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Legal Considerations in Structuring Renewable Energy Projects:
A Multidisciplinary Approach

by

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A. Renewable Energy Projects: the Opportunities and the Challenges

1. The British Columbia Opportunity

British Columbia's 2007 Energy Plan's stated intention is to provide direction in the area of secure energy supply in the face of the Province's growth in demand, leadership in environmentally responsible generation & conservation, and the development of innovative technologies in support. The 2007 plan contains 55 policy actions organized under the following four headings: environmental leadership, energy conservation and efficiency, energy security, and investing in innovation.

Two key commitments set out in the Energy Plan sets the stage for the large opportunity to the independent power producer ("IPP") sector in developing green energy projects: that the Province will be 'self-sufficient' in electricity by 2016 and will have an extra amount of "insurance" energy and capacity by 2026, and the commitment that clean or renewable electricity generation will continue to account for at least 90% of BC's total electricity generation.

Energy Plan did not define 'self-sufficiency' but later did in Special Direction No. 10 to the British Columbia Utilities Commission ("BCUC"). The Direction states that by 2016 BC Hydro must be able to meet its mid-level load forecast of energy and capacity, from generation sources located within BC assuming the hydro facilities are producing at a level they would be if it was one of the lowest water years on record. BC Hydro in July 2007 estimated that the amount of new domestic supply needed to meet this definition of 'self-sufficiency' meant that (after taking into consideration conservation measures) approximately 20,000 GWh of new energy, and 2,300 MW of additional capacity will have to be constructed and in place by 2026.

When you couple the requirements for new generation and capacity in the next 20 years with the commitment that 90% of this new generation and capacity must come from clean or renewable electricity generation, the opportunities for IPP's are significant.

2. Other 'Green Energy' Opportunities

Nearly one half of the US states have renewable portfolio standards or objectives for renewable energy sources, in their overall energy supply forecasts. For example:

- State of Washington – 15% by 2020,
- State of Oregon – 25% by 2025,

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- State of California – 20% by 2018
- State of Montana – 15% by 2015, and
- State of Nevada – 20% by 2015 (of which at least 5% must be solar).

Interestingly, although British Columbia has set a target of clean or renewable electricity generation will account for at least 90% of BC's total electricity generation, many US states (unlike British Columbia), do not consider hydro generation as renewable energy. This poses a further opportunity for IPP's particularly with wind, solar, tidal and biomass generation projects. Given that in achieving the goal of self sufficiency in the lowest water years, most of the time British Columbia will have excess generation which it will want to export out of the Province, including the US states. If BC Hydro has a portfolio of alternate green generation, then it could market that generation at a premium to those states needing to meet their renewable portfolio standards.

3. Challenges

Despite the Province's commitment to green energy as noted above and articulated in the Energy Plan, there are a number of significant challenges in successfully bringing a green energy project on line in British Columbia. At the end of the day, we all understand that the revenues produced by the project must be sufficient to finance the risks assumed and the costs incurred during the process, including the cost to operate and maintain the project once completed.

The challenges can be grouped into two categories: assumption of risk(s), and managing costs. The smaller the project (from an energy and capacity perspective), the more susceptible it will be to failure in the event of unacceptable risks, or unforeseen costs. It is for this reason, that we often see project proponents seeking to aggregate smaller projects to take advantage of economies of scale to spread out costs, or to manage risks.

A number of the presenters at this conference will be talking about the challenges and offering advice on how to deal with them. The purpose of my presentation is to identify the types of legal issues which will arise in the course of bringing a green energy project from idea to successful conclusion.

B. Legal Issues

All projects no matter what their size will have to deal with the legal issues identified below.

1. Tenure: Obtaining the Permitting and Other Required for the Project

Crown versus Private ownership. While water rights and access to lands over which your project may rest with the Province of British Columbia, certain other projects will require

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access, and other rights over privately owned lands. First steps will include determining all of the rights required first to investigate the energy generation potential of the site, and then to construct and operate an energy project. Proponents may find that they are forced to consider what rights and other benefits they are willing to grant to the land owner for permanent rights even if they are only at the initial agreement stage (i.e. to locate monitoring equipment to gather data to assess the site's potential).

Do not forget such issues as whether road access is required (and where), and what transmission lines will have to be constructed to access British Columbia Transmission Corporation's transmission system. Usually, most of the time, effort and schedule impacts associated with constructing transmission lines and access roads involve obtaining permits and right of ways for the line (yet this will total only a fraction of the actual construction cost).

Permitting. There are a number of provincial and federal permits required as part of the process to secure rights to lands and resources for green energy projects. Between 2002 and 2007 there has been a 1,140% increase in service demand from IPPs. Not surprisingly, this has resulted in bottlenecks in applications and the processes which the Province is committed to resolving. Added to the volume related delays in service, are the increasingly onerous demands on consultation relating to aboriginal rights, and differing degrees of experience of IPPs.

For the most part, the Provincial processes are now well defined (policies, guidelines, and procedures); the Province's web based information systems are a good place to start to look for this information. In addition "FrontCounter BC" was set up and intended to assist proponents in their interactions with Integrated Land Management Bureau, Ministry of Environment, including Environmental Assessment Office, Ministry of Forestry, and to harmonize decision timeframes between the ministries. Further, the Environmental Assessment process meets the requirements of both the BC *Environmental Assessment Act*, and the Canadian *Environmental Assessment Act*, and the provincial Environment Assessment Office ("EAO"). The EAO chairs joint meetings of the provincial and federal offices, minimizing duplication of reports/requirements.

Legal advice is not required to initiate the process, and is usually only necessary when considering environmental or aboriginal requirements proposed out of the consultation process. As a start however, proponents can avoid delays if they are prepared for the information requests and process in advance (meet with key agencies to discuss baseline information requests), and by ensuring that the project is well defined in order to avoid proponent initiated changes, which can result in starting much of the process over again.

2. Aboriginal Title and Rights

Recent court decisions have confirmed that the law regarding aboriginal and treaty rights, and the duty to consult is still evolving. Since 1990, the Supreme Court of Canada has actively developed the law of consultation (and accommodation) to protect aboriginal

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rights. Of the dozens of cases litigated since 1990, aboriginal people have been successful in the vast majority.

Hupacasath First Nation v. British Columbia (Minister of Forests) et al. was a 2005 decision of the British Columbia Supreme Court. In that decision the court extended the duty to consult First Nations to the private land owner because the land was subject to a Tree Farm License and the province's forestry regulations. The court determined that the province had not adequately consulted with First Nations, and because the land was within a Tree Farm License which gave the Province jurisdiction over activities on the land, it then found that the land owner had the duty to consult prior to undertaking any activity on its property which may interfere with the exercise of aboriginal rights.

Dene Tha' First Nation v. Canada ("*Dene Tha'*") was an important decision on this topic, and was released by the Federal Court on November 10, 2006. The *Dene Tha'* judgment deals squarely with the question of when the Crown's duty of consultation commences with Aboriginal peoples, and has enormous implications for the Crown, both federal and provincial, and for energy and natural resource project proponents who rely on and require Crown authorizations to carry out their projects. As a result of *Dene Tha'*, the law of Canada is that aboriginal people who assert aboriginal (or treaty) rights which may potentially be affected by a project reliant on Crown decisions or authorizations, must be consulted very early in the project planning process.

The judgment stands for the proposition that after the first interaction between a third party project proponent and the Crown, the Crown must seriously consider consulting immediately, and meaningfully, with potentially affected aboriginal peoples. Not doing so results in the Crown endangering the timelines and ultimately the viability of the energy and natural resource project under consideration. Project proponents, therefore, must ensure the Crown carries out its constitutional law obligations with affected aboriginal peoples on a timely basis and in a manner that will adequately discharge the Crown's duties. The longer the Crown delays in meaningfully engaging First Nations, the more likely an aboriginal group may obtain a declaratory relief or perhaps even an injunction to halt a project.

On November 20, 2007 the Supreme Court of British Columbia released the decision in *Tsilhqot'in Nation v. British Columbia.* In that decision the court found that there was sufficient evidence to find that the Tsilhqot'in Nation could establish aboriginal title to approximately 200 hectares of land, however due to a technicality of the way the case was pleaded, this is deemed to be an opinion (or *obiter*) by the judge, not a binding decision. A longer description of this decision and its implications is included at the end of this paper.

In an attempt to resolve outstanding aboriginal claims, the Province instituted what is referred to as a "New Relationship" between the government of British Columbia and provincial First Nations, which is continuing to grow and evolve. (In support of the New Relationship, the British Columbia government has enacted legislation and entered into

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agreements to the benefit of First Nations. The government has also created a $100 million trust fund, the New Relationship Trust, to provide First Nations with the tools, training and skills to participate in the New Relationship with government, so they can effectively participate in land and resource management, land-use planning processes and development of social, economic and cultural programs for their communities.)

In April of this year, 200 chiefs and leaders attended the First Nations Energy Summit. The objective of the summit was to develop an action plan to ensure sustainable energy development that meets the needs of First Nations. Principles of the plan developed at the summit include: consent of First Nations on projects, energy sector education and training, commitment to priority for green energy projects, action plans on greenhouse gas emissions, exploration of carbon tax rebates, and cumulative impact assessments and revenue sharing.

Another presenter at this conference will be providing advice on how best to approach partnering with First Nations. As noted above, **t**he law of the duty of consultation and accommodation is complex. Employment of legally sound strategies for meeting the requisites of consultation with aboriginal peoples is a must for any business operating, or contemplating operating on the traditional territories of aboriginal peoples.

Further, one of the mistakes some proponents make is waiting to approach First Nations with information of the proposed project until the proponent is ready to begin consultation, or worse, negotiations with First Nations on partnering opportunities and/or mitigation of adverse effects. Attempting to negotiate terms of an agreement before the parties have had a chance to develop a relationship of trust and mutual respect, guarantees that the negotiations will be difficult. Further, in my view, this approach will materially and negatively affect your chances of reaching a mutually satisfactory agreement, within a time frame you can live with. Thus, at the very beginning, proponents should ascertain whether the project is in an area where First Nations might have an interest, and initiate (directly or indirectly with someone with experience dealing with First Nations in that area) communication about who you are and what you hope to achieve in the area.

3. Financing

Project proponents face significant costs long before they get to the stage of having a power purchase agreement, and as a result IPPs have been looking for capital investment and raising money by going to the market to raise money with initial public offerings ("IPOs"). Despite the recent problems and fall out from the US credit problems, investors are interested in the opportunities presented in the alternative energy sector. For example, a number of large companies are now investing in wind development business. Raising money via IPOs and setting up companies that are publicly traded, requires the assistance of securities lawyers. They will ensure that the IPO and other public disclosure is done in accordance with applicable exchange rules and regulations.

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Later, when the proponent gets to the stage of entering into a power purchase agreement with BC Hydro or other entity, it will be able to convince banks and other lenders that it will have the necessary debt service capacity to finance the construction of the project. At this point, IPPs will benefit from the assistance of lawyers specializing in setting up traditional and innovative financing. Ensuring that these lawyers are well versed in the risks and challenges in your project will enable you to leverage the lawyer's experience to negotiate favourable terms.

4. Technology

Some of the technology for green energy projects are new, or cutting edge. Further, even traditional technologies are subject to constant design review in the quest to maximize energy and capacity generation, or to adapt to the particular specific circumstances of the project.

To the extent project proponents are able to negotiate remedies in their contracts with their equipment suppliers, some of that risk may be mitigated, but in my experience, it is impossible to obtain agreements from equipment suppliers which would compensate owners for all of their indirect damages for such things as ancillary costs associated with removal, repair and replacement of defective equipment or loss of net income arising from loss of generation or capacity. Thus, owners must carefully consider the pros and cons of accepting design risk in exchange for improved generation revenue or accept a lower production in exchange for little or no risk on the technology design.

It is also been my experience that this is an area where legal advice and review of equipment contracts can be invaluable. The usual perfunctory treatment of what is called "Boilerplate" in agreements, should not be used when it comes to warranties, guarantees, and language dealing with the consequences of equipment failure or not meeting specifications. This also means that dispute resolution processes, choice of law and location of the dispute process are important considerations; if you have a remedy that requires you to commence an expensive arbitration in New York, it may in fact not be a remedy at all.

5. Construction

In British Columbia's overheated construction market, we have seen cost increases in labour, materials and equipment in the order of 15% per year. Recently, increases in construction costs have resulted in the shelving of the Galore Creek mining project, which was to have enabled the Northwest Transmission Line construction. As a result, and particularly with green energy projects where the margins are already challenging, owners have to manage everything within their control. Some of these cost increases are outside of the control of owners, although there are some savings to be had by transferring risk of price and assuming the general contractor/project management role from the contractor. Thus, owners will want to manage everything within their control to manage, and having someone on the team with experience in managing large construction projects is key in achieving that goal. This is an area where owners are well

served by having an experienced construction lawyer draft or review construction contracts and tender documents.

Owners can incur significant legal liability even at the tendering stage of a project. It is not uncommon for owners to be sued by unsuccessful bidders; the damages if the unsuccessful bidders win, normally are the lost profits the bidder says it would have earned on the project, plus costs of the litigation. The outcome of disputes between owners and bidders in the area of tendering of projects are often difficult to predict. For example, in the recent 2007 Supreme Court of Canada decision of *Double N Earthmovers Ltd. v. Edmonton (City)*, the court held that failure of the successful bidder to supply equipment that did not meet the "1980 or newer" requirement, was not such a large discrepancy which would prevent the City of Edmonton from accepting the bid. However in 1999 the same court in *MJB Enterprises Ltd. v. Defence Construction (1951)*, found that the fact the bidder included a unit rate for fill required in the project, contrary to tender documents which required a fixed quote for fill, was enough that the owner was not entitled to accept that bid.

Given some of this uncertainty, we generally advise owners to ensure that their tender documents are very clear as to the owner's requirements (and which requirements are mandatory and not mandatory), and include very aggressive language relating to owner flexibility when considering and choosing the successful bidder. It is also important that owners take care to act in a fair and reasonable manner-thereby not giving a court any reason to find in favour of the unhappy, unsuccessful bidder.

Once the project has been tendered, an owner's ability to manage cost and schedule will depend on its ability to minimize changes to the project after tendering, and having a change order process that imposes discipline in the documentation and approvals of changes as they occur. Whether or not the project is tendered as a fixed price, unit prices, or some type of cost plus, cost increases occur as a result of the following:

- owner initiated design changes,
- lack of coordination between design and engineering disciplines,
- incomplete design drawings at time of tender, and
- concealed or unknown conditions.

These factors arguably are all within the control of the owner (i.e. preventable) if the owner ensures that it does not tender the project before thorough engineering and project scope work has been done.

Many owners and their consultants rely on standard form of contracts like CCDC 2. While this form itemizes a detailed process for administrating a 'Change Directive' and the costs which the contractor is entitled to claim, there is a lack of guidance in the standard form contract as to what costs the contractor is entitled to claim in a change order. The prudent owner should, therefore, consider adding Supplementary Conditions to the standard form of contract to assist with the valuation of change orders.

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The definition of what is considered satisfactory supporting documentation for a change order claim should also be included in the contract. If defined appropriately, owners can avoid the common situation of change order claims submitted by contractors for multiples of thousands of dollars with a single lump sum amount in a letter form. Such lack of information does not facilitate review by the owner and often requires independent calculations of the value of the claim and lengthy discussions and negotiations before the claim value is agreed to, all of which will result in unnecessary loss of productivity and costs for both parties.

Finally, owners should carefully consider language relating to the timing and process involved in the owner 'acceptance' of the completed project from the contractor. If projects require staged or graduated start-up, extra time may be required for the owner to determine if all of the project in fact meets the owner's specifications and can be 'accepted'. In some projects where equipment is required to be delivered far in advance of actual start up, owners must ensure that warranty periods do not start to run from date of delivery.

6. Operation and Maintenance

It is not unusual for owners to contract out the ongoing operation and maintenance of a project to a third party. Whether the motivation is to ensure partner participation (such as First Nations employment agreements), or because a third party can provide the services locally in a more cost effective manner, all of these arrangements require contracts which set out clearly the roles and responsibilities of both the owner and third party operator.

Local third party operators may not have the ability to accept or obtain insurance for risk of losses arising from their errors or omissions. Even if they do, the fees charged may not justify these parties from assuming risk for indirect or consequential losses arising from an incident such as loss of profits, penalties in power purchase agreements, and environmental remediation costs. Owners therefore will want to look at what insurance is available to respond to such losses, and whether or not insurers have any requirements for the contracts between owners and third party operators.

C. Maximizing Value from Legal Advisors

As with other key members of an owner's team, getting a lawyer involved in your project early is important, and will enhance an owner's ability to manage risk and costs. Lawyers can assist in the early planning of the project, the identification of all legal requirements and risks, and ensure that advice is timely and cost effective. Ideally, owners should look for a lawyer who has experience in being involved in all stages of bringing projects to successful operation. This lawyer can then anticipate and co-ordinate the specialized legal advice when and if required in the areas noted above.

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Having a legal advisor involved early in the project also maximizes the value a lawyer can bring to a project; rather than providing piecemeal advice, a lawyer involved from the outset can ensure that no single strategy or initiative results in counter productive or conflicting actions.

Steering a green energy project from the regulatory and consultation stage, through to construction and production of energy, is not for the faint hearted, nor in my view, the unsophisticated. Thus it is important that proponents assemble a good team who collectively have the necessary skills, knowledge, and ability to take advantage of the green energy opportunities in British Columbia.

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