe to a contractor many of the obligations that an employer will owe to an employee, such as annual leave and special leave, and will be able simply to terminate the contract in accordance with its terms, the Inland Revenue Department and Employment Court will not allow what is a relationship of employment in substance to be masked by what purports to be an independent contract. The determination of whether a relationship is truly one of independent contract, or is one of employment, turns primarily on the intention of the parties, as well as the degree of control exercised by the principal/employer, the level of independence of the contract/ employee, the nature of the tasks undertaken, and the economic reality of the relationship. If a relationship is borderline, it is particularly important that it be documented appropriately to demonstrate the "intention" of the parties.

Redundancy

While New Zealand employment law recognises the employer's prerogative to manage its business generally as it considers fit, this is not an unfettered discretion and it has been held that, in the absence of express agreement to the contrary, a term will be implied into the employment contract to the effect that an employer will act as a fair and reasonable employer. Generally this will include an obligation both to pay "fair and reasonable" compensation and to allow a fair and reasonable notice period in the case of a redundancy. However, if the issue of redundancy has been expressly addressed by the parties, then the Tribunal or Court will not interfere with that agreement except in "exceptional circumstances". The message to employers is to address the issue at the time of contracting, rather than when a problem arises. This might be by providing for a particular amount of redundancy compensation, a service-related formula, or even that no redundancy compensation shall be payable. A note of caution however. There has been litigation in this area and an employer should be particularly cautious in drafting such a clause.

Technical Redundancy

A "technical" redundancy occurs where an employer disposes of some or all of its business or as-

sets such that one or more of the positions of the employees who staffed those assets is redundant. Even if the purchaser of the business or assets requires the employees to work in substantially similar positions, employees cannot simply be transferred, and the fact that an employee might cease employment with a vendor on 5.00 pm on Friday, and commence similar or identical duties with a purchaser at 9.00 am on Monday does not affect the fact that there has been a cessation of employment, and an employee will consequently be entitled to any contractual benefits payable upon termination by reason of redundancy. While it is possible to address these issues to a certain extent if they arise subsequently, it is vastly preferable that the contract contain a "technical redundancy" clause which could provide that an employee is not entitled to redundancy compensation or notice of redundancy where redundancy occurs by virtue of a sale or transfer of assets and the employee is offered alternative employment by the purchaser on substantially similar terms. The precise wording of a technical redundancy clause is important, and could save an employer a considerable amount of inconvenience and expense at a later date. Remember, though, that a technical redundancy does not occur where there is nothing more than a sale or transfer of shares. After all, this happens every day.

Payments

In the electronic age, it is becoming increasingly common for an employer to overpay an employee because of a computer or even human error, and consequently is in a position where the money overpaid needs to be recovered. The Wages Protection Act 1983 provides that in certain circumstances, following the appropriate notification procedure, an employer may recover an overpayment by deducting certain amounts from an employee's wages. Technological or administrative error is not one of the grounds mentioned in the Act, and accordingly any right of recovery is dependant upon the common law. In the event therefore, particularly in the case of a larger workforce, of an overpayment being made, an employer is required to seek consent to make deductions from wages. This consent can be obtained in advance in the form of a provision in an employment contract which allows an employer to make deductions in the case of overpayments, although this consent may be withdrawn at any time. The inclusion of a overpayments clause, while it may never be needed, can, like a technical redundancy clause, save an employer considerable inconvenience and expense at a later date. Such a clause should also deal with any debts owed by the employee to the employer at the time when employment terminates.

Wellness Policies

While the Holidays Act 1981 provides for 5 days of "special leave" (being sick, bereavement, or compassionate leave), many employers are offering to their employees a "wellness" policy which provides that the employees are entitled to leave on those grounds on an "as reasonably required" basis. The success or otherwise of such a policy is largely dependant upon the particular workforce and, anecdotally, approximately 50% of employers with such a policy report a vast decrease in leave taken. The other 50% suggest a significant increase. The use of such a policy, with an appropriate workforce, conveys to the employees a trust and confidence in them and can reduce absences, but needs to be drafted in such a way so as to minimise the potential for abuse and to leave the employer a safety net in the case of abuse or repeated or long-term absences.

Confidential Information

A clause that might be of particular importance to valuers is a confidential information clause that expands and clarifies the obligations that an employee owes pursuant to common law not to deal improperly with the confidential information belonging to the employer or to clients.

Consideration should also be given to whether a restraint of trade clause is included. The courts regard restraint of trade clauses as *prima facie* unlawful, but will enforce them to the extent that they are "reasonable", and a court can enforce a clause modified by it to be reasonable. Employers considering using a restraint of trade clause should take advice on the reasonableness of the restraint that it is intended be imposed, in terms of duration, extent, and scope of the restraint, having regard to the fact that the

courts are particularly reticent to prevent an employee from earning a livelihood. In this area, precision of drafting is everything and must address issues such as whether the restraint is to apply only during or after employment, and if so for how long. Precisely what is to be restricted, and in relation to whom must also be detailed.

Suspension

In certain circumstances, the employer may consider that it is necessary that the employee be suspended for a period of time, particularly to enable the employer to carry out an investigation where it has concerns about an employee that are particularly serious and where it is feared that the employee could influence or cloud an investigation into the matter. While some commentators argue that such a right exists by virtue of common law in any case, it is in some cases preferable to deal expressly with the issue in the contract. Such a clause would ordinarily provide that the suspension would be on full salary unless and until employment is terminated pursuant to the contract.

Bonus Payments

Many employers also offer to some or all of their employees the potential to earn bonus payments. From an employer's perspective such payments should preferably, however, always be payable "in the sole discretion of the employer" or, where it is desired to give an employee an absolute entitlement to earn a bonus, then the criteria and measures to be attained should be precisely quantifiable and clearly defined, as an employee can pursue an action to recover bonus payments for up to six years after they should have been paid. There is therefore the risk that an employee might wait until his or her employment has ceased, and then seek to recover any amount which has allegedly been underpaid in the last six years. In some cases, significant liability has resulted by virtue of poor drafting.

Incorporation of Other Documents

While all the crucial terms and conditions of employment should be recorded in a written employment contract, other subsidiary and related matters can be detailed in other documents such as a Human Resources Manual. An employer must be careful, however, not to put in that manual important terms such as a redundancy clause. Documents of this nature should be referred to in the employment contract in such a way as to impose an obligation on the employee, without necessarily binding the employer, and certainly not preventing the employer from amending or expanding those policies from time to time. For example wording such as "the employee shall abide by..." would be preferable to wording such as "shall bind both parties". When considering documents of this nature, an employer should give thought to whether it is necessary to have any of the following:

- A Health and Safety in Employment Policy;
- A Sexual Harassment Policy;
- A Use of Motor Vehicle Policy;
- An E-mail Use Policy.

An employer should also recognise in the contract that it may issue policies from time to time, and that the employee must abide by these. A prime example is the recently arising need to have a policy relating to e-mails, not only to protect the employer's computer system from viruses and overload, but also to make it clear to employees what is acceptable and what is not acceptable in terms of the personal use of e-mail systems. Further, as accessibility to the Internet increases, and the use of the Internet as a tool expands, policies in respect of the downloading of information will need to be developed.

Variation of Contract

Occasionally, it is necessary that an existing employment contract be varied, either because of changing circumstances, or simply because the parties have agreed upon a different set of terms and conditions. In these circumstances, it might be easier for the parties to simply execute a new contract of employment. However, in certain circumstances all that is needed is for a variation to the contract to be prepared and executed. This course of action might also avoid an attempt by an employee or group of employees to re-negotiate the contract in its entirety. Where this variation is of a minor nature, there is a temptation that it simply be "remembered" by the parties.

As with any contractual condition that is not evidenced in writing there is a risk that the agreement will either be "forgotten" or the parties will subsequently disagree on what was agreed at the time.

Form of the Contract

While an employment contract represents the agreement reached between two parties, and therefore will not usually be able to be prepared "in advance" by an employer , the task can be made administratively easier by recording the most commonly negotiated variables such as salary and the days of annual leave per year in a separate schedule which can then be completed and attached to a copy of the contract for each employee. This method also simplifies recording remuneration increases.

Where the employment contract is to be offered to a existing employee, either as a replacement contract or as part of a new position, then the employer should consider having an "entire agreement" clause in the contract which provides that the contract and its schedules constitute the entire agreement between the parties, and exclude any conditions previously existing or that may have arisen by custom and practice, or by implication, or even by another prior express agreement. When considering such a clause, an employer should satisfy itself that there are not any existing obligations such as repayment of training expenses or an employee loan that the employer wishes to be included in the new contract.

The Last Word

An employer will often get only one chance at preparing an employment contract for an employee as once an employee is employed he or she is under no obligation to accept a variation in terms of conditions. Accordingly it is essential that this important task receives the attention that it deserves. Good legal advice always helps!

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DUE DILIGENCE PROCEDURES

This brief note on Due Diligence has been prepared by the Standards Committee of the NZ Institute of Valuers as an introduction to Due Diligence procedures. It has drawn on members' experience and other writings specially acknowledged below. It does not claim to be a comprehensive coverage of all the issues involved but rather to raise reader's awareness of the scope of a Due Diligence investigation.

A further note on some of the issues involved and a bibliography of readings are available from the NZIV on request.

1.0 INTRODUCTION

1.1 This Information Paper has been prepared for all members of the New Zealand Institute of Valuers to assist in their undertaking of Due Diligence procedures in respect of interests in real property.

1.2 This paper is intended to provide a guide to the Due Diligence review procedures which should be considered by the respective parties prior to entering into a contractual obligation to acquire an interest in real estate to ensure that such parties are fully informed regarding the attributes of a particular property and the risks associated with a proposed transaction.

Definition

1.3 Although the expression "Due Diligence" is now in common usage, there is no single definition. In general terms however, a Due Diligence exercise is taken to involve the type of comprehensive and probing investigation which a prudent person would bring to bear on the matter in question, in order to make an informed and balanced decision. It involves carrying out an investigation within a set time period, and ensuring satisfaction with all matters relevant to the decision-making process. As a result of Due Diligence, the client can confirm the contract, negotiate further or simply walk away, having obtained a "warts and all" appraisal which facilitates a fully informed decision and minimises, eliminates or provides for future surprises. Independent consultants owe a professional duty of care in their investigation and reporting, upon which the client is reliant.

Parties Involved

1.4 The Due Diligence process will often require the input of a team of qualified professionals to undertake the review. This team may include experts such as Valuers, Structural Engineers, Consulting Engineers, Solicitors, Architects, Financial and Taxation Consultants, Quantity Surveyors, Urban Consultants and other such professionals and should be coordinated by a project co-ordinator/leader who may be a Valuer. Contracting out the various aspects of the Due Diligence procedure to individual specialists ensures that each contributes in their field of expertise.

2.0 BENEFITS OF THE DUE DILIGENCE PROCEDURES

2.1 Due Diligence procedures may be undertaken by or on behalf of a prospective purchaser or by or on behalf of a prospective vendor.

Purchasers

2.2 In the case of a prospective purchaser, Due Diligence procedure clarifies the quality of information provided and sets in place the appropriate procedures to ensure investors receive the advice they need to make an informed and balanced decision.

Vendor

2.3 In the case of a prospective vendor, the Due Diligence procedure is intended to identify all relevant defects and potential problems of the property which may then be diligently rectified.

2.4 In either case, without investment in Due Diligence there is an inherent danger of being exposed to undetected risks.

Benefits

2.5 The benefits of Due Diligence are seen to be:

For the Purchaser

- Minimisation of exposure to undetected risks.
- Independent advice and guidance.
- Systematic evaluation of the relevant issues involved in the purchase process.

For the Vendor

- Opportunity to maximise the potential sale price by rectifying defects
- Opportunity to maximise the potential sale price by the correct structuring of the transaction and minimising risk to the vendor
- Opportunities to provide potential purchasers with a document which can be used as a basis for their bidding. It also enables purchasers to make informed decisions without having to undertake their own costly and time consuming Due Diligence exercises.
- The outcome of the Due Diligence process may form apart of a property information memorandum, enabling soliciting of interest in the property.
- The due diligence procedure also protects managers from negligence claims by disgruntled stake-holders, who may feel that the sale price was not maximised, or in certain circumstances from purchasers who might otherwise claim that important information was not disclosed to them.

3.0 PARTIES TO THE DUE DILIGENCE PROCEDURE

3.1 Whilst this information paper focuses on the role of the Valuer in the Due Diligence procedure, it would normally be expected that other expert advice would also be obtained from a range of professional advisors such as -

3.2 Legal Experts with regard to:

- title and ownership issues;
- leases;
- Specific legislation such as Occupational Safety & Health, the Building Act and similar legislation;
- insurance issues.

3.3 Planning Expertise with regard to:

- the Resource Management Act and related issues.

3.4 Structural and Civil Engineering Advice with regard to:

- structural surveys;

- building compliance with specific legislation such as the Building Act.

3.5 Mechanical and Electrical Engineering Advice

The condition of building services is an important factor to be evaluated by a purchaser of the property. The quality of building services is becoming an increasingly important influence in the value of a property, as tenants begin to appreciate the benefits of a "smart" building in terms of productivity and flexibility. A mechanical/electrical engineer should be engaged for specialist advice in appropriate circumstances.

3.6 Architectural advice regarding building elements, such as:

- planning;
- design;
- potential for alteration;
- likely compliance costs;
- anticipated problems with maintenance, etc.

A prospective purchaser should consider engaging the services of a suitably experienced Architect to assess these issues.

Where a building is significant, it may be advisable for the Architect to co-ordinate all of the reports from various specialist engineers into one "condition report". This report should not only identify problem areas, but also provide an indication of the cost to rectify and when rectification will be required.

3.7 Financial Advice specifically with regard to:

- taxation implications of ownership;

financial status and performance issues of the cash flow;

related party issues;

unrecorded liabilities;

linkages between lessee, lessors, and recorded revenues and similar issues;

financial strength of tenants;

trading strength of tenants;

lease analysis

3.8 Environmental Issues

An environmental audit may be appropriate, particularly if it is suspected that there are potential environmental issues arising. In this case, a person skilled in undertaking environmental audits should be retained by the parties.

4.0 DUE DILIGENCE: THE VALUER'S ROLE

4.1 Any purchaser of property must, of necessity, form a view as to what the particular property is worth. Ultimately, that view or assessment of value will be a key factor in determining how much to pay for a property or an interest in property or, from the point of view of a vendor, how much to accept for the sale of a property. Equally, the value of a property will be of critical importance to a lender who proposes to advance money against the security of a property. Valuations may also be required for the purposes of financial statements, for insurance purposes, to assist in analysing investment performance, or for future taxation implications.

4.2 In order to obtain an expert and impartial assessment of the value of a property, a suitably qualified', experienced and registered valuer should be appointed to prepare any valuation of the property which may be required. The Valuer may also be appointed as the project leader in appropriate circumstances.

4.3 There are various valuation methodologies which may be used in assessing the value of a property, and different methodologies may produce different results. It will often be appropriate for more than one methodology to be considered, and a Valuer needs to form a view as to which method or methods best suit a particular property. Whichever valuation method is used, it must be appropriate to the class of property being valued.

4.4 In undertaking this aspect of the Due Diligence procedure, both professional Valuers and their clients should have regard, where appropriate, to the New Zealand Institute of Valuers Valuation Standards, Practice Standards, Background Papers, and Guidance Notes as contained in the Institute's Technical Handbook.

' Qualification of Valuers: To be qualified as a Valuer in New Zealand, a Valuer must meet educational, professional and experience requirements. These requirements are met as follows. Where the Valuer is concerned with the valuation of land and buildings, the Valuer shall be a Registered Valuer under the terms of the Valuers Act 1948 and be an Intermediate, Associate or Fellow of the New Zealand Institute of Valuers.

5.0 APPENDIX

Matters to be Considered in the Due Diligence Procedure

Precise detailed brief instructions are critical and a specifically written Due Diligence report should be provided.

One of the disciplines may be chosen to manage the Due Diligence process and collate, compile and present the information described below.

The following issues should be considered by the professionals engaged to undertake the Due Diligence process.

- Value consideration - issues impacting on the valuation.
- Cash Flow Analysis - issues relating to the cashflows (may be undertaken in conjunction with lease analysis)
- Lease Analysis
- Leases are a vital component in most commercial properties and any Due Diligence procedures must include a thorough analysis of all leases affecting the subject property. Lease analysis may be undertaken in conjunction with the cash flow analysis. Under a Due Diligence process the professional preparing the review would normally be required to actually sight and read the leases to ensure their execution, status, terms etc.
- Tenancy analysis
- Title issues
- Environmental issues including Resource Management Act, and the need for an environmental audit
- Building analysis and design considerations
- In the case of rural land issues pertaining to land use and similar.

ACKNOWLEDGMENTS

Acknowledgment is given to the permission of the Australian Institute of Valuers & Land Economists (Inc) who have allowed the New Zealand Institute of Valuers to draw upon their Guidance Note GN LEI dated 1/96 "Due Diligence Guidelines". Acknowledgment is also given for material drawn from a media statement by Mr Dan Magree, Manager, Real Estate Services, Arthur Andersen in Melbourne and to Bayleys Research, special Bulletin "Due Diligence Checklist" November 1996

PRELIMINARY NOTICE
1998 Annual General Meeting and Conference

Venue: War Memorial Complex, Napier
Dates: Friday 1st Sunday 3rd May 1998
Programme: To be advertised in the January 1998 issue of the Valuers' Digest
Accommodation: Various city motels/hotels
Enquiries to: Secretary, Hawkes Bay Branch NZIV
PO Box 458
Napier

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"The Art Deco Lifestyle Region" of New Zealand

Suggestions to Expert Witnesses

Presented by Lincoln W. North, Chairman of the International Valuation Standards Committee at the Valuers' and Appraisers' World Conference, 1996, Warsaw, Poland.

The role of a valuer in an arbitration or, for that matter, in a civil litigation, will entail two primary functions: a valuation of the property in question and preparation of a formal report attesting to the market value (or rental value) so found and, secondly, appearing before the tribunal to present expert testimony in support of the valuation. It is with regard to the valuers' role as an expert witness that these comments and suggestions are directed.

Preparation of a valuation report that will serve as your written submission, requires a superlative effort. Such reports must be clear and as concise as possible, yet thorough. They must contain all the evidentiary material you wish to put into the record, but no more than that. Arbitrators will either read your report prior to your testimony and/or afterwards when they are constructing their Award (their Decision). They must be able to understand your report as a free-standing document. Since many arbitrators and judges lack expertise in understanding highly technical matters, or complex mathematics, keep your presentations as simple and understandable as possible. Do not expound on theories and postulations that lie behind your evidence: your report should not be designed as an educational treatise. You do not have to educate the arbitrator. If the arbitrator has questions, they will be put to you for a response. If certain passages of your report command the use of complex mathematics or very special explanations, present such material in the addenda/annexes to your report, or as a separate exhibit; leaving the main body of your report to flow in a plain and logical manner. In short, keep it simple but professional.

Protect your rear

It is important not to open doors to possible damaging cross-examination. Opposing counsel will search your report for passages where an attack can be launched. The best defence, in preparing reports for testimony, is to keep your writing and explanations as concise as possible and to avoid opportunities for opposing counsel to intervene. Your own counsel will ordinarily give your advice in this regard, when you deliver your draft report for review.

A witness should not read from his or her report during examination-in-chief (EC). Rather, a witness should become so familiar with the report that oral evidence becomes an act of presenting an extemporaneous speech; only referring to passages in your report that deserve particular emphasis, or to facts in the report that are crucial to clarifying your oral evidence.

When you are called to testify, the arbitrator will be evaluating your credibility from the outset, as you deliver your oral evidence. Should you stray from presenting your evidence in an objective, an unbiased manner, your credibility will surely be called into question. Opposing counsel will strenuously challenge your credibility, during your cross-examination, sometimes openly, but more so subliminally. His or her case may very well rest on finding

fault with your credibility, if not your factual evidence.

Rehearse your role

Preparation for testimony is like a rehearsal for a play. Your legal counsel will be your coach. He or she will challenge everything you plan to say, during this rehearsal period, as if he or she was cross-examining your evidence. This can be a painful experience, emotionally. But it is better to bear the pain before you take the witness stand. The rehearsal process will also greatly enhance your confidence, in preparation for your testimony. It is much better to shed tears during preparation, rather than during cross-examination. Good demeanour when testifying includes respect for the arbitrator(s) and opposing counsel, honesty and frankness in responding to questions under cross-examination and, basically, conducting yourself in a professional manner.

Counsel may either "turn you loose", to explain and present your oral evidence, uninterrupted, or may lead you through your report, passage by passage or perhaps a blend of such procedures. It depends on the attitude and preferences of counsel, in co-ordination with the witness, as to which procedure or strategy is considered most effective for your presentation in the conduct of the case. Each counsel has his or her own preferred methods of conducting a client's case. So too does an experienced witness. Thus, co-ordination of effort is essential to maximising the presentations.

The presentation of evidence by a valuer during evidence in chief can be a boring exercise if the valuer does not feel stimulated. Cases are often over-prepared. Witnesses are frequently over-rehearsed. As such, the most difficult testimony is EC, because of these humanistic considerations. This is one reason witnesses are advised to be thoroughly prepared, but to put the matter aside the day before giving evidence, to let one's mind rest and recuperate before the event. Over-preparation can be dangerous. There was a saying in Universities years ago that has merit: never attempt to study the night before the exam.

Be prepared

Cross examination (XE) is, or should be, a witness's best performance: i.e., the point in time when a witness can benefit most from his or her preparedness. XE is extemporaneous. If the witness is well prepared, has done the appropriate homework, knows everything possible about the subject matter, XE can be a very interesting, challenging and rewarding experience. It becomes the best opportunity to display whether or not you are a true expert witness.

Be concise

When under XE, just answer the question. Do not offer a professorial explanation beyond answering the question, unless it is absolutely called for. At times, you may view the question as being a leading question, or a trap. Answer "yes" or "no". But as an expert witness, you are entitled to qualify your answer. But answer

"yes" or "no" first, then proceed to qualify your answer accordingly: "Yes, but ..." "No, however ...". The key is to stop and think first. You will not be challenged for taking a few moments to consider the question. But respond first, with a "yes" or "no", if that is what the question calls for, and then follow with your explanation of why you have answered "yes" or "no".

Do not be intimidated under XE. Counsel for the opposing party will make every attempt to frustrate your testimony. Remain cool and collected. This is the best defence to offensive questions. Time is on your side. Do not be pressured into giving snap responses. Take a moment to consider the whole of the question when under XE. However, sometimes a simple yes or no response is all that is needed. If you do not fully comprehend the question, ask for clarification.

Be honest

If a question under XE is considered to be damaging to your evidence, and if in fact it is, then admit to it at once. Do not attempt to cover it up with wishy-washy explanations. Also, admit to any error, in fact or in judgment. Humbleness will improve the credibility of your evidence immensely.

If you ever feel uncomfortable about answering a question, for any reason, answer it but state that you are confused about the question and wish to have the opportunity to consult your notes or to reconsider the matter afterwards. Arbitrators and judges appreciate the fact that fatigue or confusion often sets in, and your credibility will be greatly advanced if you ask for time to consider a particularly complex question. You may even request that you are given, say, overnight to consider, or to reconsider the question, and then request permission of the arbitrator(s) to respond later. Arbitrators and judges are more interested in receiving evidence that assists in arriving at a fair and equitable decision, and if a delayed answer helps in that regard, your credibility will be vastly improved, as will your assistance in resolving the matter under deliberation.

Whatever you do, never lie or attempt to cover up when you are in the witness box/on the witness stand. Any such attempt will be quickly discovered, if not by opposing counsel, then by the adjudicator. There's an old saying that one lie can destroy the whole of an expert's evidence. And this includes "bending the truth", or attempting to be illusive or evasive when answering a question. A truthful answer will always be apparent, but a non-truthful or evasive answer can never be disguised.

In summary, if you are called upon to give expert evidence/testimony, simply be guided by the virtues of integrity, honesty, nonbias and a willingness to admit that "I do not know" or that "I need to reconsider the question." Whatever, do not be evasive. Do not attempt to cover up a questionable response. Be forward and direct. Be clear, concise and forceful with your responses. Be calm, cool and collected of your thoughts. Admit to your misgivings or mistakes. Just be yourself. You can never fool opposing counsel, let alone an arbitrator or judge. The credibility of your evidence is as important, if not more important, than the facts you offer in evidence. FFM

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Christchurch Tourist Hotel Market

Demand/Supply Analysis

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Synopsis

This paper presents a demand! supply analysis carried out for a hotel conversion project in 1995. It examines the history of and forecasts for visitor arrival numbers in New Zealand and puts forward a model for breaking these numbers down to net effective room demand for a particular market in this case Christchurch. Monte Carlo Risk Simulation is applied to the forecasts of demand and the results are then compared to historic patterns of hotel room supply and occupancy in order to predict when the next opportunity for economically viable additions to tourist hotel supply in the Christchurch market will occur.

Introduction

New Zealanders are aware of the very significant contribution international tourism makes to the national economy. However, various infrastructural deficiencies are frequently quoted as having an impact on the growth of this increasingly important industry. For example: lack of seat availability on inbound aircraft, lack of facilities to cater for international conferences, lack of attractions in which visitors can spend their dollars or lack of appropriate standard hotel beds in which they can spend a nights sleep.

The latter was a particularly pressing issue in Christchurch in 1994 but the response: a rash of office to hotel conversions was a cure almost as bad as the disease. A repeat performance of a pattern emerging over the last thirty years, saw a long period of inactivity in terms of hotel room construction followed by a short burst of frenzied development leading to a significant oversupply of hotel rooms, at least in the short term.

This has led to deep room rate discounting which, while attractive to some operators in the tourist industry, only serves to reinforce the widely held notion that investing in hotel construction is at best risky and at worst a guaranteed way to loose money. If this attitude continues to be held it may delay future response to hotel room shortages until the situation again approaches crises, thus repeating the already highly cyclical pattern, but with increasing amplitude.

A solution to this problem may lie in an intensified focus on demand and supply studies for the international tourist hotel market and this is the topic for this paper. It puts forward the methodology and figures used in the demand and supply section of a 1995 feasibility study on the conversion of an existing building to tourist hotel use. It is not maintained that this is a perfect approach, but it is hoped publication here may stimulate additional debate on the issues involved in demand/supply analysis leading to improved decision making throughout the property industry.

Tourist Hotel Room Demand

The process necessary to determine the micro level room/night demand that will affect the viability of individual hotel investments is to first look at the "big picture" of national demand and work your way down to the local and market niche area.

Therefore, for hotels catering to the international tourist the first step is to examine the recent history of overall international visitor numbers arriving in New Zealand and by examining trends, try to forecast numbers over the foreseeable future.

Forecast Total International Visitor Numbers

Forecasting international visitor numbers proved to be surprisingly difficult. It was expected

that this type of base data and forecasting would be readily available from secondary sources such as the New Zealand Tourism Board (NZTB) and the Department of Statistics, and indeed it was up until around 1992. Since that date, however, only historic data of actual figures are available no forecasts are made.

As a result of this paucity of secondary forecast data it was necessary to carry out some primary analysis and forecasting. Fortunately a variety of historic data, partial period or single year forecasts, older forecasts and relatively consistent trends enabled a continuous plot of international visitor numbers from 1981 to 2005 to be arrived at.

Details of the various contributory figures and final adopted forecasts are available from the author and the results - both national and Christchurch international visitor numbers are shown in Figure 1.

Figure 1 International Visitor Numbers

In summary: after rapid expansion in the mid 1980's a short lived levelling off period occurred during 1989-91. Since then strong growth has returned resuming the long term trend of averaging 8% per annum. While this rate will be insufficient to meet the Tourism Boards controversial target of 3,000,000 visitors for the year 2000, this figure was only a "target" and there is still the potential "boom" years associated with the America's cup and Sydney Olympics which may give a late decade boost to the growth rate. Even so tourism is now the largest sector of the New Zealand economy and also one of the fastest growing, so it follows that it has the greatest potential for property investment. Unfortunately this potential is also recognised by others making the market extremely competitive.

Sensitivity Analysis Forecast Total International Visitor Numbers

The international tourist market can be fickle and external events such as war, terrorism, varying exchange rates, the differential performance of national economies, major sporting events and simply travel fashions can result in substantial deviations from the most carefully formulated projections.

Investment in hotels represent permanent additions to supply with high fixed costs, so the vagaries of international tourist visitor numbers need to be taken into account and a substantial margin for error built in. To not do so risks bankruptcy, of an otherwise viable investment, due to short term external fluctuations which cannot be foreseen, and over which the investor has no control. For the above reasons the forecasts in overall visitor numbers have been subject to sensitivity analysis, using the Monte Carlo simulation technique, as have other key variables in this report. Details of this sensitivity analysis can again be obtained from the author, but in summary the standard deviation of historic rates of change in visitor numbers have been applied to the forecast data using a "stepwise" approach, in which the potential variation for each year is applied to the rate of change for the previous year. This recognises that each years visitor number changes are not entirely random and are influenced to some extent by the prior years rate of change.

Figure *2 Monte* Carlo Results *Total VN*

The results of the Monte Carlo simulation analysis are presented in Figure 2.

It can be seen that the NZTB "target" of 3 million visitors by the year 2000 is well beyond the 95th percentile and therefore unlikely to be achieved. There is instead a 68.26% chance that the visitor numbers will lie between 1.95 million and 2.24 million by this date ie. Plus or minus one standard deviation.

Christchurch Share of International Visitor Numbers

Christchurch enjoys a greater concentration of the total number of international tourists visiting New Zealand than would otherwise be expected as a result of population size or level of economic activity.

Consistently between 40 and 45% of all tourists coming to New Zealand visit Christchurch and the trend seems to be upwards. This is to be expected due to the role of Christchurch International Airport as a gateway to the scenic tourist destinations of the South Island (260,000 tourists entered New Zealand via this airport in the year ending July 1995 representing 19% of all arrivals) as well as the inherent attractions of Christchurch itself.

Applying the mean percentage of total international visitor numbers visiting Christchurch (43.44%) to the forecast total visitor numbers derived in the previous section, results in projected visitor numbers to Christchurch for the years 1995-2005 as follows:

1995	618,000
1996	668,000
1997	722,000
1998	780,000
1999	842,000
2000	915,000
2001	990,000
2002	1,069,000

2003 1,152,000
2004 1,241,000
2005 1,334,000

See also Figure 1.

These figures are similar to the NZTB Christchurch forecasts (available for only the years 1995-2000), though consistently 5-6% higher. Adoption of the higher figures is considered justifiable as the NZTB forecasts date from September 1991 and subsequent growth rates have been higher than anticipated at that time. It is also quite likely that even higher visitor numbers will result, by as much as 10%, if the recent trend for Christchurch to capture 45% of the total visitor market stabilises at this level 2% above the historic mean percentage.

This above growth rate also ties in with Christchurch City Council predictions of over 800,000 international visitors by the turn of the century.

Sensitivity Analysis Christchurch Share of International Visitor Numbers

The visitor numbers attracted to Christchurch were also subject to sensitivity analysis using the Monte Carlo simulation technique.

The results of this simulation are summarised in Figure 3.

Hotel Share of International Visitor Accommodation

The next step in the analysis is to determine the share of this growing Christchurch tourist market that will be accommodated in hotel type accommodation and predict the length of time they will occupy rooms.

Analysis of the origin of overseas visitors to Christchurch (New Zealand International Visitors Survey 1992/3 - NZTB) shows that the Australian, USA and Japanese markets are dominant with 23%, 16% and 18% respectively. However these ratios are at significant variance with the national figures, with a much higher ratio of Japanese and USA visitors and a lower ratio of Australians than for New Zealand as a whole (see Figure 4).

I

Figure 3 Monte Carlo Results ChCh VN

Figure ,d Origin of Overseas Visitors

Real W Woll

Figure 5 Hotel Usage

This has substantial impact on the hotel industry as Japanese and Americans are very significant users of hotel accommodation at 31.99% and 31.61 % respectively (see Figure 5) compared to other alternatives such as motels, bed and breakfast, backpackers accommodation etc.

Figure 6 Mean Length of Stay Christchurch

Length of Stay International Visitors

Also of significance is the average length of stay in Christchurch, as a longer stay will require more accommodation for the same number of visitors. Again Christchurch is at variance with the national average figures, particularly in respect of those nationalities with high hotel usage statistics - see Figure 6.

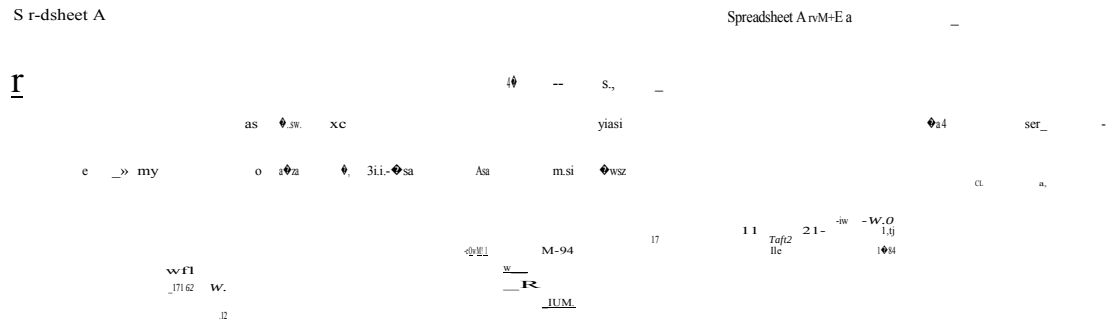
The above variation means separate identification, analysis and integration of these visitor sub markets is necessary to accurately forecast demand for hotel accommodation in Christchurch. This is carried out in the next section by development of a "demand model" for tourist standard hotel room numbers.

Demand Model for Tourist Hotel Room Numbers

In the model presented here (see Spreadsheet A for details) the forecast total Christchurch international visitor numbers for each year are divided into the five most statistically groups plus the "rest of the world", based on historic ratios for country of origin.

In turn the numbers in each ethnic cohort are multiplied by the mean length of stay in Christchurch for tourists of similar origin derived from the NZTB 1992/3 visitor survey. The "rest of the world" group are multiplied by the mean length of stay for those groups combined.

The total of these figures gives the number of person/nights spent in Christchurch by international visitors. (Column 17 Spreadsheet A).



Spreadsheet A

By no means all of these nights were spent in hotels as the results of the NZTB 1992/3 international visitor survey shows (see Figure 7).

A straight apportionment of total visitor/nights according to the above overall percentages would not show the significantly differing preferences for accommodation type between nationalities. Therefore, the visitor night statistics for each of the most statistically significant groups were again multiplied by the propensity of that ethnic group to choose hotel type accommodation. The "rest of the world" group used the mean propensity of the remainder.

other
10%

Figure 7 Accommodation used in Christchurch Visitor Nights

Domestic Visitors Hotel Accommodation

To the above figures should be added the hotel person/night requirements for domestic visitors. Although total domestic person/night figures are significant, (column 18 Spreadsheet A) the percentage spent in hotel accommodation in Christchurch is relatively small (8% according to the NZIER). In addition a proportion of this 8% would relate to cheaper "pub" type accommodation, (including the 35% of total hotel rooms without private bathroom facilities) whereas only a

very small percentage of tourists would use this type of facility. To account for the latter, the 8% figure for domestic hotel usage could be slightly reduced, but in the absence of data to support the degree of reduction it has been left unaltered for this analysis.
In any case, 1994 Christchurch international visitor hotel person/nights were 300% of the equivalent domestic figure highlighting the relative insignificance of the latter. Additionally, the growth rate of domestic visitor person/nights was a mean of negative 3 percent for the years 1981 to 1993 and is now expected to only grow slowly at around 2% pa. (NZIER and Ernst and Young) - a much lower rate than the 8-10% growth for international visitors., as a percentage of hotel occupancy, domestic demand is decreasing at a rate of around 2% according to the 1994 Ernst and Young Hotel Survey. The figures for domestic hotel person/nights are shown in column 26 of Spreadsheet A.

Once the above derived figures are totalled, a particularly valuable figure is arrived at - the Christchurch total person/night requirement for hotel accommodation. This is shown for each of the years 1981 to 2005 in column 27 of Spreadsheet A.

Overall Tourist Hotel Room Demand

The next step in the model is to divide the Christchurch total demand for hotel person/nights by the average room density. This is the figure for the mean number of people occupying each room.

In the 1994 Ernst and Young Hotel Survey this figure was 1.48 for main centre hotels and also 1.48 for rooms with a rate of over $120.00 per night. It was slightly higher for resort hotels and cheaper hotels at around 1.6 but shows very little change over time. The 1.48 rate was therefore adopted for this analysis.

The final step is to divide this room/nights figure by the 365 days in a year to arrive at the theoretical number of hotel rooms required to service demand in Christchurch.

The final demand result is shown in column 29 of Spreadsheet A and Figure 8.

However, this theoretical figure is not the real number of rooms required to adequately service visitor demand. Not all rooms are able to be occupied 100% of the time due to seasonal fluctuations as well as maintenance and management issues, so an allowance has to be made for these factors generally around 25%.

Figure 8 Demand/Supply Occupancy

To illustrate the point, occupancy rates in Christchurch hotels have been increasing in recent years as shown in Figure 8 from a low base of around 50% in 1988-89. It is generally accepted that hotels start to make reasonable profits at around 60% occupancy. However, according to the NZIER report "Tourism Investment in New Zealand", when calculating the requirement for new hotels, occupancy needs to reach around 75% before investment in new hotels will take place.

At this level the effects of seasonal fluctuations mean many hotels are fully utilised for some periods during the year with the result that room rate discounting stops, and market share will be lost to other destinations if more accommodation is not provided. In light of the above, "effective" demand for rooms can be said to emerge when occupancy approaches 75% and the room rates

are no longer discounted below the cost of adding new supply. These three critical variables, room demand, room supply and average occupancy are plotted together in Figure 8 to reveal when net effective demand for hotel rooms of the quality generally acceptable to international visitors arises. The supply variable will be further elaborated on in the "Supply " section below.

"Top Quality" Hotel Room Number Demand

There is a further extension of the demand analysis that should be carried out at this point. That is the segmentation of demand into various quality categories.

By focusing only on "tourist type" hotels and eliminating motels, campervans, bed and breakfast and backpackers accommodation, etc. much of the lower quality accommodation has already been eliminated from this model. But as the demand for hotel suites of the highest standard was the ultimate focus of the original study, it was appropriate to further refine demand down to the "top quality" market niche. This final stage of the analysis has been left out of this article in the interest of brevity but is available from the author.

Tourist Hotel Room Supply

In the 1994 LAZIER report Christchurch was stated to have 37 hotels with a total of 2,439 rooms - an average of 66 per hotel. However, only approximately 65% had private bathroom facilities indicating the remainder were almost certainly of the "pub" type and not of a quality likely to be acceptable to international visitors.

Further details on hotel size and quality were not readily available so primary research was carried out to determine figures for hotels assessed to be "two star" and above. Hotels of a quality less than 2 star are not assessed to be of significance to the international visitor or business market. If the above hotel room additions are graphed, as in Figure 9, it becomes obvious that over the last 30 years extra supply has come in "bursts" of activity approximately every ten years.

Sometimes this was a result of particular stimuli, such as the 1974 Commonwealth Games held in Christchurch. In other cases it was simply a case of visitor demand obviously exceeding room supply, followed by a number of developers seizing on

Figure 9 Christchurch Hotel Room Supply

the perceived opportunity all at once.

Unfortunately, each time the resultant over reaction has subsequently depressed occupancy levels and thus room rates for considerable periods. Growth in visitor numbers eventually makes hotels profitable again, and some time after that, sufficiently profitable to warrant further hotel development.

This repetitive process can be seen in more detail in the earlier Figure 8. For the period 1981-1995 actual figures for room supply, room demand and average occupancy were all available . When graphed it can be seen that demand increased between 1984 and 1987 while supply remained static, leading to a rapidly increasing occupancy rate approaching 70% in 1986. This triggered the hotel development "boom" of 1986-88 (Quality Durham, Park Royal and Chateau additions) but as a result of this significant new supply, the average occupancy rate dropped to unprofitable levels approaching 50% in 1988-89.

By 1991 hotels were starting to make money again and by 1994 were at the 70% occupancy rate. While this is below the 75% threshold for new hotel development used in the NZIER study, development again occurred, namely the Centra and Grand Chancellor office-to-hotel conversions. It is likely that the lower cost and shorter time frame of conversion versus new construction, combined with strong growth of Christchurch visitor numbers, plus an element of wanting to beat the competition to the market, meant the supply arrived on the market (in 1995) a little earlier than would otherwise be expected.

Forecast Hotel Room Demand/Supply Balance

To further test the effects of demand variations the results of the Monte Carlo simulation discussed earlier were run through the hotel room demand model to determine the effect of visitor number growth for Christchurch being one standard deviation above or below those forecast. Details are again available if required, but in general terms, if visitor number growth is up by one standard deviation then it brings forward the date of economic provision of new hotel rooms by slightly less than one year to mid 1998. At that stage the number of rooms that can be absorbed by the market without reducing occupancy below the critical 60% level not alter significantly from the 600 predicted to be required a year later under the "most likely" scenario. However, the compounding effect of greater growth does lead to 1100 more rooms being required in 2003 and a further 800 rooms in 2005. These figures 16 are significantly larger and earlier than the forecast "second wave" of an extra 900 rooms required in 2004 under the "most likely " forecast. Conversely, if visitor growth is down by one standard deviation this leads to a delay in the date of economic development of new rooms to 2001, when 700 new rooms would bring the occupancy level down to the minimum prof-

itable level of 60% . Additional supply would not again be required before the end of the forecast period 2005 though it would be getting close by that time.

Of course the above analysis assumes that all hotels share their level of occupancy equally. This is not always the case as due to better management, amenities and marketing, one hotel may experience short term higher occupancies at the expense of the others. However, ultimately oversupply is destructive to all, particularly if it leads to a room rate price war to gain market share.

Therefore if new hotel supply is designed to come on to the market much earlier than 1999 then it would need to have a significant competitive advantage compared with existing hotels in order to ensure sufficient occupancy at economic room rates. In effect it would need to "steal" demand from competing hotels, rather than relying on growth in overall tourist numbers. This needs to be achieved by means other than room rate cutting. For instance opportunities can arise in product differentiation and targeting a niche market.

Conclusion

New Zealand tourist arrivals are growing at double the world average rate but with some significant annual variation. For Christchurch the rate of growth is even higher and in market sectors that are heavy users of hotel accommodation. This growth is expected to continue for at least ten years and until recently there has been a shortage of hotel accommodation. Unfortunately this excess demand was recognised simultaneously by a number of hotel developers and, as has been the historic trend, they overreacted leading to a short-term oversupply of rooms.

The original 1995 analysis predicted that if no new supply, other than that already planned, was placed on the market and tourism numbers continued to grow as projected, it could be expected that average occupancy levels for hotels would remain below the critical 60% level for at least 1996 and 1997. While the forecasts of tourist numbers for the year ending December 1995 and 1996 proved to be almost exactly on target, the predicted occupancy levels proved to be slightly conservative to date. The occupancy rate reported in the Ernst and Young 1996 hotel survey was 69.8% but it should be remembered that the full effect of the recent additions to supply have not yet been fully reflected in this survey - a further reduction of 8-10% is predicted for 1997. The Ernst and Young survey also relates to the 15 hotels that generally lie at the "top" of the market in terms of quality. This group tends to experience higher occupancy than the hotel industry as a whole. A further factor may be that while the overall tourist arrivals were much as predicted there has been an increase in the arrival numbers of high hotel user groups (Japanese and Koreans) relative to low hotel users (Germans). A final factor has been the holding up of the occupancy rate at the cost of severe room rate discounting which is expected to be reflected in the 1997 figures for major hotels in the city of Christchurch.

A bright light on the horizon is that the continued increase in tourist numbers is shortening the length of time for the market to recover from these boom periods of oversupply. As can be seen from Figure 12, it was ten years between the booms of the 1960's and 70's but this has come down to eight years in recent times (1986-1994).

If the projections of tourist growth referred to earlier in the demand section come about, and no significant new supply is added in the interim (as has been the case historically), then the critical 75% occupancy rate will again be reached around the year 2000 - six years since the last occupancy peak.

It is possible that these forecast demand projections may be on the conservative side as no extra allowance has been made for the effects of the America's Cup, Sydney Olympics and the new conference centre. So this, along with developers wanting to "jump the gun" in meeting demand, may mean the development of new hotel supply designed to open in late 1998 or 1999 could be justified.

As a result of the publication of this paper it is hoped that developers and their professional advisers will more critically analyse the demand/supply balance before embarking on hotel room construction in the future. Hotels are already "lumpy" in that incremental addition of rooms is not usually possible, so it is espe-

cially important not to aggravate this characteristic by infrequent but simultaneous development of additional capacity.

A steady increase in tourist hotel room supply reflecting the steady growth of visitor numbers will better meet the needs of the tourist industry in terms of an adequate level of infrastructure and the needs of investors in hotel properties in terms of an adequate and lower risk return on their investment.

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PUGGING OF FARM LAND :

COST AND VALUE ISSUES INVESTIGATED

by Iona McCarthy

The valuation of a farm property involves consideration of external factors (e.g. markets, inflation rate, political stability) as well as the physical characteristics of the property (e.g. location, soil type, topography, climate). Any external circumstances and any physical differences between the property being valued and the sale comparables then have to to be quantified. Valuers have to rely on their particular knowledge of the market and current costs to quantify differences. This often presents a difficult challenge. Massey University assisted by a number of NZIV rural members has recently carried out research into farm value differences arising from soil compaction by livestock (pugging). The findings will help valuers to fill one of those gaps.

Soil is one of the most important physical characteristics of farm value [1] but little is known about the sensitivity of the rural property market to varying soil conditions. Degradation of soil can limit the productivity of farm land [2]. This can have a major impact on the profitability of the farming business that can extend for many years. Research was undertaken to investigate how land value is affected by soil degradation caused by stock treading.

In many parts of New Zealand when wet soils are grazed by heavy stock their treading will cause damage to soil and pasture. This is commonly known as pugging. It leads to a decrease in pasture utilisation, plastic deformation and compaction of the soil and deterioration in soil structure [3]. When severe pugging occurs, the best option for the farmer is to cultivate and regrass. This generally restores the land to it's full productive potential. If pugging and soil compaction continues over a number of years soil compaction is more marked and damage is difficult to rectify.

A case study property was used to quantify losses caused by pugging damage in two ways. First direct and indirect costs of repairing soil and pasture damage to farm land that has occurred as a result of pugging were assessed. Second the alteration in value of rural land that is attributable to pugging was determined.

Cost issues

When severe pugging has occurred, dry matter production is reduced significantly and weed infestation is likely. The best option for a farm manager is to cultivate and regrass the damaged area. In addition to the cost of regrassing the opportunity cost of foregone income from the time of cultivation to pasture establishment has to be assessed.

Direct costs of regrassing were readily available from local contractors and seed merchants. The work to be carried out would be variable according to soil conditions at the time of cultivation but is assumed to include a minimum of the following; plough, level, power harrow, level, drill. Cultivation costs are based on local contracting rates. The grass seed mix is assumed to contain a standard ryegrass and white clover mix. Weed spray and fertiliser is required to ensure establishment of the pasture, costs are based on standard applications in the area. Table I below summarises the direct cost to repair damage.

Item	Cost per hectare
Regrassing	
- cultivation and drilling	$220-$345
- grass seed	$120
- weed spray (applied)	$20-$25
- fertiliser (spread)	$60
Re-grassing cost/ha	$420-$550

Table 1. Per hectare cost of repairing damage to severly pugged land

The indirect costs were calculated in two ways, first on the basis that the land could have been used for dairy heifer grazing and second on the basis of rental income foregone. Using the bottom end of the price range for grazing opportunity cost per hectare is $360. For the 20-week period the opportunity cost per hectare of rental income foregone is $142.

The total cost of repairing the damage to pugged pasture is within the range of $560 to $910 per hectare.

Value issues

Ideally the comparison of land value before and after severe pugging would be assessed using comparable sales evidence. Sales of damaged and undamaged land in the same locality as the case study property were sought but a very limited number of recent sales had occurred. There were no recent sales with a similar level of damage to soil structure.

There was only one relevant sale that had occurred two years before the research was undertaken. This property was believed to be severely and extensively pugged, poorly drained and in young pasture at time of sale. The sale price for land was estimated to be in the order of 12% below prices paid for comparable, but undamaged, land at that time.

Value issues were further investigated by surveying local rural valuers. A postal questionnaire was sent to 44 current members of the Central Districts (North Island) Branch of NZIV. Only those members with a rural qualification and experience in the study region were surveyed. A response rate of 59% was achieved. Results are summarised below.

Review of Survey Results

Profile of Respondents

All respondents had valuation experience were current members of the New Zealand Institute of Valuers. The current field of employment of respondents is illustrated in figure 1.

The average number of years of experience of respondents in the study region was 15, with a range of two to 40 years experience. Respondents were very well qualified to answer questions relating to farm land values in the study region.

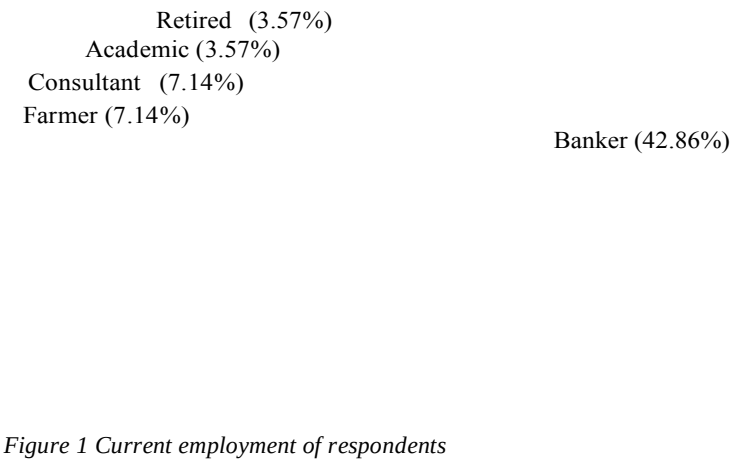

Figure 1 Current employment of respondents

Impact on Value of Severe Pugging

Respondents were questioned in three different ways concerning the impact of severe pugging on land value.

Firstly they were asked to put a value range on severely pugged land given a price of $7,500 per hectare for undamaged bare land. This question related directly to the case study farm and photographic evidence was provided. Results to this question showed an average land value range of $6,640 to $7,082 per hectare for the pugged land. This equates to an average percentage reduction in land value of 8.5% due to the pugging damage.

Secondly *they* were asked to estimate the percentage reduction in land value that they would make for land in pasture or crop that had suffered from pugging damage. This question was general and covered a range of damage from minimal to severe. Table 2 below shows the number of respondents in each category of percentage reduction for the ranges in severity of damage to land in both pasture and crop.

Results show that for any pugging damage the decrease in value is less for cropped land than for land in pasture. This was expected as the visual impact of pugging will disappear with cultivation.

Where damage is minimal any decrease in land value is very low *(0-5%).*

Where damage is moderate, the decrease in value is most likely to fall within the 6 - 10% range for pasture and the 0 5% range for cropping land. Adjustments would be slightly less for severely damaged cropping land.

With severe damage the range of responses was more widespread with 65% of respondents suggesting a decrease in value of more than 11% for land in pasture and 30% indicating a reduction in value of between 6% and 10%. The median range for reduction in value to severely damaged land was between 11% and 15%.

Thirdly they were asked if they valued damaged land at a different rate to undamaged land. This was a general question included to determine the importance of pugging damage in the estimate of land value. The majority of respondents said that they possibly would value the damaged land at a different rate. The need to consider land use and proportion of the farm affected was frequently mentioned by respondents. If most of the farm was damaged, many would value the land at a lower rate. Several respondents noted the loss of farming options with damaged land and the need to improve subsur-

	Severity of Damage					
Percentage	*Minimal*		*Moderate*		*Severe*	
Reduction (LV)	*Pasture*	*Crop*	*Pasture*	*Crop*	*Pasture*	*Crop*
0-5%	90%	100%	35%	50%	4%	22%
6-10%	10%		57%	45%	30%	26%
11-15%			9%	5%	39%	30%
16-20%					13%	13%
21-30%					13%	9%

Table 2. Number of respondents in each category of percentage reduction for the ranges of severity of damage to land in both pasture and crop

face drainage. If only a small proportion of the farm was damaged, most respondents would not differentiate in land value. In this instance many respondents argued that the land would most likely be cultivated and it was a standard farming practice to have sacrifice areas.

Saleability

Respondents were questioned about the saleability of the case study farm immediately after the pugging damage had occurred. All respondents said that the severe pugging would most likely decrease saleability of the property. The reasons given for reduced saleability were; The loss of farm productivity, poor grazing potential and the need for extensive cropping, increased drainage costs, poor appearance and lack of appeal to prospective purchasers.

Financing

Respondents were questioned on the view of financial institutions on lending on properties that had severe pugging damage. Eighty-two percent of respondents said that it was most likely that financial institutions would view lending on severely damaged properties differently from properties with minimal damage. If lending to an existing owner, the damage would suggest poor farm management ability and therefore an increased lending risk. If lending to a purchaser the damaged land would have lower earning potential and increased operating costs until the damage had been rectified.

Conclusions

The research has shown that damage to soil and pasture by stock treading will most probably result in a decrease in farm land value. Where pugging damage is minimal (as to either extent or severity of damage) the reduction in land value will be small, within the 0% to 5% range. Where damage is severe and extensive the reduction in land value will be more significant. Research results show a reduction in land value within the range of 6%-15% would be expected with severe pugging damage.

These results correlate closely with the results of land value estimations for the case study property. With the photographic evidence of the severely damaged case study farm the valuers who responded to the questionnaire estimated that the land value of the property would be reduced by 6% to 11% because of pugging. The questionnaire results correspond closely with the market evidence from the one older local sale of pugged farmland. In this sale a reduction of approximately 12% was seen in sale price.

Decrease in value caused by pugging damage has to be compared to cost to rectify the damage. In an informed market it is expected that cost and value would be equal. The cost to rectify the damage to soil and pasture on the case study property was calculated at between $560 and $9 10 per hectare. The decrease in land value estimated by the respondents was within the range of $418 to $860 per hectare based on the photographic evidence of the case study farm and between $450 and $1,125 based on the decrease in value to severely damaged land in general. This result would suggest that the market is well informed regarding the cost of visible damage to pasture and soil structure.

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Lenders' and Investors' Attitudes and Policies Toward Property Contamination In New Zealand

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1. INTRODUCTION

With the growing environmental protection controls it is becoming increasingly difficult to finance property with on-site contamination, and even those properties located near contaminated sites may suffer stigmatisation., This has an adverse effect on property values.

While numerous studies have been carried out in the United States (US), to determine the character and scope of the effects of contaminated, threatened or "stigmatised" properties on the terms and availability of debt financing (Adams & Mundy (1993), Mundy (1988), (1989), Healy & Healy (1992)), little appears in the published literature dealing with the attitudes, policies and requirements of equity investors and institutional lenders who represent the market players. In New Zealand there is a void in the literature on these issues. In order to value such property it is necessary to analyse the market and part of this process includes determining just how the market participants behave toward property contamination. Their attitudes strongly influence sale prices, upon which value estimates are based.

Without current research, the extent of opposition from both institutional lenders and equity investors toward contaminated property is *still uncertain. This paper summarises the results of a postal survey undertaken within*

New Zealand (NZ), building on the work done in the US by Kinnard and Worzala (1996), to answer the question of how those who lend on, and invest in, property effected by contamination perceive the risks associated with this type of investment and evaluate its effects. Of particular interest are the perceived effects of on-site contamination on property investment and its financing which will inevitably be reflected in price information. A further study of valuation practice is about to commence to determine to what extent such infomation is incorporated into estimates of value and the methods employed to do so. Together, these studies can be used to help develop specific industry guidelines (in addition to the more general NZ Institute of Valuers' Guidance Note 3 Overview and Bibliography(1995)) on the procedures and methods to adopt when valuing such property.

2. STATUS OF PROPERTY CONTAMINATION IN NEW ZEALAND

2.1 Background

In 1991 the Ministry for the Environment (ME) commissioned Worley Consultants Limited to prepare a report, "Potentially Contaminated Sites in New Zealand: A Broad Scale Assessment", which, while relying heavily on estimates and judgement only highlighted the severity of the problem and brought the issues surrounding contaminated sites to the top of the environmental agenda.

In January 1992, the Australian and New Zealand Environment and Conservation Council (ANZECC) in conjunction with the National Health and Medical Research Council (NHMRC) published the Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites. These guidelines are aimed at ensuring greater consistency in approach, however, they are advisory only and do not have legislative weight.

2.2 Current Contaminated Site Legislation

It was the passing of The Resource Management Act (RMA) 1991 that gave environmental issues legislative weight. Rather than being prescriptive in nature, the Act provided numerous opportunities for local authorities to be innovative in prescribing ways to deal with environmental issues, particularly in relation to funding for clean up costs, and incentives to reduce future potential contamination. For example, under section 108, local authorities can demand financial contributions as a condition of obtaining a resource consent. These could be used as a disincentive for activities likely to have adverse environmental effects, with the funds collected used to rectify such effects. However, this flexibility has resulted in a lack of national standards for contaminated site management and confusion over the correct approaches to take.

The RMA is deficient in providing specific national standards on a number of key issues such as:

- who is responsible for site contamination and the risk assessment of such;
- who is to pay for the clean-up costs, particularly where the owner or occupier cannot afford to do so, or where they did not actually cause the contamination;
- who is to pay for "orphan" sites where no party can be found to carry the liability;
- who is responsible for selecting appropriate remedies;
- how will it be decided how clean the site needs to be for it to be considered "clean";
- will the RMA be able to be applied retroactively.

To overcome some of these deficiencies and taking into account the recommendations made in 1994 by The Australian and New Zealand Environment and Conservation Council, the Ministry for the Environment (ME) released a discussion document in November 1995 on Contaminated Sites Management. This document sought input on new legislation to implement an effective management strategy for contaminated sites. The document covers such issues as the need to establish means of collecting and releasing information by local government on contami-

nated sites; the need to establish a liability regime which would apply retrospectively for historic contamination; relevant defences for innocent parties; and funding options for the clean-up of "orphan" sites.

Based on this document and the subsequent Summary of Submissions (April 1996), the ME has made the following recommendations that are soon to go before cabinet for a decision:

- joint funding of "orphan" sites by central and local government,
- liability for contaminated sites be on the owner, occupier or polluter with two defences: 1) an innocent land owner, and 2) a secured lender defence,
- any decisions made by cabinet in this respect to be included as an amendment to the RMA rather than introducing new legislation to cover these issues.

2.3 Lenders' and Equity Investors' Liability for Environmental Risks

The implication of the RMA has caused concern about the financial liability for contaminated land on which lenders have made loans and in which equity owners have invested. Lenders' liability for the cost of remedying environmental damage may arise where the owner or occupier is unable to afford the clean-up costs of contamination and is forced into receivership or bankruptcy and the lender takes control of the assets secured. Further, there is also the possibility that lenders may become liable by their role as financier to a polluter, as has occurred in the USA and Canada.

Currently, the equity investors are potentially liable whether or not they had any knowledge of, or awareness of, any earlier historic contamination, or actually caused the detriment.

Should cabinet approve the ME's recommendations these issues will be resolved with the introduction of the secured lender and the innocent landowner/occupier defence proposals (already agreed to in principle by government).

However, until the proposals are finally agreed to the position for lenders and equity investors remains unclear with the prudent approach to be to undertake risk management strategies including more extensive investigations and formal reporting procedures to avoid any potential liability. For some international banks a commitment to this has already been made with the signing the Statement of Banks on the Environment and Sustainable Development at the 1992 Rio Earth Summit that ensures they include environmental risks in the normal checklist of risk assessment and management.

2.4 Research in New Zealand

No opinion or interview surveys similar to those conducted in the US by Mundy in particular (and

by Healy & Healy) appear in the NZ literature. The only survey cited relates to determining the discount made to the price of farms with high DDE levels, a residue of the pesticide DDT used in the mid-1950s (Bilbrough 1996).

Other literature in NZ documents contaminated land liability. For example, Palmer (1996) details the approach to contaminated land liability in the United Kingdom and compares it with the approach in New Zealand under the Resource Management Act 1991, and suggests that the UK regime provides a useful model for refinement of the innocent owner/occupier liability and enforcement powers under the RMA.

Harrick, McCutcheon and Kus (1993), McArley (1993) and Hodges (1994) highlight the potential costs and liabilities for bankers in New Zealand and Australia. In particular, they show that liability can arise when lenders take possession of assets when enforcing a security or where they become receivers and expose themselves to liability by virtue of their management and control of secured assets. They outline the protection measures that can be taken to avoid these.

Saul and Janissen (1994) examine the problem of funding for the clean-up of contaminated sites in NZ and discuss the difficulties faced in the US with the Superfund approach (joint and several liability) imposed under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) plus the general "deep pockets" approach of both the Environmental Protection Agency (EPA) and State Departments of Environmental Protection (DEP) in assigning liability for mandated remediation expenses on contaminated properties. They then make suggestions on what can be learned from the US experiences.

Joyce and Parker (1994), Harding (1994), Hemmings (1994) and the Australian Institute of Valuers and Land Economists (1995) highlight the responsibilities of valuers involved with valuing land known, alleged or suspected to be contaminated and provide guidance on the approaches to take in valuing such land.

There remains a research void in NZ on both the character and scope of the effects of contamination, or stigma, on the terms and availability of debt financing as well as the perceived risks from this by market participants.

3. THE 1996 SURVEY

3.1 Objectives of the Survey

Building on the work done in the US by Kinnard and Worzala (1996) to identify and specify the attitudes and policies of both equity investors and lenders toward property contamination in the market environment a similar study in NZ was deemed worthwhile. To that end, the methodology developed by Kinnard and Worzala was adopted to enhance the validity of comparative findings between these and future studies. Two mail survey questionnaires were constructed: one for investors (including users) and one for institutional lenders. The questionnaires were administered by mail with a free-post addressed envelope included to permit the return of the questionnaire without the identification of the sender.

Twenty-one responses were received out of 136 lenders to whom surveys were mailed. Forty-eight responses were received out of 209 property investors to whom surveys were mailed. Thus, the sample consisted of 69 total responses received indicating an overall response rate of 20%: 15 % for lenders and 23% for investors.

3.2 Summary Of Survey Responses

3.2.1 Introduction

The summary of the major findings that emerged from the analysis is presented in this section with accompanying Tables in Appendix I. To keep this section brief, only a limited amount of data is cited directly. Responses are separately tabulated for lenders and investors.

3.2.2 Type of Respondent Organisation

The breakdown of the type of respondent organisation for the entire sample and for the two subgroups: 1) investors, and 2) lenders indicates that property

companies and insurance companies represent the largest number of respondents among investors, whereas commercial and merchant banks were the most frequent lender respondents.

3.2.3 Experience with Contaminated Properties (Qs 3-4)

In response to the question "Have you ever made an investment or a loan on contaminated property?" just over a third of the respondents (39%) indicated that they have made such investments or loans. By category, 45% of the lenders have made a loan on contaminated property. Of the investors, 37% have purchased contaminated property.

Because some environmental problems can be extremely expensive (and sometimes dangerous) to detect, a follow-up question was asked to elicit whether there was a difference in investing and lending patterns on properties that are known to be contaminated, versus those alleged or suspected to be contaminated. Results indicate that respondents are generally adverse to investing or lending on properties either known, alleged or suspected to be contaminated. These results are shown in Table 1, attached in Appendix I.

3.2.4 Attitude's Toward Property Known to be Contaminated (Qs 6-7)

A series of questions on the equity investors' and lenders' attitudes toward property known to be contaminated with different kinds of contamination was posed. The aim was to identify a hierarchy of different types of contamination which equity investors and lenders strive to avoid. The first of these questions asked for attitudes about three basic locales of contamination: ground water, soil and building contamination.

Building and soil contamination are the least feared (41%) by the aggregate group, with ground water being the most feared (59%).

The next question examined seven different types of contaminants by asking respondents to indicate if they would invest/lend on property with the contaminant. The original a priori expectation was that few investors or lenders would be willing to work with any category of contamination, so the results are somewhat surprising.

Respondents agreed that property contamination from radioactive materials was to be most avoided, with toxic and volatile chemicals rated similarly and in second and third places.

3.2.5 Attitudes Toward Property Alleged to be *Contaminated (Q. 8)*

After ascertaining the attitudes of the investors and lenders toward known contaminants, a similar question was asked about properties that are alleged to be contaminated. The results indicate a similar ordering of willingness to invest or lend on properties alleged to contain different contaminants as with the properties known to be contaminated. Interestingly, the lenders appear to be more adverse to most of the alleged contaminants (except for radioactive materials) than they were to the known contaminants. The reverse was the case for investors who rated each alleged contaminant less harshly than the known contaminants. By type of respondent lenders are more averse to all contaminants than investors. Results for questions' 6-8 are indicated in Table 1.

3.2.6 Attitudes Toward Property Located Within 30 Metres of Contaminated Property (Q9)

To test whether investors and lenders are also concerned with, and limit their lending and investing on, properties relatively close to a source of contamination, respondents were asked if they would invest/lend on property where the source of the contamination was within 30 metres of the property.

Of the contaminants listed'an industrial landfill (hazardous, toxic) had the most frequently recorded negative response (67%), an oil refinery next (45%), with a high-traffic roadway having the least negative response. Table I outlines these results.

3.2.7 Modification of Terms to Compensate for Increased Risk Associated with Contaminated Property (Q. 10)

This question was aimed at determining the respondents respec-

tive investment or underwriting criteria, especially as related to the increased risks associated with investing or lending on contaminated property. From the results it appears that most investors would adjust their expected yield rate; discount rate or capitalisation rate upwards to reflect the environmental risks. They might also apply a shorter capital recovery period and lower the break-even point.

Interestingly, the results indicate that the lenders place most emphasis on personal liability (88% indicated "yes) but might also lower the loan to value ratio, shorten the amortisation term and maturity for the loan or make the loan recourse. Table 2 summarise these results.

The next question focused on whether several different forms of seller indemnification might make the purchase or loan terms less stringent. Results for the aggregate group show that contractual commitment were most highly favoured. Refer to Table 3.

3.2.8 Attitudes Toward Environmental Policies When Investing in Contaminated Property (Qs. 12-16)

Some final questions were included to identify what types of policies existed within the institutions toward dealing with contaminated properties. Results show that in the aggregate group only a third of the respondents reported policies for investing or lending on contaminated property (compared to up to 91 % in the US). By respondent type, lenders were more likely to have a formal policy than were investors.

Respondents were asked if they require environmental audits to be completed on investment or loan proposals. For the aggregate sample only 27% of respondents "Always" or "Usually" require environmental audits. Investors require an environmental audit more often than the lenders. This is an interesting result given the lender respondents were more likely to have a formal policy. This may be because they take a hands-off approach rather than completing the appropriate due diligence.

A question was asked whether an environmental compliance or remedial programme was required to be undertaken on investment or loan proposals where environmental risks are identified. This was to determine what action was taken once risks had been identified, whether or not an audit had been carried out prior to the investment or loan. From the results it appears that two-thirds of the respondents "Always" or "Usually" require such action, with lenders showing a higher likelihood of requiring it. Results from these two questions indicate that respondents do not take many preventative risk measures prior to investing or lending, but rather wait until a problem arises before they take action to correct it.

The next question was whether environmental insurance was used or required. The responses

indicate that less than 10% of the aggregate group "Always" or "Usually" require it.

The final question asked whether respondents implement a formal due diligence environmental programme with half of both respondent types "Never" or "Rarely" implementing this. This mirrored and confirmed the responses to question 13, that few preventative or ongoing risk measures are taken when investing or lending on property. Table 3 outlines results to questions 12 - 16.

All responses were separated into two groups: lenders and investors and analysed on this basis. Comparing the results of the Mann-Whitney tests from the two groups indicated the responses were significantly different for the following variables:

- Do you lend/invest in property with building contamination? (More investors (74%) than lenders (37.5%)would lend/invest at least sometimes).
- Do you lend/invest in property alleged to be contaminated with asbestos? (More investors (44%) than lenders (0%) would lend/invest at least sometimes).
- Does your organisation have a set policy on lending/investing in properties known, or alleged, to be contaminated? (Fewer investors (25%) than lenders (58%) have a set policy).
- Do you purchase comprehensive environmental insurance for any of your investments? (Fewer investors (15%) than lenders (39%) purchase such insurance at least sometimes).

From these results it appears that lenders are more cautious than investors when lending on property known, alleged or suspected to be contaminated.

3.3 US and NZ Results Compared

Interestingly, the Kinnard and Worzala US study (1996) found that at least 60% of all respondents indicated that they would seriously consider and at least might invest or lend on properties contaminated with all but the most feared and avoided types of contamination: radioactive mateirals and toxic or volatile chemicals. The NZ respondents are far more cautious with only a quarter of them indicating any kind of willingness to lend or invest on such property.

Lenders in both countries and NZ investors appear to be more averse to "Known" contaminants than "Alleged" contaminants. Respondents in both countries are more likely to consider properties where the contamination is off-site, but many, such as radioactive materials, are still avoided by the majority.

In the US, lenders reported rather more tolerance toward contamination than did equity investors. This appears to reflect that investor-owners would be more likely to be held responsible for remediation expense than would be lenders, irrespective of the pattern of due diligence followed prior to the purchase of the property. Things are not so clear cut in terms of whom the liability would fall on in NZ which perhaps explains the greater caution of NZ lenders, compared to investors. The more cautious groups (equity investors in the US and lenders in NZ) reported generally stricter adherence to formal policies toward becoming involved with contaminated properties. Further, the US investors almost universally insisted upon a Phase 1 environmental study. Less emphasis is placed upon such formal studies in NZ, with the investors tending to carry these out rather than the lenders. This could be a result of the ready availability of capital in NZ. The desire of lenders to have the capital working may cause them reluctance to tighten lending policies due to the potential of losing valued customers. Finally, with the outstanding exception of the Phase I study requirement by equity investors, the respondents in the US study seem to have been less negative in their attitudes and behaviour toward property contamination, whether known or alleged, whether on-site or off-site, than were the respondents in the NZ study, as well as the Healy & Healy, and the several Mundy studies. The noticeable difference could well be the result of a growing level of tolerance toward property contamination in the US on the part of both equity investors and lenders.

4. CONCLUSIONS

There remains a paucity of information about the risks from contamination and stigma perceived by market participants: users, equity investors and lenders alike. Moreover, adjustment for and quantification of the effects of those risks typically constitutes a very challenging part of the valuation process.

This study aims to fill the information void. It investigates the attitudes and policies of investors and lenders toward investing in and lending on property known, or alleged, to be contaminated in NZ in 1996/7. It must be recognised, however, that these attitudes and policies could vary over time. In fact, the US study results appear to indicate that attitudes have changed with a greater tolerance toward contaminated property indicated. Future research is likely to find increasing tolerance, particularly in the US now that an amendment to the Federal Superfund Law has been passed limiting the liability of lenders and fiduciaries for the costs of remediating environmental contamination of properties under their control.

The most telling conclusion that emerges from these studies is that both debt financing and equity investment funds are available for the acquisition and ownership of properties effected by contamination, but more particularly in the US, than in NZ. Exceptions to this included properties with on-site radioactive waste or radioactive handling materials, and properties in close proximity to such facilities. Another exception, is the presence of volatile and toxic chemicals, which are rated high among the contaminants avoided by both respondent types. The last exception is any property within close proximity to a landfill containing or permitted to contain toxic and/or hazardous materials.

It is expected that the greater caution evidenced by market participants in NZ would be reflected in sale price information and hence estimates of value. A further study of valuation practice is about to commence to determine to what extent such information is incorporated into estimates of value and the methods employed to do so. Together, these studies can be used to help develop specific industry guidelines on the procedures and methods to adopt when valuing such property.

Acknowledgements

We would like to express our sincere thanks to all of the respondents.

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APPENDIX I: TABLES

Table 1

Factor	*Overall* Frequency%	*Lenders* Frequency %	*Investors* Frequency %
Q3. Invested/Lent on contaminated property			
Yes	39	45	37
No	61	55	63
Q4. Would Invest/Lend on possibly contaminated property (% of "no" responses)			
Known	73	84	69
Alleged	70	79	67
Suspected	68	74	66
Q.6 Would you lend/invest on property with the following contamination (% of "no" responses)			
Ground Water	59	70	54
Soil	41	50	38
Building	41	62	26

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Q7. Would you lend/invest on property with known contamination from: (% of "no" responses)			
Radioactive materials	87	88	87
Volatile chemicals	67	63	68
Toxic chemicals	64	63	64
Petroleum products	46	38	48
Asbestos	42	50	40
Tenants that contaminate	38	50	36
Underground Storage Tanks	30	25	32
Q8. Would you lend/invest on property with alleged contamination from (% of "no" responses)			
Radioactive materials	84	86	83
Toxic chemicals	66	71	64
Volatile chemicals	59	71	60
Asbestos	44	57	40
Petroleum products	41	43	40
Q. 9 Most Avoided Sources of Contamination within 30m (% of"no" or "probably not" responses)			
An industrial landfill (hazardous, toxic)	67	62	68
A chemical plant	64	50	68
A waste treatment plant	48	37	52
An oil refinery	45	25	52
High voltage electric lines	27	0	36
A landfill (non-hazardous)	21	12	24
Defence site	15	0	20
High-traffic street	6	0	8

Table 2

Investing/Lending terms	Frequency %
NB. Frequencies indicate % of respondents answering "Yes".	
Q. 10 Investors: Modification of Investing Terms to Compensate for Increased Risks	
Higher yield rate	59
Higher discount rate	57
Higher cap rate	52
Lower break-even point	45
Shorter capital recovery period	43
Longer debt amortisation term	17
Shorter maturity for the loan	16

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Q. 10 Lenders: Modification of Lending Terms to Compensate for Increased Risks

Personal liability	88
Lower loan/value ratio	50
Shorter amortisation term	38
Make the loan recourse	29
Higher debt service coverage ratio	25
Shorter maturity for the loan	25
Increase closing costs	14
Income participation	14
Higher interest rate	13

Table 3

Policy	*Overall*		*Lenders*		*Investors*	
NB. Frequencies indicate % of respondents answering "Yes"	Frequency	%	Frequency	%	Frequency	%
Q.11 Seller Indemnification to Ease Purchase/Loan Terms						
Contract Commitment	38		25		42	
Bond	22		25		21	
Remediation Cap Insurance	19		13		22	
Q. 12 Have a Policy on Investing/Lending (% of "yes"responses)						
Have a Policy	34		58		25	
Q's 13-16. Attitudes Toward Environmental Policies When Investing/Lending (% of "always" and "usually" responses)						
Require an environmental audit or phase 1 report?	27		11		34	
Require environmental compliance or remedial program where risks identified?	67		72		65	
Purchase environmental or remediation cap insurance?	8		11		6	
Implement due diligence environmental program?	26		21		28	

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ECNZ v Valuer General

Key Words:

Valuation of Land Act (1951), State Owned Enterprises Act (1986), ECNZ assets, non rateable crown land, liability for rates, market value, valuation methodology, allocation of purchase price, capital value of individual assets, NZIV Standards Definitions, "separate property", DCF, PIE, ODV, DRC, ODRC, facilitator, willing buyer, starting point of valuation, value in use, model, specialised assets, business in occupation, depreciation rates, surplus capacity, South Island differential.

IN THE HIGH COURT OF NEW ZEALAND
WELLINGTON REGISTRY
M No. 67/93
CP No. 710/92
CP No. 711/92
CP No. 712/92
CP No. 713/92
CP No. 768/92
CP No. 769/92
CP No. 231/93
CP No. 241/93
CP No. 430/93
CP No. 431/93

UNDER The Land Valuation Proceedings Act 1948

AND

IN THE MATTER of the Valuation of Land Act 1951

BETWEEN ELECTRICITY CORPORATION OF NEW ZEALAND LIMITED
Objector

AND THE VALUER-GENERAL
Respondent

Hearing: 27,28,29,30,31 May and 5 June 1996

Counsel: D J White QC and I Veale for the Objector
M T Parker for the Respondent

Judgment: 27 March 1997

JUDGMENT OF GODDARD J & MR I W LYALL

Solicitors for the Objector:
Geraldine Ann Baumann
Electricity Corporation of NZ Limited

Solicitors for the Respondent:
Crown Law Office (Wellington)

New Zealand's Electricity System

New Zealand's electricity system is customarily divided into three sectors

- *"Generation"* which is the "manufacturing" sector where the electricity is manufactured or generated in power stations. These stations generate power from either the flow of water (hydro-electric stations), the burning of gas, coal or oil (thermal power stations) or the release of steam from natural underground reservoirs (geothermal stations).
- *"Transmissions "* which is the bulk transport of electricity from these power stations to local supply areas around the country. The system of high voltage towers and wires over which the bulk electricity is transported is known as *"the national grid"*.
- *"Distribution"* which is the *"retail"* sector where local power companies take electricity from the national grid, reduce the voltage, and distribute it over local networks to consumers.

The Background to this Litigation

Electricity Corporation of New Zealand Limited (ECNZ) was incorporated on 26 February 1987 under the Companies Act 1955 pursuant to the State-Owned Enterprises Act 1986 and is a public company by virtue of s. 30(2) of

that Act. Following its incorporation ECNZ was to acquire all the electricity generation and transmission assets of the Electricity Division of the Ministry of Energy and operate them as a successful business from 1 April 1987. The assets comprised 36 power stations and two stations then under construction (Ohaaki and Clyde) together with the national transmission grid. Agreement was not reached on a sale price for those assets until 24 March 1988, however, at which time the price eventually agreed was $6.3 billion (including $300 million for working capital).

Prior to 1987, the new power station properties had been entered on the valuation rolls but classified as non-rateable Crown land. But from 1 April 1989 ECNZ was entered on the rolls as owner of the properties and would become liable to pay local authority rates, and some of those rates levied upon capital values in areas with capital rating systems. Because the valuations of the properties for rating liability had considerable practical significance, ECNZ, separately and together with Valuation New Zealand (VNZ), worked throughout the period 1989 to 1991 on settling an appropriate methodology for the valuation of its power station properties. In the event, however, ECNZ and VNZ were unable to reconcile their views as to an appropriate methodology for the valuations and an impasse was reached between them.

Following this impasse, the Valuer-General advised ECNZ in March 1992 that he had valued its power station properties at a total of $6.1 billion (as at 1 April 1987) using an adjusted *"depreciated replacement cost"* (DRC) method. ECNZ was concerned at the level of those valuations and adopted a policy of objecting to each valuation as it was advised. The objections were ultimately transferred from the various Land Valuation Tribunals around the country to the High Court and consolidated into the one proceeding before this Court.

Three principal issues, arising from the foregoing facts, have been identified for the determination of the Court. They are:

1. Whether the purchase price of $6.3 billion (including $300 million for working capital) paid by the objector (ECNZ) to the Crown for the Crown's electricity generation and transmission assets as at 1 April 1987 provided relevant evidence of the market value of the individual power stations as at 1 April 1987.
2. If so, what methodology should be adopted for allocating the purchase price between the assets of the objector, ie between the generation and transmission assets, and between individual power stations.
3. If not, whether the respondent acted correctly in using an adjusted depreciation replacement cost method to assess the capital value of individual power stations.

The Case for the Valuer-General

The Valuer-General does not accept that the purchase price of $6.3 billion (including $300 million for working capital) paid by ECNZ for the electricity generation and transmission assets as at 1 April 1987 provided relevant evidence of the market value of the individual power stations. His reasons for not accepting this can be summarised as follows:

1. The definition of *"Capital Value "* of land and the provisions of s. 8 of the Valuation of Land Act 1951 require him to assess the likely sale price for each parcel of land `separately' whereas the purchase price paid was for the electricity business as a whole and was not based on the value of the individual assets of the business.
2. The purchase price does not meet the criteria in the New Zealand Institute of Valuers Standards for a *"market"* transaction.
3. Even if the purchase price had relevance as at 1 April 1987, the Valuer-General is required to value at least some of ECNZ's assets each year, so that to rely on an increasingly ageing purchase price would lead to absurd results.

The Case for Electricity Corporation of New Zealand Limited as Objector

ECNZ challenges the Valuer-General's DRC valuation of the 36 individual power stations on the following basis:

1. The Valuer-General misconstrued the *"separate property"* provisions of s. 8 of the Valuation of Land Act by determining that those provisions precluded him from valuing the generation assets as a whole (or system) and then allocating the value of that whole across the 36 individual power station properties.

2. The purchase price of $6.3 billion, which was supported by income-based discounted cash lfow valuations carried out by both Treasury and ECNZ did provide relevant evidence of the *"market value"* of the individual power stations as at 1 April 1987 and should not have been disregarded by the Valuer-General.

The Sale of the Crown's Electricity and Generation Assets to ECNZ

Following ECNZ's incorporation pursuant to the State Owned Enterprises Act, a Board of directors, selected from the private sector for their expertise and experience in business, was appointed to administer the affairs of the Corporation. The generation and transmission assets of the Crown's old Electricity Division were to be removed from direct Government control and placed under the control of the newly created corporate entity which was required to operate successfully as a business from 1 April 1987. Under s.23 of the State Owned Enterprises Act, the Board was required to reach agreement with the Crown as to the terms on which it would purchase the assets, including agreement as to a purchase price.

The sale negotiations between ECNZ and Treasury (representing the shareholding Ministers of the Crown) took place between September 1986 and March 1988, a period of some eighteen months. The objective for Government was not to obtain the maximum achievable price for the generation and transmission assets but to fix a price that was neither too high nor too low, that is, one which would ensure ECNZ could compete with other generators on level terms and thus enable its performance to be assessed. In accordance with this policy objective, the Minister of Finance required the shareholding Ministers to stand aside from the negotiations.

During the fortnight beginning 16 March 1987 a number of meetings were held between ECNZ and Treasury representatives in an endeavour to reach agreement before the end of that financial year. In accordance with the directions of the Minister of Finance both parties clearly understood they were required to negotiate a fair market price. There were, however, important differences in each side's view of the future environment in which ECNZ would operate. Treasury took the view that electricity prices prevailing at the time were artificially low, having been politically set and based on historic cost, and that prices should be set according to the long-run marginal cost of new generating capacity, not the average cost of existing generating capacity. On the other hand, ECNZ believed prices were above the short-run marginal cost and could be undercut by any potential competitors. Therefore prices should be maintained at current levels. Treasury also believed that allowance should be made for anticipated efficiency gains and for the ability to increase production without adding capacity due to a surplus of generating plant. ECNZ did not accept those arguments, believing that the price should provide the Corporation with a commercially viable balance sheet which would enable it to raise finance. Numerous other lesser areas of disagreement also occurred. The result of these negotiations was that Treasury sought $8.5 billion as the price of the assets whereas ECNZ was offering $3.7 billion.

By 26 March it was apparent that agreement in time for a settlement by 1 April 1987 was impossible, and on 28 March 1987 the parties met and accepted that the negotiations had `fallen down' and that temporary arrangements were required. Treasury then made a settlement offer of $6.6 billion, which ECNZ did not accept, and Treasury withdrew the offer on the basis it had only made the proposal in an effort to reach settlement by 1 April 1987.

The negotiations continued throughout June 1987 with Treasury strongly of the view that a *"discounted cash flow"* (DCF)

methodology should be used to value the assets for sale, while ECNZ felt this methodology failed to adequately recognise significant areas of commercial risk and uncertainty and that a "price/earnings" (P/E) ratio, in line with market expectations, had to result if ECNZ were to meet its statutory obligation to operate successfully as a business. An important element of both the DCF and P/E methodologies was predicted price profiles for electricity. Reflecting this, ECNZ prepared a paper entitled *"Asset Valuation Exercise, Pricing Strategy"* which endeavoured to develop a price profile over a twenty year period for use in estimating future cash flows; and Treasury prepared a paper explaining its view of the valuation exercise which indicated it was also endeavouring to arrive at a commercial market value for the assets. The Treasury paper made reference to an assessment of the replacement cost of the assets at $15.6 billion.

By the end of June ECNZ was offering a maximum of $5.4 billion, while Treasury was still insisting on a price of $8.5 billion. There was, however, reasonable optimism that agreement could be concluded by the (then) agreed target of end July 1987.

This optimism was apparently dashed when Treasury wrote to ECNZ on 29 June 1987 saying that while it *"remained committed to negotiating a fair market value for the business as soon as possible"* and was *"willing to discuss middle ground solution"* its model run had produced an estimated business value of $11.3 billion which was now the asking price.

Further negotiations took place on key parameters. At the same time, the Financial Controller of ECNZ wrote to financial consultants in London commissioning a report on the ability of ECNZ to successfully sell equity bonds against a purchase price ranging from $4 billion to $10 billion. (Equity bonds are a special form of bond authorised by s. 12 of the State-Owned Enterprises Act 1986 and have most of the attributes of ordinary shares.) A report received from the London consultants concluded that *"on the basis of an average historic P/E of 13.5 times, an average prospective +1 PIE of 8.5 times (source Jarden & Co., August 1987) suggests a fixed asset transfer value of around NZ$3.5 billion ".*

On 19 November the Chairman of the Board wrote to the Minister of Finance and the Minister of State-Owned Enterprises enclosing ECNZ's written submission with supporting valuations of $3.4 billion, $3.9 billion and $4.2 billion. The submission concluded:

> *"Based on all the commercial evidence presently available in the Directors' view, the appropriate fair market value for the fixed assets [is] $4 billion. "*

On the evening of 24 March 1988 ECNZ's Chief Executive had a meeting with the Minister of Finance and the Minister for State-Owned Enterprises at which Sir Ronald Trotter acted as facilitator. After several hours of negotiation, agreement was finally reached on a purchase price of $6 billion for the Crown's electricity generation and transmission assets, plus $0.3 billion for working capital. Following this agreement as to price, the remaining sale details were quickly finalised and an *"Asset Sale and Purchase Deed"* executed on 31 March 1988.

The following extracts from Sir Ronald Trotter's evidence relating to the finalisation of the agreement between ECNZ and the Government are important:

> *"Early in 1988 the parties had reached a stalemate [the Minister of State Owned Enterprises] then asked me to assist the parties to reach agreement. The Ministers, that is [The Minister of State Owned Enterprises and the Minister of Finance], were determined to maintain the integrity of the process. They did not want to be forced to determine the price.*
>
> *I concluded that the difference between the parties could in large part be explained by the fact that the Crown was unduly influenced by the replacement cost of the assets and ECNZ were unduly influenced by the very low earning rate and the potential restructuring costs. I argued that the intent of the process was to establish SOE's as commercial busi-*

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nesses operating in a similar manner and environment to privately owned businesses. On this basis the valuation must be on the basis of a going concern with a willing buyer and a willing seller acting as they would in a private sector transaction. The focus must be on anticipated future cash flows including the pricing risks from potential competition or political intervention. In the course of my discussions both [parties] indicated to me that they were prepared to move. With some hesitations and qualifications and in several steps [the Treasury official] indicated he might recommend $7 billion and [the Chief Executive of ECNZ] similarly $5 billion. I respected the abilities of both of them. They were both hard headed in negotiations and determined to protect the positions of the Crown and ECNZ respectively. Neither wanted to be seen as giving way.

On 24 March 1988 ...[a]fter some discussion they agreed to consider my recommendation of $6billion overnight and the following day the transaction was concluded at thatfigure plus $3 million for non fixed assets.

The whole exercise had proved tough going with both parties being offended in the end as to the agreed price. I was satisifed, however, that it was a realistic compromise and a fair price for both parties. It was a price which would enable the Crown to measure the ongoing performance of ECNZ properly. The higher Treasury figures would have made that task extremely difficult."

We have been at pains to set out the salient features of the history of the negotiating process between ECNZ and the Crown in the detail above to illustrate the protracted nature of that history as well as the intense and adversarial atmosphere in which the sale and purchase negotiations were finally concluded. That history and the manner in which those negotiations were conducted provides compelling evidence of the robustness with which the issues of asset price fixing and the method of calculating price were undertaken. In the event it took a full 18 months of difficult negotiating between skilled and experienced officers on each side using independent advisers (Treasury for the Crown and Southpac for ECNZ) before a deal was able to be struck on 31 March 1988. And although there had been pressure for the Government to intervene and set the price, Government had resisted this and determined that the price should be a freely negotiated one. On the evidence, we have little doubt that the process which eventually led to agreement on the purchase price of $6.3 billion was sufficiently robust and arms-length for it to have been taken into account by the Valuer-General as relevant to the starting point from which to value the individual electricity generation assets for Valuation of Land Act purposes. We are satisfied of this, notwithstanding the relationship of the parties and the fact that ECNZ was the only possible purchaser of the assets. We do not accept that those factors totally precluded the purchase price as an indication of the fair market value for the assets, or that the purchase price bore no relevance whatever to the valuation exercise. And in support of this view we refer to *Valuer-General v Wellington City Corporation* [1933] NZLR 855 at 866, in which it was held that the owner of a property was not excluded as a potential or hypothetical purchaser for the purpose of ascertaining capital value for the district roll from the price the property might realise if offered for sale.

In reaching our conclusion we have also taken note of the fact that the Valuer-General did not call evidence from Treasury to rebut the contention that the purchase price was indicative of fair market value.

The valuation by the Valuer-General for rating purposes

Following settlement of the sale and purchase with Government on 31 March 1988, ECNZ became the owner of all the electricity generation and transmission assets formerly owned by the Electricity Division of the Ministry of Energy. As stated, the generation assets comprised 36 individual power station properties and two which were under

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construction at the time. Prior to 1987, the power stations had been entered on the valuation rolls but classified as non-rateable Crown land. But from 1 April 1989, ECNZ was entered on the rolls as owner of the properties and became liable to pay local authority rates. Because the valuations of the properties for rating purposes had considerable practical significance, ECNZ separately and together with VNZ (on behalf of the Valuer-General), worked throughout the period 1989 - 1992 on settling an appropriate valuation methodology. Essentially, the objective for both parties was to develop a methodology for valuing the power stations which would meet the following requirements:

1. To be as at 1 April 1987;

2. As far as possible to be based on publicly available information;

3. To be reconcilable with valuations of power stations not owned by ECNZ;

4. If possible, to be usable for future valuations.

In June 1990 ECNZ commissioned Ernst and Young to undertake a review of the applicable valuation principles and practice on its behalf and to develop an appropriate valuation model. A fundamental component of that model was to be the imputation of a `starting' total value from which to derive individual power station values. The question, however, as to what that total starting value should be proved to be a major obstacle between ECNZ and VNZ. Mr Horsley, a partner in Ernst and Young, summarised the debate over this issue as essentially:

> *"...one of methodology which in turn rests on how much reliance can be placed on the total purchase price paid by ECNZ to purchase the assets from the Crown and how that price should be apportioned to the main assets (distribution versus production). "*

VNZ contended there was no starting point and the Valuer-General was simply required to assign a value to each separate property with no particular interest in the sum of the individual values. ECNZ maintained that the values attributed to the individual power station properties should reflect their market value and, therefore, the purchase price must logically provide the starting point and advised Ernst and Young accordingly. Proceeding on that premise Ernst and Young, in their first report to ECNZ in October 1990, attributed a starting value of $3.657 billion to the generation assets as a whole, which value they had determined as a residual proportion of the $6.3 billion purchase price by deducting the calculated value of the transmission assets from that purchase price. And the value of the transmission assets they had calculated by using an *"optimised deprival value approach"* (ODV), a non-market valuation basis directed to the *"value-in-use"* of assets which are part of a going concern.

During the following months Ernst and Young's model underwent a number of changes in the course of numerous meetings and discussions held between ECNZ and VNZ. The issues debated at these meetings and discussions included: land values, how the residual $3.657 billion figure should be apportioned amongst the individual power stations, the ability for the model to be updated in future years, non-rateable items, historical costs, location, generation capacities and relevance to other non-ECNZ power stations. But although the model was considerably refined as the result of those meetings and discussions, it remained based on a $3,657 billion apportionment of the purchase price.

In August 1991 VNZ forwarded an apportionment calculation it had made of the $6.3 billion paid for ECNZ to Ernst and Young for consideration. That calculation was based on a schedule of completed works as at 31 March 1984, sourced from a Ministry of Energy annual report, and resulted in a value apportionment of $5.127 billion for the generation assets as a whole, although acknowledging that up to date schedules would need to be used for further apportionment to the individual power stations. Following receipt of that apportionment calculation, Ernst and Young undertook further work on their model, in conjunction with both the parties, and produced a revised version incorporating changes that had been discussed by both sides, but still

nevertheless with the starting point of $3.657 billion for the generation assets. VNZ repeated its concern about the reasonableness of the residual figure of $3.657 billion attributed to the generation assets, when compared with the value attributed to the transmission assets and sought further explanation as to how the allocation of $3.657 billion to the production assets of the $6.3 billion total price for ECNZ had been made. Essentially, VNZ questioned the apportionment of $2.265 billion to the transmission assets as excessive. Ernst and Young responded by explaining the conceptual basis upon which they had determined the generation asset values as a residual after deducting the transmission assets, and reviewed the basis of the $3.657 billion using publicly available information. And although VNZ still could not accept $3.657 billion as the appropriate starting price the Valuer-General did write to ECNZ stating:

" the discussions that we have held to this point have been worthwhile and I believe that the methodology that has been developed for apportioning `X' is quite reasonable. "

That letter reflected Mr Horsley' s own view that, at this point, agreement had nearly been reached between the parties because of VNZ's acceptance of the model for the purposes of apportionment between individual power stations, and that it was simply the starting price of $3.657 billion which required acceptance. Mr Horsley explained that Ernst and Young had consistently used that starting figure because it was advised by ECNZ and for that reason they had focussed on developing a model which would allocate that figure amongst the individual power stations in an equitable and meaningful way. But in late 1991 and early 1992, after receiving the Valuer-General's letter, Ernst and Young undertook its own estimation of an appropriate starting value for ECNZ's power stations as at 1 April 1987, using only publicly available information from the annual accounts of ECNZ and Trans Power, and from the Trans Power Establishment's Board's valuation of the transmission assets, and arrived at a starting figure of $4.031 billion. VNZ, however, was still unable to agree that a figure of either $3.657 billion or $4.031 billion should be the starting point for the valuation exercise, and so, an impasse was reached between the parties. At that point, Mr Horsley said:

"In the absence of being able to agree on the starting value, and hence make use of the otherwise accepted model, VNZ stated it would revert to a conventional depreciated replacement cost approach. At this point we commenced discussions about referring the matter to the High Court. "

Market Value and valuation methodology

The Valuer-General's conclusion that he should totally disregard the $6.3 billion purchase price paid by ECNZ for the Crown's electricity generation and transmission assets rested on his view that the purchase price did not represent a "market value" for those assets.

The term *"Market value"* is defined in the New Zealand Institute of Valuers' (NZIV) Valuation Standards as follows:

"Market Value is the estimated amount for which an asset should exchange on the date of valuation between a willing buyer and a willing seller in an arm's-length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently and without compulsion. "

The above definition can be broken down into its separate elements, each of which has its own recognised meaning:

"The estimated amount... "refers to the most probable price reasonably obtainable by the seller and the most advantageous price reasonably obtainable by the buyer.

an asset should exchange refers to the price at which a transaction should be completed on the date of valuation.

on the date of valuation requires the valuation amount to reflect the actual market state and circumstances as at the effective valuation date, not as at either a past or future date.

between a willing buyer refers to one who is moti-

vated, but not compelled to buy. The buyer is neither over-eager not determined to buy at any price. The buyer is also one who purchases in accordance with the realities of the current market and with current expectations and would not pay a higher price than the market requires.

.. and a willing seller ... " neither an over-eager nor a forced seller, prepared to sell at any price, nor one prepared to hold out for a price not considered reasonable in the current market. The willing seller is motivated to sell the asset at market terms for the best price attainable in the open market after proper marketing, whatever the price may be.

.. in an arm's length transaction ... " the transaction is presumed to be between unrelated parties, each acting independently.

after proper marketing the asset should be marketed in the most appropriate manner to effect its disposal at the best price reasonably obtainable. The length of marketing time, whilst varying with market conditions, must be sufficient to allow the asset to be brought to the attention of an adequate number of potential purchasers.

.. wherein the parties had each acted knowledgeably and prudently ... " presumes that both the willing buyer and the willing seller are reasonably informed about the nature and characteristics of the asset, its actual and potential uses, and the state of the market as of the date of valuation. Each is further presumed to act out of self-interest with that knowledge and prudently to seek the best price for their respective positions in the transaction.

"... and without compulsion... " each party is motivated to undertake the transaction but neither is forced or unduly coerced to complete it.

Market value is estimated through the application of valuation methods and procedures which reflect the nature of given property and the circumstances under which it would most likely trade in the open market. The most common methodologies used for estimating market value include the *Sales Comparison* method, the *Capitalised Income* or DCF method, and the Cost method. The NZIV Standards advise that the *Cost* method has two possible applications, one that may be used in market estimates and one that may not. When the Cost method is applied to market value estimates all elements of the method are derived from open market evidence. When a Cost method is applied to non-market value circumstances, non-market elements are applied. By further contrast, the DRC method combines market and non-market elements and cannot be regarded as market value. These different Cost applications are not to be confused or misconstrued in making, presenting or applying market value estimates. DCF is defined in the NZIV Valuation Standards as:

"A method of valuing the future cash flows that will be produced by a business. Estimated cash flows of future years are given a net present value, circulated with a discount rate chosen by the valuer. "

The exclusively DRC method, which the Valuer-General used to value the individual power stations, is based on other than market value. It is defined as:

"...[A] method of valuation which is based on an estimate of the current Market Value of land for its existing use plus the current gross replacement costs of improvements less allowances for physical deterioration and all relevant forms of obsolescence and optimisation. The result, which is non-Market Value, is referred to as the Depreciated Replacement Cost estimate. This result is subject to the adequate potential profitability or service potential of the entity. This estimate is sometimes referred to as Optimised Depreciated Replacement Cost (ODRC). "

The proviso in that definition complements the established principle that the "replacement cost" method of valuation should not be regarded as an alternative to market value, but as a factor to be considered in the assessment of a fair market value. *Valuer-*

General v Manning [1952] NZLR 700.

The Valuation of Land Act 1951 and Amendments

The term *`Government valuation'* refers to valuations determined under the Valuation of Land Act 1951 and its amendments. One purpose of Government valuations is to assess for local authority rating and the preparation of district valuation rolls is required by s.8 of the Act. Section 8(2) requires land to be treated as separate property for the district roll, if in the circumstances of the case it is reasonable to treat it as separate property, and whether or not it is separately occupied.

The information to be set out in the roll for each separate property includes the *"land value"* of the land. Section 2 of the Act defines those values as follows and provides the basis upon which they are to be assessed, which is by an estimation of their realisable or market value.

Section 2 also defines *"improvements"* to the land and the basis upon which their value is to be assessed.

The above definitions of capital value and land value require the valuer to make separate valuations whereas, improvements to land are not separately valued. Rather, the value of improvements is derived by a simple calculation of the difference between the capital value and the land value of a property, and not by a separate valuation. This principle is reflected in a number of decisions in which the courts have clearly stated that land value plus the value of any improvements will never exceed the capital value of a property, although the value of the improvements, if arrived at by a separate process of estimation, might, if added to the land value, produce a different result. On that basis a valuer is entitled to assume that the difference between the capital value and the land value is the value of the improvements, which effectively are a residual amount. *Valuer-General v Epps* [1964] NZLR 810 at 811; *McKee v Valuer-General* [1971] NZLR 440; Re *110 Martin Street, Upper Hutt* [1973] 2 NZLR 15, CA. In short, the Valuation of Land Act requirements relating to valuations for district rolls can be summarised as follows:

(i) Valuations for rating liability require each property to be separately valued;

(ii) Information required for the rolls includes separate valuations for both the capital value and the land value of each property;

(iii) Capital values and land values are to be derived by estimating the market value of each, if realised;

(iv) Improvements to a property are work done or materials used on the land;

(v)The value of improvements is derived by a simple calculation of the difference between the capital value and the land value of a property, and not by a separate valuation.

In the present case ECNZ is the *"owner"* and the *"land"* to be valued contains the individual power stations, which are, by definition, *"improvements"* to the land. There is no dispute that it is reasonable to treat the individual power stations as separate properties for roll valuation purposes, and the amenability of some to separate ownership has already been demonstrated by the 'on-sale' of at least one station at the date of hearing this case, with a proposal to sell more if buyers can be found. The parties are also agreed on the value of the land, so the focus of ECNZ's objections to the valuations of its power station properties relates solely to the assessment of their capital value as at 1 April 1987.

The Valuer-General, having concluded that the purchase price was irrelevant, formed the view that he was unable to derive the capital value of the individual power station properties by estimating their realisable or market value in accordance with the definition requirements of s.2 because he had no information upon which to base this. He therefore proceeded to assess the capital value of each power station, without reference to the purchase price paid for the total package of the electricity assets, by using an exclusively DRC method, albeit modified to reflect changes in technology, the need for reserve capacity and the existence of surplus capacity on the system. In adopting this ap-

proach he effectively valued the improvements to the land in each case, and then excluded an amount for machinery and plant, and added the value of those improvements remaining to the land value of each property. The result was that the sum of the capital values he set for the power stations alone totalled $6.105 billion whereas the power stations plus the electricity generation and the transmission assets, as a system, had realised $6.3 billion at sale. The Valuer-General also took the view that, even if the purchase price paid for the generation and transmission assets were relevant to market value, the price was paid for the electricity business as a whole and was not based on the value of the individual assets of that business, and therefore was also irrelevant on that basis, That necessarily raises the issue as to whether the s.8(2) requirement to value the individual power station properties separately for roll valuation purposes precludes the determination of those separate valuations by having reference first to the value of the generation system as a whole; that is, by first valuing the system as an aggregate entity or business within the context of the purchase price paid for it, and then allocating that value to the individual power station assets. That issue directly relates to the impasse reached between Ernst and Young and VNZ over the correct starting point for the valuation exercise and in addressing that issue useful reference can be made to NZIV Valuation Standard 1,4.4.4, which provides for the valuation of *"specialised assets".*

Specialised assets

NZIV Valuation Standard 1,4.4.4. refers to *"specialised assets"* as follows:

> *"Specialised assets and assets that have limited marketability due to their location rarely, if ever, change hands on the open market except as part of the business or entity of which they are a constituent part, occasionally referred to as the business in occupation. If the most probable use of such assets is inextricably related to the business in occupation, the processes of estimating their value are non-market dependent and may command an estimate of the entire entity's value, followed by allocations among the constituent components of the entity. These processes are distinguished from Depreciated Replacement Cost in NZIV/VS 3, and are considered non-market and inconsistent with NZIV Standards for normal financing reporting. "*

We are satisfied that ECNZ's generation system is *a "business in occupation"* and the individual power stations which make up that generation system are *"specialised assets"* within the definitions in NZIV 1,4.4.4 above, for the following reasons.

Power stations fall within the definition of specialised assets because, although identifiable as individual plants they must nevertheless operate within a system (including those which are separately owned) for the purpose of maintaining both a continuous quantity and quality of electricity supply. This reality was confirmed by Dr Waters, a Canadian expert called on behalf of the Valuer-General. Dr Waters agreed that it was impossible to have other than a co-ordinated system, because even individual power stations separately owned and used only infrequently will inevitably become part of that system for both physical and operational reasons such as: hydro availability in the case of hydro power stations, a merit firing order system, minimum production costs, and proximity to electricity markets. All of these reasons relfect important attributes of ECNZ's business operation and have an impact on the value of its electricity business as a whole. Therefore the *"most probable use"* of its individual power station assets is *"inextricably related to the business in occupation"* within the meaning of NZIV Valuation Standard 1,4.4.4. In this regard, Mr Pegler, giving evidence on behalf of the Valuer-General, also conceded that individual power stations in New Zealand are inextricably linked to the generation and distribution system as a whole so that, even if separately owned and operated, they must take their place in the overall scheme of things. There was, therefore common ground in respect of two crucial issues; firstly that indi-

vidual power stations are capable of separate ownership and operation and secondly, that collectively they may be called upon to meet the demand for electricity in New Zealand at the lowest possible cost regardless of ownership status.

Where there was not common ground, however, was in respect of the correct methodology for valuing specialised assets such as power stations. In particular, differing approaches were taken to the interpretation of Valuation Standard 1,4.4.4 and its application to the *"separate property"* provisions of s.8(2) of the Valuation of Land Act. The Valuer-General would not concede that a correct valuation approach was to estimate the *"entire entity's value, followed by allocations among* " the individual power station properties as *"the constituent components of the entity.* " He argued that, as the purpose of valuing the power stations was for roll valuation purposes and not for financial reporting purposes, estimating ECNZ's global value as a business and then allocating that value across its constituent parts would not comply with Valuation Standard 1,4.4.4. He also pointed to Valuation Standard 2, which is entitled *"Valuation Bases other than Market Value"*, and which at 2,3.3.3 describes the DRC method as the most appropriate for valuing specialised assets. Valuation Standard 2,3.3.3 provides:

"Specialised property is by definition rarely, if ever, sold on the open market. Accordingly the (DRC) method is normally used in the evaluation for financial reporting purposes with properdi sclosure. "

Mr Horsley, however, argued for a different approach to the valuation of such specialised assets as power stations, and said:

"Specialised or unique property, in the main comprising public sector type assets, has historically been valued on a DRC basis. This process has, however, changed in more recent years as asset valuations economic business cashflows have been more widely used. Hence, as owners of public sector assets have become more accountable for earning appropriate returns on these assets, the emphasis has shifted from cost-based valuation approaches to economic market-based methods, with greater weight being placed on the latter. This is especially so where the assets have been part of the market economy or in a potentially competitive framework. The use of DRC is confined more to infrastructural type assets such as roads or where there may be no competition.

I have recently been involved in various valuations of specialisedpublic sector property including airports, Crown health assets, ports and Crown research institutes. In each of these assignments the primary basis of valuation has been economic analysis. Hence, the collective value of these assets has been assessed using, principally, discounted cashflow methodology. Individual asset values are then typically apportioned based upon their contribution to a whole.

Often the DRC approach is used to derive the value proportions (ie the same proportions as suggested by a DRC approach are applied to the overall valuation of the business). The summation of these individual asset values is then able to be supported by the expected cashflows of the business.

In many cases the values adopted for public sector trading assets were lower than their cost-based value and this outcome reflected their rate of profitability, over-engineering, surplus assets and pricing constraints. "

Other evidence also supported Mr Horsley's view. Another expert witness, Mr Roger Taylor, who has extensive experience in advising the Crown on the valuation of airports and ports, said that cost-based approaches should only be adopted where there is no effective market such as with roads, sewerage systems and non-profit parts of the health sector; or used as a cross-check to provide a bench mark for either liquidation or the cost of entry into an industry. Mr Taylor's evidence was based on his experience of the book values for many State trad-

ing activities. He said these have often proved irrelevant for practical purposes and have borne little relationship to the probable market values of the entities or their earnings. This is because the future value of assets, as measured by their earnings and their remaining life span, is an important factor; for example, a dam built in the 1920's may have as much potential value as a dam built in the 1960's (all operating costs being equal) yet their book values may greatly differ. Further to those factors, he said, changes in technology must also be taken into account. Therefore improvements in construction methods mean that many buildings can now be built more cheaply and with better operating efficiencies than their older equivalents. Likewise, *`over-engineering'* components must be taken into account, along with major capital expenditure necessary to maintain the economic value of a system.

As to the issue of an appropriate valuation methodology for specialised assets, the Valuation Standards essentially advise that where possible, a valuer valuing these should develop land value, cost and accumulated depreciation estimates from market information. Where there is limited or no directly comparable market information to consider, the valuation process for specialised assets may become more complex and it is the valuer's responsibility to develop data and reasoning from the market to support and explain any value conclusion reached. Each of the recognised valuation methods may be applied and all applicable methods should be considered in the valuation of specialised assets. And although the DRC method is the one most commonly applied, it cannot be considered as representative of market value *(Valuer-General v Manning,* supra) and should only be used *"subject to adequate potential profitability"* (NZIV Valuation Standard 2,3.8). In contrast, however, the DCF method does represent market value because it is based on market-determined cash lfows and market-derived rates of return.

Issue One:

Whether the purchase price of $6.3 billion (including $300 million for working capital) paid by ECNZ to the Crown for its electricity generation and transmission assets as at 1 April 1987 provided relevant evidence of the market value of the individual power stations as at 1 April 1987?

The Valuer-General declined to regard the purchase price of $6.3 billion as providing relevant evidence of the market value of ECNZ's individual power station properties for the following reasons:

1. The definition of *"capital value"* of land and the provision of s.8 of the Valuation of Land Act require him to assess the likely sale price for each parcel of land `separately' whereas thepurchase price paid was for the electricity business as a whole and was not based on the value of the individual assets of the business.

2. The purchase price does not meet the NZIV Valuation Standards criteria for a *"market"* transaction.

3. Even if the purchase price had relevance as at 1 April 1987, he is required to value at least some of ECNZ's assets each year, so that to rely on an increasingly ageing purchase price would not be feasible.

The Valuer-General's First Reason:

It is correct that s.8(2) of the V aluation of Land Act requires properties to be valued separately for district roll valuation purposes, if it is reasonable to do so. It is also correct that the definition of *"capital value"* in s.2 of the Act provides for the capital value of each property to be separately derived by estimating the market value of each, if realised. It is also accepted, in this case, that the individual power station properties are capable of separate ownership and occupation and it is therefore reasonable in the circumstances to value them separately as required by s.8(2).

The Valuer-General concluded that he could not assess the capital value of the individual properties by estimating their market value, if realised, because, in his view, the purchase price paid for the generation and transmission assets was not representative of their market value and also because that price was paid for all the power generation assets and

was not based upon the value of the individual assets. He therefore proceeded to estimate the capital value of each power station property by using a modified DRC method on the basis that this was the only reliable valuation approach open to him. In doing so he effectively derived the capital value of the individual properties by calculating the depreciated replacement cost of the improvements in each case and then adding his valuation of the improvements to the land value. We find his approach contrary to law because it transgresses the mode of setting capital value required by s.2 of the Act, which precludes capital value being arrived at from the summation of separate assessments of land value and the value of improvements to the land. Thus, by implication, the Act proscribes the valuation of improvements by the DRC method as the means of establishing the capital value of land as defined in s.2.

The Valuer-General's view that he must disregard the purchase price paid for the total package of electricity assets as irrelevant led to his further view that he could not have any regard for the sum of the values he set for the individual assets, even if that sum were to far exceed the purchase price paid for the total package of assets.
Because the Valuation of Land Act requires capital value to be derived by direct reference to market value, we are unable to accept the Valuer-General's conclusion that the purchase price paid for the electricity system as a business was completely irrelevant to an assessment of the capital value of the individual power stations. In the first instance, we find it difficult to accept that the market value of any individual power station could ever sensibly or realistically be estimated by a simple calculation of its depreciated replacement cost, rather than by a calculation of its investment potential. In this regard, it can be assumed that if all the individual power stations were placed on the open market they would only sell at a price that was certain to yield a profit to the purchaser and so would sell on the basis of their earning power. That earning power might bear no relation to the updated historical or present replacement cost less depreciation of those individual power stations. It also follows that a purchaser of the total package of power stations would likewise only purchase the business on the basis of its estimated potential return on investment and not on the basis of historical, recent or present cost. On that basis the price paid for the business must have relevance to the value of its assets. This reality is confirmed by the fact that, in the end, both Treasury for the Crown and Southpac for ECNZ used DCF methodology to value the total package of electricity assets for sale and neither used DRC. It can be assumed that they would have applied the same approach to the individual assets if they had been required to estimate a value for those separately.

Secondly, we are satisfied that the purchase price paid for the business in this case has relevance to the value of the individual assets of that business because those assets are *`specialised assets'*.
The individual power station properties fit comfortably within the definition of *`specialised assets'* in NZIV Valuation Standard 1,4.4.4, being inextricably linked to the business operation of ECNZ, which itself comes within the definition of a *`business in occupation'* in that Standard. Therefore, whilst it is clear that individual power station properties are capable of separate ownership and occupation, and, it is therefore reasonable to accord them separate valuations for the purposes of s.8(2) of the Valuation of Land Act, the Valuer-General is not precluded from assessing the *`capital value'* of each of those separate properties by first having reference to the value of the generation system as an *`entity'*, and then allocating that value amongst the individual power station properties with appropriate adjustments if s.8(2) and NZIV Valuation Standard 1,4.4.4 are read consistently together.

The Valuer-General's second reason, namely:

The purchase price does not meet the NZIV Valuation Standards criteria for a "market" transaction.

Insofar as the Valuer-General's second reason is concerned, we find that the purchase price of $6.3 billion reasonably approxi-

mated a fair market value for the electricity business so as to provide relevant evidence of the market value of that business as at I April 1987. As stated earlier, we are satisfied that the negotiating process which eventually led to agreement on price was based on reasonable rates of return and was sufficiently robust and arms-length for it to have been taken into account by the Valuer-General as relevant to the starting point from which to assess the value of the individual power station assets. Notwithstanding that in terms of the State Owned Enterprises Act, ECNZ was the only possible purchaser, ECNZ was nevertheless a *"willing buyer"* in the sense of being motivated to buy although not at any price but, rather, in accordance with the realities of the market. And throughout the negotiations, ECNZ remained mindful of the advice that its directors would be in breach of their duties if they agreed to pay an unacceptably high price. We are also satisfied that the Government was a *"willing seller",* in the sense that it was motivated to sell, but only for the best price attainable. It is also clear that the sale transaction was undertaken in a sufficiently *"arm's-length "* manner to satisfy the accepted definition of that term and thereby ameliorate any element of compulsion arising from the `only purchaser' situation. Both parties were represented by extremely skilled and experienced negotiators using independent advisers and both parties went to considerable lengths to ensure that valuations of the assets obtainable by them were carried out on a commercial basis. The shareholding Ministers had no power to determine the purchase price unilaterally and neither party was able to be forced into an agreement on unacceptable terms or conditions. Further, we have no doubt that each party acted knowledgeably and prudently in approaching its task, so that whilst the sale may not have been concluded after *"proper marketing"* (in the usual sense of that term), the protracted and robust nature of the negotiating process itself dictated that a commercially sustainable and realistic *`fair sale price"* was obtained in the end which sufficiently approximated *"market value "* to require its acceptance by the Valuer-General as relevant to the valuation exercise, rather than its complete dismissal as a valuation criteria by him.

Most importantly, the accuracy of and foresight with which the purchase price was eventually negotiated as at 1 April 1987 has subsequently been confirmed by ECNZ's performance since that time and thus verified with the benefit of hindsight. Therefore, its relevance to the valuation exercise has also been confirmed. *Wood v Wood* (1985) 1 FRNZ 576 at 584, and *McCathie v Federal Commissioner of Taxation* (1944) 69 CLR 1.

The evidence of this hindsight confirmation was provided by a review of the sale price, conducted in the light of ECNZ's performance over the period 1987 to 1994, by Mr Cowie of Southpac Corporation Limited, who reconstructed the DCF valuation undertaken by Treasury in 1987-88 but substituting real performance data from 1987-1994 for the estimates used by Treasury. In his evidence on the issue Mr Cowie said:

> *"It is possible to run the valuation model, having adopted the Treasury conventions ... using actual data for variables rather than the forecasts that the parties used. In doing this, rather than 15 years of cash lfow forecasts, only the seven years for which actual information is available, 1987/88 to 1993/94, are analysed. To account for a shorter period, the residual value has been derived by applying the previously utilised perpetuity residual formula to 1993/94 earnings rather than 2001/02 earnings. In my opinion, a hypothetical investor standing in 1987 with perfect foresight to* 1994, *would have valued the stream of cashflows associated with ECNZ at $6.6 billion. "*

(Emphasis added)

Although Mr Cowie's calculations include only seven years, his valuation does have the benefit of hindsight because it employs actual earnings, costs and interest returns, and thus eliminates the guesswork implicit in estimates. His calculations, relfected in Table A below, depict a net value in 1987 of $6,583

billion which very nearly approximates the reality of the situation as at 1 April 1987, supporting ECNZ's valuations and indicating that the $6.3 billion purchase price paid was entirely reasonable:

Utilising Mr Cowie's valuation, we have concluded that the *"net present value"* of $6.583 billion in Table A represents the worth of the entire package of electricity assets as at 1 April 1987 but can validly be further rounded up to $6.6 billion because his calculations do not include Marsden B which is `mothballed'. That rounding up is based on our view that every power station must have some value, even if only for scrap, and thus we have made some provision for the `mothballed' Marsden B land, structure and plant in that rounded up figure whilst nevertheless excluding the Clyde and Ohaaki Power Stations because they were not commissioned at the time. The answer arrived at is shown in Table B below and represents the worth of the sum of the individual power station properties. We are satisfied, however, that it does reflect the most appropriate approach and provides the best solution to the true worth of the total package of electricity system assets as at 1 April 1987:

TABLE A

ACTUAL RESULTS

(all figures in $ millions)

	87/88	88/89	89/90	90/91	91/92	92/93	93/94
Electricity Sales	1,318	1,432	1,515	1,539	1,589	1,544	1,654
Other Income	-63	168	41	14	78	28	25
Cash Receipts	1,255	1,600	1,556	1,553	1,667	1,572	1,679
Op. Expenses (ex. Int & Depn)	-481	-494	-480	-498	-617	-595	-574
Net Income Before Tax	774	1,106	1,076	1,055	1,050	977	1,105
Taxes	-243	-212	-264	-199	-255	-234	-178
Cash Income	531	894	812	856	795	743	927
Capital Expenditure	-399	-263	-329	-405	-353	-281	-183
Net Cash Flow	132	631	483	451	442	462	744
Discount Rate	9.00%	14.67%	15.98%	15.00%	10.85%	10.20%	10.42%
Discount Factor	0.917	0.800	0.690	0.600	0.541	0.491	0.445
Discounted Cash Flow	121	505	333	271	239	227	331

TOTAL VALUATION IN 1987:

NPV of Cash Flows	2,027
Residual Value	4,582
Non-Op. Items	-26
Net Present Value	6,583

TABLE B		
Total Worth of Power Generation @ 3/87		$6.60b
Less Working Capital	0.30b	
Less Transpower Assets	1.87b	$2.17b
For the package of all units:		
VALUE OF ECNZ ASSETS OF WORKING POWER STATIONS @ 1/4/87		$4.43b

Insofar as the sum of the individual power stations is concerned, this will not necessarily equate to the global worth of the generation assets as a package because it is reasonable to assume that intending purchasers would only acquire individual power stations on the basis of a DCF calculation of potential return on investment. Therefore individual power stations, or even groups of interconnected power stations (these being, for example, hydro stations interconnected by virtue of dependence on a single water course), could expect to command a higher purchase price because the capital investment required is smaller and consequently the pool of potential investors is greater. A further reason is that the lesser degree of risk arising from the smaller capital investment permits a lower internal rate of return to a DCF on that investment. Therefore, as each power station represents only one thirty-sixth of the generation system as a whole, that fraction should be expected to earn a greater percentile return than the system as a whole because of its smaller capital worth. Thus its individual value will be greater although not markedly so, since each power station remains a segment of the whole. In this regard we refer to and rely on the decision in *Valuer-General v Alfred Kohn Family Trust* (1990) Land and Valuation Cases 867, as authority for the principle that the sum of the parts need not equal the worth of the `package' in the ratings valuation exercise.

We have accepted that the sum of the values of the individual power station properties, allowed in Table B will not necessarily equate to the global worth of the entire package of generation assets. For that reason we are of the view that the global worth of those properties can validly be increased. We would, however, place a ceiling of 10% on any such increase in value because individual power stations are naturally restrained from operating with complete independence. If they could operate independently, then the worth of each as a power production unit would undoubtedly be greater because the degree of risk would be further reduced and consequently their internal rate of return to a DCF could also be further reduced. We therefore suggest that an increase of no more than 10% results in a realistic end figure for the total added sum of the individually assessed power stations.

In our opinion, based on the evidence adduced, the worth of all the power stations, if individually assessed, would exceed the global worth of the entire package of assets by $0.4 billion as at 1 April 1987 so that the total value of the generation assets should be enhanced by individual assessment of power stations to a figure of $4.83 billion. That total figure includes Marsden `B' at the nominal sum of $17 million but does not include any amount for Clyde and Ohaaki which were only partly constructed and not commissioned in April 1987. Neither Mr Pegler nor Mr Horsley attributed any value to Clyde and Ohaaki for district roll purposes but we consider that some adjustment should be made for the investment in their partly constructed assets at that time. In the absence of any other figures we refer to the schedule of Analysis of Capital Outlay as at 31 March 1987 provided by the Electricity Division and from the figures provided there allow a rounded down figure of $17 million for the capital outlay on both partly completed stations. In conclusion therefore, the end figure we allow for the value of ECNZ's power station assets as at 1 April 1987 is $5.00 billion.

The Valuer-General' third reason:

The feasibility of updating individual power station values re-

lying on an "increasingly ageing purchase price"

Mr Pegler pointed out that VNZ does not produce valuation roll entries of power stations with a common valuation date and, as at 1987, the Valuer-General was required to revalue quinquenially in any one year. He said that undertaking those revaluations by reference to an increasingly ageing purchase price would not be feasible because:

> *"If the one sale that does exist was to be considered to be the essential basis of valuing individual power stations in 1987, the fact remains that VNZ will be valuing some power stations each yearfor the foreseeable future. In my opinion it will become increasingly irrelevant to revisit a business transaction that is no longer current and probably does not represent the portfolio of power stations that exist at that later valuation date. "*

Consequently we have been mindful that it is in the public interest for the Valuer-General to be able to update individual valuations expediently and inexpensively without the need to retain expert advice for each and every update, regardless of whether those valuations are required on a quiquenial, triennial or annual basis. It is our view that once values are set in place for the initial 1987 year, computer updated annual reviews, providing relative values for all individual power stations could be carried out in a relatively simple and straightforward manner. Indeed, Mr Horsley demonstrated the ease with which this could be achieved during the hearing by carrying out an update of the valuations set by Ernst and Young and completing the task in 2 _ hours.

Issue Two:

If the purchase price of $6.3 billion (including $300 million for working capital) did provide relevant evidence of the market value of the individualpowerstations as at I April 1987, what methodology should be adopted for allocating the purchase price between the assets of the objector, ie between the generation and transmission assets, and between individual power stations.

Accepting MrCowie's `rounded-up' hindsight valuation of $6.6 billion as the correct starting figure, the issue next arises as to the appropriate valuation methodology for allocating that figure amongst the different classes of assets; firstly, as between the generation and transmission assets; and secondly, as between the individual power station components of the generation assets once the value of that class of assets is established.

The appropriate methodology for allocating the purchase price between the generation and transmission assets.

At the point of sale in March 1988, the transmission assets were transferred from the Crown into the name of an ECNZ subsidiary, Trans Power NZ Limited. In 1994 Trans Power was separated from ECNZ ownership and is now one of the country's largest SOE's in its own right. As at June 1995, its assets had an audited book value of $2.973 billion.

The methodology used by Ernst and Young to calculate the worth of what were to be the Trans Power assets was to deduce that worth from the publicly known notional market value for the Trans Power assets, using an optimised deprival value (ODV) approach as at 1 April 1991 of $2.570 billion, and then adjust for additions made, depreciation and Construction Cost Index, so as to arrive at a valuation for those assets of $1.871 billion as at 1 April 1987.

Ernst and Young also employed an overlay of earning analysis in valuing the transmission assets and a modified DRC approach to the valuation of the generation assets to provide cross-checks in reaching those valuations. Their modified DRC approach also took into account the fact that an adjustment for surplus capacity needed to be made.

This approach is open to criticism because it adduces the worth of the total package by reference to its income earning ability, but then subtracts a portion of that package by a different methodology. It is also open to criticism because the ODV method used to value the portion ultimately relies on replacement cost and so may result in the portion being overvalued. Mr Pegler also criticised

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Ernst and Young for not carrying out that exercise in reverse, in other words, for not adducing the value of the generation assets and then subtracting their value from the worth of the total package so as to derive a residual attributable to the transmission system.

We are of the view, however, that whilst Ernst and Young's methodology for valuing the transmission assets may not be ideal, no better alternative method of calculation was put before the Court. And as there were no records of income for the transmission assets in 1987 it cannot be said that the better approach would have been to value those assets by reference to their income, although it would nevertheless be prudent to carry out checks on their 'estimated' income at that time. Nor do we see any real substance to Mr Pegler's complaint that Ernst and Young made no reverse calculation to leave a residual worth for the transmission assets. Whilst it might have been sensible to carry out a reverse calculation, the alternative chosen is more straightforward as it has a smaller asset range and mix. In any case it is clear that such a calculation could be made, if desirable, utilising the methodology employed by Ernst and Young. Further, it is apparent that the ODV approach has been widely discussed in the electricity sector and accepted as the most appropriate for natural monopoly network assets, such as the transmission grid. And, significantly, although that methodology was criticised by the Valuer-General and his expert witness, Dr Waters, they were unable to provide any alternative methodology which was not itself open to criticism.

As to the purported disagreement over the validity of using different approaches in valuing the transmission and generation assets, we heard no compelling evidence as to why, in principle, different classes of assets should not appropriately be valued using different methodologies. Indeed, in the present case where there is a fundamental difference between the nature of the assets concerned it may well be desirable to adopt different valuation approaches. In this regard Mr Horsley said:

"...it should be stressed that the transmission grid has different characteristics from the bundle of individual production sites. Stripped of surplus or over-engineered assets, the grid is a single entity. By its nature it is a near-monopoly and is now under separate ownership. It is in the form of being an infra-structural asset and is appropriately valued on a cost-basis. By contrast the production assets are heterogeneous and essentially in competition with each other as shown by the merit orderfiring system. They are appropriately valued on an income basis. For both sets of assets, the appropriate methodology adopted conforms with generally accepted valuation approaches. "

Mr Cowie was also of the view that the generation and transmission systems had different characteristics as businesses, and whereas the transmission business was a natural monopoly, the generation business was not. He said that DCF is not an appropriate valuation method for a natural monopoly because such monopolies can arbitrarily determine the size of their revenue streams and hence their value under a DCF analysis. Therefore, there are difficulties in applying a DCF valuation to a portion of the overall electricity business of ECNZ when that portion has the characteristics of a natural monopoly. It is commercially acceptable for different methodologies to be applied in the valuation of businesses or divisions of businesses operating in contestable markets from those applied in the valuation of businesses or divisions of businesses operating in monopoly markets.

The validity of the ODV valuation methodology for the transmission assets was also supported by Mr Taylor who said that it is appropriate to value a monopoly on a cost-related basis (subject to two provisos which he specified) and that:

"_in the absence of an observable market price, the ODV of the transmission relfects what a well informed buyer would be prepared to pay for the asset. For this reason I consider it valid for the value of the generation assets to be calculated as the residual

after deducting the values of the transmission and other assets from the value of the business - $6.3 billion. "

In conclusion, although we do not find the methodology used by Ernst and Young to separate the values of the generation and transmission assets ideal, no better alternative method of calculation was placed before the Court. Ideally, it may have been preferable to have heard evidence of a DCF methodology, as that was used to calculate what we have determined is the minimum worth of the total package of the electricity generation and transmission assets. In expressing this preference we nevertheless acknowledge that attributing income to the transmission assets may be problematic, but even a valuation made with the benefit of hindsight may be helpful and Trans Power has now been trading as a separate business entity since 1994. And in this regard, we note from Mr Horsley's evidence that the methodology used to value the transmission assets incorporated an overlay of earnings analysis.

The appropriate methodology for allocating the residue of the purchase price between the individual power stations

In addressing this issue we have borne in mind that no opening values have been set for individual stations and there is no evidence as to what the value of any individual station might have been as at 1 April 1987. To date, there has simply been the suggestion by Ernst and Young that the $4.031 billion sale obtained for the generation system as a whole be apportioned amongst its individual power station components. Since the sale of the generation system as a whole to ECNZ, and up to the time of hearing this case, only one sale of an individual power station had taken place (that being Arnold in the sum of $7 million), but with the basis of the price unknown.

Another important and related issue, referred to earlier by us, is whether the sum of the individual power stations for ratings valuation purposes should equate to or at least approximate the global worth of the generation assets, given that it cannot be predicted how many individual stations will ever be sold off, and given that all power stations remain inextricably linked to the electricity system even if sold off into separate ownership.

We have already accepted that a prospective purchaser of either the total package of electricity generation and transmission assets, or an individual power station, would only contemplate making such a purchase on the basis of the likely return on the investment, and therefore an economic market-based valuation approach is appropriate for these entities. We also accept, however, that although prospective purchasers must obviously made estimates of likely earning power and profit in order to determine any offer made, the Valuer-General has no practical avenue by which to assess the potential earning power of each and every individual power station in order to determine its market value. On this point there is evidence that he did seek detail of the individual revenue earnings of Arnold at the time of its proposed sale, but was advised by ECNZ that *"revenue is not attributed to any particular station. "*

Thus we must conclude that the only approach available to the Valuer-General is to make individual ratings assessments using an adjusted DRC method. It is also our view that the sum of the individual values he sets must nevertheless still relate to the value of the generation system as a whole. As he is required to set values for the individual power stations as at 1 April 1987, we would expect the sum of those DRC values to be greater than the `initial' value of the stations derived from the DCF value of the generation and transmission assets as a package, less the ODV based value of the transmission assets, because it is reasonable to expect a lower percentile return from the individual power stations as against the substantially greater investment and consequential risk arising from the ownership of the total package of all the power stations. For the reasons stated earlier we have determined that, in the absence of evidence as to actual worth of the individual stations, a figure of $4.83 billion is a fair starting price for their `initial' total value, should we omit any added value for he completed parts of both

Clyde and Ohaaki power stations as at 1 April 1987.

We must conclude therefore, that the only practical course open to the Valuer-General is for him to assess the values of the individual power stations using a DRC methodology, adjusted to ensure that the total of the sum of those individual values set by him equates to the $4.83 billion initial figure we have allowed for the global worth of the generation assets as at 1 April 1987. Once the individual power stations have been allocated a proportion of that initial figure, it should be a relatively simple matter for the Valuer-General to update those valuations, first by updating the total value of all the individual power stations; and then by allocating that total value amongst the individual power stations.

Such updates should be able to be carried out relatively simply by annual reference to the available published accounts of ECNZ and by reference to any sales of individual stations that may take place.

The allocation of the total valuation to the individual power stations

The question of the allocation of the total valuation to individual power stations on a precise date does not yet arise and the parties are agreed that the Court should adjourn the question of allocating values to individual stations at this stage.

Issue Three:

If the purchase price was not relevant, whether the respondent acted correctly in using ad adjusted depreciated replacement cost method to assess the capital value of individualpower stations.

The answer to this question has largely been covered by our conclusions as to *"The appropriate methodology for allocating the residue of the purchase price between the individual power stations"* under Issue Two above. There are, however, some remaining issues relating to differences of opinion between the valuers which require answer. These are the `mothballing' of the Marsden `B' power station, cost overruns, the depreciation allowance for thermal stations, and the question of surplus capacity.

The mothballing of Marsden `B'

We have already stated our view that no power station is worthless and therefore Marsden `B' must be worth something, even if only as scrap. On that basis we have made a $17 million allowance for Marsden `B' when rounding Mr Cowie's net present value figure of $6.583 billion to $6.6 billion, that allowance being based on figures provided by both Mr Horsley and Mr Pegler in evidence.

As at 1 April 1987, Mr Horsley valued the non-rateable value of improvements for both Marsden `A' and `B' as at 1 March 1987 at $23 million. In 1992, Mr Pegler assessed the roll valuations for both Marsden `A' and `B' as at I March 1987 at $16 million. And in 1994, he assessed their roll values as at 1 March 1987 as $24 million for Marsden `A' and 29 million for Marsden `B'.

Cost Overruns

It is clear, from an historical point of view, that there has been significant wastage both in respect of manpower and plant use in electricity generation systems constructed and operated pre-1987. Even leaving aside the technological advantages of today, there is less wastage of resources and more efficiency evident in the current construction of power stations due to the competitive environment in which construction is now tendered for by private sector companies with worldwide experience.

Nevertheless, we cannot accept as apt the definition of cost overruns provided by Mr Ryniker and Treasury, namely *"the difference between budget or anticipated cost and additional cost as a reasonable assessment of cost overruns, is appropriate".* Initial budgets or anticipated costs are frequently less than actual final costs, even where construction of a simple residence is concerned and that will certainly be so where extremely complex constructions such as power stations are concerned. Such differences in anticipated and actual cost occur because of the number of variables concerned, for example, variations in the estimated time period of construction involving increased interest costs, additions in the cost of materials and labour during periods of inflation, and unforeseen site difficulties.

We do accept, however, the need for some measure of allowance to be made for cost overruns in the ratings valuation exercise. Such overruns are particularly apparent towards the later part of the period 1916 to 1987 rather than during the earlier period.

Mr Horsley identified total cost overruns of $1.316b in 1983, and therefore of $1.82b in 1987, thus approximating 15% of replacement cost of $12b in 1987. Initially he had allowed approximately 54% of total cost overruns as a valid deduction from replacement cost at $980m but he later reduced that to $490m, that is, to 4% of replacement cost of 12b in 1987. Although there are no means of ascertaining whether that figure is the actual extent of the cost overruns, it does appear to us to be appropriately modest and therefore not wrong in principle. A methodology which would enable better differentiation between older and more recently constructed power stations, so as to reflect the likelihood that older stations are less likely to be efficient than their modem counterparts (due to technological advances), would assist in a more accurate determination of the extent of cost overruns.

Depreciation

In their original valuations Ernst and Young for ECNZ and VNZ were agreed that the per annum basic depreciation rates to be used were 1.67% for hydro stations, 2.5% for thermal stations, and 3.33% for geothermal stations.

The Ministry of Energy Financial Statements for 1986/87 show depreciation for geothermal stations at 3.3%, depreciation for fuel stations at 2.5% and depreciation for all other works at 1%, which we assume includes hydro stations. The Financial Statements also show respective life estimates for the stations of 20,25 and 41 years. In his evidence, Mr Horsley argued strongly that the depreciation rate for thermal stations should be significantly higher than 2.5% because, in his view, thermal stations have a short economic life. He estimated their life as some 50% of that of hydro stations and therefore allowed them 3.33% depreciation rate to accord with that allowed for geothermal stations. In contrast, Mr Pegler accepted the life expectancy of the geothermal and hydro stations as shown in the Financial Statements but lengthened the life expectancy of thermal stations by 20%.

In the absence of persuasive reasons as to why the thermal stations should have their life shortened to equate to that of the geothermal units we accept the ratios as shown in the Ministry of Energy Financial Statements We also accept the depreciation rate of 1.67% per annum for the hydro units allowed by Mr Pegler, as that is half the depreciation allowed for geothermal stations and thus corresponds with evidence we heard relating to geothermal stations having half the life of hydro stations. On that basis, we adopt the per annum basic depreciation rates allowed by Mr Pegler, but adjusted in respect of thermal stations as follows:

Hydro Station
1.67% per annum with maximum 67% at age 40

Thermal Station
2.7% per annum with maximum 67% at age 25

Geothermal Station
3.33% per annum with maximum 67% at age 20

Locational Allowance

In respect of this issue Mr Horsley summarised the demand and supply of electricity in the North Island and South Island as follows:

> *"There was greater production in the South Island, but greater demand in the North Island in 1987.*
>
> *1,217 GWh or nearly 5% of production was lost in transmission. "*

And he said that the power stations which are closer to the larger North Island electricity markets will have more value in terms of reducing transmission losses than power stations which are identical in every other respect but located in the South Island.

The Valuer-General, however, made no allowance in the ratings valuation exercise for disadvantage to South Island power stations resulting from the extra cost of transmission to North Island users, nor any allowance resulting from power loss in transmission. Mr Horsley, on the other hand, made allowance for the *"reduced worth"* of power sta-

tions situated in the South Island because of the addition of the cost of transmitting through the Cook Strait cable, and he allowed for 5% power loss in transmission. He provided actual production and demand figures for both islands for the ending 31/3/87, showing 55% usage and 46% production for the North Island; and 45% usage and 54% production for the South Island.

On the basis of the number of power stations and the comparative total values allocated to them as at 1 April 1987 by VNZ ($5.99b) and Ernst and Young ($4.031b), 42% of VNZ's total value for the generation assets is in the South Island and 44% of Ernst and Young's total value for the generation assets is in the South Island. Therefore, no major degree of difference arises between the parties as to the effect of power transmission loss upon values.

The issue is nevertheless somewhat problematic since there will always be events that affect South Island storage such as drought, or ice and snow holding autumn and winter precipitation within the catchments, and thus will require power to be transmitted from the North Island to the South Island. Therefore, although South Island power stations may earn less because of their remoteness and power loss, contingencies of this type tend to negate a "one way" value differential to South Island power stations when viewed over (say) a twenty year time period (that being the accepted maximum term over which ECNZ can sensibly be expected to maintain a constant power supply).

In conclusion therefore, although we do not reject Mr Horsley's differential of 100% for South Island power stations and 120% for North Island power stations, we nevertheless regard it as probably too wide in the light of contingencies that might, on occasions, cause power supplies to be reversed from the North Island to the South Island.

Surplus Capacity

The question of surplus capacity proved an extremely vexed question between the parties and resulted in the widest difference of opinion between them. In the end, we have concluded that a level of surplus capacity of 25%, resulting in a deduction of around $1.828 billion, as allowed by Mr Devine (the Group Manager for Fuel Resource Group of ECNZ) is the most realistic and reliable estimate that was put before the Court. Mr Pegler had originally attempted to assert that a standard surplus capacity figure of 14.5% per power station was appropriate, resulting in a total deduction of $1.035 billion. This calculation was based on a misunderstanding of Dr Water's advice to him, however, and the correct result on his calculations should have been a figure of 28.6% per power station, resulting in a deduction of over $1.828 billion. At the hearing Mr Pegler acknowledged that he had misunderstood Dr Water's advice and had thus considerably overstated the reserve capacity. He nevertheless attempted to justify his original assessment of 14.5% for surplus capacity on the basis of what he referred to as *"an absence of redundant generation assets"* and also, because the electricity system was unable to meet the demands of consumers in 1992, so there was in fact little or no surplus capacity. We cannot, however, accept that as accurate or realistic.

Costs

The issues that were posed for the determination of the Court are extremely complex and novel and had been unresolved since 1989. We are satisfied, however, that the parties used every effort to resolve the issues themselves and drew on the best skills and advice available to them in attempting to do so. In the end, the matter was properly placed before the Court for resolution. In addition there are real public interest factors implicit in the issues and for all of these reasons we are of the view that costs should lie where they fall. LH&

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MODERN MERCHANTS LTD v GILLARD & ORS

(CA, 18/9/1997; Keith, Gallen and Doogue JJ, CA 8/97),

where MML appealed unsuccessfully from the HC's refusal of a declaration that, where the formula in the lease for determining the percentage of outgoings to be paid by the tenant in a shopping mall differed from that derived from s 6 of the Unit Titles Act 1972 (the mall having been converted into a series of unit titled areas after the lease had been entered into), the lower 1972 Act formula applied, the CA held that (I) the terms of the lease prevailed, and there was nothing in the lease that could allow the Act's formula to be applied, nor (ii) did the change in tenure justify a renegotiation of the lease.

IN THE COURT OF APPEAL OF NEW ZEALAND
C.A. 8/97

BETWEEN MODERN MERCHANTS LIMITED

Appellant

AND

GEORGE MICHAEL GILLARD,

BEVERLEY MARY GILLARD,

SHERYL EVELYN DRINKWATER and

MARGARET GRACE FRANK

Respondents

Coram: Keith J
Gallen J
Doogue J

Hearing: 15 September 1997

Counsel: G.S.A. Macdonald for appellant

H. Fulton for respondents

Judgment: 18 September 1997

JUDGMENT OF THE COURT DELIVERED BY DOOGUE J

This is an appeal as to the meaning of certain terms in a deed of lease dated 27 April 1992. Under that lease the appellant is liable to pay, in addition to the regular rent, a variable rent which is defined at clause 2.01(d) as meaning:

> ... a percentage of the aggregate of variable outgoings as defined in Clause 2.01(e), the percentage payable by the Lessee being calculated on the basis the basis of the proportion that the floor space of the premises (excluding the mezzanine floor) bears to the total lettable floor space in the Centre as certified from time to time by the Lessor's architects...

"Aggregate of variable outgoings" is defined in clause 2.01 (e) as meaning:

> the total amount expended by the Lessor (excluding capital expenditure but including Goods and Services Tax or other tax of like nature) in respect of the whole of the Centre including any additions thereto ...
>
> [on such matters as rates, insurances, lighting and cleaning of common areas]

When the appellant entered into the deed of lease relating to a shop within the South Mall Shopping Centre (described as "the Centre" in the lease and this judgment), it was owned by a company, South Mall Limited. Subsequent to the lease being entered into, the lessor sold its interest in the Centre to another company, Ladstone South Mall Limited, which in turn subdivided the Centre into unit titles under the Unit Titles Act 1972. As a result, the Centre is now divided into some 26 unit titles, with the respondents owning the title leased to the appellant. Each unit was assigned a unit entitlement based on their relative values as required by s.6 of the Unit Titles Act 1972, and the respondents contribute to the expenses and outgoings of the statutory body corporate as pro-

vided for in s. 15 of that Act in accordance with that entitlement. The respondents since they took over the particular unit on or about 7 June 1995 have had to meet 7.62% of the expenses and outoings of the Centre based on valuation ratios. However, under the lease, literally interpreted, the appellant continues to be liable to pay to the lessee 11.8979% of rates and insurances and 8.689% of all other outgoings. The appellant objected to having to pay more than the 7.62% of the expenses and outgoings of the Centre being paid by the respondent. As a result, the respondents brought proceedings in the High Court seeking a declaration that they were entitled to the variable rent in accordance with the provisions of the lease literally interpreted. The appellant disputed that contention and said that the respondents were only entitled to that proportion of the expenses and outgoings relating to the premises paid by them because that was the underlying intention of the lease. The essence of the appellant's contention is that that was the objectively ascertainable purpose and intent of the variable rent provisions under the lease and that the proper construction of it requires the appellant to reimburse the respondents those amounts actually contributed by the respondents to the outgoings of the body corporate and nothing more. Neither in the High Court nor in this Court has there been any argument for the implication of any fresh terms and nore has there been any suggestion that the lease was frustrated.

In the High Court Smellie J held that the correct interpretation of the provisions of the lease was the literal interpretation. The Judge noted the lease specifically defined the terms "lessor" and "person" in the following language:

> "Lessor" shall mean and include the Lessor its successors and assigns [clause 2.01(I)]
> "Person" shall include a corporation, words importing the singular number or plural number shall include the plural number and singular numberrespectively ... [clause 2.01 (k)]

The Judge put emphasis upon the words of the lease that the aggregate of the variable outgoings meant the "total amount expended by the Lessor ... in respect of the whole of the Centre" combined with the definitions of "lessor" and "person". He saw no basis for interpreting the lease other than pursuant to those terms. He could see no ambiguity in the terms which required him to look beyond them and saw the respondents' obligation vis-a-vis other lessors or the body corporate as a separate issue from the appellant's obligation under the lease.

The appellant argues that the provisions in the lease relied on to support the Judge's interpretation of "lessor" do not support it, but in that the appellant is wrong. The deed of lease spelt out that South Mall Ltd was the lessor and that it was registered as proprietor of an estate as lessee in the whole of the property constituting the Centre and it and the appelland had agreed that the appellant would take a lease of the particular shop. The lessor leased the shop to the appellant in accordance with the provisions of the lease, the essential terms of which have already been referred to. Although the Centre is now owned by a number of unit trusts and the appellant's liability to pay rent may be to the owner of the particular shop unit, its calculation is not affected by the provisions of the Unit Titles Act. No issue of privity of contract nor privity of estate arises in respect of the application of the provisions of the lease for the purposes of interpreting what proportion of the variable outgoings are to be paid by the appellant pursuant to the lease.

The appellant's liability for variable rent under clause 2.01(d) is defined in respect of the ratio of lfoor space the shop bears to the total lettable floor space in the Centre not the respondents' entitlement under the Unit Trusts Act, a ratio based on values in accordance with s.6. The term "lessor" in the definition of "aggregate of variable outgoings" in clause 2.01 (e) must be read for the purpose of that clause as defined in the lease, which requires it to be read in terms of ownership of the Centre as a whole and not ownership of the particular shop. Simply because the owners' entitlements under the Unit Trust Act have been fixed upon some other basis than floor space ratios does not mean there can be any

justification for changing the basis upon which the appellant is to meet outgoings in respect of its shop. There is nothing in the lease which entitles the appellant to have its share of the outgoings calculated upon any different basis from that stated in the lease. When the lease is clear and precise in its terms, relating the variable rent to the floor space proportion of the shop to the whole of the Centre, there is no justification for the Court to seek to apply any other basis for calculation. As noted by the Judge, the appellant's argument really requires a rewriting of the provisions to be based upon its reading of the terms of the lease. It is simply not known what led the respondents or other unit trust owners in respect of the Centre to pay what they did for their units and the entitlements relating to them. It is clear that any suggestion by a unit title holder that any other lessee at the Centre should pay more than required under the provisions of clauses 2.01(d) and (e) in reliance upon that unit title holder's entitlement under the Unit Trusts Act would be likely, understandably, to be resisted by the lessee. When the lease can be applied in its terms without any lessee being any better or worse off than if the Centre continued to have a single owner there is no justification for a strained meaning which would have the variable rent assessed not in terms of the lease but by something soutside and different to its terms. The change of circumstances in respect of the ownership of the Centre may provide a justification for the appellant seeking to renegotiate the terms of the lease upon its expiry. It cannot provide a justification for the appellant not abiding by its terms.

The declaration in the Court below will be upheld, namely that the appellant is required to pay 11.8979% by way of variable rent under clause 2.01 (d)(1) and 8.689% for the purposes of clause 2.01 (d)(ii).

The respondents are entitled to their costs, which are fixed in the sum of $3,000.00, together with their reasonable disbursements inclusive of reasonable travelling and accommodation costs of one counsel. In the event of disagreement the disbursements are to be fixed by the Registrar.

Solicitors: Phillips Fox, Auckland, for appellant
Miller Poulgrain, Thames, for respondents

LRW

REGISTRATION REQUIREMENTS MANUAL

The changes in the Oral Examination Policy announced by the Valuers Registration Board in the May edition of the NZIV Property Digest have now been incorporated into an updated version of the Board's Registration Requirements Manual.

The manual revised as at 6 June 1997 is available from the Registrar, Valuers Registration Board, P 0 Box 5098, Wellington.

Any prospective applicants for registration should always ensure that they have the most recent copy of the manual available. As it is difficult for the Board to keep track of everyone who has a copy of the manual, it is the individual responsibility of each valuer to guarantee she/he has an updated copy of the manual throughout the 3 year practical experience period.

Employers of graduate valuers may also find the manual a useful tool in the supervision and guidance of valuers working towards registration.

Sylvia Maunder
Registrar

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