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Acquiring and Consenting Routes and Sites for Electricity  
Infrastructure - The Critical Success Factors

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## INTRODUCTION

The purpose of this paper is to outline the factors that will increase your success for acquiring and consenting new routes and sites for electricity infrastructure.

But before I start I need to clarify a few matters. When I talk about acquisition, I am referring primarily to acquiring future rights to resources from *owners*, such as landowners, ‘*guardians*’, such as Iwi, and *authorities*, such as the Department of Conservation (“DoC”). When I talk about consenting, I am referring to the procedures under the Resource Management Act 1991 (“RMA”) for obtaining resource consents and designations.

Also keep in mind that this paper is focused on large-scale ‘green field’ projects. Therefore, parts of this paper may not be relevant to smaller electricity infrastructure involving minor upgrades or maintenance.

So what is the current situation for electricity organisations in the business of generation, transmission and distribution? To cut a long story short, I have answered this question in three short statements. (1) New Zealand’s electricity demand is growing; (2) new infrastructure is needed and we are seeing new generation stations, switchyards, substations, and lines for transmission and distribution popping up all over the country, and; (3) electrical engineers appear to have work for the next 10 years.

The problem begins here. New Zealanders have a heightened awareness of electricity assets these days. Can you remember that TV programme in the 80’s called “The Invisible Man”? Well believe it or not, once upon a time, electricity assets were invisible. They sat there quietly humming away doing their job without the slightest bit of attention, with the exception of some hydro tourist attractions. Did you ever hear anyone 20 years ago complaining about the pylons alongside the Desert Road. Was there such a thing as a pylon spotter? Unlikely. However, I now know at least five self-confessed pylon spotters, who are not engineers. I have to admit that I am one myself.

We can joke about this all we like, but the fact is people are now seeing and perceiving electrical infrastructure, *loud and clear*, and in many cases, *they don’t like it*.

## WEAKNESSES AND THREATS

To add to this growing awareness, electricity businesses are also confronted with a number of weaknesses and threats.

### ***Lack of Expertise in the Electricity Industry***

Over the last 15 years there have been very few ‘green field’ electricity projects in New Zealand. Only a handful of people in the industry have accumulated the skills and experience necessary to manage the acquisition and consenting phases for large-scale electricity projects, particularly for routes. I am told that this is a worldwide trend.

### ***The Growth and Change in Regulation***

The regulatory landscape for development of infrastructure has markedly changed. Legislation has recently undergone a major facelift, especially with the advent of the RMA. This huge wad of words presents a series of flaming hoops that must be leapt through and which can badly burn inexperienced players. Regional and district plans are variable in their

treatment of electricity infrastructure across different locations, despite consistency in the design of these assets. Government action on the development of RMA national policy statements for generation and transmission is moving at a snail's pace. The result is that electricity infrastructure projects are repeatedly experiencing the same issues in different locations. Many of the decision-makers employed in councils are young, inexperienced and on the whole unaccountable. Most of these people have a limited understanding of, or any regulatory incentive, to consider the social and economic consequences of their decisions on electricity supply projects. Cancer-phobia is on the rise and the NIMBY attitude prevails. And without doubt, the RMA is used as a vehicle by some to seek compensation for injurious affects on their property values.

### ***Access to, and the Cost of, Land and Resources***

Many landowners are suspicious of electricity businesses and in some cases are working in organised groups to fight electricity projects. They are using the e-mail, internet and media to effectively communicate their message. These people have a greater knowledge of their legal rights; are well resourced and in many cases are skilful negotiators. As you are no doubt aware, Federated Farmers and other groups are out there stirring up a hornets nest for electricity projects. Take for instance New Era Energy, a group formed to fight the 400 kV HVAC transmission line from Otahuhu to Whakamaru.

To add to the problem, other network utility operators owning high return assets are setting economic precedents when it comes to compensating landowners. Some operators are even paying rentals to landowners. These kinds of changes create more hurdles for electricity projects.

Electricity businesses are facing increased competition for resources such as land, coastline, water and air space. Subdivisions are sprouting all over the place, life stylers continue to flock to the country and large tracts of land have been handed to Iwi and DoC. There is also a race occurring amongst network utilities, energy companies and other infrastructure providers to grab as much space and resource as they can and some of these organisations are scrapping with each other for sites, routes and buffer zones.

## **THE CRITICAL SUCCESS FACTORS**

So what are the factors that will increase your success of acquiring and consenting new routes and sites for electricity infrastructure in light of these obstacles?

### ***Weighting the Acquisition and Consenting Functions***

The first critical success factor is to recognise that the importance you place on the acquisition function should vary in relation to the importance you place on the consenting function.

For routes, there tends to be more challenges around the acquisition of property rights because these normally traverse several properties. In these situations it is obvious that more importance should be placed on the acquisition phase. However, for single sites it would *appear* that issues emerge during the consenting stage, especially for projects in residential areas or when generators attempt to access resources such as water or airspace.

Despite this, my belief is that in nearly all these situations, the acquisition of rights to natural resources and space is more important than the consenting function, and therefore requires

the most time and effort. I also believe that if you can successfully acquire property or resource rights from owners, guardians and authorities *at the beginning* of a project, then many of the typical consenting issues will evaporate.

Some of you may disagree, but if you count the number of times the RMA has been used by people to claw back property rights or access to natural resources that were not the subject of negotiation, then you might change your mind.

If you place more importance on the acquisition function and think outside of the square when it comes to identifying the owners and guardians of natural resources and property, then it is more likely that your project will pass through the consenting phase with greater ease.

### ***Requiring Authority Status and Compulsory Acquisition***

The second critical success factor is that you are a requiring authority under the RMA. Requiring authority status gives you the power to designate land and to compulsorily acquire land under the Public Works Act. An application to the Minister of the Environment to become a requiring authority should happen well before you embark on a large scale project. I realise generators do not qualify for this status and I sympathise with their position.

A lines business without these powers can be rendered impotent when negotiating with landowners for large scale lines project. The playing field is tilted in favour of the landowner. And there will always be a small percentage of unreasonable or greedy landowners on a proposed route who will attempt to bribe you during a negotiation if your organisation does not possess these powers.

Don't be afraid to draw on these powers if you have them, although any decision to compulsorily acquire must be a strategic one supported by carefully staged negotiation tactics and a consideration of the alternatives. In saying this, I see no harm with a negotiator *suggesting* to a troublesome landowner in the later stages of a project that a lines business might be forced to compulsorily acquire if it is backed into a corner. My point here is that negotiators should be allowed to hint at the possibility of compulsory acquisition, so they can push vital negotiations through with troublesome landowners that would otherwise stall.

### ***Project Management***

The third critical success factor is that you employ a project manager who understands the *interplay* between the acquisition and consenting functions, and the budgets and timeframes needed for these functions. This person must also have a sound technical understanding of electrical assets. Where there is no project manager to link, balance and sequence these functions the establishment of new routes and sites for electricity infrastructure can become a nightmare.

In a similar vein, a project manager must be capable of implementing an evaluation system for considering alternative routes and sites, based on property, environmental planning, engineering, commercial and system-technical criteria. Such a system will help to determine optimal locations for sites and routes.

A common mistake is to appoint a project manager who is only an expert in one of these areas. The risk is that this person will place too much weight on their own concerns at the expense of the other functions. One systemic cause of this problem, particularly in larger organisations and consultancies, is poor cooperation and communication between the

property, environmental planning and engineering sections, or a lack of expertise in one of these areas.

Take for instance a project manager who lets the consenting function dominate the acquisition function while establishing a new route in a rural area. Under this scenario, the location of the route is determined by public consultation and attempts to avoid and mitigate environmental effects. As a result, landowners' rights are marginalised and private property is seen as the 'path of least resistance'. This leaves landowners with no choice but to enter into the consenting process as objectors and to slow projects down with expensive hearings and appeals.

### ***Team Skills and Experience***

The fourth critical success factor is the establishment of a team with the right skills and expertise. Ideally, you should draw from people that have actually worked in the electricity industry. These people should be contracted in when in-house expertise is not available.

The acquisition team should cover the following professional fields: surveying, valuation, negotiation, and contract and conveyancing law. The consenting team should include specialists that can assess the environmental effects of an electricity project in terms of the relevant environmental criteria in the RMA, and the applicable regional and district plans. At a minimum, the consenting team should include an environmental planner. It might also include landscape architects, archaeologists, acoustic engineers, traffic experts, ecologists, medical doctors or hydrologists, to name but a few.

However, it is essential that your negotiator, environmental planner, valuer, lawyer and landscape architect all have electricity sector experience. These experts should also work for you and should not be commissioned to work on behalf of a landowner.

### ***Geographical Information System***

The fifth critical success factor is to make use of a geographical information system ("GIS"). The old adage, "a picture paints a thousand words" truly applies when it comes to complex projects involving several alternatives. GIS systems make it possible to comprehend and communicate the complexity associated with new electricity infrastructure, and to evaluate alternative sites and routes. One is able to plot and visualise all the alternative sites or routes, and the associated constraints and opportunities. High powered GIS can now be obtained for less than \$1,000. So there is no excuse not to have one these systems. The benefits are just too great.

If it is possible make sure all your team members are using the same GIS, preferably your in-house software application. This makes it easier to exchange information. And be sure to layer high resolution aerial photos and information on your existing assets onto the GIS.

### ***Communication with Stakeholders***

The sixth critical success factor is that you implement an appropriate communication methodology designed to meet the needs of the project stakeholders.

Stakeholders can be placed into three groups. The first group consists of owners, guardians and authorities. These are the people who will suffer a direct loss, economic or otherwise, as a result of the project. The second group consists of the people whose environment will be affected by your project, but where the potential exists to avoid or mitigate these effects to an

acceptable level. The third group consists of the people who have an interest your project for whatever reason.

The first group should be addressed through negotiation or be allowed to participate in project decision making. This will provide these people with the opportunity to reduce or recoup their losses. The second group should be addressed using consultation to identify measures that will avoid or mitigate any environmental effects. The third group can be addressed using broadly focused public relations and information provision initiatives to keep them informed.

Also important is the sequence in which you rollout these communication methods. It is critical that you negotiate and trade with owners, guardians and authorities first and that these exchanges are confidential and individual. These people should be addressed *first* as they have the most power or incentives to obstruct a project. As a rule, avoid dealing with people publicly or in groups as this provides troublemakers with a means to negatively influence otherwise willing parties. Note that in most situations negotiations will double up as consultation for consenting purposes.

If you use the wrong communication methodology your project is likely to experience early resistance. For example, if you engage landowners along a proposed route through a public relations exercise before you negotiate, this may be viewed as a threat to private property rights. Publicity programmes like this also provide affected landowners with the opportunity to identify one another and to form groups to fight a project.

### ***Negotiation***

The seventh critical success factor is that you use *experienced* negotiators to trade with owners, guardians and authorities. A good negotiator will knock years off a project and prevent problems arising during the consenting phase. It is an area that should definitely be left to a specialist. Ideally, these people should hold local knowledge and be available to meet people outside of normal working hours.

My preference is to use as many negotiators as possible in order to shorten the negotiating phase. This will not increase your costs. It is the number of external parties that multiply the costs, not the number of negotiators. A rapid negotiation phase should bring forward your revenue because new assets are brought online earlier. A rapid negotiation phase should also decrease costs, because trouble makers are flushed out sooner, and the time available for objectors to organise resistance is reduced. And believe me word travels quickly amongst landowners.

One way to speed up the negotiation phase for a lines project is to target the key landowners first. These are the people who own land along the *critical* sections of the line. It is important to gain the support of these people in the early stages, and if this is not possible, to look for alternative routes.

Negotiators should have an understanding of the kind of people they are dealing with and their operations. Sending out a young urban-based negotiator to deal with an older farmer can be a recipe for disaster. Words of warning when dealing with DoC, traditionally a fickle organisation; where possible use an ex. DoC employee to facilitate negotiations for concessions under the Conservation Act.

Negotiators should be armed with detailed project information or at least an idea of the worst case design. They should be provided with alternative designs and the costs and rates for these designs. Most importantly they should be given the authority to make decisions on the spot within set parameters. This includes pre-approved rates for making financial offers and *quid pro quo* deals, and clear guidance on technical constraints, contract agreement clauses and use of “compulsory acquisition”. Major opportunities *will be lost* if negotiators have to turn to their superiors every time a decision is needed. It is also useful at this stage to get your negotiators to identify RMA issues and to obtain written approvals. This can save time at the consenting phase.

Before you send your negotiators out onto the road ensure you are using a modern sales and purchase or easement agreement. I recently heard of an easement agreement being presented to landowners that did not include any provision for access. Consider running your agreement past local lawyers that will represent landowners to iron out problems in advance. This is another measure that will shorten the negotiation.

### ***Consideration of the Alternatives***

The eighth critical success factor is to have a robust, theoretically sound and dynamic system for evaluating alternative routes, sites and methods. The aim of the evaluation is to firstly identify the optimal routes, sites and/ or methods, and secondly to meet the requirements of the RMA. A project founded on a solid evaluation will *finish* and finish *first*, because the risks stemming from the various alternatives are identified and mitigated at the beginning of the project. If you fail to perform this function you are asking for trouble.

The evaluation of alternatives is an integral part of the planning phase, but it should continue throughout the acquisition and consenting phases. Routes and sites often change during a project, so it is unwise to treat the evaluation as a one-off exercise.

Make sure you plot alternative routes or sites that are preferred from an engineering and commercial perspective *first*. *Do not* take environmental factors into account at this stage. It is the engineer’s role to provide the property and environmental planning experts with as many feasible alternatives as possible. *It must not be the other way round*. After all you (the engineers), are in the business of generating, conveying and distributing electricity, and making a commercial return. Your decisions have the greatest effect on the general populace and these should not be held to ransom by localised environmental effects, or environmental planners.

Likewise, recognise that the consideration of alternatives is not an exercise in finding a route or site amongst a ‘sea’ of environmental constraints, which has *unfortunately* been a popular approach of late.

Include and weight *all* the relevant engineering, commercial, property, and environmental criteria before you evaluate the alternatives. As a general rule, I believe you should be giving greater weight to the criteria linked to the acquisition function than the criteria linked to the consenting function. And remember to include criteria that represent *opportunities* as well as criteria that represent *constraints*. Be careful when using indices to rank alternatives. The process of weighting and scoring evaluation criteria is very subjective and there are issues with normalising measurements on dissimilar scales. Therefore, I think it wise to let the decision-makers see all the weights and scores, so that they can formulate their own judgements.

Last but not least, maintain a detailed audit trail of the evaluation and all your decisions over the life of the project. The audit trail is needed during the consenting phase to demonstrate that you have *actually* considered alternatives and the reasons for selecting a particular location or method.

## CONCLUSIONS

So in summary, what are the critical success factors for acquiring and consenting routes and sites for electricity infrastructure? I believe these are:

1. As a general rule of thumb, give the acquisition function more weight than the consenting function, especially at the beginning of the project;
2. Become a requiring authority under the RMA and do not write-off compulsory acquisition;
3. Employ a project manager who understands how to integrate the acquisition and consenting functions, and who also has sound evaluation experience;
4. Assemble a team of people with the right skills and experience in the electricity industry;
5. Use a GIS software application to support your project;
6. Develop a communication methodology based on stakeholder needs, which is led by negotiations;
7. Use experienced negotiators and give them the authority to make key decisions within set parameters, and finally;
8. Consider the alternative routes and sites in order to identify the optimal locations and methods, but make sure these alternatives are initially developed by engineers, and not environmental planners.