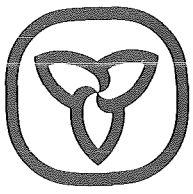
REVIEW UNDER THE ENVIRONMENTAL ASSESSMENT ACT

prepared by Ministries and Agencies of the Province of Ontario



Province of Ontario

MINISTRY OF THE ENVIRONMENT

REVIEW
of the
ENVIRONMENTAL ASSESSMENT

CLASS ENVIRONMENTAL ASSESSMENT
"PROGRAM ENVIRONMENTAL ASSESSMENT DOCUMENT"
MINOR TRANSMISSION LINES AND TRANSFORMER STATIONS (NEW OR UPGRADED) AND COMMUNICATIONS TOWERS

EA File No. 2-75-0001-000

1980 ?

submitted by
ONTARIO HYDRO

Review prepared pursuant to Section 7(1) of
The Environmental Assessment Act, 1975

By Ministries and Agencies of the Provincial Government

SEPTEMBER 1980
PROVINCE OF ONTARIO

The following is a list of Ministries that contributed towards this Government Review. The name of the contact person for each Ministry is also listed:

Ministry of Agriculture and Food	Mr. D. Gallagher
Ministry of Colleges and Universities	Mr. S. T. Orlowski
Ministry of Community and Social Services	Mr. M. Basich
Ministry of Correctional Services	Mr. M. J. Algar
Ministry of Culture and Recreation	Ms. J. Simonton
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Ministry of Energy	Ms. D. Saxe
Ministry of the Environment	Mr. R. W. Houldin
Ministry of Health	Mr. B. L. Miranda
Ministry of Housing	Mrs. P. Grundland
Ministry of Industry and Tourism	Mr. S. Lau
Ministry of Labour	Mr. B. Spinner
Ministry of Natural Resources	Mr. D. Johnstone
Ministry of Northern Affairs	Mr. A. Morpurgo
Ministry of Revenue	Mr. J. Tait
Ministry of the Solicitor General	Mr. R. Philippe
Ministry of Treasury and Economics	Mrs. C. Lonero
Ministry of Transportation and Communications	Mr. D. E. McFarlane

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RECOMMENDATION

Pursuant to Section 5(1) of The Environmental Assessment Act, it is recommended that:

a) The Environmental Assessment be accepted; and

b) The undertaking be given approval to proceed subject to the conditions given on pages 23 to 26 of this review.

Note: Anyone having questions regarding the review, please contact the review co-ordinator, Mr. Russ Houldin, Ministry of the Environment, Environmental Assessment Section, Environmental Approvals Branch, 135 St. Clair Avenue West, Toronto (416) 965-3198.

EXPLANATION OF TERMS

The Act: refers to The Environmental Assessment Act, 1975; unless otherwise specified.

EA: the Environmental Assessment document for which acceptance under the Act is being sought.

EAB: the Environmental Assessment Board.

MCR: the Ministry of Culture and Recreation.

MOE: the Ministry of the Environment.

MOH: the Ministry of Housing.

MNR: the Ministry of Natural Resources.

MTC: the Ministry of Transportation and Communications.

Hydro: Ontario Hydro, which is the proponent of the undertaking.

kV: Kilovolt, which is 1000 volts.

Class EA: an EA prepared for a Class of similar projects of relatively small scale, rather than each project individually. (See Appendix II for a full explanation).

The Reviewers: refers to the Government Ministries that took part in the review of the EA.

The Guidelines: the Site Restoration and Construction Guidelines, which are part of this EA.

OUTLINE

This review is comprised of five parts:

Part A: Introduction and Overview, provides some background to the preparation of this review, describes the Class EA and a proposed addition to it and presents the overall perspective of the reviewers on the undertaking.

Part B: Issues for which Conditions of Approval are Recommended, discusses major issues which require that conditions be placed on the approval of the undertaking.

Part C: Other Issues, indicates those issues for which acceptable resolutions have been obtained by the submission by Ontario Hydro of various additional materials.

Part D: Conclusions, Recommendations and Recommended Conditions of Approval, sets forward the reviewers' conclusions and recommendations regarding the approval of the undertaking and the appropriate conditions to be placed on that approval.

Part E: Appendices, presents further comments which must be taken into account by Hydro in finalizing its Draft Site Restoration and Construction Guidelines, together with explanatory and background material to this Class EA.

PART A - INTRODUCTION AND OVERVIEW

1. The Government Review

This is the Government review of the Ontario Hydro Class EA for minor transmission facilities, submitted for approval to the Minister of the Environment on June 12, 1978. Further supplementary submissions by Ontario Hydro were added as addenda to the environmental assessment on September 21st, 1978, January 17th, 1979 and February 15th, 1980.

The review is intended generally to assist in clarifying for the decision-makers under the Act and the public the issues raised by the undertaking. For those unfamilar with the Act and its provisions, Appendix III gives details of the purpose of and requirement for the review and the decisions to be made under The Environmental Assessment Act.

Appendix II provides a discussion of the concept of "class" environmental assessments.

Appendix IV sets out a brief history of the various additional submissions received for this EA.

2. Description of the Class EA

Ontario Hydro submitted the "Program Environmental Assessment Document", under review here in its revised form (as of April, 1979), in order to meet the requirement imposed by a condition in Exemption Orders OHE-5, OHG-7 and OHL-12 to submit such a document before April 1, 1978. This document, therefore, deals with a class of projects, formerly exempted from the provisions of the Act by the above three Exemption Orders. Until the approval for this Class EA process is given, the projects which fall within the class definition given below will continue to be carried out in accordance with Exemption Order OH-21, which is a consolidation of the above three Orders, and which expires on December 31, 1980.

The class definition is as follows (the words in italics are slight changes from the wording in the EA):

a) The planning of, the acquisition of property for and the design and construction of a minor transmission line and/or a minor transformer station and/or a communication tower and the subsequent operation and maintenance of these facilities.

Minor transmission lines include all transmission lines longer than 2 km (*about* 1.25 miles) which:

- are capable of operating at a nominal voltage level no higher than 115 kV; *or*

- are capable of operating at a nominal voltage level higher than 115 kV and which are shorter than 8 km. (*about* 5 miles).

Minor transformer stations include those stations whose nominal operating voltage level is not less than 115 kV and not more than 230 kV. (Where a station has more than one voltage level, the highest level is used to determine whether or not the project is covered by this class definition.)

b) The planning, design and construction of a minor transmission line and/or a minor transformer station and/or a communication tower on property previously acquired and the subsequent operation and maintenance of these facilities. Such property may have been acquired prior to proclamation of The Environmental Assessment Act, 1975 or subsequent to that time but for a different specific use.

c) The planning, property acquisition, design and construction required to modify or upgrade a transmission line, and the subsequent operation and maintenance of a revised line where:

- the work requires replacement of poles or towers (other than angle poles or towers) and/or changes in the right-of-way; *and*,

- the revised line is capable of operating at a nominal voltage level of at least 115 kV.

d) The planning, property acquisition, design and construction required to modify or expand a transformer station, and the subsequent operation and maintenance of the revised station where:

- an extension of the site is necessary; *and* ,

- the revised station is capable of operating at a nominal voltage level of not less than 115 kV and not more than 230 kV. (Where a station has more than 1 voltage level, the highest level is used to determine whether or not the project is covered by this class definition.)

3. A Proposed Future Addition to the Class

In addition to the above, the reviewers consider it appropriate to include within the class those projects currently covered by Exemption Order OHF-6 for new transmission line taps of less than 2 km in length which are capable of operating at a nominal voltage level of at least 115 kV. The reviewers recognize that these projects are usually of a very minor nature but recommend this addition for the following reasons:

- as a matter of consistency, since the modification or upgrading transmission lines of less than 2 km is already included in the above definition;
- it will not impose any additional administrative or planning burden on Hydro over and above the requirements of Exemption Order OHF-6, since Hydro's approach to the planning of such projects is the same as that described in the Class EA; and,

- it is reasonable to allow the potentially affected public (and Government Ministries and Agencies) to have the ability to "screen" such projects for the occasional one which may have significant environmental effects.

Since October 1976 when Exemption Order OHF-6 was approved, circumstances and public awareness have changed. In response so have Ontario Hydro procedures. Accordingly, it would be in order for Ontario Hydro to consider a formal request to amend this Class EA and Exemption Order OHF-6, so that these new transmission line taps of less than 2 km in length would in future be planned and implemented in accordance with the procedures of this Class EA.

4. Special Considerations in the Review of a Class EA

In any EA, a judgement must be made on the significance of the undertaking under consideration. In submitting a Class EA, the judgement of the proponent is that the implementation of most projects within the class does not entail significant enough environmental effects to merit an individual EA. In reviewing whether this is the case, criteria to be applied to the review of a Class EA are:

a) Does the Class EA provide enough information to support the view that the separate projects within the Class are likely to have environmental effects which are relatively insignificant and narrow in extent?

b) For a project within a class, are there effective "bump-up" provisions to ensure that, where project-specific factors may create particularly significant environmental effects, a full individual or project-specific EA will be submitted?

c) Will following the procedures proposed in the Class EA ensure that the planning of all projects within the Class will be carried out in an environmentally sound manner consistent with the purpose and approach embodied in The E.A. Act? More specifically:

i) Does the EA document clearly specify that the planning/ decision-making process for the projects included within the class will examine adequately those matters set out as the content requirements for an EA, in S.5(3) of The Act?;

ii) Does the EA provide reasonable assurance that the proponent is committed to carrying out projects within the class in accordance with the planning/decision-making process? Since the statements made by the proponent in the EA are legally binding, the process must be described in a clear and unambiguous fashion; and,

iii) Does the planning process set out in the EA provide a reasonable opportunity for involving in the planning the public and affected Government Ministries and agencies?

5. Overview

In consideration of the criteria discussed in 3, above, it is the recommendation of this review that the EA be accepted as a satisfactory basis to make the decision on approval and that the undertaking be approved with Conditions.

This recommendation is made in light of the revised EA document, the draft "Site Restoration and Construction Guidelines", which are part of the EA, the document "Property Policies and Practices for High Voltage Transmission Line Rights-of-Way Station Sites, August 22, 1977", and the history of discussions between Ontario Hydro and MOE, as the co-ordinator of the Government review. At the time of the initial review, beginning on June 12, 1978, several issues were identified as major deficiencies in the EA. Subsequent discussions have resolved the major points of contention, however, and the remaining outstanding issues can be acceptably dealt with through

Conditions on the approval of the undertaking. (See Appendix IV for an outline of the history of the discussions).

It is a characteristic of Class EAs that they must satisfy the Government and the public that the future planning for projects within the particular class will conform to certain principles, as discussed above.

This characteristic necessitates an agreement in the first place between Government Ministries and Agencies and Hydro, and in the second place by the public, that the planning process outlined in the Class EA is adequate. The need for agreement amongst Government Ministries resulted in the discussions on major issues, following the initial submission of the EA by Hydro for acceptance of the EA document and approval of the undertaking. With the publication of this review the public have the opportunity to express their views on Hydro's proposed planning process for the class of projects covered by the approval being sought.

PART B - ISSUES FOR WHICH CONDITIONS OF APPROVAL ARE RECOMMENDED

1. Ministry, Agency and Public Involvement

The commitments made by Hydro for involving Provincial Ministries and Agencies in the planning of projects are generally adequate. The flow chart in Figure 3-2 of the EA indicates that all "interested or affected" Ministries will be contacted at stage 3.3.4 in the Hydro planning process, which is immediately following the delineation of the study area and prior to the development of the "Scope of Study" document. This is an appropriate point at which contact should be made but the determination as to whether a Ministry is interested or affected appears to be left to Hydro. However, in the text on page 12 of the EA, the impression is left that all Ministries will be contacted for each project. The reviewers consider that the latter position is the more appropriate. Thus, Hydro will be required to contact all Provincial Ministries for each project, unless alternative arrangements are worked out on an individual basis with particular Ministries.

In addition, MOH is concerned that Hydro must consult with any of the affected Local, Regional, District or Metropolitan municipalities. Although the EA indicates that such agencies are likely to be included as part of the "external" study groups convened following the writing of the Scope of Study document, it is important that municipalities be contacted in all cases and that this should not be left to Hydro's discretion. Similarly, in the stage immediately preceding the delineation of the area of study, when some basic environmental data is collected, Hydro should take note, in all cases, of environmentally sensitive areas that have been identified in Official Plans.

With respect to other Provincial Agencies, the Niagara Escarpment Commission should be consulted in all cases where facilities may be placed on lands that fall within its

jurisdiction. When the Proposed Plan for the Niagara Escarpment is formalized (hearings are currently being held on it) Hydro should take account of the provisions of the Plan in the planning and design of projects. Conservation Authorities must also be consulted where lands within their jurisdiction may be affected. In both cases consultation should occur at the same time as for Provincial Ministries and affected municipalities (i.e. Stage 3.3.4).

On the flow chart Hydro indicates certain "specific public" representatives which it will consider inviting to be on the "external working committee" for a particular project. A "specific public" type not indicated by Hydro as potentially a member of one of the external working committees is that of groups concerned for the protection of heritage resources, such as Local Architectural Conservation Advisory Committees. Where such a Committee exists, Hydro should invite a representative of the Committee or, of some other group which is focused on heritage resource concerns (if such a group exists), to be on its own external working committee for the project in question.
Condition 1 formalizes the above points.

2. Notification of the Public and of Provincial Ministries and Agencies

As with the general provisions for public and agency involvement, the notification procedures given in the EA are generally satisfactory, but there remain a few specific points which need to be addressed more precisely.

First Notification

The EA says that a public announcement will be made at the Announcement of the Study stage of a particular project within the class (3.3.4). It is not clear whether or not

the public will be provided with the same information as the Provincial Ministries (that is: the system needs; the options; and the area that is proposed to be studied). Also, which members of the public will be notified, - and by what methods - is not specified.

While there is, justifiably, a large area of discretion as to which members of the public should be contacted and how this should be done, as a minimum, those members of the public living in the study area should be contacted by the appropriate means. Those on the perimeter of the study area can be contacted according to the discretion of Ontario Hydro.

The information given to the public and to other Government Agencies in the first notification should be the same as that given to the Provincial Ministries, but, in addition, the public should be told that the project is being planned according to this Class EA approval and they should be informed of their rights under this approval. In particular, they should be informed of their right to have Hydro "bump-up" the project, if, by the end of the study process, they are not satisfied.

Final Review and Notification

While it is implied in the text of the EA that, as a minimum, those to be involved in the final review of the specific project, once established (Stage 3.5), will be those Provincial Ministries and Agencies that are interested in the project and the directly affected public, this is not explicitly stated. Thus, the reviewers recommend that this shall indeed be the case.

In addition, it is recommended that there be a minimum 30 day period between the final notification of the affected public, Ministries and Agencies of the selected alternative

and the commencement of property acquisition or construction. This is in order that a final consideration may be given to the possibility of "bumping-up" the project to a full individual EA. Referring to the flow chart in Figure 3.2 of the EA, "final notification" is interpreted as taking place immediately following the orange hexagonal symbol in the lower right of the chart, labelled "Alternative Selected".

In the matter of the manner of this final notification and what information should be provided in such notification the EA is vague. Thus it is recommended that the minimum information to be made available to interested Ministries and Agencies and the directly affected public shall be: the precise location of the facility; the environment to be affected; the expected impacts on the environment; the way in which the proponent evaluated the impacts and the alternatives; and, the proposed mitigation procedures.

The reviewers think that it would be of benefit to have the study process and results summarized in a report form covering at least the matters discussed above, at the time of the final notification, so that there is available to those receiving the final notification a complete and concise description of the chosen project and how it came to be chosen.

It is anticipated that the format and content of these reports will be similar to the Environmental Reports which have already been submitted pursuant to various Exemption Orders. These latter reports may be inspected at the offices of the Environmental Approvals Branch of MOE in

Toronto and of the Region of MOE in which the particular project is planned.

As for the final notification itself, by whatever means is chosen, it should provide at least: a description of the selected alternative, including location; the name of someone from whom further information may be obtained; a date by which comments must be received; and, a reference to the above report, along with the places where it may be viewed or from where it may be obtained.

Subsequent to the elapse of the 30 day period following the final notification Hydro will file the "study documentation" mentioned in the EA (page 13) with MOE. This documentation is purely to allow the Class EA to be monitored. In most cases it is likely that this documentation will consist of the report prepared for the final notification.

Condition 2 deals with these matters.

3. Site Restoration and Construction Guidelines

These Guidelines are referenced in the EA (page 15) and initially it was Ontario Hydro's position that they were merely a "reference document" and not a part of the EA. As a result of the process of discussions, however, Hydro has agreed that the Guidelines form an integral part of the EA. This position, and the Guidelines themselves, are acceptable to the reviewers.

It should be noted that Hydro also intends to use the Guidelines for the design and construction of transmission projects not covered by this class approval. While it is not possible to give such a general approval to the Guidelines in the context of the present review, the reviewers acknowledge that the guidelines are appropriate for use in

all transmission facility construction activities, subject to the monitoring provisions recommended in Condition 3, as discussed below.

Nevertheless, as acknowledged in the Guidelines, it is essential that the Guidelines, like the Class EA itself, be subject to continued monitoring and scrutiny for possible improvements. Indeed, it is the understanding of the reviewers that Hydro's intention in calling the present document a "draft" set of Guidelines is to allow for minor changes which may be suggested by this review to be incorporated into a "finalized" version. Hence, the reviewers recommend that this requirement be formalized and that Hydro undertake a monitoring study to improve the Guidelines as experience is gained with specific projects. The Guidelines will also be re-evaluated along with the Class EA document at the end of the period described in Condition 4.

Appendix I contains some relevant comments on the Guidelines which Hydro must take into account as it finalizes the Guidelines and in the course of monitoring and improving the Guidelines. It should be noted that the main significance of Conditions 3 and 4 for the Guidelines is to: (1) set up a framework within which such comments will be incorporated into Hydro's finalized Guidelines, and (2) to provide for a continuing long-term dialogue between Hydro and other Government agencies and the public with respect to the content and implementation of the Guidelines.

Condition 3 recommends that Hydro monitor the use and content of the Guidelines, beginning with their finalization, following this review. The Condition also specifies a period of 3 months following the approval of this class for the Guidelines to be finalized.

4. Re-evaluation of the Class EA

A class approval represents an approval in advance for certain projects, if a certain planning process is followed. Since such a process is quite general and must cover essentially hypothetical circumstances, it is important to analyze the performance of the Class EA over that period of time, to assess the strengths and weaknesses of the process to build any lessons learned from the experience into an amended and resubmitted Class EA document.

Consequently, it is recommended that the Class EA be resubmitted for approval, with appropriate changes in light of experience, four years after the initial approval.

This requirement is formalized in Conditions 4 and 5.

5. Noise Impacts

Generally the concerns of Provincial Ministries and Agencies with respect to particular projects will be addressed by Hydro through the process of consultation discussed in 1 and 2 above. On the issue of noise impacts, it is the view of the reviewers that Hydro should commit itself to certain policies in all cases. The MOE promulgated in 1978 a Model Municipal Noise Control By-Law, which sets out in the publications within the By-Law various limitations of controlling noise for optional use by municipalities. As an Agency of the Provincial Government, it is appropriate for Hydro to observe the By-Law provisions and guidelines, as if they were logically applied to the project site irrespective of whether a particular municipality has chosen to adopt them.

To this end, Hydro and MOE have been working towards a Protocol on noise control (available in the Public Record), which is now in its final stage of drafting.

Condition 6 requires that projects carried out under this EA be planned and constructed in accordance with the final version of the noise Protocol.

6. Land Acquisition Practices

The EA does not discuss in any depth the land acquisition policies of Hydro and the appeal procedures available to the public in relation to them. In response to the identified need for a fuller explanation of these matters, Hydro has submitted a reference document entitled, "Property Policies and Practices for High Voltage Transmission Line Rights-of-Way and Station Sites", dated August 22, 1977.

The policies and practices set forward in the above document and elsewhere in the EA dealing with the treatment of property owners are acceptable in their present form to the reviewers. Therefore, the reviewers are of the opinion that the above document must be considered a part of the EA and not a reference document. However, changes to the document would not mean that the class as a whole would have to be resubmitted for approval.

Condition 7 requires that Ontario Hydro will follow in the policies and practices on land acquisition given in the above document.

PART C - OTHER ISSUES

1. Nature of the Issues Discussed in this Part

As discussed in Part A, this review has been written following a history of discussions between MOE and Hydro on the document which was originally submitted for review under The Act (See Appendix IV). In order to give the reader a complete picture of how the reviewers interpret the final document under review here this Part discusses how the document deals with issues which were identified as deficiencies in Hydro's original Class EA ("Program Environmental Assessment Document", March 1978).

2. Illustrative Environmental Effects

The EA document itself contains no description of the likely environmental effects that will occur due to the projects covered by the Class EA. While it is recognized that it is impossible to give an exhaustive listing of such effects and that there are dangers in becoming too tied to a "checklist" or "cookbook" approach to environmental assessment, some indication of the type and range of environmental effects is needed. This is in order to assess the general contention that the projects within the class are of an "insignificant" sort with respect to their environmental effects.

An extensive description of the sorts of effects associated with the projects covered by the Class is given in the Site Restoration and Construction Guidelines, however. The development of these descriptions in the Guidelines has satisfied the reviewers with respect to this issue. Further modifications to this "list" of illustrative environmental effects are outlined in Appendix I.

3. "Need" for Facilities

Throughout the review, various concerns have been raised regarding the establishment of the "need" for any of the projects to be planned within this undertaking. The term "need" is put in quotation marks to emphasize that the reference is to the narrow concept of a "need" to overcome an identified inadequacy in Hydro's system: whether a project earmarked to respond to a perceived inadequacy is in fact needed (in the normal, broader sense) is, of course, a matter to be determined by the environmental study process. In particular, the role of the load forecast and of the alternatives of conservation and local initiatives in energy planning have been raised as issues. The Ministry of Energy has also raised a concern that it has a statutory obligation under The Power Corporation Act to review the "need" for Hydro facilities.

In the present version of the EA, the first set of concerns is met in two ways.

Firstly, it is clear from the flow chart that the "need" is established in relation to: socio-economic conditions; federal/provincial policies and directives; industry standards and criteria; and technological trends and data. Policy directives to take account of conservation or of other energy options, therefore, are a significant factor in the determination of the "need" for any particular project. The process of actually determining which project should be subject to further study under the Class EA process at what point in time is still contingent upon Hydro's internal load forecasting and review procedures. It should be noted, however, that these procedures are also subject to the indirect influence of government policies on, for example, the actions municipalities, or even local public utilities, may take in relation to conservation measures or other energy alternatives.

Secondly, the flow chart for the planning process clearly indicates that the "need" for a particular project is continually reassessed throughout the life of the planning of the project as knowledge of its environmental effects are learned and in accordance with changing circumstances.

The review of "need" by the Ministry of Energy occurs in three ways. General directives by the Ministry form part of the "situation input" when Hydro is identifying system requirements. More project specific review can take place during the first notification step and, if a project is not "bumped" out of the class, then a final review occurs when Hydro applies for an Order-in-Council to go ahead with the project.

4. The "Bump-up" Mechanism

The "bump-up" mechanism refers to the way in which it will be decided whether a particular project should proceed on the basis of the approval granted under this Class EA or is significant enough that a full individual environmental assessment be submitted and reviewed.

The EA states:

> "If there is expressed opposition to the selected project, Ontario Hydro will re-evaluate the rationale for the selection in light of the opposition. If the re-evaluation satisfies the specific opposition and results in no further opposition, then the project will be considered acceptable and will become an undertaking as above. If re-evaluation does not eliminate all expressed opposition, Ontario Hydro will submit the project for individual review and approval under the Act" (emphasis added).

This is a change from the original mechanism proposed by Ontario Hydro which said that Hydro would submit the project for individual review and approval under the Act should the project be "considered unacceptable", by Ontario Hydro. This position was considered to be too discretionary.

By way of contrast, the provisions for "bump-up" in the approved MTC Class EAs*, involves giving the Minister of the Environment the ability to decide whether a project should remain within the Class or not, should the matter be brought to his attention. The position taken by Hydro is that if it is unable to satisfy all expressed opposition on re-evaluation, then it is prepared to initiate "bump-up", thus removing the need for the matter to be brought before the Minister of the Environment. This position is acceptable to the reviewers.

5. Environmental Study Methodologies

The EA leaves open the possibility of using different study methodologies for different projects. Some concern was initially expressed that this was too vague for a Class EA and that Hydro should specify more clearly the way in which it would go about its studies. Hydro's concern was to avoid binding itself to methodologies which may become out of date.

As a compromise, Hydro has given examples of the kinds of study methodology which it commonly uses and has referenced standard sources for such techniques, while retaining the right to use more advanced and suitable ones as they are developed.

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* On March 5, 1980, 7 MTC Class EAs received Approval with Conditions under The Act. See EA Update, Vol. V, No. 1 (April, 1980), for details.

It should also be noted that there is a commitment to the general technique known as "constraint mapping", whereby areas of identified "constraints" (for example, a marsh or class I agricultural land, etc.) are overlaid on a map of the study area in order to obtain a picture of where the best locations for facilities might be. This technique is acceptable to the reviewers. As experience is gained, Hydro will be able to change the ways in which the impacts that are represented on the constraint maps are identified and evaluated.

6. Class Definition

As worded in the original Class EA document, the class definition left open the possibilities of extending an existing transmission line of up to 500 kV rating for an indefinite distance or upgrading a transformer station to 500 kV.

Ontario Hydro agreed that it was not the Corporation's intent to cover such large projects by this Class EA process and the definition has been modified accordingly. Existing transmission lines may be upgraded to 500 kV under the Class EA but new 230 or 500 kV transmission lines are not covered by this approval. Transmission stations which involve extensions are only included in this class if they have a voltage of between 115 and 230 kV, inclusive.

7. The Handling of Polychlorinated Biphenyls (PCBs)

PCB's have commonly been used as a coolant for transformers because of their high thermal stability, although the EA says that their use has now been discontinued by Hydro.

The EA document itself does not discuss PCB's and their handling, but the Guidelines provide a description of the

way that spills of oil and other hydrocarbons, such as PCB's, are handled. The Guidelines also state that in general, PCB's are handled in a manner in accordance with other pieces of Federal and Provincial legislation. For example, oil containing PCB's from older transformers has to be stored safely until approval to dispose of it is obtained under The Ontario Environmental Protection Act.

The reviewers find the EA's treatment of the handling of PCBs to be acceptable.

PART D - CONCLUSIONS AND RECOMMENDATIONS

1. Conclusions

The Class EA and the accompanying Site Restoration and Construction Guidelines and "Property Policies and Practices for High Voltage Transmission Line Rights-of-Way and Station Sites", August 22, 1977, outline the planning and construction process that Ontario Hydro intends to employ in the planning of the minor transmission facilities covered by the class definition and which have been deemed environmentally acceptable by the planning process outlined in the EA. Although the reviewers have some reservations regarding the process, they believe these concerns can be satisfactorily resolved through Conditions of Approval. Therefore they are of the opinion that the documents are an acceptable basis for a decision to be made on approval and that the undertaking should be approved subject to Conditions.

2. Recommendations

Based upon the above conclusion, formed in the course of reviewing the Class EA, and having regard to the purpose of the Act and the content requirements of Section 5(3) of The Act, the reviewers are of the opinion that the information in the Class EA of which the "Site Restoration and Construction Guidelines" forms an integral part, is sufficient and satisfactory to enable a decision to be made as to the approval of the undertaking. Therefore, it is recommended that the environmental assessment be accepted (S.9 of The E.A. Act).

Having regard to the purpose of the Act, the nature of the undertaking and the environmental assessment, it is recommended that the undertaking be given approval to proceed subject to Conditions (S.14) of the Act.

3. Recommended Conditions of Approval

The approval applies only to the undertaking as described in the Ontario Hydro EA (April 1979, Revision 1) except that the class definition given in Part A, Section 2 of the review shall apply, provided that the projects are planned and implemented in the manner outlined in the EA and in the "Site Restoration and Construction Guidelines" and subject to these Conditions of Approval.

1) At the "Announcement of the Study" stage (stage 3.3.4 in the process outlined in the EA) for a particular project, Ontario Hydro shall notify all of the Provincial Ministries. However, particular Ministries may reach agreements, in writing, with Ontario Hydro that they need not be contacted, at this stage, for certain types of projects. Any such written agreement shall be filed in the Public Record for this undertaking. At this stage Hydro shall also:

   a) notify all potentially affected Local, Regional, District and Metropolitan Municipalities, and identify any affected environmentally sensitive areas specified in the Official Plans of such Municipalities (such Municipalities are to be considered as part of the "public" in the rest of these conditions);

   b) where the study area includes any part of the area under the jurisdiction of the Niagara Escarpment Commission, notify the Commission and take account of any features of the Proposed Plan for the Niagara Escarpment;

c) notify any Conservation Authorities which have jurisdiction over watersheds that may be affected by a project; and

d) include amongst the specific public groups which may be invited to take part in Ontario Hydro's external working committee for a project a group concerned with the protection of heritage resources, where one exists.

2) Ontario Hydro shall:

a) Include in the notification given to the directly affect and interest public and Provincial Agencies of a proposed study in a particular area (stage 3.3.4 in the Class EA process, the "Announcement of the Study"), information as to the system need for the proposed project, the options available, the area that Ontario Hydro proposes to study and the rights given to the public under this Class EA approval or advice as to how this information may be obtained;

b) when giving final notification to the Provincial Ministries and Agencies and the public that a specific project has been established (the beginning of stage 3.5 in the Class EA process), ensure that the Provincial Ministries and Agencies which have indicated a continuing interest in the project and the directly affected public are informed;

c) prepare an Environmental Report which shall contain those matters referred to in Condition 2(d), and be made available to those receiving the final notification pursuant to Condition 2(b); and

d) include in the notification pursuant to Condition 2(b) a description of the selected project and advice that comments on the selected project should be received by a specified person by a given date and that the Environmental Report prepared for Condition 2(c) is available for inspection at specific locations and that it describes the precise location of the selected project, the environment to be affected, the expected effects on the environment, along with the way in which Ontario Hydro evaluated the impacts and the alternatives and the mitigation procedures that are proposed; and,

e) begin the property acquisition for or the construction of any project only after at least 30 days have expired following the date on which final notification of the specific project was given to interested Provincial Ministries and Agencies and the directly affected and interested general public.

3) Ontario Hydro shall:

a) take account of the comments made in this review regarding the "Site Restoration and Construction Guidelines" in preparing an amended version of it not later than three months following the date on which approval of the undertaking is received under the Act;

b) develop a monitoring program on the effectiveness of the "Site Restoration and Construction Guidelines" in its application to specific projects, in order to improve it; and,

c) submit the Guidelines, including any changes made during the monitoring program to the Minister of the Environment for approval at the same time as, and as part of, the submission of the revised Class EA as set out in Condition 4.

4) Ontario Hydro shall carry out a re-evaluation of the Class EA covered by this approval, make appropriate revisions, and submit the revised environmental assessment for review under the Act by January 1st of the fourth complete year after approval.

5) This approval shall terminate on the later of:

   a) the earlier of,
      i) the date on which approval of the undertaking under a new EA submitted as a result of the re-evaluation required by Condition 4 is received under the Act, and
      ii) January 1st of the fifth complete year after approval; or,

   b) such later date as the Minister specifies by Notice in writing to the proponent and in the Ontario Gazette.

6) Ontario Hydro shall, for this undertaking, adhere to the provisions of the Protocol for Community Noise Control. The final version of the Protocol shall be submitted to the Environmental Approvals Branch of MOE for placing in the Public Record no later than 30 days after the date on which approval of the undertaking is given.

7) Ontario Hydro shall comply with "Property Policies and Practices for High Voltage Transmission Line Rights-of-Way and Station Sites, August 22, 1977" as amended from time to time by Ontario Hydro.

8) File any amendments and improvements to the Guidelines referred to in Condition 3 or the policies referred to in Condition 7 with the Environmental Approvals Branch of the Ministry of the Environment for placing in the Public Record.

APPENDIX I
COMMENTS TO BE NOTED IN FINALIZING THE SITE RESTORATION AND CONSTRUCTION GUIDELINES

Hydro must take account of the following comments in finalizing the text of the Site Restoration and Construction Guidelines and in the process of implementing them.

1. Consultation with Other Ministries and Agencies

MNR is concerned about the definition of "sensitive areas" used by Ontario Hydro and the way in which Hydro intends to handle stream crossings. Similarly, there are concerns with respect to consultation with the MOE regarding the disposal and handling of hazardous chemicals. In the next paragraph the reviewers set out their understanding of the provisions of the Guidelines in these regards.

The Site Restoration and Construction Guidelines state on page I-15 that if any Provincial Ministry or Agency desires to be kept informed of final facility design, before construction begins, then Hydro will undertake to do so. The text of the EA document along with Condition 1 of this review ensures that all Ministries and Agencies will be contacted early in the planning. A Ministry which wishes to ensure that its concerns are dealt with throughout the planning, design and construction of a project is therefore protected by the provisions of the proposed Class EA process. The most appropriate time for a Ministry or Agency to request that Hydro keep them informed is following final notification of the selected project (see pages 10 and 11 of this review).

2. Implementation of the Site Restoration and Construction Guidelines

The reviewers note that in some respects the Guidelines are vague in relation to the field judgements that will be made on particular environmental matters. It is further noted that the value

of the Guidelines essentially depends upon the site-specific field implementation of them. However, the Guidelines do set out a process by which responsibility is assigned for the field work, and trade-offs are made. This will be among the matters closely scrutinized when the Class EA is re-evaluated according to the provisions of Conditions 4 and 5.

To make clear Hydro's commitment to the implementation of the practices and procedures described in the Guidelines the statement of policy on Page I-1 should be changed to indicate that it is Hydro's policy "to develop and implement" sound environmental practices.

3) Control of Nuisance Vegetation

The Guidelines note that attempts will be made to control the spraying of herbicides (p. II - 68 and 73). The best way of "controlling" them is to avoid their use. Alternative means involve removing nuisance vegetation by mechanical methods, such as cutting off branches, trimming or uprooting bushes, etc. The Guidelines should specify that such means will be considered before the use of herbicides.

4) Graded Areas and Stabilization

The Guidelines do not say how long graded areas will be allowed to be exposed before temporary stabilization methods are used (e.g., protecting earth piles with rock fragments). If the exposure is allowed to occur over too long a period of time, then there may be problems of dust and erosion.

Similarly, the Guidelines make reference to having to stop or modify activities due to inclement weather. Contingency measures should be taken to minimize erosion from graded areas, in the event of bad weather (especially heavy rainfall).

5) Machine Use in Sensitive Areas

It should be noted that in especially sensitive areas consideration should be given to substituting extra labour for machinery so that less damage is done.

6) Heritage Resources Concerns

The Guidelines do not mention any impacts on heritage resources nor how such impacts may be mitigated. Sections shall be added to the relevant parts of the Guidelines to describe possible impacts, cross-refer such impacts to the activities which may cause them and describe mitigation measures. The advice of MCR shall be sought in adding these Sections and in the best means of instructing field crews to be sensitive to heritage resource impacts.

A suggested definition of "heritage resources" to be added to the Glossary is:

- archaeological sites and artifacts;
- properties, buildings and structures of historical, architectural, or cultural importance; and
- the man-made or modified characteristics of the visible surroundings of the area in question whether wild, rural, or urban (referred to generally as the cultural landscape).

In relation to the discussion on "Appearance - Stations" (p. III-17), it would be appropriate to consider the compatibility of the station itself to the surrounding area, not just the compatibility of the hoardings during construction. Factors to be considered in judging compatibility include; the height of the station, the siting, the scale, the type of station and the colour of materials used in its construction. In the same vein it would also be important to consider the landscaping around the station: eg. types of plants, fences and gates, in a manner compatible with the locale. This would be true in both urban and rural situations.

7. Noise Pollution from Construction

The discussion of construction noise impacts makes no mention of Hydro's policy towards the Model Municipal Noise Control By-Law. In accordance with proposed Condition 6, which requires that Hydro adhere to the "Protocol for Community Noise Control" for projects planned under this EA, the Site Restoration and Construction Guidelines should make a reference to the Protocol and commit Hydro to its provisions in respect of construction activities.

APPENDIX II
WHAT CLASS EAs ARE

A brief explanation of the concept and general content requirements of a Class EA is provided below. For more detail on class environmental assessments, the Ministry of the Environment's publication entitled: General Guidelines for the Preparation of Environmental Assessments; (Second Printing, February 1979), should be consulted. This document is available by mail from the Ontario Government Publications Centre, 5th Floor, 880 Bay Street, Toronto, Ontario, M7A 1N8, or in person from the Ontario Government Bookstore at the same address (price $4.00 including postage).

Undertakings can be put foward on either a "Specific (or "Individual") or on a "Class" basis.

A "Specific" (or "Individual") undertaking is one put forward by the proponent based on a decision-making process which has already been carried out; the environmental assessment document contains a description of that process. Most environmental assessments are likely to fall into this category.

A "Class" undertaking is one in which the proponent asks for approval of the undertaking, based on a decision-making process which is described now (in the Class EA document), but which is proposed to be carried out in the future.

The use of Class EAs is a method of dealing with certain types of projects which have important characteristics in common. Such projects are relatively small in scale, recur frequently, and have a generally predictable range of effects which, though significant enough to require environmental assessment, are likely to cause relatively minor effects in most cases.

The EA Act, by allowing flexibility in the way an undertaking is defined, makes it possible to deal with such projects without the necessity of passing each individual project through the formal review and decision-making procedure under the Act, provided that an acceptable planning process is followed.

Projects satisfying the criteria outlined above may be grouped together into a "class". A single formal environmental assessment document is prepared for that class, rather than one for each individual project. The class of projects as a whole is therefore the "undertaking" under The Environmental Assessment Act.

The Class EA describes the planning process which the proponent proposes to follow, each time a project within that class is undertaken in the future.

The Class EA document should outline in general terms a common set of procedures for the planning, design and implementation of the project type. It should also describe, in general terms, the alternatives, and the types of effects which are likely to occur, and how each of these will be dealt with for individual projects within the class. The means of ensuring public access to, and participation in, the process should also be stated.

The document should describe the characteristics (e.g., maximum or minimum size, specified standard designs, etc.), of projects which are to be included in that particular class. The proponent must therefore explain the method by which a project will be "tested" at various stages of the environmental assessment study process, to see whether it still conforms to the description of the class as approved. If indeed it does not conform it will be dealt with by other means, e.g., different Class EA, or a Specific EA; or perhaps it is not significant enough to be subject to the Act.

The proponent should provide for the "elevation" or "bumping-up" if necessary of a particular project from the Class EA category to that of a "Specific" (or "Individual") environmental assessment. The document should explain in what circumstances this would occur and how it would be done. It might occur, for instance, if a particular project appeared to involve severe adverse environmental effects (natural or social), and/or if significant public controversy seemed a likelihood. The procedure and responsibility for determining whether such circumstances exist should be set out in the Class EA.

The Class EA document is submitted and processed like any other EA; the review process includes the possibility of a hearing before the Environmental Assessment Board.

Once the undertaking dealt with in the class document has been approved, and provided that the proponent complies with the approval and any terms and conditions specified in it, projects falling within the class can proceed from planning through implementation, with no further formal applications required under the EA Act.

The class document represents a commitment by the proponent to the government and the public to follow the environmental planning process described in it, each time a project within that class is undertaken. For each project, the proponent will produce a study report. The class document should outline what subjects the study report will cover. The report when complete will be sent to the Ministry of the Environment for information and monitoring purposes. Indeed, it is suggested that the report used for this purpose should be the document used by the proponent as the basis for the decision to proceed with the project, provided that it also contains the information to satisfy Class EA requirements. In this way, the natural environment, social, economic and technical concerns are likely to be most effectively integrated, and internalized in the proponent's decision-making process.

APPENDIX III
THE GOVERNMENT REVIEW

1. The Requirement For and Purpose of the Review

The Government Review is prepared to fulfill the requirements of Section 7(1)(a) of the Act, which states that:

> "Where an environmental assessment of an undertaking is submitted by a proponent to the Minister (of the Environment), the Minister,
>
> a) shall cause a review of the assessment to be prepared; ...".

On direction of the Minister of the Environment, the Environmental Assessment Section of the Ministry of the Environment (MOE) solicited comments from those Ministries and Agencies of the Provincial Government which expressed an interest in reviewing the proposal. This review represents the combined comments of those Ministries and Agencies, co-ordinated by the Environmental Assessment Section.

2. Decisions to be made on the EA and the Undertaking

There are two decisions which must be made under Section 5(1) of the Act. The first concerns the acceptability of the EA itself, and the second is the determination of whether approval to proceed with the undertaking should be given, with or without terms and conditions, or should not be given.

The recommendation on acceptability of the environmental assessment is based on a consideration of the document in light of the purpose and requirements of the Act. In particular, the reviewers have arrived at their recommendation after forming an

opinion on whether or not the information in the document is considered sufficient to enable a decision to be made with regard to the approval of the undertaking.

The recommendation on approval is based on the consideration of the environmental consequences of the undertaking, in the light of the purpose and requirements of the Act. Sufficient information may be available, but the reviewers must decide whether or not they agree with the way in which the proponent, in the EA, has interpreted the information to come to the conclusion that the undertaking should be approved.

For both decisions there are three choices to be made. The first decision involves making a choice among these options:

1) to accept the EA;
2) to amend and accept it; or,
3) to order further research.

The decision to amend and accept is taken where a change in the EA is needed before it can be accepted and the Minister may use an Order to Require Further Research to require the proponent to do such additional work as is needed to enable a decision on acceptance to be made. Any information produced by such work is incorporated into the EA. For the second decision the choices are: to give approval (with or without conditions); or to refuse approval.

Decisions on acceptance and approval are made either by the Minister of the Environment, or by the EAB, and may, as specified in The Act, take one of three routes:

i) The Minister decides on acceptance of the EA, and also decides, subject to approval of the Cabinet, on approval of the undertaking;
ii) The EAB makes both decisions;
iii) The Minister makes the first decision, and the EAB makes the second one.

The factor that determines which route is taken is whether or not a hearing is required by the Minister or the public; and if it is, at what stage of the process.

4. Status of the Review: Not a Decision

This co-ordinated review is the preliminary review of the proponent's EA submission. The review addresses the adequacy of the information presented in the EA and makes recommendations regarding the approval of the undertaking proposed therein. In addition, the review is intended, by means of an interpretation and critique of the EA, to assist the public's understanding of the EA and of the issues identified by the reviewers.

It is important to clarify at this time that the review and the recommendations it contains represents only the preliminary position of the reviewers based on the comments of the Provincial Ministries and Agencies involved in the review. It does not represent a decision and should not be construed as directing the Environmental Assessment Board (EAB) in matters that may come before it. It is only after a consideration of any public submissions received by the Minister of the Environment on the EA or the review, or after a hearing (if one is held) before the EAB, that the decisions on the acceptability of the environmental assessment, and on whether or not to approve this undertaking, will be made. Should a hearing arise, the reviewers reserve the right to revise and update the review in light of submissions received or any new information which arises.

APPENDIX IV
HISTORICAL BACKGROUND TO THIS CLASS EA

In order to meet the deadline for the submission of a program environmental assessment by April 1, of 1978, imposed by a common condition of the Exemption Orders OHE-5, OHG-7 and OHL-12, one copy of the Program Environmental Assessment Document was submitted to Mr. D.P. Caplice, Director of the Environmental Approvals Branch on March 23, 1978. An official letter to the Minister of the Environment requesting approval for the Class undertaking represented by the Program Environmental Assessment Document was received on May 5th, 1978 and additional copies for circulation to the Government Reviewers were sent to the Environmental Approvals Branch subsequently, with the letter advising the Minister that this had been done, on June 12th, 1978.

Copies of this document were circulated to the Government Reviewers and comments were reviewed. It became apparent that there were a number of serious deficiencies in the document originally submitted. Given the nature of a class environmental assessment and in conformity with the approach adopted with the development of MTC's Class EAs, Hydro was contacted about these deficiencies and a meeting was held between Hydro and the Review Co-ordinator on August 16th to discuss them. The following issues were discussed:

- the lack of sufficient environmental detail in describing the class of effects that were produced by the projects described by the documents;

- the need to clarify the status of the Site Restoration and Construction Guidelines;

- the need for more details of Provincial Government Agency's participation in the process (and existing liaison);

- the lack of detail regarding public involvement;

- the need for more details on the environmental study methodologies used by Ontario Hydro;

- the need to clarify the nature of the "bump-up" procedures;

- the value of a concrete example of how the process outlined in the EA document is intended to function;

- the need to refer to Hydro's policies on property acqusition.

Hydro requested that the finalization of the review be delayed pending a submission by Hydro of an addendum of revisions. This addendum was received on September 27th, 1978 by the Environmental Approvals Branch.

During the period of preparation of this addendum a further problem with the EA document was identified; a careful reading of the definition of the class indicated that:

a) there was no upper limit on the voltage level of the line to be "extended";

b) there was no length limit on the line to be "extended"; and

c) although there was an upper limit on the voltage level of the station, it was not clear whether this referred to the voltage level of the station before or after upgrading.

The addendum was circulated amongst the Government Reviewers and additional comments received. Some of the original deficiencies identified by the review team were partially removed by the new material, but issues of significance still remained. Further meetings occurred on December 7, 1978 and January 3, 1979. The issues discussed were:

1. The construction guidelines were not part of the EA submission and the reviewers were not willing to make a recommendation on approval until they had a chance to review the Guidelines and to feel that they were satisfactory.

2. The lack of illustrative environmental effects and mitigation possibilities.

3. The lack of an acceptable "bump-up" procedure.

4. The lack of explanation of the types of study methodologies to be used.

5. The lack of a clear definition of the types of projects covered by the Class.

6. The existing flow chart did not accurately represent the inputs to the "front-end" of the planning process, with respect to the "need" for an individual project.

A further addendum was received on January 22, 1979 by the Environmental Approvals Branch and circulated for review.

The result of this further addendum was that the outstanding major deficiencies were cut down to two:

1) The problem with the Guidelines - i.e., not being considered part of the environmental assessment and not having been accepted by the Environmental Approvals Branch up to that point; and,

2) The lack of illustrative effects associated with the class of projects.

The Guidelines had been given an "interim approval" by the Environmental Approvals Branch as part of the program of phasing-in the application of The Environmental Assessment Act following its proclamation in 1976 but were not at this point considered acceptable. These became the focus of attention for achieving final resolution of all of the outstanding deficiencies identified by the Government review for this Class EA. A series of meetings was held between Hydro and staff of the Environmental Approvals Branch during which several additions to the existing Guidelines were made by Hydro and were reviewed by MOE. These culminated in the submission on February 15th, 1980, by Hydro of "Draft Construction and Site Restoration Guidelines" for inclusion in the review of the Class EA as a whole, following agreement from the Environmental Approvals Branch that the Guidelines were now in an acceptable form for such review.

On February 29, 1980, the draft Guidelines were circulated for review along with revised copies of the program environmental assessment document, incorporating all of the changes that had been made by the two addenda which had been submitted in September, 1978 and in January, 1979.

The present document is the result of the comments received from this review.

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