

DE12-212

HYDRO MANAGEMENT GROUP, LLC

C/O ESSEX HYDRO ASSOCIATES, LLC
55 UNION STREET, 4TH FL
BOSTON, MA 02108

TELEPHONE:
E-MAIL:

+617-367-0032
AL@ESSEXHYDRO.COM

July 12, 2012

Ms. Debra A. Howland
Executive Director and Secretary
State of New Hampshire
Public Utilities Commission
21 S. Fruit St, Suite 10
Concord, NH 03301-2429



Attn: Executive Director and Secretary Howland

Dear Ms. Howland,

Pursuant to New Hampshire Administrative Code Puc 2500 Rule, Puc 2505.02 Application Requirements Laws of 2012, Chapter 0272, please find included with this letter an application for the qualification of Alden Hydro LLC's Waterloom Falls hydroelectric project as a New Hampshire Class IV RPS Resource.

An electronic copy of this application was emailed to you at executive.director@puc.nh.gov and Barbara Bernstein at barbara.bernstein@puc.nh.gov on Wednesday, July 12th and three hard copies were delivered to your attention at the New Hampshire PUC via overnight mail on Friday, July 13th, 2012.

Thank you in advance for review of this application and please contact me at 617-367-0032 or al@essexhydro.com with any questions

Sincerely,

Alden Hydro, LLC
by Hydro Management Group, its agent
as aggregator



Andrew Locke
Vice President



State of New Hampshire
Public Utilities Commission

21 S. Fruit Street, Suite 10, Concord, NH 03301-2429



APPLICATION FORM FOR
RENEWABLE ENERGY SOURCE ELIGIBILITY FOR CLASS IV

HYDRO SOURCES WITH A TOTAL NAMEPLATE CAPACITY OF ONE MEGAWATT OR LESS

Pursuant to New Hampshire Administrative Code [Puc 2500](#) Rules, [Puc 2505.02](#) Application Requirements
Laws of 2012, Chapter 0272

- Please submit one (1) original and two (2) paper copies of the completed application and cover letter to:

Debra A. Howland
Executive Director
New Hampshire Public Utilities Commission
21 South Fruit Street, Suite 10
Concord, NH 03301-2429

- Send an electronic version of the completed application and the cover letter electronically to executive.director@puc.nh.gov.

The cover letter must include complete contact information and clearly state that the applicant is seeking certification as a Class IV source. Pursuant to Chapter 362-F:11 I, the Commission is required to render a decision on an application within 45 days upon receiving a completed application.

If you have any questions please contact Barbara Bernstein at (603)271-6011 or Barbara.Bernstein@puc.nh.gov.

Please provide the following:

1. Applicant Name: Hydro Management Group LLC as agent for Alden Hydro, LLC

Mailing Address: c/o Essex Hydro Associates, L.L.C. 55 Union Street, 4th Floor

Town/City: Boston State: MA Zip Code: 02108

Primary Contact: Andrew Locke

Telephone: (617) 367-0032 Cell: (617)-367-0032

Email address: al@essexhydro.com

2. Facility Name: Waterloom Falls Hydroelectric Facility

(physical address) 96 River Road

Town/City: New Ipswich State: NH Zip Code: 03071

If the facility does not have a physical address, the Latitude _____ & Longitude _____

(To qualify the electrical production for RECs, the facility must be registered with the NEPOOL – GIS). Contact information for the GIS administrator follows:

James Webb, Registry Administrator, APX Environmental Markets
224 Airport Parkway, Suite 600, San Jose, CA 95110
Office: 408.517.2174, jwebb@apx.com

3. The facility's ISO-New England asset identification number, if available. 901
4. The facility's GIS facility code, if available. MSS901
5. A description of the facility including the following:
 - 5.a. The gross nameplate capacity 0.150MW
 - 5.b. The facility's initial commercial operation date 10/01/1981
 - 5.c. The date the facility began operation, if different than the operation date _____
 - 5.d. A complete description of the facility including related equipment

The Waterloom Falls hydroelectric project ("the project") is located on the Souhegan River, in the town of New Ipswich, Hillsborough County, New Hampshire.

The project is operated as a run-of-river facility. Outflows from the project equal inflows on an instantaneous basis, and water levels above the dam are maintained at the crest of the dam and are not drawn down for the purposes of generating power. Project works consist of: (1) a 200-foot-long and 22-foot-high dam; (2) a an 80-foot spillway; (3) an entrance gate, fore bay and trash racks located on the left side of the dam; (4) one sluice gate in the right side abutment; a 6-foot-diameter steel penstock that runs 50-feet to the powerhouse; (5) one Holyoke horizontal water turbine with two independent Francis runners on a common shaft which is direct coupled to one Fairbanks-Morse Generator rated at 150 kW; and (6) appurtenant facilities.

The project is located on the Souhegan River in New Ipswich, New Hampshire. The project utilizes a previously existing impoundment and the plant is unmanned, but operation is monitored on a 24/7 basis.

6. A copy of all necessary state and federal (FERC) regulatory approvals as **Attachment A**.
7. A copy of the title page of the Interconnection Agreement between the applicant and the distribution utility, the page(s) that identifies the nameplate capacity of the facility and the signature pages. *Please provide this information as Attachment B.*
8. A description of how the generation facility is connected to the distribution utility.

The Waterloom Falls 150 kW hydroelectric generating facility is interconnected with the electric system of Public Service Company of New Hampshire ("PSNH") in accordance with applicable New Hampshire Public Utilities Commission ("NHPUC") Orders and federal law. The delivery point is that point at which

the facility interconnects with the 4.16 KV electric system of PSNH. All electric energy delivered to PSNH's system from the Facility is 4.16 KV, three phase, sixty hertz.

Under this Agreement, the Interconnector shall receive and pay for the services necessary for the purpose of connecting, and providing the continued connection of, the Waterloom Falls Facility with the PSNH electrical system, including Pool Transmission Facilities ("PTF") as defined by NEPOOL, and non-PTF.

9. A statement as to whether the facility has been certified under another non-federal jurisdiction's renewable portfolio standard and proof thereof.

The Waterloom Falls Hydroelectric Facility (the "Facility") is not currently qualified under another non-federal jurisdiction's renewable portfolio standard.

10. A statement as to whether the facility's output has been verified by ISO-New England.

The Facility's output is verified by ISO-New England who is responsible for reporting the Facility's generation to the NEPOOL GIS.

11. An affidavit by the applicant attesting that the contents of the application are accurate. *Use either the Affidavit at the bottom of this page, or provide a separate document as **Attachment C**.*

12. The name and telephone number of the facility's operator, **if different from the owner.**

Facility Operator Name: Robert Greenwood, President, Alden Hydro, LLC

Phone: (603) 924-5777

13. Other pertinent information that you wish to include to assist in classification of the facility provide as **Attachment D**.

CHECK LIST: The following has been included to complete the application:	YES
• All contact information requested in the application.	x
• A copy of all necessary state and federal (FERC) regulatory approvals as Attachment A .	x
• A copy of the title page of the Interconnection Agreement between the applicant and the distribution utility, the page(s) that identifies the nameplate capacity of the facility and the signature pages as Attachment B .	x
• A signed and notarized attestation or Attachment C .	x
• A GIS number has been provided or has been requested.	x
• Other pertinent information has been provided (if necessary) as Attachment D .	N/A
• This document has been printed and notarized.	x
• The original and two copies are included in the packet mailed to Debra Howland, Executive Director of the PUC.	x
• An electronic version of the completed application has been sent to executive.director@puc.nh.gov .	x

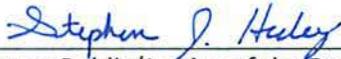
AFFIDAVIT

The Undersigned applicant declares under penalty of perjury that contents of this application are accurate.

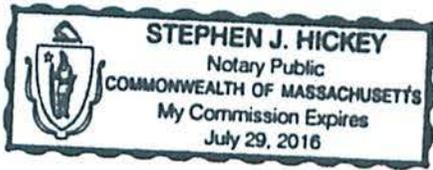
Applicant's Signature  Date 7/12/12

Subscribed and sworn before me this 12th Day of July (month) in the year

County of Suffolk State of Massachusetts


Notary Public/Justice of the Peace

My Commission Expires July 29, 2016



Attachment A

**Waterloom Falls Hydroelectric Project
(MSS901)**

**ORDER GRANTING EXEMPTION FROM LICENSING OF A SMALL
HYDROELECTRIC PROJECT OF 5 MEGAWATTS OF LESS (FERC No. 7920)
dtd March 11, 1985**

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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Alden T. Greenwood) Project No. 7920

ORDER GRANTING EXEMPTION FROM LICENSING OF A
SMALL HYDROELECTRIC PROJECT OF 5 MEGAWATTS OR LESS

(Issued March 11, 1985)

The Applicant ^{1/} filed an application for exemption from all or part of Part I of the Federal Power Act (Act) pursuant to 18 C.F.R. Part 4 Subpart K (1980) implementing in part Section 408 of the Energy Security Act (ESA) of 1980 for a project as described in the attached public notice. ^{2/ 3/}

Notice of the application was published in accordance with Section 408 of the ESA and the Commission's regulations and comments were requested from interested Federal and State agencies including the U.S. Fish and Wildlife Service and the State Fish and Wildlife Agency. All comments, protests and motions to intervene that were filed have been considered. No agency has any objection relevant to issuance of this exemption.

Standard Article 2, included in this exemption, requires compliance with any terms and conditions that Federal or State fish and wildlife agencies have determined appropriate to prevent loss of, or damage to, fish and wildlife resources. The terms and

conditions referred to in Article 2 are contained in any letters of comment by these agencies which have been forwarded to the Applicant in conjunction with this exemption. ^{4/}

Should the Applicant contest any terms or conditions that were proposed by Federal or State agencies in their letters of comment as being outside the scope of Article 2, the Commission shall determine whether the disputed terms or conditions are outside the scope of Article 2.

Based on the terms and conditions required by Federal and State fish and wildlife agencies, the environmental information in the application for exemption, other public comments, and staff's independent analysis, issuance of this order is not a major Federal action significantly affecting the quality of the human environment.

It is ordered that:

(A) The Waterloom Falls Project No. 7920 as described and designated in Alden T. Greenwood's application filed on December 23, 1983, is exempted from all of the requirements of Part I of the Federal Power Act, including licensing, subject to the standard articles in §4.106, of the Commission's regulations attached hereto as Form E-2, 18 C.F.R. §4.106 45 Fed. Reg. 76115 (November 18, 1980), and the following Special Article.

Article 6. Any exempted small hydroelectric power project that utilizes a dam which is more than 33 feet in height above streambed, as defined in 18 CFR 12.31(c) of this chapter, impounds more than 2,000 acre-feet of water, or has a significant high hazard potential, as defined in 33 CFR Part 222, is subject to the following provisions of 18 CFR Part 12;

- ^{1/} Alden T. Greenwood, Project No. 7920, filed on December 15, 1983.
- ^{2/} Pub. Law 96-294, 94 Stat. 611. Section 408 of the ESA amends *inter alia*, Sections 405 and 408 of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. §§2705 and 2708).
- ^{3/} Authority to act on this matter is delegated to the Director, Office of Hydropower Licensing, under §375.314 of the Commission's regulations, 49 Fed. Reg. 29,369 (1984) (Errata issued July 27, 1984) (to be codified at 18 C.F.R. §375.314). This order may be appealed to the Commission by any party within 30 days of its issuance pursuant to Rule 1902, 18 C.F.R. 385.1902, (1983). Filing an appeal and final Commission action on that appeal are prerequisites for filing an application for rehearing as provided in Section 313(a) of the Act. Filing an appeal does not operate as a stay of the effective date of this order or of any other date specified in this order, except as specifically directed by the Commission.

- ^{4/} An exemption from licensing granted by this Commission does not serve as any basis for restricting hunting and fishing access to the waterway involved except to the extent required

Attachment B

**Waterloom Falls Hydroelectric Project
(MSS901)**

**INTERCONNECTION AGREEMENT
dtd June 20, 1985**

INTERCONNECTION AGREEMENT

AGREEMENT, dated June 20, 1985, by and between ALDEN T. GREENWOOD, an individual with his principal residence in Mason, New Hampshire (hereinafter referred to as INTERCONNECTOR), and PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE, a New Hampshire corporation having its principal place of business in Manchester, New Hampshire (hereinafter referred to as PUBLIC SERVICE).

WHEREAS, INTERCONNECTOR desires to interconnect his Waterloom Falls hydroelectric generating facility, located in New Ipswich, New Hampshire on the Souhegan River, with the electric system of PUBLIC SERVICE in accordance with applicable New Hampshire Public Utilities Commission (hereinafter referred to as NHPUC) Orders; and

WHEREAS, the NHPUC requires that a written interconnection agreement be executed between the parties; and

WHEREAS, it is necessary that certain agreements be made prior to interconnection and the commencement of sales of electricity to insure the safety, reliability and integrity of PUBLIC SERVICE's electric system, and to establish a mechanism of payment of the rate established by the NHPUC, the parties hereby agree as follows:

Article 1. Interconnection and Voltage Characteristics.

The interconnection point shall be that point at which INTERCONNECTOR's generating facility interconnects with the 4.16 KV electric system of PUBLIC SERVICE.

Unless PUBLIC SERVICE converts its interconnection circuit, all electric energy interconnected with PUBLIC SERVICE's system shall be 4.16 KV, three-phase, sixty hertz.

Article 2. Metering.

The metering shall be configured so as to represent the generation delivered to PUBLIC SERVICE. The metering may be installed on the generation side of the transformer provided that transformer losses are subtracted from the measured generation by a suitable method.

INTERCONNECTOR will install, own, and maintain all metering equipment as referenced in Article 4, to measure the flow of electrical energy from INTERCONNECTOR to PUBLIC SERVICE. If at any time, the meter is found to be in error by more than two percent fast or slow (+ or - 2%), INTERCONNECTOR shall cause such meter to be corrected and the meter readings for the period of inaccuracy shall be adjusted to correct such inaccuracy so far as the same can be reasonably ascertained, but no adjustment prior to the beginning of the preceding month shall be made except by agreement of the parties. All tests and calibrations shall be made in accordance with Section V-14 of the NHPUC Rules and Regulations Prescribing Standards for Electric Utilities in effect as of September 8, 1972, as amended. The meter shall be tested as prescribed in said Rules and Regulations.

In addition to the regular routine tests, INTERCONNECTOR shall cause the meter to be tested at any time upon request of and in the presence of a representative of PUBLIC SERVICE. If such equipment proves accurate within two percent fast or slow (+ or - 2%), the expense of the test shall be borne by PUBLIC SERVICE.

PUBLIC SERVICE reserves the right to secure or seal the metering installation, to require INTERCONNECTOR to measure electrical energy sold to PUBLIC SERVICE on an hour-by-hour basis, and to require INTERCONNECTOR to notify PUBLIC SERVICE once each day of INTERCONNECTOR's generation in kilowatt-hours for each hour during the prior 24 hours.

Article 3. Billing and Payment.

PUBLIC SERVICE shall read the meter on or about the end of each month and shall promptly send INTERCONNECTOR a form showing the month's beginning and ending meter readings and net kwh generation. INTERCONNECTOR shall then transmit to PUBLIC SERVICE a bill showing the amount due for the sale of energy to PUBLIC SERVICE, which amount shall be determined by multiplying the number of kWh's of energy delivered to PUBLIC SERVICE since the prior reading of the meter times the energy rate per kwh (or times the appropriate time-of-day rates, as applicable) set forth in INTERCONNECTOR's rate filing approved by the NHPUC and is attached hereto as Attachment A.

INTERCONNECTOR shall also include on said bill the appropriate capacity payment, if any, to be made by PUBLIC SERVICE, as approved by the NHPUC. PUBLIC SERVICE will send to INTERCONNECTOR a payment for that amount within 20 days of receipt of INTERCONNECTOR's bill. The foregoing is intended to provide a procedure for the payment of rates established by the NHPUC, and shall not be construed as creating a separate contractual obligation on the part of PUBLIC SERVICE to pay the rate(s) approved by the NHPUC.

INTERCONNECTOR understands that any capacity payments are contingent upon an audit of the generating facility performed by the NHPUC and that Interconnector must request the NHPUC to perform said audit.

Article 4. Interconnection & Protection Requirements.

The INTERCONNECTOR shall install all interconnection, protection, metering, and control equipment as specified in PUBLIC SERVICE's study of the INTERCONNECTOR's electric generating facility, which study is attached hereto as Attachment B and any other such equipment which may be necessary to ensure the safe and reliable operation of INTERCONNECTOR's generating unit in parallel with PUBLIC SERVICE's system. INTERCONNECTOR shall bear all costs associated with said equipment and its installation, including those costs associated with PUBLIC SERVICE's study of the INTERCONNECTOR's electric generating facility. Prior to the aforementioned study, one half of PUBLIC SERVICE's estimated costs of the study shall be paid to PUBLIC SERVICE prior to beginning the study. The balance, based on actual costs incurred, shall be due upon completion of the study.

Up to the interconnection point, all said interconnection, protection, metering, and control equipment including, but not limited to, line extensions, transformers, meters, relays, breakers, and appurtenant equipment shall remain the sole property of INTERCONNECTOR.

INTERCONNECTOR shall have sole responsibility for the operation, maintenance, and repair of its generating unit, including the interconnection, protection, metering, and control equipment. INTERCONNECTOR shall maintain, repair, or replace said generating unit including said equipment whenever necessary for the safe and reliable operation of INTERCONNECTOR's electric facility in parallel with PUBLIC SERVICE's system.

In addition to the above, upon the effective date of this Agreement, and every twelve months thereafter, the INTERCONNECTOR shall test, or cause to be tested, all protection devices including verification of calibration and tripping functions; and the INTERCONNECTOR shall notify PUBLIC SERVICE in writing that said tests have been conducted. INTERCONNECTOR shall notify PUBLIC SERVICE of any defect affecting the safety or reliability of said equipment not later than two hours after its discovery of the same.

If either party reasonably determines that the operation or use of any portion of the protection system, as required in this Article, will or may not perform its protective function, including but not limited to opening the interconnecting tie, INTERCONNECTOR shall open the interconnection between PUBLIC SERVICE's system and INTERCONNECTOR's facility. INTERCONNECTOR shall notify PUBLIC SERVICE not more than two days after it has opened said interconnection. PUBLIC SERVICE shall not be obligated to receive electrical energy from INTERCONNECTOR and the interconnection shall remain open, until INTERCONNECTOR has satisfactorily cured said defect at no cost to PUBLIC SERVICE.

Article 5. Right of Access.

Upon prior written or oral notice to INTERCONNECTOR, PUBLIC SERVICE shall have the right to enter the property of INTERCONNECTOR at reasonable times and shall be provided access to INTERCONNECTOR's metering, protection, control, and interconnection equipment.

Article 6. Modification of Facility.

If INTERCONNECTOR plans any modifications to its electric facility, INTERCONNECTOR shall give PUBLIC SERVICE prior written notice of its intentions. In the event that PUBLIC SERVICE reasonably determines that said modifications would necessitate changes to the interconnection, protection, control, or metering equipment or would cause PUBLIC SERVICE to incur additional expenses associated therewith, the INTERCONNECTOR shall make such changes as reasonably required by PUBLIC SERVICE and reimburse PUBLIC SERVICE for said expenses before PUBLIC SERVICE is obligated to purchase any increased output.

If the PUBLIC SERVICE interconnecting circuit is converted to a higher voltage in the future, the INTERCONNECTOR shall be responsible for all interconnection changes necessitated by the conversion and shall bear all costs associated with said conversion.

Article 7. Liability & Insurance.

- a. Each party will be responsible for its facilities and the operation thereof and will indemnify and save the other harmless from any and all loss by reason of property damage, bodily injury, including death resulting therefrom suffered by any person or persons including the parties hereto, employees thereof or members of the public, (and all expenses in connection therewith, including attorney's fees) whether arising in agreement, warranty, tort (including negligence), strict liability or otherwise, caused by or sustained on, or alleged to be caused by or sustained on, equipment or facilities, or the operation or use thereof, owned or controlled by such party, except that each party shall be solely responsible for and shall bear all costs of claims by its own employees or contractors growing out of any workmen's compensation law.
- b. INTERCONNECTOR hereby agrees to maintain in force and effect, for the duration of this Agreement, Workmen's Compensation Insurance, as required by statute, and Comprehensive General Liability Insurance for bodily injury and property damage at minimum limits of three million dollars (\$3,000,000). At least sixty days prior to the actual, physical interconnection of the facility, the INTERCONNECTOR agrees to provide PUBLIC SERVICE with a certificate of insurance evidencing such coverage.
- c. In no event shall INTERCONNECTOR or PUBLIC SERVICE be liable, whether in agreement, tort (including negligence), strict liability, warranty, or otherwise, for any special, indirect, incidental, or consequential loss or damage, including but not limited to cost of capital, cost of replacement power, loss of profits or revenues or the loss of the use thereof. This provision, Article 7, subsection c, shall apply notwithstanding any other provision of this Agreement.

Article 8. Force Majeure.

Either party shall not be considered to be in default hereunder and shall be excused from interchanging electricity hereunder if and to the extent that it shall be prevented from doing so by storm, flood, lightning, earthquake, explosion, equipment failure, civil disturbance, labor dispute, act of God or the public enemy, action of a court or public authority, withdrawal of facilities from operation for necessary maintenance and repair, or any cause beyond the reasonable control of either party.

Article 9. Termination.

PUBLIC SERVICE may not terminate this Agreement during such time as its obligations as set forth in the Limited Electrical Energy Producers Act or Public Utility Regulatory Policies Act remains unchanged and in force, except that PUBLIC SERVICE may terminate this Agreement should INTERCONNECTOR fail to substantially perform in accordance with the terms of this Agreement.

The INTERCONNECTOR may terminate this Interconnection Agreement in accordance with the provisions established by the New Hampshire Public Utilities Commission in their applicable orders.

After termination, both parties shall be discharged from all further obligation under the term of this Agreement, excepting any liability which may have been incurred before the date of such termination.

Article 10. Modification of Agreement.

In order for any modification to this Agreement to be binding upon the parties, said modification must be in writing and signed by both parties.

Article 11. Prior Agreements Superseded.

This Agreement with Attachments A and B represents the entire agreement between the parties hereto relating to the subject matter hereof, and all previous agreements, discussion, communications, and correspondence with respect to the said subject matter are superseded by the execution of this Agreement.

Article 12. Waiver of Terms or Conditions.

The failure of either party to enforce or insist upon compliance with any of the terms or conditions of this Agreement shall not constitute a general waiver or relinquishment of any such terms or conditions, but the same shall be and remain at all times in full force and effect.

Article 13. General.

This Agreement shall be binding upon, and inure to the benefit of the respective successors and assigns of the parties hereto, provided that INTERCONNECTOR shall not assign this Agreement except to an affiliated company, without the prior written consent of PUBLIC SERVICE, which consent shall not be unreasonably withheld. The term "affiliated company" shall include any partnership in which INTERCONNECTOR or one of INTERCONNECTOR's subsidiaries, affiliates, principals, or owners is a general partner or any corporation in which INTERCONNECTOR or one of its subsidiaries, affiliates, principals, or owners owns or controls more than 50 percent of the voting stock or otherwise has operating control. In the event of an assignment to an affiliate, INTERCONNECTOR shall notify PUBLIC SERVICE within five (5) days of the effective date of the assignment.

Article 14. Applicable Law.

This Agreement is made under the laws of The State of New Hampshire and the interpretation and performance hereof shall be in accordance with and controlled by the laws of that State.

Article 15. Mailing Addresses.

The mailing addresses of the parties are as follows:

INTERCONNECTOR: Alden T. Greenwood
R.R. #1, Box 56
Greenville Road
Mason, N.H. 03048

PUBLIC SERVICE: Public Service Company of New Hampshire
1000 Elm Street
P.O. Box 330
Manchester, NH 03105

ATTN: Ralph S. Johnson, Vice President

Article 16. Effective Date.

This Agreement shall become effective between the parties as of the effective date of the Commission order approving the long term rate, although PUBLIC SERVICE shall not be obligated to make any payments to INTERCONNECTOR, as referred to in Article 3, until INTERCONNECTOR has satisfactorily installed all metering, interconnection and protective equipment as specified in Attachment B.

IN WITNESS WHEREOF, the parties each by its duly authorized representatives have hereunto caused their names to be subscribed, as of the day and year first above written.

Suzanne D. [Signature]
(Witness)

By: Alden T. Greenwood
Alden T. Greenwood, Owner

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

John E. Lyons
(Witness)

By: Ralph S. Johnson
Ralph S. Johnson, Vice President