



RP-2002-0142

IN THE MATTER OF AN APPLICATION BY

ONTARIO POWER GENERATION INC.

TO AMEND ITS LICENCE OBLIGATIONS TO PROVIDE A REBATE TO CONSUMERS UNDER SPECIFIED **CIRCUMSTANCES**

DECISION WITH REASONS

2003 APRIL 4

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IN THE MATTER OF sections 70 and 74 of the *Ontario Energy Board Act*, 1998, S.O.1998, c.15, Schedule B;

AND IN THE MATTER OF Transitional Generation Licence EG-0333, issued to Ontario Power Generation Inc.;

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AND IN THE MATTER OF an application by Ontario Power Generation Inc. to amend its licence obligations to provide a rebate to consumers under specified circumstances.

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BEFORE:

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Bob Betts Presiding Member

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Brock Smith Member

Paul Sommerville Member

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DECISION WITH REASONS

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April 4, 2003

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1.0 Introduction

The Application

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On August 19, 2002, Ontario Power Generation Inc. ("OPG" or "OPGI") filed an application (the "Application") with the Ontario Energy Board (the "Board") pursuant to Part 4, Section 4 of OPG's Transitional Generation Licence (EG-0333) issued by the Board. OPG has applied for an Order determining that the transaction with Bruce Power L.P. ("BP LP") to lease and operate the Bruce Nuclear Generating Stations (the "Bruce Transaction") represents the transfer of Effective Control over the output of the Bruce Nuclear Generating Station ("Bruce NGS").

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1.2 The Proceeding

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On September 19, 2002 the Board issued a Notice of Application, which was published and served in accordance with the Board's direction on September 26, 2002.

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On October 16, 2002 the Board issued Procedural Order No. 1 establishing a preliminary issues list and setting dates for an Issues Conference on October 28, 2002 and an Issues Day held on October 31, 2002.

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Procedural Order No. 2, issued on November 12, 2002, contained the Approved Issues List. It also established a process for interrogatories and responses on the pre-filed evidence. Interrogatories were filed by November 22, 2002 and the Applicant's responses were filed on or about December 9, 2002. Procedural Order No. 2 also made provision for filing of intervenor evidence, and interrogatories on this evidence, but no intervenor evidence was filed.

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The Board invited the federal Competition Bureau (the "Bureau"), by letter of December 6, 2002, to participate in the hearing. The Bureau accepted the invitation by letter of January 22, 2003, supplied written evidence on January 28, 2003, and appeared as witnesses on the opening day of the hearing. The Bureau's written and oral testimony contained evidence on the meaning of the term interdependent behaviour and its application to Canadian antitrust law.

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Many of the documents filed by OPG contained redactions and some were redacted in their entirety. Procedural Order No. 3 was issued on January 23, 2003 ordering OPG to file with the Board unredacted copies of all partially and fully redacted documents. The Board indicated that it would carry out a preliminary review of the relevance of the redacted portions and provide an opportunity for parties to make submissions on the relevance of the redactions and need for confidentiality.

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On January 29, 2003 the Board issued Procedural Order No. 4 which revised the date for commencement of the oral hearing to February 6, 2003.

The Board completed its review of the relevance of redacted documents and issued Procedural Order No. 5 on February 3 ordering OPG to make available to parties unredacted copies of 9 specific agreements, provided that parties were prepared to sign confidentiality undertakings and file them with the Board.

During the course of the hearing, the parties agreed to oral argument. Argument was presented on the following dates: the Applicant's argument-in-chief and the Intervenors' Arguments - February 12, 2003 (Day 4); and the Applicant's Reply Argument - February 13, 2003 (Day 5).

1.3 Participants and their Representatives

Below is a list of participants and their representatives.

Ontario Power Generation Inc. Michael Penny

Patricia Jackson Andrew Barrett

Board Counsel and Staff Pat Moran

David Brown Laurie Klein

Bruce Macodrum

Canadian Manufacturer's and Exporters Inc.

("CME")

Competition Bureau Josephine Palumbo

Consumers Association of Canada ("CAC") Robert Warren

Energy Probe Mark Mattson

Tom Adams

Green Energy Coalition ("GEC")

David Poch

Independent Power Producers Society of Ontario

("IPPSO")

George Vegh

Elizabeth DeMarco

Power Workers Union Andrew Lokan

Vulnerable Energy Consumers Coalition Michael Janigan

("VECC") Judy Kwik

1.4 Witnesses

The Competition Bureau witnesses were.

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Richard Annan Acting Assistant Deputy Commissioner

of Competition, Division A, Mergers

Branch

Mark Ronayne Senior Competition Law Officer, Civil

Matters Branch

The following OPG employees appeared as witnesses:

Colin Anderson Senior Advisor, Regulatory Affairs

Bruce Boland Senior Vice-President, Customer

Solutions

Pierre Charlebois Chief Nuclear Engineer

David Drinkwater Executive Vice-President of Corporate

Development and Legal Affairs

Rumina Velshi Director of Commercial Activities,

Nuclear Strategy and Support

In addition OPG called the following witnesses:

Lawson H. Hunter Stikeman Elliot

Joel Singer Awad and Singer

1.5 Submissions and Exhibits

Copies of the evidence, exhibits, arguments, and a transcript are available for review at the Board's offices. The Board has considered the evidence, submissions, and arguments in the proceeding but has summarized the evidence and the positions of the parties only to the extent necessary to provide context for its findings.

The Board, with industry participation, has developed standards and processes for the electronic regulatory filing ("ERF") of evidence, submissions of parties, Board orders and decisions. This Decision with Reasons will be available in ERF form shortly after initial copies are issued in hard copy. The ERF

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version will have the same text and n	numbered headings as the in	nitial hard copy, but may	be formatted
differently.			

2.0 The Issues

Introduction

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Acting under Section 27 of the OEB Act, 1998 (the "Act"), the Minister of Energy directed the Board on March 24, 1999 to include certain provisions in OPG's licence. These appear in Part 3 - Price Cap and Rebate, and Part 4 - Transfer of Effective Control, of OPG's licence.

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Part 3 of OPG's licence establishes a price cap and rebate mechanism for a period of four years from the date the electricity market opens. The price cap and rebate mechanism sets an annual average price cap of \$38/MWh for a defined quantity of OPG's energy production referred to as the Contract Required Quantity or CRQ. OPG's revenues in excess of this limit on the CRQ amount are remitted to the Independent Electricity Market Operator ("IMO") in the form of a rebate. OPG can reduce the CRQ, and hence the quantum of the rebate derived from it, by satisfying the Board that it has transferred effective control over the output of a generation unit to another party. Effective control over output is defined in the licence to mean control over the timing, quantity and bidding of that output into the Ontario market. Part 3 of OPG's licence also divides Ontario's generation capacity into two tiers. Tier 1 capacity is defined to include all nuclear and hydroelectric generation in Ontario. Tier 2 capacity is defined to include that portion of Ontario's generation capacity that is not part of Tier 1 capacity, and all inter-tie capacity and demand-side bidding.

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Part 4 of OPG's licence sets out the process to be followed in OPG's application to the Board for a finding that it has transferred effective control of the output of a generation unit. Paragraph 4 of Part 4 of the licence provides as follows:

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4. OPGI Application

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(a) OPGI may apply to the Board for:

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(i) a determination of whether a specific transaction by OPGI represents the transfer of Effective Control over the output of a generation unit; and

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(ii) confirmation of:

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(A) the appropriate adjustments, if any, to the CRQ and the Q_h in accordance with paragraph 4 of Part 3 (no adjustments shall be made in the circumstances set forth in paragraph (b) below);

			(B)	subject to paragraph (b) below, the amount of output in respect of which a transfer of Effective Control has occurred; and	48
			(C)	subject to paragraph (b) below, the associated Tier of such output.	49
	(b)			Effective Control of output shall be considered not to have occurred if the nes that:	50
		(i)		nsferee has or obtains, as a result of the transfer, Effective Control over kimately 25 percent or more of either:	51
			(A)	total in service Tier 2 capacity; or	52
			(B)	total in service Tier 1 and Tier 2 capacity;	53
			in each	n case at the time of completion of the transfer; or	54
		(ii)		exist any on-going arrangements which facilitate interdependent behavior en OPGI or a subsidiary of OPGI and the transferee.	55
	dingly, b		e Board	can grant the relief requested by OPG on this Application, the Board must	56
1.				BP LP control over the timing, quantity and bidding into the Ontario om the Bruce NGS;	57
2.				arrangements which facilitate interdependent behavior between OPG or BP LP; and	58
3.				d effective control over approximately 25 percent or more of either total ity or total in-service Tier 1 and Tier 2 capacity.	59
2.2	Tran	sfer o	f Cont	rol	60
OPG's	prefiled	eviden	ce states	that:	61
•				BP LP control over the timing, quantity, and bidding into the Ontario f the Bruce NGS; and	62

• BP LP is the sole licensed operator of the Bruce NGS under a Canadian Nuclear Safety Commission ("CNSC") licence. Also BP LP is the registered market participant in the IMO-administered markets.

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This evidence is uncontroverted. Accordingly, the Board finds that OPG has transferred to BP LP control over the timing, quantity and bidding into the Ontario market of the output from the Bruce NGS.

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2.3 Facilitation of Interdependent Behaviour

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2.3.1 Definition

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As part of the determination of whether there has been a transfer of effective control, the Board has to determine whether there are on-going arrangements which facilitate interdependent behaviour. The term "interdependent behaviour" is not defined in the licence and accordingly the definition of interdependent behaviour was added to the Approved Issues List which was finalized at Issues Day on October 31, 2002.

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2.3.1.1 The Competition Bureau's Evidence

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The Bureau participated as an amicus curiae and took no position on the merits of the Application.

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The evidence of the Bureau was to the effect that the term "interdependent behaviour" is a term of art in the realm of competition law. "It involves firms making decisions (about pricing, service, capacity, output etc.) that are in the joint interest of the firms as opposed to decisions solely based on each firm's own self interest." (Bureau submission page 2, para.5). Thus, the term interdependent behaviour covers a range of actions, agreements, arrangements, or understandings between two or more firms to jointly exercise market power in a way that each finds profitable because of the accommodations each firm affords the others.

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The Bureau's evidence was also that a specific finding of interdependent behaviour must be grounded in a context of market power and facilitating factors.

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According to the Bureau, interdependent behaviour is one way to exercise market power. Market power is the ability of one or more firms to profitably set or sustain prices above competitive levels, or to materially reduce other factors of competition, such as service quality or variety, for a considerable period of time. If the firms in the market do not possess market power, interdependent behaviour cannot successfully take place.

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Market power will exist if the market exhibits certain structural features, or facilitating factors. The Bureau presented a list of market conditions, which if present, would tend to create a context in which

market power could be exerted by key market participants. The Bureau identified high market share enjoyed by market participants, and the lack of ease of entry for new participants as being particularly important.

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Finally, the Bureau gave evidence on the notion of facilitation of interdependent behaviour, or facilitating practices. These are practices that increase the ability of two or more firms to carry out interdependent behaviour. They work by making it easier for firms to reach agreements, monitor them, and punish defectors from agreements. For example, an arrangement between two parties could facilitate interdependent behaviour simply by incenting one of the parties to restrict output to the mutual benefit of both firms. Such an arrangement would be said to facilitate interdependent behaviour even if the output restriction had not yet actually occurred.

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2.3.1.2 OPG's Position

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OPG's definition of interdependent behaviour was developed in the written and oral evidence of Mr. Lawson H. Hunter. He states that "interdependent behaviour" is referenced most frequently in competition policy in the context of merger reviews:

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Although merger laws are focused on preventing the creation or enhancement of market power, whereas the situation before the OEB relates to the creation of a competitive market where market power already existed, the analytical concerns are similar. (Prefiled evidence, Tab 6, page 10)

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He goes on to define interdependent behaviour as:

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Joint or coordinated action by two or more parties that is anti-competitive in nature and has a materially negative effect on the market. (Prefiled evidence Tab 6, page 10)

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Mr. Hunter's submission applied this definition to the arrangements within the Bruce Transaction. His view on whether an arrangement could be said to facilitate interdependent behaviour was different from the view put forth by the Bureau. He states:

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In analyzing whether the SRPs [Supplemental Rental Payments] facilitate interdependent behaviour, I have considered whether the essential elements contained in my recommended definition are met. My definition of interdependence requires joint, anti-competitive action by the parties. In other words, for interdependence to occur, OPG and Bruce Power would have to mutually alter their market behaviour from what it otherwise would be.

In other words, OPG's position is that for an arrangement to facilitate interdependent behaviour it is not enough for one of the parties simply to be incented or caused to take certain actions that benefit all. Such actions must actually be carried out by all the participants and provide benefits to all the parties involved.

In testimony and in argument OPG witnesses and counsel emphasized that the definition of interdependent behaviour could also serve as a *test* for the Board's purpose of determining whether or not any arrangements in the Bruce Transaction *facilitate* interdependent behaviour. In particular, Mr. Penny stated in final reply argument:

Now, Mr. Hunter ... testified that the facilitation of interdependent behaviour must include a consideration of whether there is an effect in the market, whether the effect is material, whether it is adverse, and whether it is anti-competitive. (Transcript volume 5, paragraph 31)

This reasoning parallels Mr. Hunter's conclusion in his prefiled evidence about the Bruce Transaction:

... I have concluded that the Bruce Transaction does not facilitate interdependent behaviour between OPG and Bruce Power. While arrangements between OPG and Bruce Power do exist for various business, safety, or regulatory reasons, they do not represent joint or coordinated action that is anti-competitive in nature and materially harmful to the competitiveness of Ontario's electricity market. (Prefiled evidence, Tab 6 page 3)

This position was qualified somewhat by Mr. Hunter under cross-examination by Board Counsel where Mr. Hunter agreed that he did not intend his definition to exclude anything included in the definitions from the Competition Bureau documents.

2.3.1.3 Board Findings

The parties agreed that the structural features, or facilitating factors of a market are important to consider. While there was some disagreement regarding the extent to which the list of features presented

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by the Bureau are present in the Ontario market, it is clear that a significant number of them are present. These include high concentration of market share, and lack of ease of entry.

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The Board notes that OPG's proposed definition of interdependent behaviour appears more narrow than the definition offered by the Bureau. A narrower definition, such as OPG's, runs the risk of excluding implicit understandings or explicit agreements between the two parties that do not appear to require joint action in order to arrive at their anti-competitive effect. An example of an understanding that might be excluded by OPG's definition would be an implicit understanding to allocate clients in the bilateral markets. Another example would be an explicit agreement between market participants where an anti-competitive effect arises because one of the parties derives an incentive from the agreement to withhold output in a manner that profits both firms. Even though these two examples appear to fall outside OPG's definition, they are examples of interdependent behaviour. Therefore the Board finds that an appropriate definition for interdependent behaviour for application in this proceeding should be broad enough to cover the range of actions, agreements, or understandings specified in the Bureau's evidence.

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After considering all of the evidence presented in this proceeding the Board finds the following to be a suitable definition for the purposes of this proceeding:

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Interdependent behaviour refers to explicit or implicit understandings, agreements or arrangements, or conduct or actions among firms in the market to jointly exercise market power or limit competition on price, quality, service, variety, or any other dimension of competition, in a manner that is profitable for each of them only because of the accommodating cooperative conduct of the others.

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The primary purpose of this proceeding is to determine if there are on-going arrangements between OPG and BP LP that facilitate interdependent behaviour. In other words, it is not necessary to find the actual occurrence of interdependent behaviour, only that it is made easier, i.e. facilitated, by on-going arrangements.

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2.3.2 On-Going Arrangements

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The record establishes that there are on-going arrangements between OPG and BP LP. These arrangements can be categorized into three groups as outlined below. In addition to the arrangements between OPG and BP LP, there are a range of protective measures that OPG has undertaken to address concerns relating to whether these arrangements could facilitate interdependent behaviour. They are also outlined below.

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Group 1: Ancillary Services Agreements

In several areas OPG and BP LP have entered into agreements to provide services to each other that are required for the safe and efficient operation of nuclear plants. These range from Laundry Services to Reactor Fuel Channel Inspection and Maintenance.

Group 2: Joint Committee Representation, Joint Cooperation and Other Joint Arrangements

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The Amended and Restated Lease Agreement provides for a Liaison Committee in which representatives of OPG and BP LP will provide oversight and direction regarding the lease agreement, and resolve disputes. The ancillary service agreements also provide for Coordinating Committees in respect of the services they deal with. There are several agreements that provide for the joint development and transfer of intellectual property, joint cooperation and collaboration on broad technology-related matters as well as regulatory coordination. Finally there are many agreements relating to miscellaneous matters such as employee transfers, pension investments, and so on.

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Group 3: Financial Arrangements

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There are several agreements relating to financial transfers including the Supplemental Rent Payments as provided for in the Letter Amendment to the Amended and Restated Lease Agreement, and the Contract for Differences for Forced Outages.

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OPG has instituted protective measures which are designed to prevent information about BP LP that flows into OPG as a result of the arrangements from influencing OPG's market conduct. The measures include the Competition Legislation Compliance Program, the Code of Business Conduct, the Guide for Exchange of Information between OPG and Bruce Power Staff, and the Bruce Power Ring-Fence plan.

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2.3.3 Do the Arrangements Facilitate Interdependent Behaviour?

2.3.3.1 Group 1: Ancillary Service Agreements

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OPG states in its prefiled evidence that the ancillary services agreements are in place out of necessity, to avoid duplication of infrastructure and effort, and because the necessary skills are in short supply. OPG acknowledges that its services personnel will get information about BP LP operations, and, in particular, outages that could conceivably be of commercial value. OPG highlighted the NOSS [Nuclear Operating Support and Services] Transitional and Technical Support and Services Agreement, the Reactor Fuel Channel Inspection and Maintenance Services Agreement, and the Steam Generator and Special Inspection and Maintenance Services Agreement as particularly relevant. However, OPG asserts that the commercial value of this information to OPG is mitigated by the IMO's publication of aggregate outage information in its System Status Reports and System Adequacy Assessments. Moreover, OPG asserts that its protective measures preclude inappropriate use of the information.

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GEC's final argument highlighted the above-mentioned three ancillary service arrangements as being of particular concern. GEC points out that OPG's planned and forced outages are coordinated with OPG's Energy Markets staff. The services of the OPG staff who carry out this coordination and maintenance for OPG are shared with BP LP under the agreements. GEC's cross-examination of OPG's first witness panel (Transcript, volume 1, paragraphs 754-803) elicited evidence that these service personnel were active in coordinating windows of opportunity for maintenance services with both BP LP and OPG Energy

Markets. In GEC's view the seriousness of these information flows with respect to the facilitation of interdependent behaviour are demonstrated by the evidence of Mr. Hunter, who stated:

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... given the degree of information that was to be shared, and, in particular, that was going to come into OPG's hands, I thought it was essential that there be protections with respect to the use and sharing of that information. (Transcript, volume 3, paragraph 137)

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Other intervenors also recognized the concern arising from the flow of information between OPG and BP LP, and the need for protective measures.

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2.3.3.2 Group 2: Joint Committee Representation, Joint Cooperation and Other Joint Arrangements

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OPG acknowledges in its pre-filed evidence (pages 44-46) that the provisions for Joint Committee Representation could also be of concern with respect to the facilitation of interdependent behaviour. However, in OPG's view, this concern is fully mitigated by the protective measures it has implemented, in particular the Bruce Power Ring-Fence. All information received by OPG as a result of joint committee participation will be inside this Ring-Fence.

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In GEC's cross-examination of OPG's second witness panel (Transcript, volume 2, paragraphs 251-267) the testimony identified several cooperative arrangements between OPG and BP LP including the agreement to cooperate on regulatory matters, and several trade associations to which both OPG and BP LP belong.

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2.3.3.3 Group 3: Financial Arrangements

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Two of the agreements provide for financial payments between OPG and BP LP that are contingent on market prices for electricity, and on forced outages at BP LP. The Bureau's written submission indicated that "Payments, such as the Bruce supplemental payment, may ... be anti-competitive where [they result] in the company receiving the payment restricting supply below levels it would otherwise provide in order to capture the payment."

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Regarding the Supplemental Rent Payments paid by BP LP to OPG, Mr. Hunter, observed in his testimony that, although the level of the supplemental rent is contingent on an average price for the year at or above \$30/MWh, the payment level is fixed and does not otherwise depend on the market price. Therefore, only if the average price appeared close to \$30/MWh would the supplemental rents provide any incentives for price manipulation. Since OPG would benefit and BP LP would lose if the average price came in *above* \$30/MWh, and these gains and losses are reversed for a price *below* \$30/MWh, any price manipulation incentives faced by the two companies go in opposite directions.

The Contract for Differences for Forced Outages (the "CFD") presents a <i>prima facie</i> concern as it links financial payments between OPG and BP LP to forced outage events at BP LP. The cross-examination of Mr. Drinkwater by Board Counsel explored some basic features of the payments that could flow between OPG and BP LP in the event of a forced outage. Mr. Drinkwater indicated that OPG would not object if the Board were to prohibit the renewal or amendment of the CFD.	115
2.3.3.4 Protective Measures: Relevance and Adequacy	116
As mentioned above, OPG has adopted protective measures to deal with the new competitive market in general, and the relationship with BP LP in particular. They are:	117
• Letters to OPG employees on Bruce Power and Commercially Sensitive Information (Interrogatory - Attachment I 15.13);	118
• The Bruce Power Ring-Fence plan (Prefiled Evidence, Tab 8 and Interrogatories - Attachments I 6.5 and I 15.13);	119
• The Guide for Exchange of Information between OPG and Bruce Power Staff (Interrogatory - Attachment I 6.7);	120
• The Code of Business Conduct (Interrogatory - Attachment I 1.24); and	121
• The Competition Legislation Compliance Program and Compliance Guideline for Preventing Anti-Competitive Behaviour. (Interrogatory - Attachment I 15.16)	122
The Board's summary of these measures follows.	123
The letters to OPG employees discuss the new competitive relationship between OPG and BP LP, and the need to safeguard commercially sensitive information.	124
The purpose of the Ring-Fence plan is to make sure that all information received as a result of the Bruce Transaction and the related agreements are passed only to OPG employees, representatives and/or agents inside the Ring-Fence. The ring-fenced data also includes information exchanged in committees that principally facilitate the Service Agreements.	125
An exception to the above rule is made for safety and environmental information, which may pass from BP LP to OPG employees outside the Ring-Fence plan.	126

Ethics Officer.	Also OP	ected violations of the Ring-Fence plan are to be investigated by OPG's Chief PG will conduct an internal audit of the completeness and security of the s time, an internal audit has not yet taken place. (Transcript, volume 2, paragraphs	127
The following g	groups o	f employees are currently inside the Ring-Fence:	128
•	Ring-Fe	ence team;	129
٠	Office of	of the CIO - Nuclear Systems and Document Management;	130
•	Nuclear	r:	131
	•	Engineering and Modifications (including Engineering Services, Nuclear Safety and Technology Department, Inspection Services, and Special Projects)	132
	•	Strategy and Support - Nuclear Commercial Activities, Environment Section, and Training Support & Services Division	133
	•	Nuclear Operations - Outage Support, Emergency Preparedness, and Radiation Protection;	134
•	Nuclean	r Waste Management;	135
•	Electric	city Production - Plant Life and Integrity;	136
•	Nuclean	e - Contracts Office (including Asset Management Office), Financial Planning, r Controller's Office, Risk and Assurance Services (selected individuals), and Chain (selected individuals);	137
•	Law Di	vision;	138
•	Corpora	ate Real Estate (selected individuals); and	139
•		Resources (selected individuals from Labour Relations, Pension and Benefits, rporate Security)	140

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OPG has a number of internal controls in place to limit access to ring-fenced data. OPG has a Ring-Fence Administrator who manages and administers the implementation of the Ring-Fence Plan, and all violations of the Ring-Fence plan are reported to the Administrator. Hard copies of Ring-Fenced data are physically secured under lock and key, and IT systems that include Ring-Fenced data are password protected or have other controls that will limit access. OPG has requested BP LP and their representatives to provide Ring-Fenced data to OPG employees through OPG approved communication channels only. Also, representatives of shared services providers such as New Horizon System Solutions and Hydro One, are requested to provide ring-fenced data to OPG employees within the Ring-Fence only.

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In addition, OPG has informed its employees and agents that are outside the Ring-Fence not to seek out ring-fenced data. If these employees (and/or agents) come into possession of ring-fenced data, they are requested not to use it. OPG employees that move outside the Ring-Fence (i.e., employee's current position has been moved outside the Ring-Fence and/or employee is in a new position outside the Ring-Fence) are required to review and return the ring-fenced data to OPG employees inside the Ring-Fence.

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Furthermore, OPG employees within the Ring-Fence have been informed not to seek out ring-fenced data beyond what is required to perform their specific tasks under the service agreements. These employees have also been informed not to share ring-fenced data in their possession with other staff within the Ring-Fence unless there is a legitimate need for sharing the information pursuant to the BP LP service agreements.

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Ring-fenced data is to be shared only if it directly relates to an employee's position and will be used only for the purpose for which it was provided.

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OPG has provided and will continue to provide training on the Ring-Fence plan to all employees within the Ring-Fence, as well as affected employees throughout OPG, particularly employees within OPG Energy Markets.

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The Business Code of Conduct prohibits inappropriate disclosure of confidential information.

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The Guide for Exchange of Information between OPG and Bruce Power Staff was given to OPG employees on November 15, 2001. This brochure outlines the types of information that OPG employees can and cannot share with BP LP employees and their representatives.

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OPG's Competition Legislation Compliance Program and Compliance Guideline for Preventing Anti-Competitive Behaviour outline the mandatory procedures and guidelines for complying with the federal *Competition Act* and Ontario's *Electricity Competition Act*.

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On the relevance of the protective measures, OPG's position is that they fully offset any risk that information gained by OPG as a result of the arrangements could be misused to the benefit of OPG and BP LP and to the detriment of the market. OPG submits that the Board should consider the on-going arrangements together with the protective measures to determine if the on-going arrangements will facilitate interdependent behaviour.

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For the adequacy of the protective measures, OPG argues that the protective measures are sufficient to prevent the facilitation of interdependent behaviour. Therefore, in OPG's view, the arrangements between OPG and BP LP do not facilitate interdependent behaviour when considered in light of the presence of the protective measures.

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CAC agrees with OPG that the Board should look at the on-going arrangements and the protective measures as a whole. It submits that the service agreements and other arrangements between OPG and BP LP are necessary for safety and operational reasons, and it could not have been the intent of the Market Design Committee (the "MDC") or the Minister to preclude these arrangements as aspects of decontrol transactions.

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GEC, on the other hand, argues that the protective measures are irrelevant to the question of whether the on-going arrangements facilitate interdependent behaviour.

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As for the adequacy of the protective measures, GEC argues that the protective measures will not be effective or adequate. GEC is concerned that the protective measures are based upon trusting that individuals will continue to respect the goals of the protective measures even in the face of counter-incentives, and the fact that detection of misbehaviour is difficult. Also, the Ring-Fence affords no protection that BP LP will not abuse information it may glean about OPG as a result of their various interactions. Finally, the Ring-Fence is a behavioural solution to a structural problem. GEC cites the Competition Bureau's preference for structural solutions to structural problems, and asserts that the structural problems here will not be resolved until the key remaining service arrangements in the Bruce Transaction are brought to an end.

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CAC submitted that while GEC's position contains speculation that the protective measures might not be effective, there is no evidence that they will not be effective. Several Intervenors expressed concern that once the Board decides this matter with respect to the Bruce Transaction, the potential exists for the effectiveness of the protective measures to erode. Energy Probe asked "whether or not, in the future, there are adequate arrangements put in place so that the public and the Board can ascertain whether it does facilitate interdependent behaviour". GEC argued that "The players will change, corporate cultures will change, market pressures will change."

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These concerns led Intervenors to request various forms of relief, including licence conditions requiring that:

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• OPG perform regular audits of protective measures;

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 The audit be performed, overseen or reviewed by a third party; and 	
• The Board receive the results of the audit.	15
Although witnesses for OPG asserted that extra protections of this sort were not necessary, under cross-examination they did not object to them.	159
2.3.4 Board Findings	160
2.3.4.1 The Group 1 and Group 2 Arrangements, and Relevance of Protective Measures	16
In the Board's view the record establishes that there have been and continue to be a very considerable array of arrangements between the parties which address virtually every aspect of the operation of the Bruce NGS. The Board is of the view that, in order to determine if these arrangements facilitate interdependent behaviour, the Board must examine the arrangements together with the protective measures. When determining whether an electrical wire can cause an electric shock, one does not ignore the fact that the wire is insulated. To do so would lead to the absurd conclusion that an insulated wire can cause an electric shock.	165
2.3.4.2 The Group 1 and Group 2 Arrangements, and Adequacy of Protective Measures	163
Since the time the Bruce Transaction was entered into on May 11, 2001, OPG has provided an extensive regime of technical and operational support to BP LP which covers virtually every element of plant and facilities operation. OPG's on-going support has extended into personnel and payroll activities, the provision of Information Technology services, joint representation on operating committees, joint technology development, and cooperation on regulatory concerns. The pervasiveness of OPG's support is hard to overstate.	164
It is clear that given the range of services provided by OPG under the arrangements, it could develop detailed knowledge of the BP LP operation, including prior knowledge of planned outages at the Bruce NGS. Prior knowledge of planned outages is important because that information could enable OPG to bid into the market with higher prices, safe in the knowledge that a substantial mitigating quantity of	16

Partly mitigating the concerns expressed above is the fact that there has been, and will continue to be, a progressive reduction in the degree of OPG's support of BP LP. Many of the agreements and services provided by OPG in the early stages of the transition in control, have lapsed, and have not been renewed.

production would not be available to the market. Moreover, given the closeness of the OPG BP LP relationship, it would not be hard to imagine the two companies becoming, in effect, strategic partners to the point where their activities in several dimensions, including bilateral markets, become coordinated.

In some instances BP LP has assumed roles initially taken up by OPG; in other cases services have migrated to non-affiliated third party providers. In the case of engineering services, OPG person-hours devoted to Bruce activities have decreased considerably, and there is every indication that that trend will continue. Of special relevance in this regard is the intention of OPG to divest itself of its inspection services activities. When this is accomplished, a significant area of OPG engagement will pass to an unaffiliated third party provider.

167

The Board recognizes the need for OPG's role in support of the Bruce facilities. While non-nuclear generation assets can be serviced, maintained, and repaired by broadly available engineering support, the nuclear assets cannot. In fact, it appears that OPG is currently the only organization with the requisite expertise and experience to provide the support needed. CNSC identified this in its decision to license BP LP.

168

The Board is satisfied that OPG's protective measures are currently sufficient to prevent the facilitation of interdependent behaviour. However, the Board agrees with the intervenors that additional controls should be added. To accomplish this, OPG's licence must require:

a) The implementation of and compliance with an on-going and effective Ring-Fence, to prevent the inappropriate handling and use of information exchanged between OPG and BP LP.

169

b) The effectiveness of the Ring-Fence be evaluated by an internal (OPG) audit on an annual basis.

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c) The Board of Directors of OPG to annually appoint an external auditor to review the internal audit and provide an opinion on the audit methodology and effectiveness.

171

d) That the Internal Audit and the external auditor's opinion be provided to the Board in two forms: first a Confidential filing of the full, unredacted document, and secondly, a copy for public consumption redacted to remove any information that the Board agrees may be redacted under its confidential filing guidelines.

172

e) OPG will be required to report to the Board any material changes to the list of active agreements or the terms of the active agreements.

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The Board acknowledges the concern expressed by some parties about the possibility of an OPG employee being transferred from a position inside the Ring-Fence, to a position in the Energy Markets group, where knowledge of ring fenced information could conceivably influence OPG bidding considerations or pricing in bilateral markets. With respect to this concern, the Board notes OPG's assertion that even if such a transfer occurred, it would be highly improbable that one person, acting in violation of several protective measures could influence OPG's bidding policies.

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To address this concern, the Board will require OPG to report on each occasion that a person transfers	1/5
directly from inside the Ring-Fence to a position in the Energy Markets group in the annual audit report to the Board so that the Board can assess the significance of such transfers.	
	176
The agreements that exist between OPG and BP LP were clearly the catalyst for concern over interdependent behaviour. That concern was expressed by many and acknowledged by all, including OPG, and certainly shared by the Board. To address these concerns the Board expects OPG to continue to work towards reducing, in a safe and prudent manner, the level of support it provides to BP LP.	
	177
2.3.4.3 Group 3 Financial Arrangements	
	178
These arrangements are dealt with separately because the protective measures are not relevant to them.	
	179
The Board accepts the evidence of OPG that any incentives created by the Supplemental Rental	
Payments are limited to a range around an average annual price of \$30/MWh, and that such incentives run in opposite directions for the two parties. Therefore the Board finds that the Supplemental Rental	
Payments do not facilitate interdependent behaviour.	
	100
In the Board's view, the Contract For Differences For Forced Outages ("CFD") payments, combined with a rise in market prices for energy resulting from a forced outage, could provide both OPG and BP LP	180
with incentives to artificially extend the length of a forced outage. These incentives would facilitate	
interdependent behaviour. However, the Board notes that this agreement expires on the second	
anniversary of Market Opening, and that OPG agreed under cross examination not to renew or amend it. Accordingly the Board will include a licence condition requiring that the CFD not be renewed or	
amended. Also, the Board has taken the step of informing the IMO and the Market Surveillance Panel of	
the existence of this agreement.	
	181
2.3.4.4 Conclusion	
	182
The Board finds that, taken as a whole, the arrangements existing between BP LP and OPG do not	
represent on-going arrangements which facilitate interdependent behaviour.	
	183
2.4 Has BP LP Obtained a Market Share of 25% or More?	
	184
Licence condition: Part 4, S. 4(b)(i) says that a transfer of Effective Control of output shall be considered not to have occurred if the Board determines that:	
not to have occurred if the Board determines that.	
(i) the transferred has an obtains as a regult of the transfer Effective Control area	185
(i) the transferee has or obtains, as a result of the transfer, Effective Control over approximately 25 percent or more of either:	

	(A)	total in service Tier 2 capacity; or	186
	(B)	total in service Tier 1 and Tier 2 capacity;	187
in each case at	the time	of completion of the transfer. Only (B) applies as nuclear is in Tier 1.	188
OPG's evidence	e shows	that:	189
•	Total T	Tier 2 capacity as at May 12, 2001 is 17,858 MW;	190
•	Total T	Tier 1 capacity as at May 12, 2001 is 16,898 MW;	191
•	Therefo	ore Total Tier 1 plus Tier 2 capacity is 34,756 MW;	192
•	BP LP	capacity as at May 12, 2001 is 3,160 MW; and	193
•	Therefo	ore BP LP capacity is about 9% of the market.	194
OPG's evidence	e on this	point has not been challenged, and is accepted by the Board.	195
Based upon the unchallenged evidence of OPG, the Board finds that the Bruce Transfer has not resulted in BP LP (the Transferee) obtaining Effective Control over 25 percent or more of either the total in service Tier 2 capacity or the total in service Tier 1 and Tier 2 capacity.			196

3.0	Adjustments to CRQ and Q _h	197
3.1	CRQ Adjustment Values	198
them w Licens of valu	oard has examined CRQ and Q _h values supplied by OPG for the Bruce NGS and has compared with the CRQ and Q _h values for Bruce NGS held by the staff of the Energy Licensing Group, sing and Applications Branch of the Ontario Energy Board. The Board confirms that these two sets less for the Bruce NGS are in agreement and are the values to be used for computation of the ge Price and the Rebate amount as provided for in the OPG licence, Part 3, sections 1 and 2.	199
3.2	Effective Date for Adjustments to CRQ and Q _h ?	200
3.2.1	Board Findings	201
develo functio	espect to the timing of the CRQ and Q_h adjustments, while the control measures were not fully ped upon the date of market opening, the Board finds that effective protective procedures were oning from the commencement of the Bruce Transaction, and that the CRQ values therefore shall usted retroactively to May 1, 2002.	202

4.0	Во	ard Order	203
The Bo	oard Ord	lers that:	204
The fo	llowing	conditions shall be added to OPG's Interim Generation Licence:	205
1.		hall implement a Ring-Fence plan in accordance with the plans referred to in Section 8A G's pre-filed evidence, and as detailed more fully in Interrogatory Responses I 6.5, and I	206
2.		hall conduct an internal audit of the Ring-Fence plan prior to March 1, 2004. This audit over the period from Market Opening to December 31, 2003.	207
3.	OPG s	hall annually conduct internal audits of the Ring-Fence plan thereafter.	208
4.	audit c	o April 1st of every year, an external audit shall be conducted to review OPG's internal of the Ring-Fence plan. The external auditor shall report its findings annually to OPG's of Directors. The external audit shall include:	209
	a.	A review and evaluation of OPG's internal audit group's protocols for auditing the Ring-Fence plan; and	210
	b.	A review of OPG's internal audit of the design, implementation, completeness, and security of the Ring-Fence plan.	211
5.	OPG s	hall make Status Reports to the Board within 30 days of:	212
	a.	Any additional agreements entered into with BP LP;	213
	b.	Any amendments, replacements or extensions of existing agreements with BP LP; and	214
	c.	Expired agreements under the Bruce Transaction.	215
6.		o May 1st of every year of this licence, OPG shall submit an annual Confidential Audit to the Board. The report shall include:	216

	a.	A review of the design, implementation, completeness and security of the Ring-Fence plan by OPG's internal audit group;	217
	b.	A list of all the violations of the Ring-Fence plan with an explanation as to the type of violation, the employee's position and department or group, and whether the incident represents a repeat violation by a given employee;	218
	c.	Recommendations regarding corrective action where the Ring-Fence plan has been violated;	219
	d.	The external audit report;	220
	e.	A list of the number of employees that have moved outside the Ring-Fence to a new position in OPG (whether the position is permanent or temporary) The Report shall identify the old position and department or group that was in the Ring-Fence plan, and the new position and department or group in which the employee now works.	221
7.	Report Confide	December 31st of every year of this licence, OPG shall submit an annual Public Audit to the Board for the public record. The report shall include the above findings from the ential Audit Report, however, the report shall be redacted to remove personal information of other information that the Board agrees may be redacted under its confidential filing mes.	222
8.		entract for Differences for Forced Outages agreement between OPG and BP LP shall not wed at its expiry on the second anniversary of Market Opening.	223

5.0 Cost Awards	224
The Board received submissions and claims for costs from the following parties:	22:
• IPPSO	220
• VECC	22
• AME	22
• IPPSO	229
• GEC	230
Energy Probe	23
• CAC	23:
• AMPCO	23:
The Board received an objection from OPG with respect to the cost claim of AMPCO, as well as a reply submission from AMPCO.	23
In its submission OPG raised concerns with respect to AMPCO's claim on a number of issues including the lack of participation by AMPCO, the fact AMPCO did not file final argument, as well as cost submissions for charges that were not attributable to this proceeding.	23.
The Board has carefully reviewed all the submissions, including the supporting documentation filed with the Board.	230
The Board acknowledges that intervenors may be required to spend a great deal of resources in preparation of their intervention, while at the same time be uncertain of the matters that the Board will	23

wish to hear until Issues List is set. Upon issuance of the Issues List, intervenors may be required to re-evaluate their level of participation. Such was the case with AMPCO. The Board is appreciative of the fact that intervenors whose issues are no longer before the Board reduce their level of participation,

leading to a reduction of hearing-related time and costs to all parties. However, costs incurred in the preparation of the intervention are eligible for a cost award.

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The Board was assisted by the contributions of the parties and awards IPPSO, VECC, AME, GEC, Energy Probe, CAC and AMPCO 100% of their reasonably incurred costs in connection with their participation in this proceeding, subject to assessment by the Board's Cost Assessment Officer. The Board notes that AMPCO, in their reply submission, have reduced the hours of Mr. Kenneth Snelson to 21.5 hours. The Board directs the Cost Assessment Officer to review the costs claimed and to make adjustments as necessary to ensure that they are consistent with the Board's Tariff.

239

The Board orders that the eligible costs of intervenors, as assessed by the Cost Assessment Officer, shall be paid by Ontario Power Generation Inc. upon receipt of the Board's Cost Order.

240

The Board's costs of and incidental to the proceeding shall be paid by Ontario Power Generation Inc. upon receipt of the Board's invoice.

DATED at Toronto April 4, 2003

Bob Betts Presiding Member On behalf of the Hearing Panel