United States
Department of Energy

Office of Electricity Delivery and Energy Reliability

NRG Power Marketing, Inc.

OE Docket No. EA-220-B

Order Authorizing Electricity Exports to Canada

Order No. EA-220-B

August 23, 2005

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I. BACKGROUND

Exports of electricity from the United States to a foreign country are regulated and require authorization under section 202(e) of the Federal Power Act (FPA) (16 U.S.C.§824a(e)).

On May 3, 2000, the Department of Energy (DOE) issued Order EA-220 authorizing NRG Power Marketing Inc. (NRG) to export electric energy to Canada. On September 24, 2002, in Order EA-220-B, DOE renewed NRG's authority to export electric energy; that Order expired on September 24, 2004. On May 31, 2005, NRG again applied to renew its authority to export electric energy to Canada for a five (5) year term.

NRG proposes to purchase surplus electric energy from electric utilities and other suppliers within the United States and to export this energy on its own behalf to Canada. The energy to be exported would be delivered to Canada over the international electric transmission facilities presently owned by the following:

Basin Electric Power Cooperative
Bonneville Power Administration
Eastern Maine Electric Cooperative
International Transmission Company
Joint Owners of the Highgate Project
Long Sault, Inc.
Maine Electric Power Company
Maine Public Service Company
Minnesota Power, Inc.
Minnkota Power Cooperative
New York Power Authority
Niagara Mohawk Power Corp.
Northern States Power Company
Vermont Electric Power Company, Inc.
Vermont Electric Transmission Co.

Notice of the NRG export application was placed in the *Federal Register* on June 8, 2005, (70 FR 33463) requesting that comments, protests, and petitions to intervene be submitted to DOE by July 8, 2005.[1] A timely Motion to Intervene and comments were filed by ISO New England, Inc. (ISO-NE).

II. INTERVENTION AND COMMENT

ISO-NE

ISO-NE is the entity that serves as the Regional Transmission Organization (RTO) for New England and has the responsibility to ensure that energy transfers to Canada do not jeopardize the reliability of the New England bulk transmission system. ISO-NE supported granting NRG's

[1] As indicated in the notice of application, DOE utilizes provisions of the Federal Energy Regulatory Commission's (FERC) Rules of Practice and Procedure (18 CFR 385.211 and 385.214) for purposes of processing petitions to intervene, comments, and protests in electricity export proceedings.

request for export authorization. It did, however, express concern that any authorization be conditioned in such a manner as to ensure that there would be no inconsistency between ISO-NE's and NRG's authorities that might adversely affect reliable and efficient operation of the bulk power system or the New England markets. ISO-NE also asked for appropriate conditions in the export authorization to clearly require compliance with region-specific requirements, both for reliability and market administration.

Pursuant to 18 CFR 385.214, there being no objection to ISO-NE's timely request to intervene, they became a party to this proceeding.

DOE Response To Comment

DOE issues export authorizations on a non-exclusive basis in such a way as to avoid conflicts or inconsistencies between similar authorities. All exporters are required to comply with existing industry standards for obtaining transmission capacity on the domestic transmission system, including conducting operations in accordance with applicable provisions of the FPA and any pertinent implementing rules, regulations, directives, policy statements, and orders adopted or issued thereunder.

All export authorizations issued by DOE, including this one, have been conditioned to ensure that the export would not cause operating parameters on regional transmission systems to fall outside of established industry criteria or cause or exacerbate a transmission operating problem. In order to avoid any confusion as to the intent of such conditions, DOE has made some minor editorial changes to these conditions to ensure that the scheduling and delivery of the export must comply with all of the general and region-specific reliability standards and requirements applicable to the movement of electricity from the point of origin to final destination.

DOE believes that the standard export conditions as now modified and adopted for this and future export authorizations satisfy the reliability concerns raised by ISO-NE.

III. DISCUSSION AND ANALYSIS

The authority requested of DOE by NRG is a necessary condition for exporting under section 202(e) of the FPA. Before an electricity export authorization is granted, DOE evaluates the impact of the export on the reliability of the U.S. electric system.

Specifically, under the first criterion of section 202(e), DOE shall approve an electricity export application "unless, after opportunity for hearing, it finds that the proposed transmission would impair the sufficiency of electric supply within the United States...." DOE has interpreted this criterion to mean that sufficient generating resources must exist such that the exporter could sustain the export while still maintaining adequate generating resources to meet all native load obligations. Power marketers, like NRG, do not have franchised service areas and, consequently, have no native load obligations like the traditional local distribution utility. Marketers build a power purchase portfolio from electric power purchased from various entities inside and outside the United States. The power purchased by a power marketer is, by definition, surplus to the needs of the selling entities. With no native load obligations, the power marketer

is free to sell its power portfolio on the open market domestically or as an export. Because a marketer has no native load obligations and because power purchased by a marketer would be surplus to the needs of the entities selling the power to the marketer, an export occurring under such circumstances would meet the first statutory criterion of section 202(e) of the FPA of not impairing the sufficiency of supply within the United States.

Under the second criterion of section 202(e), DOE shall approve an electricity export application "unless, after opportunity for hearing, it finds that the proposed transmission…would impede or tend to impede the coordination in the public interest of facilities subject to the jurisdiction of the Commission." DOE has interpreted this second criterion primarily as an issue of the operational reliability of the domestic electric transmission system. Therefore, export authorizations issued by DOE have been conditioned to ensure that the export would not cause operating parameters on regional transmission systems to fall outside of established industry criteria or cause or exacerbate a transmission operating problem.

Prior to the restructuring of the electric power industry, the only entities able to export were those electric utilities that were contiguous with the U.S. international border that owned international transmission facilities. The exported energy originated from within the exporter's system and standard transmission studies could be performed to determine the impact of the export on regional electric systems.

However, deregulation of wholesale power markets and the introduction of open-access transmission expanded the geographic scope of entities capable of exporting electric energy. Today, at the time of application, the typical exporter cannot identify the source of the exported energy or the electric systems that might be called upon to provide transmission service to the border. Consequently, traditional transmission studies cannot be used to determine the impact of the export on the operational reliability of the regional electric transmission systems.

In evaluating the operational reliability impacts of export proposals, DOE has always used a variety of methodologies and information, including established industry guidelines, operating procedures and/or infrastructure, as well as traditional technical studies where available and appropriate. When determining these impacts for exports by power marketers or other entities operating in a similar manner, it is convenient to separate the export transaction into two parts: (1) moving the export from the source to a border system that owns the international transmission connection; and, (2) moving the export through that border system and across the border.

In order to deliver the export from the source to a border system, NRG must make the necessary commercial arrangements and obtain sufficient transmission capacity to wheel the exported energy to the border system. In doing so, NRG would use domestic transmission facilities for which open-access tariffs have been approved by FERC. NRG also must make reservations for transmission service in accordance with the FERC Open-Access Same–Time Information System (OASIS), and must schedule delivery of the export with the appropriate Regional Transmission Organization(s) (RTO), Independent System Operator(s) (ISO) and/or control area operator(s). The posting of transmission capacity on OASIS indicates that transmission capacity is available. Furthermore, it is the responsibility of the RTO, ISO, and/or

control area operator to schedule the delivery of the export consistent with established operational reliability criteria. During each step of the process of obtaining transmission service, the owners and/or operators of the transmission facilities will evaluate the impact on the system and schedule the movement of the export only if it would not violate established operating reliability standards. Therefore, DOE has determined that the existing industry procedures for obtaining transmission capacity on the domestic transmission system provide adequate assurances that an export will not cause or exacerbate a transmission operating problem on the U.S. electric power supply system.

In determining the operational reliability impacts of moving the export through a border system and across the border, DOE relies on the traditional technical studies that were performed in support of electricity export authorizations issued to that border system. Allowing these technical studies to suffice in this docket is sound and, thus, DOE need not perform additional impact assessments here, provided the maximum rate of transmission for all exports through a border system does not exceed the authorized limit of the system.

However, this approach is applicable only for exports over international transmission facilities for which export authorizations have been issued and for which operational reliability studies have been performed. Several of the international transmission lines over which NRG seeks export authority are owned by the New York Power Authority (NYPA) and the Bonneville Power Administration (BPA).

As an instrumentally of the State of New York, NYPA is non-jurisdictional to section 202(e) of the FPA. Consequently, DOE never issued NYPA an export authorization or prepared an impact assessment which could have been used to determine the allowable instantaneous rate of transmission (power) for exports over NYPA's international transmission lines. Thus, in lieu of that, DOE is utilizing the information contained in the report entitled, "Load & Capacity Data, 2001 Report of the Member Electric Systems of the New York Power Pool."[2] This report is prepared and filed with the New York Public Service Commission pursuant to section 6-106 of the Energy Law of New York State. It will be made part of the record in this proceeding and included in the public docket. Section IX of this report lists the transmission transfer capabilities between New York State and surrounding electric systems, including Hydro-Quebec and Ontario Hydro. Since all of the major transmission interconnections between New York State and Ontario, Canada, are operated in parallel, it is appropriate to consider a single export power limit for this "electrically logical" grouping of lines. Accordingly, the transfer capability between New York State and Ontario (as identified in Section IX of the above report) has been used to limit the instantaneous transmission rate for exports by NRG over all international transmission lines connecting New York State with Ontario (subparagraph B(13)(a) of this Order). A separate limit (subparagraph B(12) of this Order) has been assigned for exports over NYPA's 765-kV tie with Hydro-Quebec because of the asynchronous nature of that interconnection.

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[2] This report increases the New York-Ontario transfer limit to 1650 MW from the 550-MW limit contained in the 1995 version of the report. On September 26, 2002, DOE authorized the New York ISO to export at this higher transfer limit in Order EA-227-A. New York Power Pool no longer exists and all of the operational responsibilities of the pool are now being performed by the New York ISO.

As a Federal agency, BPA also is non-jurisdictional to section 202(e) of the FPA. Consequently, BPA was never issued an export authorization which DOE could have used to set power limits for exports by NRG over BPA's international transmission ties with Canada. However, DOE has obtained information from BPA on the transmission limits assigned to the two 500-kV and the two 230-kV lines connecting the BPA system with British Columbia Hydro and West Kootenay Power for operation in the export mode. This information has been made a part of this Docket. It has been used by DOE in setting limits on the power to be exported by NRG over the BPA international transmission facilities (subparagraph B(14) of this Order).

NRG requested and is being authorized to export electricity over the transmission facilities of some border utilities whose export authorizations still contain limits on the total amount of energy that can be exported by these utilities. These energy limits no longer have any direct relevance to the way DOE addresses reliability. DOE expects to initiate a future proceeding regarding the removal of these limits.

However, DOE recognizes the potential inequity of retaining energy limits on certain exporters while currently authorizing marketers, or other entities operating in a similar manner, to export unlimited amounts of energy. Until the above referenced proceeding is completed, exports by power marketers, or other entities operating in a similar manner, will be constrained by the same energy limits, except exports by such entities will not reduce or be "charged against" those energy limits contained in the original export authorization.

Open Access

An export authorization issued under section 202(e) does not impose on transmitting utilities a requirement to provide service. However, DOE expects transmitting utilities owning border facilities to provide access across the border in accordance with the principles of comparable open access and non-discrimination contained in the FPA and articulated in FERC Order No. 888 (Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities, FERC Statutes and Regulations ¶31,036 (1996)), as amended. The actual rates, terms and conditions of transmission service shall be consistent with the non-discrimination principles of the FPA and the transmitting utility's Open-Access Transmission Tariff on file with the FERC.

All recipients of export authorizations, including owners of border facilities for which Presidential permits have been issued, are required by their export authorization to conduct operations in accordance with the principles of the FPA and pertinent rules, regulations and orders, which include the comparable open access provisions of FERC Order No. 888, as amended. Cross-border electric trade ought to be subject to the same principles of comparable open access and non-discrimination that apply to transmission in interstate commerce. (See Enron Power Marketing, Inc., 77 FERC ¶61,013 (1996)). Thus, DOE expects owners of border facilities to comply with the same principles of comparable open access and non-discrimination that apply to the domestic interstate transmission of electricity.

IV. FINDING AND DECISION

DOE has assessed the impact that the proposed export would have on the reliability of the U.S. electric power supply system. Based on the above discussion and analysis, DOE has determined that the export of electric energy to Canada by NRG, as ordered below, would not impair the sufficiency of electric power supply within the United States and would not impede or tend to impede the coordination in the public interest of facilities within the meaning of section 202(e) of the FPA.

The circumstances described in the NRG application are virtually identical to those for which export authority had previously been granted in FE Order EA-185. Consequently, DOE believes that it has adequately satisfied its responsibilities under the National Environmental Policy Act of 1969 through the documentation of a categorical exclusion in the FE Docket EA-185 proceeding.

V. ORDER

Based on the above, it is hereby ordered that NRG is authorized to export electric energy to Canada under the following terms and conditions:

(A) The electric energy exported by NRG pursuant to this Order may be delivered to Canada only over the following existing international transmission facilities for which assessments of the transmission limits for operation in the export mode have been made:

Present Owner	Location	Voltage	Presidential Permit No.[3]
Basin Electric Power Cooperative	Tioga, ND	230-kV	PP-64
Bonneville Power Administration	Blaine, WA	2-500-kV	PP-10
	Nelway, WA	230-kV	PP-36
	Nelway, WA	230-kV	PP-46
Eastern Maine Electric Cooperative	Calais, ME	69-kV	PP-32
International Transmission Company	Detroit, MI	230-kV	PP-230
	Marysville, MI	230-kV	PP-230
	St. Claire, MI	230-kV	PP-230
	St. Claire, MI	345-kV	PP-230
Joint Owners of the Highgate Project	Highgate, VT	120-kV	PP-82
Long Sault, Inc.	Massena, NY	2-115-kV	PP-24

[3] These Presidential permit numbers refer to the generic DOE permit number and are intended to include any subsequent amendments to the permit authorizing the facility.

Maine Electric Power Company	Houlton, ME	345-kV	PP-43
Maine Public Service Company	Limestone, ME	69-kV	PP-12
	Fort Fairfield, ME	69-kV	PP-12
Minnesota Power, Inc.	International Falls, MN	115-kV	PP-78
Minnkota Power Cooperative	Roseau County, MN	230-kV	PP-61
New York Power Authority	Massena, NY	765-kV	PP-56
	Massena, NY	2-230-kV	PP-25
	Niagara Falls, NY	2-345-kV	PP-74
	Devils Hole, NY	230-kV	PP-30
Niagara Mohawk Power Corp.	Devils Hole, NY	230-kV	PP-190
Northern States Power Company	Red River, ND	230-kV	PP-45
	Roseau County, MN	500-kV	PP-63
Vermont Electric Power Co.	Derby Line, VT	120-kV	PP-66
Vermont Electric Transmission Co.	Norton, VT	±450-kV DC	PP-76

(B) Exports authorized herein shall not cause a violation of the terms and conditions contained in existing electricity export authorizations associated with the international transmission facilities identified in paragraph (A) above. Specifically:

(1) Exports by NRG made pursuant to this Order shall not cause the total exports on facilities authorized by Presidential Permit PP-64 (issued to Basin Electric Power Coop.) to exceed an instantaneous transmission rate of 150 Megawatts (MW). The gross amount of energy which NRG may export over the PP-64 facilities shall not exceed 900,000 megawatt-hours (MWH) during any consecutive 12-month period.

(2) Exports by NRG made pursuant to this Order shall not cause the total exports on the facilities authorized by Presidential Permit PP-66 (issued to Vermont Electric Power Co.) to exceed an instantaneous transmission rate of 50 MW. The gross amount of energy which NRG may export over the PP-66 facilities shall not exceed 50,000 MW annually.

(3) Exports by NRG made pursuant to this Order shall not cause the total exports on a combination of the facilities authorized by Presidential Permit PP-230 (issued to International Transmission Company) to exceed a coincident, instantaneous transmission rate of 2.2 billion volt-amperes (2,200 MVA).

(4) Exports by NRG made pursuant to this Order shall not cause the total exports on the facilities authorized by Presidential Permit PP-32 (issued to Eastern Maine Electric

voluntary transfer of this authority to export electricity, the transferee and the transferor shall file jointly an application for a new export authorization, together with a statement of reasons for the transfer.

(J) Exports authorized herein shall be reduced or suspended, as appropriate, whenever a continuation of those exports would cause or exacerbate a transmission operating problem.

(K) This authorization shall be effective for a period of five (5) years from the date of this Order. Application for renewal of this authorization may be filed within six months prior to expiration of this authorization.

Issued in Washington, D.C., on August 23, 2005.

Anthony J. Como
Director, Permitting and Siting
Office of Electricity Delivery and
Energy Reliability