B.C. Hydro Reconsideration Decision Phase II October 17, 1995BACKGROUND

On November 24, 1994, the British Columbia Utilities Commissic ("Commission", "BCUC") issued its Decision and Order No. G-89-94 on the 1994/1995 Revenue Requirements Application filed by the British Columbi Hydro and Power Authority ("B.C. Hydro", "Utility") on February 11, 1994.

Pursuant to Section 114 of the Utilities Commission Act ("Act"), B.C. Hydr made an application ("Reconsideration Application") dated February 8, 199 asking the Commission to reconsider certain aspects of its November 24, 199 Specifically, B.C. Hydro sought reconsideration of directions i Decision. the Decision and in the attached Order related to B.C. Hydro's Integrate In particular, the Utilit Resource Planning ("IRP") processes and filings. disagreed with the Commission's interpretation of its jurisdiction wit respect to mandating various IRP related requirements from the utilities i B.C. Hydro also sought reconsideration of directions in th regulates. Decision with regard to B.C. Hydro's policy for allocating line and wir Finally, the Utility asked that the Commission reconsider the parts c work. the Decision relating to the calculation of forecast net export revenues ar the rate of return on equity.

The Commission elected to follow a two phase reconsideration process. In the first phase, a public hearing was held to determine if any or all of the individual issues in the Reconsideration Application could pass a prima faci test of merit. Issues that passed such a test would then proceed to a secon phase for full argument on their merits.

Oral argument on the first phase of the B.C. Hydro Reconsideratic Application was heard on April 12, 1995. The Commission then issued it Reconsideration Phase I Decision on May 8, 1995 which concluded that th Commission should review its jurisdiction with respect to IRP (Orde No. G-39-95). All other issues in the Reconsideration Application wer denied. Oral argument on the merits of the jurisdictional issue were hear on July 27, 1995. This Decision is the Reconsideration Phase II Decision.

2.0 THE EVOLUTION OF INTEGRATED RESOURCE PLANNING WITHIN ENERGY UTILITY REGULATION

The BCUC IRP Guidelines (Appendix C), issued to all regulated utilities i 1993, define IRP as:

"... a utility planning process which requires consideration of all know resources for meeting the demand for a utility's product, including thos which focus on traditional supply sources and those which focus c conservation and the management of demand." (BCUC IRP Guidelines, p. 1). IRP first developed in the United States in the early 1980s, where it we originally referred to as least-cost planning. It was motivated by custome and public concerns with rate and public risk impacts associated with utilit investments in electricity generation (notably nuclear power) and with th failure of utilities to adequately explore lower cost alternatives especially those alternatives which encourage energy efficiency investmer and behaviour by customers (this latter is referred to as Demand-Sic Management or DSM). In this sense, IRP was mainly focused on electricit generation planning in its earlier applications. However, the principles c IRP can be applied to many aspects of utility expenditures. For example since the early 1990s, IRP methods have been increasingly used for assessir utility choices between expenditures to upgrade the distribution system in certain area and location-specific energy efficiency measures.

In Canada, IRP was first applied in the early 1990s and its principles ar now applied in Europe and elsewhere. Currently, 37 state utilitie commissions in the United States and three provincial utilities commissior in Canada (Ontario, Nova Scotia, and British Columbia) require utilities the regulate to conduct IRP in some form.

One possible approach to utility regulation could be to await a utility' application for recovery of expenditures in rates before making ar determination, even preliminary, of prudency. The utility management migh make a capital investment decision (e.g., a nuclear plant or larg hydroelectric dam) and then commence expenditures without input from it utilities commission. Upon completion of the project, the utilitie commission would then be asked to adjust rates to ensure that sufficier revenue is collected from customers to cover the full expenditure includir accumulated interest charges. If the utilities commission deemed such c expenditure to have been imprudent, it could refuse the recovery throug rates.

This approach has been widely rejected by utilities commissions in Nort America in the exercise of their general supervisory and ratemakir responsibilities. First, with large expenditures, disallowance after th fact may be disastrous for shareholders and customers alike. Hindsigh disallowance could bankrupt the utility while customers would still need t get their electricity from somewhere, alternative investments not having bee made. Second, utilities commissions cannot fairly judge the prudency of c expenditure decision without knowledge of the information available t utility management at the time it took the decision. Hindsight disallowanc could be unfair to the utility's shareholders if the decision was the bes possible at the time, even if it proved to be sub-optimal after-the-fact.

Therefore, utilities commissions generally develop various mechanisms t provide guidance in advance to utility management of the kinds of plannin and decision-making methods that seem to be most sound. IRP guidelines ar such a mechanism. The IRP Guidelines do not usurp the utility managemer decisionmaking responsibility, but they do provide an advance indication of th approach that the utilities commission is likely to apply when assessing th prudency of utility expenditures.

This link between IRP and determining the prudency of utility rates i emphasized in the Commission's B.C. Hydro Decision of November 24, 1994:

"Capital expenditures by B.C. Hydro on new generation, transmission ar distribution plant are recovered in the rates of customers over many years following the completion of the capital projects. Other capital initiatives as new facilities and durable investments like new informatic such technology, are capitalized and recovered in rates over the expected useful So, also, the investments in Demand-Side Managemer life of the investment. initiatives are recovered over varying time frames reflecting the useful lif of the investment. New capital projects underway in the year of a particula revenue requirement review will typically not show their impact on custome rates until project completion in a subsequent year. However, the carryir charges on investments make up a large portion of the costs that customer The 1994/95 Plan shows the Finance, Depreciation ar must pay for. Amortization expense is \$977 million, 45 percent of the existing revenu (Exhibit 1, p. I-7-D4). The Commission must, therefore, pay specia attention to the investment plans of the Utility. Integrated Resource Plar which recognize the total cost of alternative investments in new energy supply and conservation alternatives are the critical components which wil translate into investments on behalf of customers. The IRP is the drivir force behind the establishment of a utility action plan approved by senic The capital spending budgets flow out of that action plan ar manaaement. show themselves in customer rates following completion of the project, c depicted in Figure 3.6.1.



Figure 3.6.1 Relationship of IRP to Customer Rates" (November 24, 1994 Decision, p. 21).

In the IRP process, many utilities commissions have examined not just direc customer impacts of utility expenditure decisions, but also broader socic impacts that may affect all members of the public including those who are nc direct customers of the utility. In the case of a specific electric utility non-customers may include members of the public who do not use electricity who generate their own electricity, or who are customers of another electri utility. To assess these broader impacts, utilities commissions hav generally required public input at some point in the utility IRP developmer process or in a public hearing or in both.

Consideration of the broader public impacts of utility expenditures is c everyday component of utility regulation.¹ There are many examples, five c which are presented here. (1) Utilities fund research and development b non-utility agencies and institutions. Some of the ultimate beneficiaries c this research may not be customers of the utility, although the costs ar recovered from the rates paid by utility customers. (2) Utilities mak charitable donations which utilities commissions are asked to allow them t recover in the rates paid by utility customers. These charitable donatior may benefit non-customer individuals and groups. (3) Utilities regularl make environmental mitigation expenditures that exceed those required k Again, these are generally paid for by al environmental regulators. customers even though the mitigation measures may benefit or reduce costs t customers and non-customers alike. (4) Utilities modify the operation c their facilities (e.g., voluntary adjustments to reservoir levels fc recreational use) in order to reduce social impacts on both customers ar non-customers. These modifications can have rate implications for customers (5) Utilities provide electric line under-grounding subsidies for aestheti The aesthetic benefit is realized by any passing viewers includir purposes. non-customers.

The authority for the utility regulator to allow expenditures that benefit c reduce impacts (or risk of impacts) to non-utility customers is found in th language of most utilities commission acts. However, it is important t recognize that a utilities commission's consideration of the broader publi impacts of utility expenditures and actions should be done with restraint s as not to overlap significantly with the responsibilities of other regulator entities. For example, in requiring a utility to incur extra costs t mitigate environmental impacts, the utility regulator must be confident thc such costs are consistent with the policy objectives of environmentc regulators.

3.0 B.C. HYDRO'S RECONSIDERATION APPLICATION

In its February 8, 1995 Reconsideration Application, B.C. Hydro initiall alleged the following three errors by the Commission relating to th Commission's jurisdiction with respect to requiring IRP by all utilitie under its regulatory authority:

• taken as a whole, the November 24, 1994 Decision represents c extension of Commission regulation into areas over which the Commission hc been given no jurisdiction by the legislature;

^{1. &#}x27;Public impacts' here refers to impacts of a social or environmentc nature on the public at large, regardless of whether or not the members c the public are customers or non-customers. The term 'social costs' i frequently used as a synonym.

• the associated Order and directions in the Decision made by th Commission were made in the absence of any express or implied statutor authority; and

• the Commission exceeded its jurisdiction by having reference t irrelevant or legally improper considerations (namely the Environmentc Assessment Act which was not proclaimed until June 30, 1995).¹

In his July 27, 1995 oral argument, B.C. Hydro's counsel chose not to add t the earlier written submission in B.C. Hydro's Reconsideration Applicatic with respect to the third allegation. B.C. Hydro's counsel also chose t merge the first two allegations and treat them as one "... because th overall objectives of the Utilities Commission Act are key to both aspects c the argument." (T. 10).² Thus, B.C. Hydro's oral argument on July 27, 199 focused essentially on one issue, the Commission's jurisdiction over al regulated utilities with respect to IRP.³

In reviewing the submissions and transcripts, the Commission identifies thre major points advanced by B.C. Hydro in support of its position.

Point 1. IRP is resource planning, which is under the government' jurisdiction for project approval in Part 2 of the Act, not under the Commission's ratemaking jurisdiction in Part 3 of the Act.

Point 2. IRP includes consideration of non-customer impacts of utilit actions and this is not part of the Commission's jurisdiction under the Act.

Point 3. B.C. Hydro acknowledges the Commission's right to issue IR Guidelines but not to treat them as mandatory regulations with sanctions fc failure to comply.

These three major points are presented sequentially below and again i Chapter 4 (Intervenors' Positions) and Chapter 5 (Commission Assessment).

^{1.} The proclamation of the Environmental Assessment Act, and the repeal c Sections 17 to 21 and 51(7) and 51(8) of the Utilities Commission Act occurred prior to the writing of this Reconsideration Phase II Decision bu after the presentation of evidence and argument. In this Decision, fc consistency with the arguments, the Commission generally refers to these nc repealed sections of the Act in the present tense, as if they still existec Appendix D details the legislative amendments to the Act.

^{2.} In this Decision, all references to transcript pages (T.) are to the transcript of the oral hearing of July 27, 1995.

^{3.} B.C. Hydro did not allege that the Commission's jurisdiction with respec to B.C. Hydro, in this particular regard, was different than its jurisdictic with respect to other regulated utilities, so the Reconsideration Applicatic refers universally to the Commission's jurisdiction with respect to thi issue.

1. IRP is resource planning, which is under the government's jurisdictic for project approval in Part 2 of the Act, not under the Commission' ratemaking jurisdiction in Part 3 of the Act.

Counsel for B.C. Hydro argued that, because the Commission's jurisdiction t require IRP is not expressly stated in the Utilities Commission Act, ar Commission mandate with respect to IRP, if it exists, can only be inferre from the general powers given to the Commission by the Act. After reviewir some of these powers, B.C. Hydro's counsel stated:

"... I think it is fair to say that the absence of express language relatir to IRP or indeed the resource planning function more generally, where expres language has been used to confer jurisdiction over other aspects of th utility's business, makes an inferred authority less plausible than it migh be in an act which was general in all respects." (T. 12).

According to B.C. Hydro, the distinction between the project approve responsibilities of government under Part 2 of the Act and the ratemakir responsibilities of the Commission under Part 3 of the Act is evidence of th legislature's intent with respect to resource planning. Sections 17 to 21 c Part 2 of the Act provide the government with the authority to award Energ Project Certificates for regulated projects as determined by the governmer in the Energy Project Review Process. B.C. Hydro concludes from this tha the intent of the Act is that the Commission does not have jurisdiction wit respect to resource planning.

"... the Commission has the responsibility for traditional rate regulatior including responsibility over [B.C. Hydro's] rate design. On the other hand the energy planning function is removed from the Commission and vested in the Minister of Energy." (B.C. Hydro Reconsideration Application, p. 5).

Sections 51(7) and 51(8) of Part 3 of the Act state that, when the governmer awards an Energy Project Certificate or an Energy Operation Certificate, th BCUC is deemed to have awarded a Certificate of Public Convenience ar Necessity. According to B.C. Hydro, these sub-sections of the Act make i clear that any Commission authority contained elsewhere in Part 3 (i.e. Section 51), over the construction and operation of public utility plant c system, is superseded by the project approval authority of the Minister ar Cabinet in Part 2 of the Act.

"... the issue ... is resolved expressly in the Act, and it's resolved i favour of the scheme in Part 2, saying no, whether or not the Commissic considers it appropriate to exercise its jurisdiction to issue a Certificat of Public Convenience and Necessity will not be brought into play when th Minister has determined that an Energy Project Certificate ought to b issued. Thus the only jurisdiction the Commission has over the constructic or operation of regulated projects is by specific delegation to it from th Minister." (T. 18).

In the Energy Project Review Process under Part 2 of the Act, the governmer may consider or require information on anything, including a resourc planning review of alternatives to a given project. According to B.C. Hydro, this potential authority in the Energy Projec Review Process confirms an interpretation of the Act in which jurisdictic over resource planning resides with government and not the Commission. A further evidence, B.C. Hydro referred to the Guide to Energy Project Revie Process which:

"... contains specific guidance on the public consultation aspect of the resource planning process. ... They [the Ministry of Energy, Mines ar Petroleum Resources] have authority; they've exercised it; the field is occupied; and whatever the Commission is doing it's doing it in a field wher there exists a separate regulatory scheme under Part 2." (T. 28).

Under Part 2 of the Act, the government can also deem anything to be regulated project, not just projects that satisfy the 'regulated project definition in the Energy Project Review Process. According to B.C. Hydrc this could include Demand-Side Management and virtually any other resource not satisfying the regulated project definition under the Act. As evidence Counsel for B.C. Hydro noted two government Orders in Council, issued unde Section 16(2) of the Act, which deemed very different entities as regulate projects. These are the Power Exchange Operation and the Non-Treaty Storag Agreement with Bonneville Power Administration (T. 29).

Finally, B.C. Hydro's counsel argued that the distinction between Part 2 ar Part 3 in the Act is especially important because the Commission's concerr in the November 1994 Decision were focused on resource planning, a Part issue, not with ratemaking, a Part 3 issue. B.C. Hydro contended that, i the BCUC does not have express authority for resource planning in the Act, i cannot use its ratemaking authority as a way of extending its jurisdictic into the resource planning domain. Here, B.C. Hydro relied upon the decisic of the Manitoba Court of Appeal, <u>Public Utilities Board (Manitoba)</u> v <u>Manitoba Hydro et al.</u> (1989), 61 Man.R (2d) 164 (Man. C.A.), with respect t the jurisdiction of the Manitoba Public Utilities Board over resource planning by Manitoba Hydro (T. 43).

"... it was argued before that court that because capital plans can't b ignored in any workable system of rate review, it was necessary to infer the power to the Board. That contention was soundly rejected by the Court c Appeal, ... Now I hasten to say here that ... here [in B.C.] the legislatic isn't silent. It confers many of these powers on another body [th government], so the situation in B.C. is perhaps more extreme than it was i Manitoba." (T. 55).

2. IRP includes consideration of non-customer impacts of utility actions ar this is not part of the Commission's jurisdiction under the Act.

According to B.C. Hydro, the BCUC's definition of IRP includes consideration of impacts of utility actions on the public at large (which mc include non-customers of B.C. Hydro) and, as a consequence,

calls for an assessment of public impacts and a degree of public involvemer in utility planning which exceeds the Commission's ratemaking authority unde the Act.

"... if you read Part 3 as a whole you can find and explain all of it provisions in the context of that general thrust, that is, the thrust t control what I call the interface between customer and utility. It' designed to ensure that customers get the services that they need and the they want, and done in a safe and proper way with acceptable quality c service as determined by the Commission, and at a rate which is fair to bot the customer and to the public utility. You cannot read into the generc regulatory powers of the Commission an authority unrelated to that basi thrust or purpose, ..." (T. 36).

"... [the Commission's Decision] wasn't limited to the impact on ratepayers It was clearly focused on: Are we minimizing the impacts of these project on society generally; are these the ones that have the least cost; and al the kinds of things that go into integrated resource planning, which b definition is to consider all of these diverse interests, interests muc broader than simply the narrow interests of the ratepayer. ... The clea focus of that order was to, one, ensure that Hydro's planning proces properly accounted for social costs and other things which might not b considered too important to Hydro management but might be considere important to others, put bluntly; and second, that the public was full involved in that process, properly consulted, and that the review or the planning process was informed in a way the Commission thought proper, wit public views. And it's those aspects of what the Commission's order di which I say make it clear that it wasn't really ratemaking which was th focus of that decision." (T. 163).

B.C. Hydro's counsel acknowledged that Section 51 gives the Commission som role in determining public convenience and necessity but in his view thi extends only to the limited role of protecting the utility's customers, no to the broader context of protecting the interests of all members of th public. In stating this position, he relied on comments made about th interpretation of the Commission's authority and the term 'public convenienc and necessity', as found in the British Columbia Court of Appeal decision c British Columbia Hydro and Power Authority v. BC Gas Utility Ltd. et al (unreported) May 31, 1995 Vancouver Registry No. CA017981 (B.C.C.A.); in th Supreme Court of Canada decision in Memorial Gardens Association (Canada Limited v. Colwood Cemetery Company et al., (1958) S.C.R. 353; and in th British Columbia Natural Gas Limited, (1978) 5 W.W.R. 1 (B.C.C.A.); 87 D.L.R. (3c 248 (B.C.C.A.) (T. 33-40).

"What I say that <u>Crestbrook</u> stands for is the proposition ... that you hav to look at the Act as a whole, and you have to find in there generc authority over the subject matter in which you intend to make orders, ar that if you do that in the context of resource planning as a whole, specifi projects in particular, public consultation with respect to resourc planning, you'll not find that general regulatory grant of jurisdiction thc the court in <u>Crestbrook</u> says is necessary to [serve as] the basis for prope orders." (T. 40). 3. B.C. Hydro acknowledges the Commission's right to issue IRP Guideline but not to treat them as mandatory regulations with sanctions for failure t comply.

Finally, B.C. Hydro claimed that none of its argument about the Commission' lack of IRP jurisdiction negated the right of the Commission to issue IR Guidelines, but that the Commission erred when in the B.C. Hydro Decision i imposed sanctions and threatened further sanctions for failure to comply wit the Guidelines. For this, B.C. Hydro counsel relied on the decisions of th Ontario Court of Appeal in <u>Ainsley Financial Corporation v. Ontari Securities Commission (1994)</u>, 21 O.R. (3d) 104 (C.A.) and the Supreme Cour of Canada in Pezim v. British Columbia (Superintendent of Brokers), (1994) S.C.R. 557, 114 D.L.R. (4th) 385.

"Now, in my respectful submission [these two court decisions are] exactl analogous to what happened in the context of the IRP pronouncements of thi Commission. The IRP Guidelines, so long as they are simply guidelines nc backed by sanction and not attempting to be imposed mandatorily, didn' offend the principle laid down by the Ontario Court of Appeal. But when th line was crossed to make those mandatory and compulsive, as was achieved wit the November 24th decision and the Order attached to it, then thos guidelines effectively became laws and they cannot be made except wit express statutory authority, which I have sought to demonstrate earlier thi morning is lacking in this case." (T. 63).

4.0 INTERVENORS' POSITIONS

Interventions in the oral hearing of July 27, 1995 were presented by counse for (listed in order of appearance) the British Columbia Energy Coalitic ("BCEC"), the Consumers Association of Canada, B.C. Branch et al. ("CAC(B.C. et al."), and a broad coalition of B.C. forestry, mining and chemicc industry customers ("Industrial Customers"). The major arguments of thes intervenors are presented below, following the same three major point identified from B.C. Hydro's Reconsideration Application and oral argument.

1. B.C. Hydro erred in claiming that, because Part 2 of the Act provides the government with authority in utility energy project approval, the Commissic has no jurisdiction with respect to utility resource planning in general ar IRP in particular.

Counsel for the BCEC argued that the IRP requirement is a mechanism for th Commission to obtain information about how the utility plans it expenditures, especially its major capital expenditures, and the authorit for this comes from both the general supervision and the ratemaking sectior of the Act.

"... B.C. Hydro has argued that the IRP Guidelines have no basis in th Utilities Commission Act because the Commission has no planning authorit under the former

Part 2 of the Act dealing with project reviews. ... this preoccupation wit the Commission's planning powers under Part 2 is irrelevant to th Commission's jurisdiction over IRP. The B.C. Hydro argument assumes that the Commission is making decisions, decisions about what the utility can c cannot build, when it approves an IRP, and this assumption is completel The utility can go ahead and build whatever it wants. wrong. ... The us that the Commission makes of an IRP is not determinative of whether tha project can be built or not, or whether the utility can proceed with the project or not. Now, B.C. Hydro concedes that the Commission has th authority to disallow a project from rate base after it is built, and submit that it is ludicrous to suggest that, as a matter of sour administrative practice, the Commission is not able to establish quideline for gathering information for the purpose of providing the parties wit advance notice of the questions that may arise later with respect to variou courses of action open to it." (T. 76).

"... the statutory basis for the Commission's IRP Guidelines, ar specifically as they relate to the November 24, 1994 decision, may be four in its powers of general supervision under Section 28 and 29, and th ratemaking power provisions, roughly Section 64 to 67." (T. 77).

"So you don't have to simply wait until a hearing is upon you to start askir for very complex information that you know you're going to need. You can as for it in advance in the interests of administrative efficiency and as a wc of letting the utilities know in advance what is expected of them." (T. 79). "... the B.C. Hydro argument seems to assume that the IRP process is an er in itself when in fact it is a means to an end. The utility is not bound t execute the action plan in its IRP. The IRP is a tool that provides th Commission with the information it needs to ask the right questions about th decisions that the utility makes." (T. 80).

Counsel for the Industrial Customers concurred with this position, arguir that B.C. Hydro is incorrect in claiming that the Commission's application c IRP implies taking over B.C. Hydro's resource planning responsibility.

"I just want to make clear that by reviewing the resource planning, th Commission is not managing B.C. Hydro, which I take to be the underlyir objection here. You're giving guidance to B.C. Hydro on how you wil exercise your powers over resource additions. B.C. Hydro is still free t choose the path it wishes to follow. You are simply telling them, whe you're making your decision on choosing the path, these are the elements w would like you to include. The management and the choice is still theirs. (T. 138).

Counsel for the CAC(B.C.) et al. also concurred with this position, focusir especially on the general supervision responsibilities of Section 28 of the Act.

"I would suggest that in order to fulfill the responsibility for the generc supervision of utilities it's quite reasonable for the Commission to requir that they prepare IRPs. The contrary view as put forward [by B.C. Hydro], i seems to me, suggests that general supervision must not mean certain things It must not mean thinking about how the utility will meet future demand, ... In fact, if B.C. Hydro was planning to meet its entire future demand k something as speculative as say cold fusion or microwave transmission frc satellites, I suppose that according to B.C. Hydro's argument in this cas the Commission should just close its eyes and say, 'Fine, we're not going t look at that. We're not going to be concerned about what B.C. Hydro will k doing tomorrow or next year or the year after or five years from now, we're just going to be concerned with who B.C. Hydro did yesterday and last year.' Well, I would suggest that woul not be the Commission discharging this duty of general supervision c utilities set out in Section 28(1), ..." (T. 103).

"... in sum then, Section 28, I would submit, provides lots of authority fc the Commission to be doing exactly what it's doing [with] integrated resourc planning. Just on those plain words of Section 28, one doesn't really hav to look much further to see that the Commission can order what it has bee ordering in this case. ... But there are other provisions of the Utiliti ϵ Commission Act that are also relevant, I would suggest. Section 31(a): .. [gives the Commission the authority to fix] standards, rules, practices the the Commission wants B.C. Hydro to use in integrated resource planning Section 29 of the Utilities Commission Act imposes a positive duty upon you upon the Commission, to inform itself about the operations of publi utilities, including B.C. Hydro. ... The means by which the Commission cc fulfill its obligation to inform itself about this topic is by integrate resource planning. Asking [B.C. Hydro] to give you information in a certai manner, it seems, is entirely consistent with this." (T. 109).

Counsel for the Industrial Customers added that the absence of a specifi reference to IRP in the Act is not important given the general powers of th Commission and the fact that the Commission must have some discretion t determine the means by which it carries out its powers.

"There's lots of instances in the Act where there is general authority give to the Commission, then there's broad discretion left with the Commission t interpret that authority in a way that allows the carrying out of the Act t be done appropriately." (T. 131).

"We also have to keep in mind, I would suggest, that resource addition ar planning associated with it is fundamental to an electric utility' operation. If the Commission is to have general supervision over c electrical utility, it would seem to follow that some sort of supervisic over that aspect of the utility's operations and activities would necessaril follow." (T. 133).

Counsel for the CAC(B.C.) et al. also argued, and provided supportir evidence, that the Commission's IRP requirement of all utilities it regulate is not unique but rather an increasingly accepted practice for North Americc utilities commissions in conducting their general supervision and ratemakir responsibilities. This was supported with an affidavit showing that thre Canadian jurisdictions and 37 United States jurisdictions currently requir IRP (Exhibit 1).

"The majority of jurisdictions in Canada and the United States requir integrated resource planning. I would suggest that that does mean that it i in accord with established principles of utility regulation." (T. 114). Counsel for the CAC(B.C.) et al. rejected B.C. Hydro's interpretation of th Part 2 versus Part 3 distinction in the Act, arguing that the court generally prefer to focus on the plain words in the statutes if they ar unambiguous, as is the case with respect to the Commission's powers unde Part 3 of the Act.

"So my point here is that since the wording of Section 28 and the othe provisions of the Utilities Commission Act is not unclear, it would be wror to enter into the type of analysis suggested by B.C. Hydro, that analysi Instead, the Commissic about what Part 2 means and what Part 3 means. should rely upon the plain words of the statutes. But here is something I'vwrestled with a bit. It seems to me that even if the Commission di undertake such an analysis as suggested by B.C. Hydro, it's simply impossibl to arrive at the conclusions that B.C. Hydro has put forth, because Part 2 c the Act contemplates an approval process for the construction and operatic of certain kinds of individual projects, if one were building a hydroelectri dam or a big new gas generating plant. Whereas integrated resource planning on the other hand, if it considers such projects at all, considers the merely as possible elements within the utility's overall system. And in fac I pointed out that the possibility of [Demand-Side Management] projects ar small generation units could theoretically, although probably not i practice, actually exclude the sort of projects considered by Part There is no conflict between the different parts of the Ac altogether. There is division of responsibilities which is entirely consister here. with Commission authority for integrated resource planning. It's jus . . . completely illogical to think that because the Commission does not have th authority to do a detailed assessment of the proposed construction of c energy project that it cannot consider how different resource options woul fit into the overall operation of the utility." (T. 118).

Counsel for the Industrial Customers concurred with this assessment.

"Under Part 2 the Minister has very broad power, but that is in the contex of a specific application for a regulated project. In fact, the Minister' authority is only triggered by the filing of an application. It says 'upc receipt of an application'. So the Minister, in looking at a specifi regulated project, then would have authority to dispose of it in a number c ways which are set out in the legislation. And that's quite broad. Th Minister can [exempt] it from the rest of the application of the Act; it cc approve the project; or it can refer to the Commission with specific terms c When you look at resource planning, however, the issue reference. associated with resource planning and IRP can be quite broad and would g beyond the scope of a specific energy project. I'm thinking in particular c resource acquisitions by way of a rate design proposal or by way of demanc side management. Those types of issues are not applications for a specifi project. Rather they are other plans and strategies that the utility can pu in place to acquire resources or forgo or forestall the need to build specific project. The Minister, acting under Part 2, would not be looking c those types of projects. Nor would they be looking at the integrate resource planning process itself." (T. 134).

2. IRP includes consideration of non-customer impacts from utility actions which is part of the Commission's mandate.

Counsel for the Industrial Customers submitted that the responsibility of th Commission is not limited to the interface between the utility and it customers, but also to the relationship of the utility to the public c large.

"[B.C. Hydro's counsel] then went on to sum up that the jurisdiction of th Commission is limited to the control of the interface between the utilitie and its customers. As I considered the implications of that, I was flippir through various sections of the Act, and it seemed to me that the Commissic often gets into situations where it is considering the effect that th utilities would have on other than its customers first of all, and more the just its potential customers as well. Under Section 28, matters of publi safety, for instance, would clearly go beyond the customers and its utility Section 37, 38 talks about the use of public ways, and the Commission cc specify terms of the use. ... Again, that would affect more than just th Similarly, under Section 86 the right to complain i utility's customers. not limited to the customers. ... Finally, under Section 51(5) and (6), th legislature has chosen very broad words here as well. In deciding under (5 whether the Commission should approve a privilege, concession, or franchise you have to take into account matters that are necessary for the publi convenience and properly conserves the public interest. A public interest i very broad there, and it would have been quite easy for the legislature t limit that to customers by the use of the word 'customers'." (T. 139).

Counsel for the CAC(B.C.) et al. again emphasized that the Commission shoul look no further than the language of Section 28(2) in assessing B.C. Hydro' argument that the Commission only has the authority to consider B.C. Hydro' relationship to customers and not its impact on the public at large. H noted that the section requires the Commission to ensure that the utilit 'conducts its operations in a way that does not interfere with or caus unnecessary damage or inconvenience to the public'.

"... many of the choices that are made by a utility can cause damage c inconvenience to the public, and sadly the history of electrical generatic in British Columbia has involved many such situations, some of which, if w were making the decisions now, perhaps we would make them differently; peopl displaced from their homes, valuable resources lost. The Commission has t think about these things. It's the Commission's responsibility under th Act." (T. 108).

Counsel for the BCEC argued that B.C. Hydro's challenge to the directions i the November 24, 1994 Decision respecting public involvement is withou foundation because the Commission has clear authority to require publi involvement in order to determine social and environmental impacts as well c the authority to involve the public generally in its regulatory process.

"I will note that the Commission does have jurisdiction to require publi consultation under IRP in two respects; first, public consultation provide information regarding public acceptability of projects, regulatory risk, ar appropriate social trade-offs, especially those related to social ar environmental externalities, that would not be provided if the utility merel provided its own opinion on these issues itself in an IRP; so that publi consultation is relevant to the exercise of the Commission's powers under Section 28 Secondly, the requirement to consult through a consultative committee mc also be seen as an exercise of the Commission's authority to determine it own hearing procedures. Now, it is stated in the IRP Guidelines that or purpose of IRP is to develop consensus and reduce the level of conflict s that hearings are made more efficient and cost-effective. And in this sens the consultative committee component of IRP is a part of the hearing process in the same manner that so many other tribunals are instituting alternativ dispute resolution mechanisms to assist the efficiency of its hearing processes." (T. 84).

3. The Commission has the authority to issue both guidelines and regulation and has the power to ensure compliance with either, and this power is als applicable to IRP.

Counsel for the BCEC argued that it is immaterial whether the Commission' IRP Guidelines are interpreted as a policy statement or guidelines c regulations because the Commission has the authority to issue all of these.

"... I refer you to Section 28(2) of the Utilities Commission Act, whic gives the Commission the authority to make regulations in relation to it general supervision of public utilities. And in my opinion the Commissic satisfied any requirements that could have been implied for the issuance of regulation under Section 28(2) when it issued a draft guideline to all of th public utilities giving them notice of its intention to issue IRP guideline by soliciting comments, by holding a public workshop, and then by giving th public utilities an opportunity to file written briefs, in that sense holdir a hearing by way of written argument." (T. 70).

Counsel for the BCEC argued further that, even if the IRP Guidelines are onl interpreted as a guideline or policy statement and not as a regulation, th Commission must have some implied authority to motivate the utilities i regulates to take its guidelines into account.

"... the implication of [B.C. Hydro's] argument is that a commission cc issue guidelines, but then it's completely helpless to do anything t encourage compliance with them and I don't think that that is what the cour is saying in <u>Ainsley Financial Corporation</u>, ... " (T. 74).

"The IRP Guidelines are intentionally general in nature for the purpose c allowing the utilities flexibility in deciding how they are going to achiev the spirit of the guidelines in terms of the information that the Commissic needs, ... And the Commission's approach has been consistent with this notic In my experience before the Commission dealing with thes of flexibility. IRPs, the Commission provides guidance and direction to the utilities on the way that they have prepared their IRPs and offers guidance and direction c how they might be improved in the future. It doesn't make final decisior about the plans themselves. The situation that arose with B.C. Hydro is the it simply refused to recognize the guidelines at all, and I think it would b ludicrous to suggest that a Commission has no authority to compel complianc with guidelines at all in the face of that kind of non-compliance. **Otherwis** the guidelines would be completely useless as a regulatory tool. What woul be the purpose? Everybody would just completely ignore them." (T. 90).

"In this case, in the December 7th [1993] Decision, the Commission had give advice to B.C. Hydro about what it purported to be an IRP, and it jus completely ignored everything that the Commission said. Now, if B.C. Hydr had come in and explained what it did and why it did it, Hydro probably woul have gotten a different reaction. If they had said, 'We didn't do a MAI process, we did this instead and we think it achieves the same purpose ar here is why,' or 'We didn't establish a collaborative committee but we di this and we think --'. I mean it's that kind of interaction that th guidelines are intended to institute. But Hydro did nothing, and I think i that instance that the Commission does have the authority to take action. (T. 91).

Counsel for the CAC(B.C.) et al. concurred, stating that, because the Ac gives the Commission the authority to issue regulations, there is no issu with respect to the Commission's authority to require compliance with its IR Guidelines.

"The Commission may make regulations: And again, just pointing out that i another statute in this case, the Interpretation Act, which is tab 10 of m book of authorities, the orders of the Commission are regulations as define in the Interpretation Act." (T. 107).

Counsel for the CAC(B.C.) et al. also argued that there is a significan difference between the <u>Ainsley Financial Corporation supra</u> case and thi case.

"The Ainsley case, I submit, is quite different to the situation in thi case, ... the interpretation I would put forward is that in that case th [Ontario Securities] Commission seemed to be telling the sellers of the penr stocks how very specifically they should conduct themselves in the wide world, how they should go about their business, their dealings with th public and so on. I would suggest that in this case, with integrate resource planning, the [B.C. Utilities] Commission is dealing with somethir different. It's dealing with the nexus between itself and the utility. It' dealing with the information that the utility has to bring back to th Commission in order for the Commission to be able to regulate the utility That seems very different from the Ainsley case." (T. 125).

The Industrial Customers argued in their written submission that the directions from the Commission to B.C. Hydro were exceptional but wer required because B.C. Hydro had deliberately ignored the Commission.

"The guidelines are just that, 'guidelines', intended to assist the utilitie in their planning process, not to micromanage them. The specific order complained of by B.C. Hydro in this matter, the particulars of which will b discussed later, do not amount to micromanagement but were necessary step which had to be taken by the Commission due to serious deficiencies i B.C. Hydro's planning process and willful disregard of previous Commissic directions and orders. If B.C. Hydro feels it is being criticized and tol what to do in ways that are too specific to be comfortable, it has no one t blame but itself." (Phase I Submission, p. 3). As a reminder of the situation facing the Commission in the 1994 hearing, th Industrial Customers, in their written submission, quoted from their finc argument at the original hearing leading up to the November 24, 199 Decision.

"It is in public participation that B.C. Hydro's ignoring of the Commissic and stalling on the implementation of an IRP is most readily apparent. Th Commission was very clear and, in spite of arguments to the contrary B.C. Hydro was to achieve the Commission's goal of publi unambiquous. participation and to report on what it had done ... so far by June 30, 1994 B.C. Hydro did not even come close. Some time after August 31, 1994 B.C. Hydro filed a document entitled 'B.C. Hydro's Integrated Resourc <u>Planning - Public Participation Program (IRP 4) Scoping Document'.</u> Thi document, which consists of 15 pages including two appendices, is an insul to the Commission and to the participants. This document, we submit, coul have been drafted by anybody knowledgeable in public participation processe in a matter of days and B.C. Hydro has a large number of such individuals c the payroll. Attached to the IRP 4 document is a program schedule whic would not have public consultation commencing until April of 1995, more the two years after the Commission issued its directive with respect to IRPs ar fifteen months after the Commission issued its order requiring stakeholde input have been achieved, not commenced. If this schedule is adhered to, th results of the public consultations will not be available until the Spring c 1996, at which time it will be too late to incorporate them in the 1996 IRF This leaves us waiting until 1997, or possibly even later, to se B.C. Hydro's first IRP with public participation impact. B.C. Hydr suggested the development of the IRP 4 document involved 2100 hours work, th equivalent of one person year of work with overtime. ... If this is true something is very wrong at B.C. Hydro. If this is representative c B.C. Hydro productivity, then we suggest the Commission should have littl fear of making very severe cuts to B.C. Hydro's budget. We suggest th reality is that B.C. Hydro did not take the Commission's order seriousl originally and in IRP 4 is still not taking it seriously. That is nc satisfactory to the industrial customers and we hope it is not satisfactor to the Commission." (Phase I Submission, p. 8).

5.0 COMMISSION ASSESSMENT

This section is organized to respond to the same three major point identified earlier from the submissions and arguments of B.C. Hydro and th intervenors. A fourth point responds to the original B.C. Hydro argumer that the Commission's Decision was based on the Environmental Assessment Act which was not proclaimed at the time of the November 24, 1994 Decision.

1. The Commission's jurisdiction with respect to requiring IRP from the utilities it regulates.

In Chapter 2 of this Decision the Commission defined briefly it understanding of IRP. The arguments of B.C. Hydro and the counter argument of the intervenors suggest that there is disagreement on the relationship between several critical terms. The Commission presents here its views c the relationship between the terms 'project review and approval', 'resourc planning', 'integrated resource planning', and 'regulating utilit expenditures for recovery in rates'.¹

According to B.C. Hydro, authority over individual project review ar approval implies authority over utility resource planning. If the governmer has the former authority, by implication it also has the latter. If it has the latter authority, then the field is occupied and the Commission must no have authority over resource planning (or integrated resource planning), eve though it admittedly does have authority over regulating utility expenditure for recovery in rates.

According to the intervenors, the Commission's authority for regulatir utility expenditures for recovery in rates includes authority over resourc planning (or integrated resource planning) because it is this latter utilit function that plays the most important role in determining those utilit expenditures. Authority over resource planning, and the determination of th most prudent mix of resources (including acquiring no resources if that i most prudent), does not imply that the Commission also has authority over separate government process of project approval that applies to both utilit and non-utility energy projects. Thus, by requiring IRP in order to obtai the information necessary to evaluate the prudency of utility expenditure for recovery in rates, the Commission is not usurping the government'

authority for individual energy project approval. Having considered all of the evidence and arguments, the Commission disagree with B.C. Hydro's position and agrees with the position taken in common b the intervenors. The Commission believes that its authority to require IR by regulated utilities is derived both from its authority for generc supervision of utilities and from its authority for determining the prudenc of utility expenditures in order to allow their recovery from customers i rates. Furthermore, the Commission believes that both of these authoritie are inextricably linked, as will be explained below. Numerous sections c the Act provide the Commission with jurisdiction in this regard.

Utilities do resource planning and on outcome of that planning process i justification for major expenditure decisions, be these to purchase energy to develop energy resources, to encourage energy conservation, to extend c expand transmission access to energy resources, or something else. Thes expenditures must ultimately be deemed prudent and be approved by th Commission if they are to be

^{1.} The term 'project review and approval' is basically self-defining. It refers t various processes established by the appropriate decision making authority to determin if a particular proposed project may proceed to a construction phase. The term 'resource planning' in the context of energy utilities may have historically connoted a focus of energy supply provision, but increasingly it is used synonymously with 'integrate resource planning'. IRP is defined in Chapter 2 of this Decision. 'Regulating utilit expenditures for recovery in rates' is also a term that is basically self-defining.] is the method by which a utilities commission informs itself of, and then determines the prudency of, those expenditures that a utility seeks to recover from the rates paid to its customers. The determination of prudency depends upon the judgment of the utilitie commission, based on the evidence before it.

recovered in rates. The Commission must have information on a utility' resource planning process in order to determine if this process meets th Commission's standards for prudency in resource planning, for trading-of between alternatives and for executing major expenditures, all of which ar intimately tied to the rates faced by utility customers. The Decision c November 24, 1994 emphasized this linkage between IRP, utility expenditure and customer rates. This linkage was explained in detail on page 21 of th Decision (quoted in Chapter 2 above), and it was re-emphasized throughout th Decision as the following two quotes indicate:

"... the Action Plan should be used to generate the Utility's necessar capital budget which contributes to the determination of the Utility's rates. This is the most effective means for the Commission to assess the prudency c the capital component of future rates." (p. 34);

"... the Commission has developed the IRP process to ensure, through the associated Action Plan, that capital budgets and consequent rates are full justified." (p. 64).

Indeed, it is the Commission's understanding that IRP has been implemented b utilities commissions throughout North America primarily to meet th objective of determining in advance the prudency of utility expenditures i order to avoid after-the-fact rate disallowances that could be catastrophi for utility shareholders and customers alike. As noted, IRP was originall referred to as least-cost planning. The fundamental rationale of IRP i tightly linked with the regulatory responsibilities of utilities commissior for determining the prudency of utilities' expenditures.

In contrast, counsel for B.C. Hydro seemed to suggest that, in writing th November 24, 1994 Decision, the Commission saw no link between resourc planning and ratemaking.

"I think that reading that decision of the Commission simply doesn't allow c objective reader to conclude that the fundamental objective of this panel c the Commission had to do with ratemaking. It didn't have to do wit ratemaking. It had to do with direct control of resource planning, and it' simply not available to say anything else about it." (T. 42).

This argument is both surprising and perplexing to the Commission. As note above, the November 24, 1994 Decision clearly states in several places th fundamental link between resource planning and ratemaking. As the Commissic noted in the Decision, the annual costs of B.C. Hydro's invested capitc (annual capital expenditures, financing charges, return to shareholde equity) dwarf its annual operations and maintenance budget. Capitc expenditure decisions are thus the major determinant of rates. IRP is firs and foremost a means of evaluating the prudency of capital expenditures Utilities commissions have a duty to examine and evaluate the prudency c these capital expenditures, regardless of whether that process of examinatic and evaluation is referred to as IRP, resource planning, capital planning, c something else. When questioned by the Commission panel, B.C. Hydro's counsel seemed t acknowledge this link in spite of his earlier comments to the contrary.

"There's no question that the Commission has considerable power to, certainl as part of its ratemaking function if nothing else, require of the utilit provision of information and also to undertake actively certain steps and c certain things. And I'm sure without having gone through each provisic relating to the rate side of your jurisdiction in the context of th questions you've just asked that there exists sufficient authority for th Commission to require the filing of capital budgets, probably capital plar that go with it, because the nexus there with ratemaking is so clean ar clear that one can see the need for it." (T. 161).

"Ultimately it [the Commission] needs to be satisfied with respect to the prudency of the investment, and one can build a case, I'm sure, in som instances that one needs to have looked at, when you come to review it in the end, the complete context, whether there were cheaper alternatives, thos kinds of things." (T. 163).

"I suspect that there are circumstances where an ex ante review of certai programs or certain anticipated programs is entirely necessary." (T. 165).

These comments suggest that, if the Commission were to rename IRP as capitor planning or, even more properly, resource expenditure planning (therebe including not only energy supply and conservation investments but also energe purchases and other resource-related expenditures), then B.C. Hydro woul agree that the Commission has the jurisdiction to require all of the utilities it regulates to carry out this planning activity and to provide particular information to the Commission on this process.

As noted, B.C. Hydro's counsel argued that, in the Decision of November 24 1994, the Commission's IRP focus was not motivated by its concerns ar authority for ratemaking. Furthermore, B.C. Hydro's counsel argued that even if this had been the case, the Manitoba Court of Appeal decisic demonstrates that ratemaking authority does not imply an authority ove resource planning.

"If, though I say it clearly wasn't, the Commission's decision was reall rooted in a concern about rates, then I say based on <u>Manitoba Hydro</u> that th Commission exercised power that could only be inferred to it, and inference of that breadth and nature are not available to it on the strength of th reasoning in the Manitoba case." (T. 57).

In considering this submission, the Commission notes that there are som critical differences between the current situation in British Columbia ar the issue before the Manitoba Court of Appeal and that these differences wer referenced by many of the intervenors. In particular, the stated case put before the Manitoba Court of Appeal wc with respect to the Manitoba Public Utilities Board's ("PUB") jurisdictic over the capital projects of Manitoba Hydro. After reviewing the Manitob Crown Corporations Public Review and Accountability Act, and other relevar material, the Court determined that:

"On the basis of the legislation as it stands, the Board has no jurisdictic to approve, reject or vary Manitoba Hydro's major capital projects such a construction of new generating power stations or transmission lines." (Publi Utilities Board (Manitoba) supra, p. 165).

In contrast to the stated case in Manitoba, the BCUC does not suggest the via IRP it has authority to approve, reject or vary major capital projects c B.C. Hydro. The BCUC's requirement that all utilities it regulates shal produce an IRP is primarily designed to provide the information necessary t determine the prudency of utility expenditures in order to determine if suc expenditures should be recovered in rates. The BCUC IRP Guidelines state:

"IRP does not change the fundamental regulatory relationship between th utilities and the BCUC. Thus, IRP guidelines issued by the BCUC do no mandate a specific outcome to the planning process nor do they mandat specific investment decisions. Each utility's IRP will reflect tho utility's unique circumstances and its management's judgment. Under IRF utility management continues to have full responsibility for making decisior and for accepting the consequences of those decisions. IRP will be relevar to the question of determining utility revenue requirements and rate desigr Consistency with IRP Guidelines and the filed IRP plan will be an additiono factor that the BCUC will consider in judging the prudency of investments ar rate applications, although inconsistency may be warranted by change circumstances or new evidence." (BCUC IRP Guidelines, p. 2).

In addition, it should be noted that, while the Commission believes the majc justification for IRP to be its role in providing the Commission wit critical information for judging the prudency of utility resourc expenditures, the Commission also agrees with the intervenors that th Commission has, in any event, the authority to require IRP because of it general supervisory authority in Section 28 and Section 29 (and reinforce throughout the Act). Here there is little to add to the submissions and orc arguments of the intervenors. The Manitoba Court of Appeal did not pronounc on the jurisdiction of the Manitoba PUB to require Manitoba Hydro to produc an IRP and, specifically, the Court did not pronounce on whether such requirement was justifiable on the basis of the PUB's general supervisor powers.

In the view of this Commission, and a growing majority of utilitie commissions throughout North America, IRP is a valuable tool in exercisir this general supervisory function. Only through an IRP-like approach ar utilities commissions able to establish the basis for evaluating utilitie managements' trade-offs between many difficult and complex issues. However even at this general level, one does not stray far from the prudency c expenditure issue. Almost every utility decision has at least som expenditure implications, meaning that the general supervisory responsibility and the prudency of expenditure responsibility cannot be separated in practice notwithstanding the arguments of B.C. Hydro.

For these reasons, the Commission does not accept B.C. Hydro' primary jurisdictional argument. The Commission believes that it authority to require IRP by regulated utilities is derived bot from its authority for the general supervision of utilities and it authority for evaluating utility expenditures for prudency in orde to allow their recovery from customers in rates. Furthermore, th Commission believes that both of these authorities are inextricabl linked.

2. The inclusion of non-customer impacts and public involvement in IRP.

B.C. Hydro argues that, while the Commission regulates the interface betwee utilities and their customers, it has no jurisdiction at the interfac between utilities and the public at large (customers and non-customer alike). This argument is rejected by the intervenors, who have cited variou sections of the Act which require the Commission, when regulating utilities to consider the 'convenience and necessity of the public' and to 'minimiz unnecessary damage and inconvenience to the public'.

The Commission agrees with the intervenors that its regulatory jurisdictic includes the relationship between utilities and the public at larg (customers and non-customers alike). In support of this, the Commissic notes the various sections of the Act that refer to 'the public' and th effect upon it of utilities' actions. Counsel for the BCEC, the CAC(B.C.) ϵ al. and the Industrial Customers referred, in particular, to Sections 28, 37 38, 51, and 86.

It is also the view of this Commission that much of current utilit regulatory practice involves regulating the interface between the utility ar the public at large, and that there are inevitable rate implications from this interface. In Chapter 2 above, the Commission provided five examples c how utilities take actions and incur costs based on a consideration of th convenience and necessity of the public at large. All of these examples ar directly applicable to B.C. Hydro and each of them involves expenditures wit ratemaking implications. This Commission, like every utilities commissior is continually judging the prudency of expenditures that utilities ar incurring for the convenience and necessity of the public, and the specifi reference here is to expenditures which have not been mandated by some othe regulatory authority. If this Commission were to rule that it did not hav the jurisdiction to permit such ongoing expenditures, rate hearings would b immediately required for B.C. Hydro and all other utilities regulated by thi The flexibility for utility managers in how they use revenu Commission. from customers would be severely restrained relative to current practice However, in the view of this Commission, the Act is

clear in providing the Commission with jurisdiction over this interfac between the utility and the public at large, and the authority to permit c disallow expenditures related to this interface to be recovered in rates.

Counsel for the BCEC pointed out an additional reason for public involvemer in IRP that is important in the view of the Commission. The Utilitie Commission Act requires the Commission to hold public hearings in exercisir various regulatory functions. As stated throughout this Decision, utilit resource planning is intimately connected to utility rates. The Act does no specify that intervenors at public hearings (be these revenue requiremer hearings or other hearings) must be customers of the utility; traditionally the Commission has allowed members of the public to participate in thes hearings if they could demonstrate an interest in the utility's actions. Th Commission is in the process of reforming its public hearing processes i order to improve regulatory efficiency and encourage more effective publi involvement. Therefore, if the Commission were to accept B.C. Hydro' argument that it did not have jurisdiction to require a public informatic and consultation process with respect to utility resource planning (th current IRP framework), the Commission is of the view that it would need t develop alternative mechanisms to fulfill its mandate for effectivel involving the public in the regulatory process.

Finally, as a point of clarification, the Commission notes that th definition of IRP applied by B.C. Hydro is not the only possible definitic and that the option is available for this or any other utilities commissic to include or exclude public impacts and public involvement from th definition of IRP. Indeed, while this Commission has generally treate public impacts and public involvement as integral elements of IRP, it ha also been relatively cautious in practice in this regard. The Commission' IRP Guidelines are especially flexible with respect to public involvement ar environmental and social impacts. The point is that one can decide tha utilities commissions have limited or no authority to require consideratic of broader public impacts of utilities' actions and yet maintain that suc utilities commissions do have the authority to require a utility resourc plan (produced following a specified process) in order to judge the prudenc of utility expenditures. Such a plan would be very close to what is referre to as IRP, absent the consideration of broader public impacts and publi involvement.

The Commission does not accept B.C. Hydro's arguments respectin the interface between the utility and the public. The authority from the Utilities Commission Act to The Commissio consider th interface of the utility and the public, whether in IRP or in it other regulatory responsibilities, and consequently to requir various kinds of information from the utility (in a form deeme necessary by the Commission) on public impacts with respect to it Furthermore, options. in virtually all resource situation involving the interface between the utility and the public ther are ratemaking implications and the Commission's jurisdiction ove ratemaking has not been challenged.

3. The Commission's authority to issue IRP guidelines and to issue order and sanctions in cases of non-compliance.

B.C. Hydro argues that the Commission has the authority to issue IR Guidelines so long as these are not mandated, with threat of sanction fc non-compliance. According to B.C. Hydro, while the Commission may have th authority to issue regulations and impose sanctions for non-compliance i areas where it has regulatory authority, where it lacks such regulator authority the Commission can only issue guidelines without sanctions Intervenors responded by submitting that, because the Commission does hav the authority to issue guidelines and regulations and because the Commissic also has the authority to require IRP, it has the authority to issue th Order and sanctions associated with the November 24, 1994 Decision.

The debate therefore hinges on the Commission's determination on the firs two major points in B.C. Hydro's Reconsideration Application, as detailed i Point 1 and Point 2 above. Thus, because the Commission agrees with th intervenors with respect to its jurisdiction over IRP, including it jurisdiction over the interface between the utility and the public at large it follows that the Commission also agrees with the intervenors with respec to its authority to issue orders and sanctions in the case of non-compliance

The Commission wishes to note, however, that it imposed sanctions in thi case with reluctance. Based on the evidence before it at the 1994 hearing the Commission became convinced that B.C. Hydro was ignoring the intent c the directions of the Commission, both with respect to the IRP Guidelines i general and with respect to providing the necessary resource plannir information for the purpose of judging the prudency of specific expenditures Counsel for B.C. Hydro argued during oral argument that this was not th case.

"... the first comment I wanted to make was in respect of the suggestion the B.C. Hydro had refused to acknowledge or blatantly rejected the Commission' IRP Guidelines. Of course that's nonsense. That isn't what the Commissic said in its decision. ... at no time has it been suggested that there we any deliberate or absolute refusal to comply in some way, and it's quit inappropriate now I think to say that there was." (T. 145).

The Commission does not agree with this view of B.C. Hydro. In its Decisic of November 24, 1994, the Commission quoted at length the commentary c intervenors stating that the most likely interpretation of the evidence wc that B.C. Hydro was deliberately ignoring the intent of the generc directions in the Commission's previous (1993) Decision. Moreover, th evidence suggested that without immediate action the Commission might nc have the information it needed before 1997 or later, even though mar critical resource expenditure decisions were likely to be necessary between 1993 ar 1997. This was an extremely different response than the Commission hc received from any other utility.

The following quote of the counsel for the CAC(B.C.) et al. gives a flavou of the intervenor quotes that the Commission included in its November 24 1994 Decision.

"In judging whether it was reasonable for B.C. Hydro to interpret th Commission's 1993 Decision as not requiring full public involvement b June 30, 1994 and whether B.C. Hydro did, in fact, interpret it that way there are two alternatives. The first is to accept that the only possibl interpretation of the 1993 Decision was that B.C. Hydro was to achieve ful public involvement and then report to the Commission before June 30, 1994 c how it had done that. If this is accepted, then it follows that B.C. Hydr either unreasonably failed to understand and act on the Decision or that i deliberately chose to ignore the Commission's Decision.

The alternative is to conclude that there really was ambiguity in the That is to conclude that although the Commissic Commission's Decision. wanted a report on public involvement by June 30, 1994, it did nc necessarily intend that there would have been any progress upon which t report and it had not set any deadline whatsoever for actually achievir public involvement, i.e., that as long as the report was submitted t June 30, 1994, it would have been satisfactory if public involvement did nc take place for another year, or five years, or ten years or more. This als requires concluding that the supposed ambiguity did not oblige B.C. Hydro t take any steps to resolve the ambiguity, such as telephoning the Commissior A further requirement of accepting this interpretation is to conclude the B.C. Hydro managed to remain completely unaware of what other utilities i British Columbia were being required to do at this time and were, in fac In addition it requires accepting that B.C. Hydro had forgotten th doing. Commission's requirement that all utilities submit an IRP with publi involvement by the end of 1993. In sum, this alternative requires acceptir a lot that seems unlikely." (November 24, 1994 Decision, p. 56).

In its November 24, 1994 Decision, the Commission stated clearly the B.C. Hydro had not complied with its directions in the 1993 Decision.

"B.C. Hydro has not followed the spirit of the Commission's Guidelines wit respect to public involvement, has not followed the specific directions give to it in the last Decision with respect to public involvement, and has no made the obvious responsible effort to seek clarification from the Commissic as to what was required by a direction which B.C. Hydro alone suggests we ambiguous. ... This failure to understand or, if understood, failure t comply with, the Commission's Guidelines and directives with respect t public participation forces the Commission to issue new directions wit respect to this issue that are unprecedented in their detail. The Commissic regrets that such action is necessary since it is wary about entering arec that have traditionally been the prerogative of management; however B.C. Hydro's failure to respond to the Commission's December 7, 199 directions leaves it no choice." (November 24, 1994 Decision, p. 57).

Given the Commission's original view, reconfirmed herein, that i has the jurisdiction to require IRP, including IRP that consider the interface between the utility and the public (which therefor requires public involvement of some form) and, given that th Commission has the authority to issue guidelines and regulations the Commission therefore has the authority to issue orders and sanctions in case of non-compliance, as occurred with B.C. Hydro in the November 24 The Commission notes that in this particular cas 1994 Decision. that B.C. Hydro had ignored the Commission's it believed 199 Decision without having applied for a reconsideration of tha Decision or without having launched an appeal of the Commission' jurisdiction. This belief played a key role in convincing th Commission that it was dealing with an exceptional case requirin exceptional actions.

4. The Commission's Decision of November 24, 1994 was based upon c unproclaimed act.

In its original Reconsideration Application, B.C. Hydro also argued that the Commission's Decision and Order of November 24, 1994 was in error because i was based in part on legislation that had not yet been proclaimed, i particular the Environmental Assessment Act.¹

The Commission rejects the B.C. Hydro argument that it relied upo the unproclaimed Environmental Assessment Act, and is confiden that an objective reading of the November 24, 1994 Decision woul lead to the same conclusion. The reference in the November 24 1994 Decision to the new Act is as an additional commentary, whic notes the potential future implications of the Commission' Decision, after the fundamental basis for reaching the conclusion therein had already been clearly presented.

^{1.} The Commission notes, however, that the Environmental Assessment Act wa proclaimed June 30, 1995 and its passage has coincided with the repeal of th sections of the Utilities Commission Act upon which B.C. Hydro has based it argument in this Reconsideration Application (Sections 17 to 21 in Part 2 ar Sections 51(7) and 51(8) in Part 3). Thus, even if this Commission agree with B.C. Hydro's Part 2 versus Part 3 argument in this Reconsideratic Application, and herein reversed its November 24, 1994 Decision with respec to the Order and sanctions related to IRP, the Commission would not hav before it sufficient evidence or argument to suggest that it does nc currently (given the new Environmental Assessment Act and the revise Utilities Commission Act) have regulatory jurisdiction to require utilit IRP.

6.0 COMMISSION DECISION

For the reasons given in Chapter 5, the B.C. Hydro Reconsideratio Application is denied.

Dated at the City of Vancouver, in the Province of British Columbia thi day of October, 1995.

Dr. M.K. Jaccard Chairperson

F.C. Leighton, P. Eng. Commissioner

K.L. Hall, P. Eng. Commissioner

IN THE MATTER OF the Utilities Commission Act, S.B.C. 1980, c. 60, as amended

and

IN THE MATTER OF an Application by British Columbia Hydro and Power Authority for Reconsideration of the Commission's November 24, 1994 Revenue Requiremen Decision and Commission Order No. G-89-94

BEFORE:	M.K. Jaccard, Chairperson;)	
	Hall, Commissioner; and)	October 17, 1995
F.C.	Leighton, Commissioner)	

O R D E R

WHEREAS:

A. On February 8, 1995 British Columbia Hydro and Power Authorit ("B.C. Hydro") applied to the Commission, pursuant to Section 114 of th Utilities Commission Act ("the Act"), for a reconsideration ("th Reconsideration Application") of certain aspects of the November 24, 199 Decision upon the Applicant's February 11, 1994 Rate Application an Integrated Resource Plan ("IRP") and, pursuant to Section 119(2) of the Act for a stay of certain aspects of the Decision pending determination of th Reconsideration Application; and

B. The Commission reviewed written submissions and heard oral argument c April 12, 1995 on the Reconsideration Application and issued its Phase Reconsideration Decision and Order No. G-39-95 on May 8, 1995 denying th Application except with respect to the issue of the Commission's jurisdictic as it relates to IRP; and

C. The Commission reviewed written submissions and heard oral argument c July 27, 1995 on the Commission 's jurisdiction as it relates to IRP; and

D. The Commission has considered the Reconsideration Application ar arguments, all as set forth in the Decision issued concurrently with thi Order.

NOW THEREFORE the Commission orders that B.C. Hydro's request fo reconsideration of the Commission's November 24, 1994 Decision is denied fc the reasons set out in the Decision issued concurrently with this Order.

DATED at the City of Vancouver, in the Province of British Columbia thi day of October, 1995.

BY ORDER

Dr. Mark K. Jaccard Chairperson G-86-95

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COMMISSION ORDER NO. G-86-95

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APPEARANCES

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D. BURSEY	Council of Forest Industries of British Columbia Mining Association of B.C. Electro-Chemical Producers
M.P. DOHERTY A. NADER	The Consumers' Association of Canada (B.C. Branch) British Columbia Old Age Pensioners' Organization Council of Senior Citizens' Organizations of B.C. Federated Anti-Poverty Groups of B.C. Senior Citizens' Association of B.C. West End Seniors' Network
C. REARDON	British Columbia Energy Coalition

EXHIBITS

Exhibit Nc

1

Affidavit of Mr. Aymen Nader, Canadian and United States public utility commissions that require IRPs of their utilities

INTEGRATED RESOURCE PLANNING ("IRP") GUIDELINES BRITISH COLUMBIA UTILITIES COMMISSION ("BCUC")

I PURPOSE OF GUIDELINES

These guidelines relate to the practice of IRP by utilities regulated to the BCUC. The guidelines are intended to provide general guidance regardir BCUC expectations of the process and methods utilities follow in developir an IRP. It is expected that the general rather than detailed nature of th proposed guidelines will allow utilities to formulate plans which reflec their specific circumstances.

II DEFINITION

IRP is a utility planning process which requires consideration of al known resources for meeting the demand for a utility's product, includir those which focus on traditional supply sources and those which focus c conservation and the management of demand¹. The process results in th selection of that mix of resources which yields the preferred² outcome c expected impacts and risks for society over the long run. The IRP proces plays a role in defining and assessing costs, as these can be expected t include not just costs and benefits as they appear in the market but als other monetizable and non-monetizable social and environmental effects. Th IRP process is associated with efforts to augment traditional regulator review of completed utility plans with cooperative mechanisms of consensu seeking in the preparation and evaluation of utility plans. The IRP proces also provides a framework that helps to focus public hearings on utilit rates and energy project applications.

^{1.} Referred to as Demand-Side Management (DSM)

^{2.} The term "preferred" is chosen to imply that society has used some proces to elicit social preferences in selecting among energy resource options Unfortunately, there is rarely agreement on the best process for elicitir social preferences. Candidate processes in a democracy include publi ownership with direction from cabinet or a ministry, regulation by a publi tribunal, referendum, and various alternate dispute resolution methods (e.c consensus seeking stakeholder collaboratives).

III RELATIONSHIP OF BCUC AND UTILITIES UNDER IRP

IRP does not change the fundamental regulatory relationship between th utilities and the BCUC. Thus, IRP guidelines issued by the BCUC do nc mandate a specific outcome to the planning process nor do they mandat specific investment decisions. Each utility's IRP will reflect thc utility's unique circumstances and its management's judgement. Under IRF utility management continues to have full responsibility for making decisior and for accepting the consequences of those decisions. IRP will be relevar to the question of determining utility revenue requirements and rate desigr Consistency with IRP guidelines and the filed IRP plan will be an additionc factor that the BCUC will consider in judging the prudency of investments ar rate applications, although inconsistency may be warranted by change circumstances or new evidence.

2

IV GENERAL IRP GUIDELINES

An IRP must include certain basic components. These components ar described in the following list of general guidelines that the BCUC will us in assessing the IRP efforts of the utilities it regulates. Smalle utilities will not be required to provide the level of detail and analysi contained in the IRPs of larger utilities and will have the opportunity t adopt components of those plans.

1. Identification of the objectives of the plan

Objectives include but are not limited to: adequate and reliabl service; economic efficiency; preservation of the financial integrity of th utility; equal consideration of DSM and supply resources; minimization c risks; consideration of environmental impacts; consideration of other socic principles of ratemaking³; coherency with government regulations and state policies.

^{3.} Bonbright, Danielsen and Kamerschen, (Principles of Public Utility Rates 1988, Ch.8, p.165), define social principles of ratemaking as "any policy c rate control designed to make the supply of utility services responsive t social needs and social costs". The authors point out that the rates set t utility commissions invariably involve some discretionary judgement about th extent to which broader social principles should influence ratemaking. Th most recent concern is with negative environmental externalities, but thi concern should be situated within the broader issue; hence the inclusion c the generic term social principles of ratemaking. The general implication i that because of social and environmental objectives, the rates charged b utilities may be allowed to diverge from those that would result from a rat determination based exclusively on financial least cost. The socic principles to be addressed may be identified by the utility, intervenors, c government.

2. Development of a range of gross (pre-DSM) demand forecasts

In making a demand forecast, it is necessary to distinguish betwee demographic, social, economic and technological factors unaffected by utilit actions, and those actions the utility can take to influence demand, (e.g. rates, DSM programs). The latter actions should not be reflected in th utility's gross demand forecasts⁴. More than one forecast would generally Erequired in order to reflect uncertainty about the future: probabilities c qualitative statements may be used to indicate that one forecast i considered to be more likely than others. The energy end-use categories use in analysis of DSM programs should be compatible with those used in demar forecasting, so that at any point a consistent distinction can be mac between demand with and without DSM on an end-use specific basis. Thus, th gross demand forecast should be structured in such a way that the savings load shifting or load building due to each DSM resource can be allocated t specific end-uses in the demand forecast.

3. Identification of supply and demand resources

All feasible ⁵ individual supply and demand resources, both committe and potential, should be listed. Individual resources are defined c indivisible investments or actions by the utility to modify energy and/c capacity supply, or modify (decrease, shift, increase) energy and/or capacit demand.

4. In other words, gross forecasts represent an attempt to simulate market in which the utility did nothing to influence demand. Of course this is no entirely possible. Utilities will continue to require rate increases ar existing DSM programs will affect demand as will already ordered rate desig changes. However, the assumptions made with respect to these factors i estimating future gross demand should be clearly specified so that th effects of these assumptions may be distinguished from the effects of futur utility actions designed to influence demand.

5. Feasible resource options are defined as those options consistent with the objectives of the IRP. For example, government policy may rule out particular technology or form of energy.

3

4. Characterizing supply and demand resources

Each supply and demand resource must be measured against a consister set of attributes.⁶ These attributes reflect the objectives established i They may include utility and customer costs (life cycle costs Guideline 1. impact on rates) as well as monetizable and non-monetizabl social/environmental impacts, risks and lost opportunities.⁷ This i generally referred to as multi-attribute analysis, a methodology that allow for comparison of resources not just in terms of direct costs, but also i terms of all other relevant attributes. Supply and demand resource cos estimates should represent the full costs of achieving a given magnitude c the resource. These cost estimates may be represented as supply curves; i.e graphs showing the unit costs associated with different magnitudes of th resource.

4

5. Development of multiple integrated resource

For each of the gross demand forecasts, several plausible resourc portfolios should be developed, each consisting of a combination of suppl and demand resources needed to meet the gross demand forecast. The gros demand forecasts and the resource portfolios should cover the same perioc generally 15 to 20 years into the future.

6. Evaluation and selection of resource

For each of the gross demand forecasts, the set of alternative resourc portfolios which match the forecast are compared on an attribute by attribut basis, as defined by the objectives of the IRP. If a minimal quantity of resource (e.g. a given amount of DSM) is included in all resource portfolic attached to a gross demand forecast, then that quantity can be included i the IRP without further analysis. For those resources that are not

^{6.} Measurement may be quantitative or qualitative depending on the attribute 7. Lost opportunities are opportunities which, if not exploited promptly, ar lost irretrievably or rendered much more costly to achieve. Examples cc include cogeneration opportunities that occur when renovating a pulp an paper mill but are not taken and additional insulation that is not installe in a new house.

identified as common to all resource portfolios, a multi-attribut trade-off process, involving the public, should be undertaken. This proces would lead to the selection of a set of resource portfolios, each portfoli matching one of the gross demand forecasts. The set of resource portfolic is the utility's IRP.⁸

7. The action plan

The selection process in Guideline 6 provides the components for th action plan. The action plan consists of the detailed acquisition steps fc those resources (from the selected resource portfolio) which need to t initiated over the next four years in order to meet the most likely gros In addition, the action plan should specify how th demand forecast. utility will respond over time to increased information indicating that th most likely gross demand forecast was too high or too low. 9 Examples c flexible actions that the utility could consider include the optioning c specific resources (i.e. moving them to shelf-ready status), acquiring extrc regional purchase options, acceleration or deceleration of DSM programs early retirement or recommissioning of facilities, or sale of surplus at discount. The action plan should also show how resources with considerabl uncertainty (e.g. DSM) include experimental design criteria and monitorir that allow for hindsight evaluation of their market impacts and full resourc costs.

8. Public input

The public is to be involved throughout the IRP process. This could incluc a wide range of methods for providing information to the public and fc involving the public in the planning process. Methods might incluc stakeholder collaboratives, information meetings, workshops, and issue paper seeking public response. Utilities are encouraged to focus resources fc public participation on areas of the IRP where it will prove most useful ar to choose methods which best fit the need of their IRP. Joint processes b two or more utilities are acceptable provided the requirements of eac utility can be met.

8. Guidelines 4 through 6 may require iteration to account fc interdependencies.

9. For example, the level of population growth and economic activity ove time begins to suggest that a different demand forecast is more likely.

9. Regulatory input

The BCUC staff should be given opportunities to review and commer during the various phases of preparation of the IRP.

10. Government policy input

The IRP should address government policy, as evidenced by legislatic (e.g. efficiency standards) and stated policies. Emerging policy issues such as increased control of air emissions, may be addressed as ris factors.

11. Regulatory review

The IRP and the action plan should be filed biannually with the BCUC fc review. The review may, at the initiative of the BCUC, provide opportunitie for written and/or oral public comment. After review, the BCUC will provic written commentary on the plans.

BIBLIOGRAPHY OF STANDARD REFERENCES FOR INTEGRATED RESOURCE PLANNING ("IRP")

The following list of IRP source documents has been compiled by BCUC staf for informational purposes only. Although staff believe that these source form part of the body of standard works to which reference is often made i discussions of IRP, inclusion in the list does not imply that the statement made in the various sources reflect Commission policy. This list of source does not form part of the BCUC IRP Guidelines.

1. Spurring Inventiveness by Analyzing Tradeoffs: A Public Look at Ne England's Electricity Alternatives, Clinton J. Andrews, Environmental Impac Assessment Review, 1991

2. Least Cost Planning and Utility Regulation, David Berry, Public Utilitie Fortnightly, March 17, 1988

3. <u>The Structure of Electric Utility Least Cost Planning</u>, David Berry Journal of Economic Issues, September 1992

4. Standard Practice Manual - Economic Analysis of Demand-Side Managemer Programs, California Public Utilities Commission December 1987

5. Moving toward Integrated Resource Planning: Understanding the Theory ar Practice of Least Cost Planning and Demand Side Management, Prepared & Electric Power research Institute, Palo Alto, California, EPRI, EM-5065 February 1987

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13. The Role of Conservation in Least-Cost Planning, Northwest Powe Planning Council, June 10, 1988

14. <u>Discussion Paper of Gas Integrated Resource Planning</u>, Ontario Energ Board, 1991

15. Submissions to Ontario Energy Board re: EBO 169-III

16. Handbook of Evaluation of Utility DSM Programs, Edited by Eric Hirst ar John Reed, Oak Ridge National Laboratory, December 1991

17. Electric-Utility DSM Programs: Terminology and Reporting Formats, Eri Hirst and Carol Sabo, Oak Ridge National Laboratory, October 1991

18. <u>Planning for Uncertainty: A Case Study, Systems Planning and Research</u> Southern California Edison Company, Technological Forecasting and Socic Change, 1988

INTEGRATED RESOURCE PLANNING GLOSSARY

This is a working draft of a glossary to support the Integrated Resourc Planning Guidelines issues in February 1993 by the B.C. Utilities Commissior The glossary will be refined and updated after feedback. Comments ar suggestions are welcome.

Achievable Potential - That portion of the Technical Potential for Energe Conservation that could be achieved by a given set of DSM programs.

Action Plan - A component of IRP, describing utility actions in the short term (about two years) to meet the supply and demand objectives of the integrated resource plan.

Avoided Cost - The cost of the next utility supply resources for meetir demand. This concept has been used as a yardstick for testing individual DS and non-utility supply options, but it is becoming less important as the IR process develops comprehensive packages of DSM and supply resources.

Bidding - A tendering process designed to compare and evaluate non-utilit supply resources. In some cases DSM resources are included in the process.

Demand-Side Management (DSM) - Deliberate effort to decrease, shift c increase energy demand. Utilities develop DSM "programs" to encourag customers to enact DSM "measures". Because of measurement difficulties ar uncertainty about consumer behavior, DSM programs must be carefull "evaluated" before and after implementation to determine their full impacts. **Economic Potential** - That portion of the Technical Potential for Energ Conservation that would occur if all energy using technologies were replace with market ready substitutes that maximize economic benefits using a "socic discount rate" and Social Cost.

Energy Conservation - Reduction in energy consumption due to efficienc improvements in energy using technologies (e.g. more efficient light bulb) Sometimes this definition is extended to include behavioral changes in th way technologies are used (e.g. turning off unneeded lighting).

Energy Conservation Potential - Potential Energy Conservation due treplacing existing technologies with more efficient market reactechnologies. This concept has sub-categories: Technical Potential, Economi Potential, Achievable Potential.

Externality - A cost or benefit that is experienced by a third party, as consequence of a transaction between two other parties. (e.g. A sells fuel t B for consumption in B's car, thereby polluting the air breathed by C.)

Free Rider - A party who receives some form of incentive (e.g. grant, lc interest loan) for a DSM action that they would have undertaken without th incentive. **Free Driver** - A party who undertakes DSM actions as a result c the program but do not participate in the program for fear of administrativ hassle.

Gross Energy Demand Forecast - The amount of energy required from energy supply resources after accounting for external factors changing energy demar and assuming that there will be no extra DSM than that which alread exists.Integrated Resource Planning (IRP) - A planning process, used b regulated energy utilities, that equally compares options that involv changes in supply resources and changes in energy demand. The outcome of the process is an "integrated resource plan" (usually covering 15 to 25 years and an Action Plan (usually two years). Least-Cost Conservation Suppl **Curve** - A graph showing the energy saving of individual efficiency measure on the X-axis and the total cost-per-unit-of-energy-saved on the Y-axis.Los **Opportunity Resources** - Energy DSM or supply resources with "life-cycl cost" benefits that, if not exploited promptly, are lost irretrievably c rendered much more costly to achieve. Examples include cogeneratic opportunities when renovating a pulp and paper mill and extra insulation whe building a new house.Multi-Attribute Analysis - A method which allows fc comparison of options in terms of all attributes which are of relevance t the decision maker(s). In IRP, common attributes are financial cost environmental impact, social impact and risk.Net Energy Demand Forecast The Gross Energy Demand Forecast less the effect of all DSM. No-Losers Tes - Evaluation of DSM resources in order to identify those that would nc result in an increase in energy prices, thereby ensuring that Nor See Total Resource Cost Test, Utility Cos Participants are no worse off. Test.**Non-Participants** - Parties that, because they have not participate in DSM, may be worse off if such measures lead to increased energy prices.Social Cost - Cost determined from a social perspective as oppose to a private perspective. All externalities should be included, if thei monetization is feasible. Stakeholder Collaborative - A public involvemer process associated with IRP. Stakeholders are defined as groups whos interests are affected by the utility planning process. Representatives c key stakeholder groups work together with the utility's staff in collaborative to seek consensus and compromise in the production of the utility's integrated resource plan. The commitment is not full-time, bu collaborative members may find themselves involved in a process that involve occasional meetings and background work over several years.Technica **Potential** - Energy Conservation occurring if all technologies were replace with the most energy efficient market ready substitutes, regardless c cost.Total Resource Cost Test - Evaluation of DSM resources in order t identify those that have a net benefit to society (see Economic Potential ar Avoided Cost). DSM resources meet this test if their net benefits ar sufficient to compensate all Non-Participants. See No-Losers Test, Utilit Cost Test.Utility Cost Test - Evaluation of DSM resources in order t identify those that have a net benefit to the utility. See No-Losers Test Total Resource Cost Test.

APPENDICES

- 1. BIBLIOGRAPHY OF STANDARD REFERENCES FOR INTEGRATED RESOURCE PLANNING ("IRP")
- 2. Glossary of Terms

Appendix D - Queens Printer List, Consequential Legislative Amendments for reading see Decision copy