

**SUPPLIER GUIDE**  
**TABLE OF CONTENTS**

- I. Introduction to Supplier Guide
- II. Retail Competition Implementation Requirements
  - A. Restructuring New Hampshire's Electric Utility Industry: Final Plan
  - B. Rehearing Order
  - C. Supplier Registration Requirements
  - D. Electronic Data Interchange (EDI) Working Group Report
- III. Supplemental Materials
  - A. Web Site Information
    - 1. Tariffs
    - 2. Meter Read Schedules
    - 3. Electronic Interchange Operating Schedules
    - 4. Class Average or Segment Load Shapes
    - 5. Contacts
    - 6. Holiday Schedule
    - 7. Supplier Training Schedule
  - B. Contact Information
    - 1. NHPUC
    - 2. NEPOOL/ISO-NE
    - 3. Distribution Company Contact Summary
    - 4. Service Territories
    - 5. Corporate Descriptions
  - C. Supplier Registration
    - 1. State Regulatory Agencies
    - 2. NEPOOL/ISO-New England
    - 3. Supplier Training Attendance
    - 4. Service Agreements
    - 5. Communications/Testing

#### D. Billing

1. Required Billing Information
2. Meter Reading
3. Rate Structures
4. Billing Options
5. Cash Posting
6. Account Resolution and Supplier Write Offs
7. Special Situations
8. Revenue Protection

#### E. Load Estimation Systems

1. General Overview
2. "Own Load" Reporting Schedule
3. Distribution Companies' System Descriptions

#### F. Telemetry

1. Overview
2. Telemetry Options
3. General Procedures

#### G. Information Exchange

1. Electronic Business Transactions
2. E.D.I. Guidelines
3. E.D.I. Implementation
4. Electronic Data Transmission 5. Alternate Transport Options
6. Computer Operations
7. Testing Requirements

#### H. E.D.I. Appendices

1. E.D.I. Data Formats
2. E.D.I. Glossary
3. E.D.I. Implementation Guidelines
4. Compliance Test Standards
5. Compliance Test Conditions
6. Change Control Process

# I. INTRODUCTION TO SUPPLIER GUIDE

## STATEMENT OF PURPOSE

This Supplier Guide has been assembled to communicate essential information to Competitive Suppliers (Suppliers) about participating in retail choice opportunities in New Hampshire. This Guide is intended to describe proactively how the six state utilities<sup>1</sup> (Distribution Companies) are implementing retail choice on behalf of New Hampshire consumers and in compliance with the New Hampshire Public Utilities Commission (NHPUC) policies, thereby enabling Suppliers to enter the market, sell electric power, and operate without unnecessary interference.

Customer choice of an electricity Supplier is new in New Hampshire. This new market opportunity has obvious implications for Distribution Companies and New Hampshire consumers, as well as Suppliers. Suppliers must be registered by the NHPUC. Customer enrollment with new Suppliers must be handled with high assurance to avoid potential confusion. And, the Customer loads served by every Supplier must be metered or estimated on a daily basis for reporting to the ISO-New England in order for the settlement process to proceed in a timely manner. Many Distribution Company business processes have been modified from past practice or designed from scratch to insure that the requirements being created by competitive electricity supply are handled correctly and efficiently.

This Guide summarizes key processes and communication protocols that must be understood and implemented by Suppliers and the Distribution Companies in order for Customer choice to work smoothly and for the benefits of the new, competitive market to be fully realized by both consumers and Suppliers.

For additional information or any questions, please contact the (NHPUC) or any of the New Hampshire Distribution Companies.

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<sup>1</sup>Concord Electric Company, Connecticut Valley Electric Company, Exeter & Hampton Electric Company, Granite State Electric Company, New Hampshire Electric Cooperative, and Public Service Company of New Hampshire.

## II. RETAIL COMPETITION IMPLEMENTATION REQUIREMENTS

The following documents will be provided at the training session as part of this guide. In the interim, if you would like to review them, they are available on the Internet at:

A. Restructuring New Hampshire's Electric Utility Industry: Final Plan

*Available at:* [www.puc.state.nh.us/d96150pg.html](http://www.puc.state.nh.us/d96150pg.html)

B. Rehearing Order

*Available at:* [www.puc.state.nh.us/d96150pg.html](http://www.puc.state.nh.us/d96150pg.html)

C. Supplier Registration Requirements

*Available at:* [www.puc.state.nh.us/srwgpg.html](http://www.puc.state.nh.us/srwgpg.html)

D. EDI Working Group Report

*Available at:* [www.puc.state.nh.us/edipg.html](http://www.puc.state.nh.us/edipg.html)

### **III. SUPPLEMENTAL MATERIALS**

The following sections include Supplemental Materials that provide additional explanation, system requirements, and utility contact information.

These additional materials are meant to both enhance the understanding as well as simplify the implementation of the NHPUC supplier registration requirements, and Electronic Data Interchange Standards.

#### **A. WEB SITE INFORMATION**

The following Utility specific information can be found on each Distribution Company Web Site as indicated in Section III (A) (5), Contacts, of this guide.

1. Tariffs

Each Distribution Company will post on its Web site currently effective unbundled tariffs (i.e. rate schedules) for each rate class. The tariffs will apply to, at a minimum, residential, commercial and industrial rate classes. Suppliers should be aware of the fact that the structure of the tariffs, although quite similar, may be different from one Distribution Company to another.

2. Meter Read Schedules

Each Distribution Company will post its meter reading schedule for the current year on its Web site. The dates shown indicate the scheduled read date of each cycle. In addition, each Distribution Company has a different "window" of time in which to obtain meter readings after the scheduled read date. Distribution Company specific information can be found in the Billing section of this manual.

3. Electronic Interchange Schedules

Each Distribution Company will publish its daily electronic data interchange schedule as a guideline to Suppliers.

4. Class Average or Segment Shapes

Utilities have developed and utilized the load profiles of specific customer classes since the enactment of the Public Utility Regulatory Policies Act (PURPA) in 1978. In

general, load profiles are estimates of the amount of electricity the average customer in a particular customer class or customer segment uses each hour of the year. Traditionally, customer classes have been defined on the basis of rate codes as they appear on a Utility's corporate master billing file. It is also possible for customer classes or segments to be defined by various other criteria such as consumption patterns, SIC codes, size of facility etc.

Today in New Hampshire, most load profiles are based on data collected from statistically valid samples designed to achieve a high precision. Load Profiles will now be made available on each Distribution Company's Web site.

5. Contacts

Each Distribution Company will post both a "general" as well as "technical" contact to which Suppliers can direct questions on operational issues.

6. Holiday Schedules

Each Distribution Company will post its holiday schedule, which specifies the days it will be closed for business and therefore will not process EDI transactions.

7. Supplier Training Schedules

The Supplier Training Schedule will be posted on each Distribution Company Web site. The posted Supplier Training Schedule will list the date of each training session, the site for each training session, and contact persons with phone numbers and e-mail addresses. These contact persons are the individuals that Suppliers can sign up with prior to the cutoff date for participation in each scheduled supplier training session.

Training will be offered on the first Thursday of every month beginning May 7, 1998. Participation will be reserved on a first-come, first-served basis as long as space is available. In the event that there are no supplier signups one-week prior to the scheduled training session, the scheduled training will be cancelled for that month.

## **B. CONTACT INFORMATION**

The following section provides a brief description, as well as a contact person for each market participant whom Suppliers will need to contact in order to facilitate their participation in New Hampshire's retail electric market.

### **1. NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION**

#### **Mission Statement**

The mission of the NHPUC is to ensure that customers of regulated utilities receive safe, adequate and reliable service at just and reasonable rates; to foster competition where appropriate; to provide necessary customer protection; to provide a thorough but efficient regulatory process that is fair, open, and innovative; and to perform its responsibilities ethically and professionally in a challenging and supportive work environment.

For further information or to register with the NHPUC, please see the following homepage on the World Wide Web:

#### **NHPUC**

[HTTP://WWW.PUC.STATE.NH.US](http://www.puc.state.nh.us)  
8 Old Suncook Road  
Concord, NH 03301  
Telephone: (603) 271-2431

## **2. NEPOOL/ISO NEW ENGLAND**

ISO New England, located in Holyoke, New Hampshire, is responsible for planning, managing and operating New England's bulk electricity supply facilities and administering the region's wholesale bulk power market. ISO New England is the nation's first Independent System Operator and was created by spinning off the former New England Power Pool (NEPOOL) staff and facilities into a non-stock, not-for-profit corporation.

### **NEPOOL MEMBERSHIP**

Cynthia Brodhead, Senior Counsel  
Secretary of the NEPOOL Management Committee  
Northeast Utilities Service Company  
P.O. Box 270  
Hartford, CT 06141-0270  
Telephone: (860) 665-5501  
Fax: (860) 665-5504

### **NEPOOL BILLING AND TIE-LINE ACTIVATION**

Neal Lamberton  
Data Base Supervisor  
NEPOOL Billing  
Telephone: (413) 535-4067



### 3. DISTRIBUTION COMPANY CONTACT SUMMARY

NEW HAMPSHIRE DISTRIBUTION COMPANY	GENERAL INFORMATION	TECHNICAL INFORMATION
<p>Concord Electric Company            6 Liberty Lane West            Hampton, NH 03842-1720  <a href="http://WWW.UNITIL.COM">WWW.UNITIL.COM</a></p>	<p>Steve Murphy            Manager, Customer Operations and Billing            5 McGuire Street            Concord, NH 03301-4622            (603) 227-4570            (603) 227-4670 (fax)  <a href="mailto:MURPHY@UNITIL.COM">MURPHY@UNITIL.COM</a></p>	<p>Supplier Load Estimation            Doug Debski            Supervisor, Regulatory Design            (603) 773-6443            (603) 773-6643 (fax)  <a href="mailto:DEBSKI@UNITIL.COM">DEBSKI@UNITIL.COM</a></p> <p>Systems and Electronic Interchange            Karen Warner            Systems Manager            (603) 227-4571            (603) 227 4671 (fax)  <a href="mailto:WARNER@UNITIL.COM">WARNER@UNITIL.COM</a></p>
<p>Connecticut Valley Electric Company</p>		
<p>Exeter &amp; Hampton Electric Company            6 Liberty Lane West            Hampton, NH 03842-1720  <a href="http://WWW.UNITIL.COM">WWW.UNITIL.COM</a></p>	<p>Steve Murphy            Manager, Customer Operations and Billing            5 McGuire Street            Concord, NH 03301-4622            (603) 227-4570            (603) 227-4670 (fax)  <a href="mailto:MURPHY@UNITIL.COM">MURPHY@UNITIL.COM</a></p>	<p>Supplier Load Estimation            Doug Debski            Supervisor, Regulatory Design            (603) 773-6443            (603) 773-6643 (fax)  <a href="mailto:DEBSKI@UNITIL.COM">DEBSKI@UNITIL.COM</a></p> <p>Systems and Electronic Interchange            Karen Warner            Systems Manager            (603) 227-4571            (603) 227 4671 (fax)  <a href="mailto:WARNER@UNITIL.COM">WARNER@UNITIL.COM</a></p>
<p>NEES Companies            Granite State Electric Company            9 Lowell Road            Salem, N.H. 03079-0026  <a href="http://WWW.NEES.COM">WWW.NEES.COM</a>            Tariff Site  <a href="http://WWW.NEES.COM/RATES/INDEX.HTM">WWW.NEES.COM/RATES/INDEX.HTM</a></p>	<p>Annemarie Loftus            Manager, Load Data Services            (508) 389-3059            (508) 389-2060 (fax)  <a href="mailto:LOGISTICS@NEESNET.COM">LOGISTICS@NEESNET.COM</a></p>	<p>David Falkowski            Manager, Billing and Systems            (508) 357-4640  <a href="mailto:LOGISTICS@NEESNET.COM">LOGISTICS@NEESNET.COM</a></p>

NEW HAMPSHIRE DISTRIBUTION COMPANY	GENERAL INFORMATION	TECHNICAL INFORMATION
<p>New Hampshire Electric Cooperative, Inc.  579 Tenney Mountain Highway  Plymouth, NH 03264  <a href="http://WWW.NHEC.COM">WWW.NHEC.COM</a></p>	<p>Steve Kaminski  Director, Energy Access  (603) 536-8655  (603) 536-8698 (fax)  <a href="mailto:NHECHQ@NHEC.COM">NHECHQ@NHEC.COM</a></p>	<p>Ray Gosney  Director, Delivery Services  (603) 536-8659  (603) 536-8682 (fax)  <a href="mailto:NHECHQ@NHEC.COM">NHECHQ@NHEC.COM</a></p>
<p>Public Service Company of New Hampshire  1000 Elm Street  PO Box 330  Manchester, NH 03105  <a href="http://WWW.PSNH.COM">WWW.PSNH.COM</a></p>	<p>Marlon Baese  Manager, Customer Information Systems  (603) 634-3653  (603) 634-3750 (fax)  <a href="mailto:BAESEMK@PSNH.COM">BAESEMK@PSNH.COM</a></p>	<p>Telemetry Services  Attn: Robert Evans  603) 634-2128  <a href="mailto:EVANSRE@PSNH.COM">EVANSRE@PSNH.COM</a></p> <p>Electronic Interchange  Attn: Ray Widrew  Information Resources Group  603) 634-3712  603) 634-3475 (fax)  <a href="mailto:WIDRERS@NU.COM">WIDRERS@NU.COM</a></p> <p>Load Estimation and NEPOOL Reporting  Attn: Corrie Cockrell  603) 634-3136  <a href="mailto:COCKRCO@PSNH.COM">COCKRCO@PSNH.COM</a></p>

**4. UTILITY SERVICE AREAS**

**STILL NEED FROM CVEC**

## **5. DISTRIBUTION COMPANY CORPORATE DESCRIPTIONS**

The **six** Distribution Companies in New Hampshire, and their associated parent affiliates, are:

- Concord Electric Company – Unitil Corp.
- Connecticut Valley Electric Company – Central Vermont Public Service
- Exeter & Hampton Electric Company – Unitil Corp.
- Granite State Electric Company – New England Electric System (NEES)
- New Hampshire Electric Cooperative
- Public Service Company of New Hampshire – Northeast Utilities (NU)

**CONNECTICUT VALLEY ELECTRIC COMPANY**

No information was available at the time this version was published.

## **NEW ENGLAND ELECTRIC SYSTEM**

New England Electric System (NEES) is a public utility holding company, headquartered in Westborough, Massachusetts. Its subsidiaries are currently engaged in the generation, transmission, distribution, and sale of electric energy, and serve 1.3 million customers in Massachusetts, Rhode Island, and New Hampshire. Other business activities include independent transmission projects, telecommunications, and energy marketing.

### **Headquarters:**

25 Research Drive  
Westborough, Massachusetts 01582  
(508) 389-2000

### **District Offices:**

#### *Massachusetts:*

Northampton, Worcester, North Andover, Hopedale, Malden, Nantucket

#### *Rhode Island:*

Providence, North Kingstown

#### *New Hampshire:*

Lebanon, Salem

### **NEES Distribution Subsidiaries include:**

Massachusetts Electric Company, which serves 959,000 customers in 146 Massachusetts communities.

The Narragansett Electric Company, which serves 330,000 customers in 27 Rhode Island communities.

Granite State Electric Company, which serves 36,000 customers in 21 New Hampshire communities.

Nantucket Electric Company, which serves 8,000 customers on the island of Nantucket, off the coast of Massachusetts.

### **Other Key subsidiaries include:**

**New England Power Company**, an electric generating and transmission company that operates 20 generating stations and approximately 2,400 miles of transmission lines. This subsidiary is in the process of divesting its fossil and hydro facilities. A purchase and sales agreement was signed in 1997, with the sale closing anticipated in 1998.) NEP generating capacity: 5,276 megawatts (MW)

**Narragansett Energy Resources Company**, which owns 20 percent of the Ocean State Power thermal generating station in Burrilville, Rhode Island.

**AllEnergy Marketing Company, L.L.C.**, an unregulated retail energy marketing joint venture.

**NEES Communications, Inc.**, an exempt telecommunications company with a license from the Federal Communications Commission. This subsidiary focuses on the fiber optics, cable, and personal communications industry.

**New England Energy Incorporated**, an oil and gas exploration and development company, (NEES is also in the process of divesting its oil and gas holdings.)

**New England Electric Transmission Corporation**, which operates a direct current/alternating current converter terminal and related facilities for the first phase of the Hydro-Quebec and New England interconnection and six miles of high-voltage, direct current (HVDC) transmission line in New Hampshire.

**New England Hydro-Transmission Corporation**, which operates 121 miles of HVDC transmission line in New Hampshire for the second phase of the Hydro-Quebec and New England interconnection, extending to the Massachusetts border.

**New England Hydro-Transmission Electric Company, Inc.**, which operates a direct current/alternating current converter terminal and related facilities for the second phase of the Hydro-Quebec and New England interconnection and 12 miles of HVDC transmission line in Massachusetts.

**NEES Global Transmission, Inc.**, a domestic and international project development company that focuses on building, owning, and operating transmission projects.

**New England Power Service Company**, which provides NEES and its subsidiaries with support services including finance and accounting, legal, human resources, corporate communications and information services.

**Financial Information:**

**Cost per kilowatt-hour:** Average electricity cost to customers in 1996 was 9.51 cents per kilowatt-hour (kWh), the lowest rate offered by a major New England utility.

**Number of Employees:** 4,787

**Trading Symbol:** New York Stock Exchange and Boston Stock Exchange: NES

**Number of shareholders:**

NEES registered shareholders at December 31, 1996 were 52,564

**1996 Operating Revenue:** \$2,350,698,000

**1996 Earnings:**

\$3.22 per average share compared with \$3.15 in 1995. Return on common equity was 12.6 percent, placing NEES in the top third of major electric utilities in the nation. NEES also rated in the top third in the New England-New York region for the eighth consecutive year.

<b>1996 Dividends declared per share:</b>	\$2.35
<b>Book value per share at year end 1996:</b>	\$25.98
<b>Market price per share at year end 1996:</b>	\$34 7/8



## **NEW HAMPSHIRE ELECTRIC COOPERATIVE, INC.**

New Hampshire Electric Cooperative is a consumer owned distribution utility incorporated in 1939 with its headquarters located in Plymouth, New Hampshire. The Cooperative provides electric distribution and complementary products and services over a 2,420 square mile territory in the state of New Hampshire. The assigned service territory stretches from the southern part of the state near Manchester, 60 miles north of Boston, to the north near Colebrook, 30 miles from the Canadian border, and from the east adjacent to the Maine border in the Mt. Washington Valley area to the west adjacent to the Vermont border along the Connecticut River. At year-end 1997 the Cooperative served approximately 69,000 residential and commercial consumer-owners in 118 towns located in nine of ten counties in New Hampshire. The New Hampshire Public Utilities Commission regulates NHEC. The Cooperative continues to develop as a superior distribution utility and now obtains all its financing from private markets.

## **NORTHEAST UTILITIES**

Northeast Utilities is an electric utility holding company registered under the Public Utility Holding Company Act of 1935 and is the parent company of the NU system, one of the 20 largest utility systems in the country and the largest in New England. NU serves an average of 1.7 million retail electric customers in Connecticut, New Hampshire and Western Massachusetts.

### **General Offices:**

107 Selden Street

Berlin, Connecticut 06037-1616

(860) 286-5000

<http://www.nu.com>

### **Service Area:**

NU has a service area that stretches from the Connecticut shore through the Berkshires in western Massachusetts to the Canadian border with New Hampshire and covers approximately 11,335 square miles (4,400 in Connecticut, 1,490 in Massachusetts and 5,445 in New Hampshire).

### **Distribution Subsidiaries include:**

Connecticut Light and Power Company, which serves 149 communities in Connecticut.

Public Service Company of New Hampshire, which serves 198 communities in New Hampshire.

Western Massachusetts Electric Company, which serves 60 communities in western Massachusetts.

### **Other wholly owned Subsidiaries include:**

Northeast Utilities Service Company (NUSCO) provides centralized accounting, administrative, information resources, engineering, financial, legal, operational, planning, purchasing and other service to the system companies.

North Atlantic Energy Service Corporation (NAESCO) has operational responsibility for the Seabrook nuclear generating facility.

Northeast Nuclear Energy Company (NNECO) acts as agent for the system companies and other New England utilities in operating the Millstone nuclear generating facilities.

Select Energy is an unregulated retail energy supplier.

**Transmission and Distribution:**

NU delivers electricity through 3,056 circuit miles of transmission lines, more than 32,649 pole miles of distribution lines, 519 transmission and distribution substations, and 391,562 distribution transformers. Comprehensive construction and reconstruction projects are under way to upgrade distribution facilities and improve reliability. Included is the installation of loop systems that automatically restore service to unaffected portions of circuits that are experiencing service interruptions.

**Financial Information:**

Number of Employees:	8,988
Trading Symbol: New York Stock Exchange:	NU
Number of Common Shareholders as of January 31, 1997:	114,818
Common Shares issued and outstanding as of January 31, 1997:	136,051,939
1996 Operating Revenue:	\$3,792,148,000

## **UNITIL**

Unitil Corporation of Hampton, New Hampshire (AMEX:Ticker UTL), is a public utility holding company system with several wholly-owned energy and energy service companies providing electricity and natural gas to over 100,000 customers located in Massachusetts and New Hampshire. All Unitil customers are supplied from a broad portfolio of energy supplies which include modern plants, clean-burning fuels and renewable resources.

### **UTILITY SUBSIDIARIES**

#### *CONCORD ELECTRIC COMPANY*

Concord Electric Company, (Concord Electric) incorporated in 1901, provides retail electric service to 25,000 customers in a 240 square-mile service area in the Merrimack River Valley of south-central New Hampshire, with an estimated population of 79,000. It serves the City of Concord and major portions of the surrounding 12 communities of Bow, Boscawen, Canterbury, Chichester, Epsom, Salisbury, and Webster, and limited areas in the towns of Allenstown, Dunbarton, Hopkinton, Loudon, and Pembroke. Concord Electric's business office is located at One McGuire Street, Concord, New Hampshire 03301, and can be reached by telephone at 1-800-852-3339.

#### *EXETER AND HAMPTON ELECTRIC COMPANY*

Exeter & Hampton Electric Company, (Exeter & Hampton) incorporated in New Hampshire in 1908, provides retail electric service to 36,000 customers in a 168-square-mile service area in southeastern New Hampshire, with an estimated population of 114,000. The Company serves the Town of Exeter and all or part of the 17 surrounding communities of Atkinson, Danville, East Kingston, Hampton Falls, Kensington, Kingston, Newton, Plaistow, Seabrook, South Hampton and Stratham, and portions of the towns of Derry, Brentwood, Greenland, Hampstead and North Hampton. Exeter & Hampton's business office is located at 114 Drinkwater Road, Kensington, New Hampshire 03833 and can be reached by telephone at 1-800-582-7276.

#### *FITCHBURG GAS AND ELECTRIC LIGHT COMPANY*

Fitchburg Gas and Electric Light Company (FG&E), Incorporated in Massachusetts in 1852, provides retail electric and natural gas service to 40,000 customers in a 170-square mile service area in north-central Massachusetts, with an estimated population of 82,000. The Company provides electric service to 25,000 customers in the communities of Fitchburg, Townsend, Lunenburg, Ashby, Westminster, and Gardner. FG&E's business office is located at 285 John Fitch Highway, Fitchburg, Massachusetts and can be reached by telephone at 1-888-301-7700.

## **OTHER SUBSIDIARIES**

### *UNITIL RESOURCES, INC.*

Unitil Resources, Inc., incorporated in 1993, provides power marketing, financial, accounting, regulatory and related operational services to non-affiliated clients. In 1996, Unitil Resources began supplying electricity to retail customers in New Hampshire's Pilot Program on retail electricity competition and has recently received approval to begin supplying additional energy products and fuels in competitive markets.

### *UNITIL POWER CORP.*

Unitil Power Corp., incorporated in 1984, is a wholesale supplier of electricity to its affiliated companies. Unitil Power is a New England Power Pool member and is regulated by the Federal Energy Regulatory Commission. Unitil Power currently has a portfolio of contracts for power from numerous suppliers. These contracts are purchased from investor-owned, municipal and cooperative utilities and other independent power producers including purchases from Qualified Facilities under the Public Utility Reporting Policy Act. Power supplies are evaluated on the basis of price, fuel source, vendor diversity, physical diversity and other factors which will contribute to a robust power supply under a wide variety of possible future scenarios. These contracts are a mix of long term and shorter term purchases and include unit capacity purchases and system capacity purchases to meet firm customer needs.

## *UNITIL SERVICE CORPORATION*

Unitil Service Corp., incorporated in 1984, is divided into several functional areas that supply a variety of centralized administrative and management services to Unitil System subsidiaries.

### **Financial Information:**

Number of employees: 320

Number of Shareholders: 2,473

1996 Operating Revenue: \$170,846,000

1996 Earnings: \$1.94 per average common share outstanding. An increase over 1995 earnings per share of \$1.88. 1996 marked the fourth consecutive year that Unitil achieved record earnings.

1996 Dividends declared per share: \$1.32

Book Value per share at year end 1996: \$15.50

Market Price per share at year end 1996: \$20.00

## **C. SUPPLIER REGISTRATION**

The purpose of the Commission's rules for providers of competitive electric services is to establish requirements for competitive electric suppliers seeking to sell generation service to retail customers in New Hampshire consistent with the promotion of full and fair competition among competitive electric suppliers.

As part of the NHPUC Supplier registration requirements, competitive Suppliers will be required to file an application with the NHPUC. That application requires suppliers to provide certain information including certification of compliance with ISO reliability requirements. To enable the electronic exchange of information, as well as to support the NHPUC billing options and other available opportunities, a Supplier will also have to sign a trading partner agreement with each Utility as well as communicate electronically with each utility.

### **1. REGISTRATION WITH STATE REGULATORY AUTHORITIES**

A Supplier must register with the state regulatory authority, the **NHPUC**, as required by the Commission's administrative rules.

### **2. NEPOOL/ISO-NEW ENGLAND REPRESENTATION**

#### *NEPOOL Membership*

A Supplier must obtain a Certificate of Compliance from NEPOOL stating that it has complied with the ISO reliability requirements. Suppliers can comply with those requirements by either becoming a NEPOOL member or establishing a contract with a NEPOOL member so that its bulk power supply facilities and resources are administered by NEPOOL. Such administration by NEPOOL provides reliability of wholesale supply in accordance with NERC and NPCC guidelines, NEPOOL reliability criteria and operation of the NEPOOL system by NEPEX currently, and by ISO New England under a restructured NEPOOL.

Membership in NEPOOL is open to any person or organization engaged in the electric utility business (the generation, transmission or distribution of electricity for consumption by the public, or the purchase, as principal or broker, of electric energy and/or capacity for resale at wholesale) whether the United States of America or Canada, or a state or

province or a political subdivision thereof or a duly established agency of any of them, a private corporation, a partnership, an individual, an electric cooperative or any person or organization recognized in law capable of owning property and contracting with respect thereto.

If a Supplier elects not to be a NEPOOL Participant, its power supply must be treated by NEPOOL as part of a Participant's responsibility for energy and capacity. After a Supplier and a NEPOOL Participant have made their own bilateral agreement, they should inform NEPOOL that all transactions involving the Supplier will be treated as those of the NEPOOL Participant.

#### *CREATION OF A TIELINE*

In NEPOOL billing, a tieline is a connection, or combination of connections, across which energy flows between Participants. A tieline may be a combination of several actual connections. The NEPOOL Automated Billing System (NABS) Procedure for the Transfer of Capability and Energy Responsibility For Load Between NEPOOL Participants (NABS 18) describes the procedure for establishing tielines. It involves the Participants whose NEPOOL energy bills will be affected by the transfer, the Host Utility and NEPOOL Billing.

Suppliers should contact **both** NEPOOL and the Host Utility to establish and activate tielines prior to enrolling their first customer in that utility's service territory.

In general, each Host Utility will require the following supplier information to establish a tie line:

- Host Utility
- NEPOOL Participant
- Participants Own Load Dispatch Number
- Supplier's Name
- Supplier's Contact Name, Telephone Number, and Address
- NEPOOL Contact
- Estimated Load Transfer
- Estimated Load Transfer Date

### **3. SUPPLIER TRAINING ATTENDANCE**



Attendance at a Supplier Training Workshop is a requirement for doing business in the New Hampshire retail energy market. Any entity intending to register with the NHPUC as a Supplier or service provider must attend a Supplier Training Workshop. Additionally, successful testing of a supplier's ability to send and receive electronic data, according to the rules set forth in the EDI Working Group Report, is required prior to initiation of any electronic transaction or being allowed to enroll customers in a Distribution Company's service territory. Attendance at a Supplier Training Workshop is a prerequisite for EDI testing.

#### **4. TRADING PARTNER AGREEMENTS**

Before a competitive Supplier can enroll a Customer it must have a service contract with the Distribution Company in whose service territory the Supplier intends to do business. At a minimum, the agreement resolves information exchange, problem resolution, and revenue liability issues.

#### **5. COMMUNICATIONS TESTING**

Each Distribution Company will commence testing transaction transmittals once the Supplier has signed a Supplier Agreement, established its trading partner relationships, completed internal EDI hardware and/or software/interfaces, and mapped the transactions specified in the EDI Working Group Report. Compliance testing for Suppliers is accomplished by successfully exchanging a standard set of test transactions with each Distribution Company in whose service territory it intends to do business. Standard tests and time requirements are described further in Sections III (G) and III (H).

## **D. BILLING**

This section outlines how Distribution Companies will handle billing in compliance with the NHPUC requirements. Similarities and differences in the approaches between Distribution Companies will be identified to facilitate the seamless exchange of information for the overall benefit of the customer.

### **1. BILLING OPTIONS**

In order to aid the provision of competitive electric generation services, Distribution Companies or their agents shall offer both Standard (Passthrough) and Consolidated billing services as described below:

#### *Standard Billing Service - Passthrough (Separate Bills):*

A Distribution Company shall offer a standard billing service to all Competitive Suppliers doing business in its service area. Standard billing service requires the Distribution Company to electronically transfer to a Customer's authorized Competitive Supplier the Customer's usage data within twenty four (24) hours of the Distribution Company's issuing a bill to that Customer. See Transaction #10. After receiving the data, the Competitive Supplier can issue a separate bill for energy services provided.

#### *Consolidated Billing Service:*

Under this option, a Competitive Supplier or its agent must provide the Distribution Company with its price schedule for the relevant Customer or customer class. Using these prices and metered usage data, the Distribution Company can calculate the Customer's energy service bill and include this on a single bill together with Distribution Company's unbundled transmission, distribution and stranded cost charges. See Transaction #11.

Competitive Suppliers who select the Consolidated Billing Option are limited to the rate structures, customer class definitions and availability requirements that are within the capabilities of the Distribution Company's billing system.

### **2. REQUIRED BILLING INFORMATION**

The billing application process must be formalized to ensure Customers are billed properly and the necessary information is passed correctly from Distribution Company to Supplier and vice versa. An example of the basic information requirements needed to establish a consolidated billing profile include but are not limited to:

- Name of Supplier
- Supplier Address
- Supplier Customer Service phone number
- Supplier Tax Identification number
- Dun and Bradstreet number
- VAN account, User-ID and any message class requests

Supplier's billing contact & phone number

- Name of receiving bank (to accept electronic transfer of Customer payments)
- Routing and transit number (ABA number)
- Bank account number

To facilitate the accurate and timely exchange of billing and usage information, each Supplier may be required to sign a formal service agreement which includes more specific data requirements for each Distribution Company. Suppliers are encouraged to contact the appropriate Distribution Company representative for more information.

### **3. METER READING**

Distribution Companies and suppliers will read all Customer meters in accordance with NHPUC policies and regulations and established Distribution Company meter reading and billing schedules. The following table outlines the similarities and differences that exist among Distribution Companies' meter reading processes.

COMPANY	NO. OF CYCLES	BILLING PERIOD	BILLING WINDOW	USAGE TRANSMISSION AFTER VALIDATION	ACTIVITY CODES
Concord Electric					
Connecticut Valley Elec.					
Exeter & Hampton Elec.					
Granite State Electric					
New Hampshire Coop.					
Public Service Co./ N.H.					

**Explanation of Data:**

*Billing period range:* The number of days from one meter reading to the next which will produce a standard “monthly” bill.

*Billing window:* The maximum number of days after the reading date that an on-cycle bill may be generated. Bills rendered after this date will either be estimated or billed off-cycle.

*Usage transmission:* The elapsed day(s) that data will be sent electronically to the Supplier after the data has passed utility validation checks.

*Activity codes:* The usage type that is sent to the Supplier.

To facilitate the exchange of information, each Distribution Company will publish its meter reading schedule on its Web Site.

**4. RATE STRUCTURES**

In order to support the consolidated billing option, Suppliers must adhere to NHPUC-approved Customer class designations for each Distribution Company. Each Distribution Company will post currently effective tariffs on its Web site.

If a Supplier makes a written request to add a pricing/rate structure not currently supported by a Distribution Company, the Distribution Company will consider making reasonable changes to its billing system. The requesting Supplier will be responsible for any costs incurred to make the designated changes, which will be quoted by the Distribution Company to the Supplier in advance of any changes. A different price structure may also require the installation of a different meter.

Under the Standard billing option, Suppliers will handle billing for the generation component of the service.

#### **5. CASH POSTING SEQUENCE (CONSOLIDATED BILLING OPTION)**

Each Distribution Company will submit, as part of its compliance filing, a proposed cash posting sequence to be applied under the Consolidated Billing Option. The proposed Cash Posting Sequence will be subject to Commission approval.

#### **6. SPECIAL SITUATIONS**

##### *Bill Cancellations: Standard Billing*

If a meter reading problem occurs which results in incorrect usage being transmitted, the metering agent will send a cancel usage transaction to the appropriate parties for the incorrect bill periods. If the Metering Agent has corrected the usage data for those canceled bill periods, they will send the appropriate usage transaction. In many situations, the usage cancellation and correction is done at the same time, so the two transactions would be transmitted, most often, in the same file.

##### *Bill Cancellations: Consolidated Billing*

If there has been a problem with readings which has resulted in incorrect usage being billed to an account, the Distribution Companies will send a cancel usage and billing transaction to the current Supplier and to any previous Supplier. The activity code on the transaction will indicate that it is a cancellation.

When the Distribution Company releases the corrected bill showing the corrected use and dollars, it will send a corrected usage and billing transaction to the current and previous Suppliers. In most instances, the activity code will indicate it is an “off-cycle” bill.

The cancel transaction will indicate what use and dollars are being “backed-out”. The corrected bill transaction will show the use and dollars being re-billed in place of what was canceled.

If the cancellation and re-bill covers bill periods for Suppliers that have been dropped, and the Distribution Companies have already charged back any balances to the Suppliers, the cancel use transaction and corrected use transaction will be handled the same way as they are handled for Standard billing.

*Budget Processing/Payment Plans: Consolidated Billing*

The customer will be budgeted for the Distribution component of the bill only. The Supplier balance would be added to the Budget amount on the consolidated bill.

If a Customer with Complete Billing is in arrears with the Distribution Company, payment plans would customarily be made on the Distribution balance in the appropriate circumstances. Payment Plans on Supplier balances would only be done if the particular Service Agreement with the Distribution Company provided for those specific services.

*Summary/Statement Billing*

Some Distribution Companies offer qualified customers with multiple electric service accounts a summary billing option. Designed to consolidate multiple individual account billings on a single bill format, this optional service allows Customers to pay numerous accounts with one check.

At the start of Retail Access, only Granite State Electric is able to support Summary/Statement billing for the summary billed Customers who have selected the Consolidated Billing Option.

If a Supplier wants a Distribution Company to provide Summary/Statement Billing services for their customers on the Consolidated Billing Option, and the Distribution Company does not support that service initially, a bilateral agreement will need to be made in order for the Distribution Company to make the systems changes. Since each Distribution Company has its own particular systems' architecture for this type of billing, the costs and effort required to adapt each system may vary widely.

**7. Revenue Protection**

On occasion, the Metering Agent will uncover losses in usage information and revenue. These may result from a variety of causes, i.e., meter equipment malfunction, accidental damage, diversion of electricity, or meter tampering, and all result in losses to the Distribution Company and Competitive Suppliers.

If the Customer-of-Record is served by a Competitive Supplier, the Metering Agent will apprise the Supplier and the Distribution Company of the nature of the problem when it is uncovered, and will keep the parties informed as the case progresses toward resolution.

Corrections to billing will result from any of several industry-accepted methodologies for restructuring losses based on the problem conditions found and available account history for the affected customer. Corrections to billing may not necessarily include corrections to, or exchanges of, the assigned billing meter(s). All appropriate usage adjustments will be communicated to the Supplier and Distribution Company.

## **E. ESTIMATION OF HOURLY SUPPLIER LOADS**

### **1. General Overview**

Generating units will be dispatched to meet the region's electrical requirements reliably.

In each hour some Generators are net sellers of electricity, while other Generators are net purchasers. As a result, a Supplier's individual electricity production may not match the demand of its Customers.

To determine the extent to which a supplier is a net buyer or seller on an hourly basis for ISO settlement purposes, it is necessary to measure or estimate the hourly aggregate demand ("own-load") for all Customers served by each Supplier. Distribution Companies are responsible for estimating the loads of customers who do not have hourly metering capability. These aggregate hourly loads are then reported to the ISO on a daily basis.

The estimation process is a cost-effective approach to producing estimates of Supplier loads that are reliable, unbiased and reasonably accurate. The hourly load estimates are based on rate class load profiles, which are developed from statistically designed samples. Each day, the class load shapes are scaled to the population of customers served by each Supplier. In cases where telemetered data on individual customer loads are available, they are used in place of the estimated shapes. Each month the estimates are adjusted to reflect actual usage data obtained from Customer meter readings. Supplier loads are also adjusted so that the sum of the estimated and telemetered loads matches the total load delivered into the distribution system.



## **2. DISTRIBUTION COMPANY LOAD ESTIMATION PROCEDURES**

### **Connecticut Valley Electric Company**

Information was not available at the time this version was published.

## NEES COMPANIES

The NEES Companies' load estimation system has been in operation since June 1996 to support the NEES Companies' retail access pilots. The NEES Companies now estimate load for 1.3 million customers every day and report this data to ISO-NE within 36 hours.

### **ESTIMATION OF SUPPLIERS' HOURLY "OWN LOAD"**

Granite State Electric Company (GSEC) is responsible for estimating the hourly aggregate demand ("own-load") for all Customers served by each Supplier within its service territory. These hourly loads are reported to the ISO on a daily basis. Each month, the estimates are refined by incorporating actual usage data obtained from customer meter readings.

### **DAILY ESTIMATION PROCESS**

The daily process estimates the hourly load for each Supplier for the previous day. There are five components in this process:

#### *Select Load Shapes*

Select a proxy date from a 90-day window in the previous year with load characteristics which most closely match the day for which the hourly demand estimates are being produced. Extract load shapes for each customer class for the selected proxy date from the load research database. Load shapes for the Residential and Small C&I rate classes are based on statistically valid samples. For large C&I customers (over 200 kW), individual customer load shapes are used.

#### *Aggregate Usage Information*

Scale the class load shapes appropriately for each individual customer based on the usage level of the customer relative to the class average usage level. Calculate a factor for each customer which reflects its relative usage level and includes an adjustment for distribution losses ("load adjustment factor"). Aggregate the load adjustment factors across the customers served by each Supplier in each class.

#### *Develop Preliminary Estimate of Hourly Loads*

Produce a preliminary estimate of each Supplier's hourly loads by combining the proxy day class load shapes with the Supplier's total load adjustment factors incorporating any telemetered loads. Aggregate the loads across the classes for each Supplier.

#### *Reconcile to Meters at Transmission Delivery Points*

Adjust the preliminary hourly supplier estimates so that their sum is equal to the Company's actual hourly metered loads (as metered at the point of delivery to the distribution system) by allocating any differences to Suppliers' proportionally.

#### *Incorporate Transmission Losses*

Transmission losses will be approximated and added to the results of the previous steps.

### **MONTHLY RECONCILIATION PROCESS**

The monthly process improves the estimates of Supplier loads by incorporating the most recent customer usage information, which is available after the monthly meter readings are processed. GSEC will make diligent efforts to read all Customers' meters in accordance with its terms and conditions as approved by the NHPUC. Customers' actual usage is summed for each Supplier, and then compared to the Supplier's estimated usage. The difference between actual kWh and the estimated kWh reflects a kWh amount for which the Supplier may have been overcharged or undercharged by the ISO during the month. As in the daily process, all Suppliers' loads are adjusted so that the sum of the estimated and telemetered loads matches the total load delivered into the distribution system.

## **NEW HAMPSHIRE ELECTRIC COOPERATIVE**

The NHEC Load Estimation Procedure is currently based on information provided by PSNH. A new process is currently under development.

**PUBLIC SERVICE OF NEW HAMPSHIRE**

Information was not available at the time this version was published

## UNITIL SYSTEM OF COMPANIES

The Unitil Companies' load estimation system has been in operation since June 1996 to support the Unitil Companies' participation in the New Hampshire Retail Competition Pilot Program. The Unitil Companies now estimates hourly loads for approximately 63,000 customers every day and reports this data to ISO-NE within 36 hours. The current methodology will be changed significantly before the implementation of retail competition. Below is a description of the methodology to be used after retail competition begins.

### **Daily Estimation of Suppliers' Hourly Loads:**

The daily process estimates the hourly load for each Supplier for the previous day. There are five major steps to this process:

#### *Select Proxy Load Shapes*

The actual load shapes collected from telemetered customers will be used in the estimation process whenever they are available. For all other customers, a proxy load shape will be used. For the largest customers who have interval data recorders (IDRs), the actual load data from the historical proxy day will be used. The Company will select this proxy day based on the system load shape from the previous year which most resembles the current day for which an estimate is required. The corresponding customer class and IDR load shapes for that same date from the load shape database will be selected.

#### *Aggregate Usage Information*

The class load shapes are scaled up or down for each customer based on the customer usage factor (CUF). The CUF is the ratio between the individual customer's usage and the average class usage. Distribution losses are added for each customer and the loads are then summed across the customers served by each Supplier for each class.

#### *Combined Loads to Develop Preliminary Estimates of Supplier Loads*

The loss adjusted proxy day IDR loads and loss adjusted telemetered loads are then added to the appropriate Supplier's load. A total hourly load is computed for each Supplier by adding together the different class loads.

#### *Reconcile to Tie-Point Loads*

The preliminary Supplier loads are summed and compared to the sum of the Unitil Companies' metered system tie-line loads. A residual is developed and allocated back to each of the Suppliers on a proportionate basis, excepting telemetered loads.

#### *Adjust for Transmission Losses*

Transmission losses are estimated and added to each Supplier's estimated hourly loads.

### **Monthly Reconciliation Process**

The daily load estimation process will be improved by re-estimating each day at month end, after all the current month's meter readings have been processed, based on the most up to date usage information available. Revised daily estimates will be summed for each supplier to calculate the monthly loads. The difference between the new monthly kWh and the previously reported monthly kWh is then reported to the ISO-NE as the preliminary month-end adjustment. The same process is done the following month with even more up to date information and reported as the final month-end adjustment.

## **F. TELEMETERING**

### **1. OVERVIEW**

The meter installed at a Customer site will be used to provide core metering services consistent with NHPUC policies and regulations. These services may include determining customer usage for the purpose of refining the load estimation process.

Telemetry provides the ability to collect detailed customer usage data (interval data) daily from a recording device using telephone or other electronic communications. Suppliers may elect to have the Distribution Company install or install their own telemetry equipment at a Customer's location if they are the Supplier of record. Installation of telemetry has the following benefits:

- Provides interval metering data to Suppliers and/or Customers to facilitate the development of products and services.
- Enables the Distribution Company to replace estimated hourly data with actual hourly data for ISO-NE own-load reporting purposes.

## **2. TELEMETERING OPTIONS**

### *Service Option 1*

Suppliers who opt for actual hourly data but do not wish to purchase their own equipment may enter into metering services agreements with competitive providers. At the supplier's request, the Distribution Company will install the appropriate interval recording equipment on the Suppliers' behalf and provide actual hourly loads to ISO New England in lieu of load estimation. The Customer/Supplier shall separately arrange for the installation and pay all associated installation, operation, data collection, and maintenance costs.

### *Service Option 2*

For Suppliers that opt for actual interval data and wish to own their own equipment, the Distribution Company would provide energy pulses to a Supplier-owned recorder.

Where the Supplier opts for actual hourly load reporting by the Distribution Company in lieu of estimation, the Supplier must purchase an approved interval recorder and provide the Distribution Company with timely access to the data so as to comply with

the daily reporting requirements of the ISO-NE. Should the ability to access the interval data be impaired, the Distribution Company would revert to load estimation until such time that access is restored. The Supplier may remove both the recorder and the communications line at their discretion.

Suppliers that choose Distribution Company load estimation (basic service) but wish to own their own equipment for bill calculation or other purposes may purchase any device that accepts the Distribution Company pulse outputs, i.e., these devices do not have to be on the Distribution Company approved list.

Distribution Companies will work with Customers, Manufacturers and Suppliers to develop and standardize on other, more advanced communication interfaces as they evolve.

### *Service Option 3*

The Supplier may request installation by the Distribution Company of an approved meter and/or communications device, provided such a device does not interfere with the operation of the existing meter. The Supplier shall bear all costs associated with the installation, and maintenance of the communications device or meter.

### *General Procedures*

Suppliers considering telemetering should contact the technical contact at each Distribution Company. They will provide company specific materials, including:

- Procedures: Step by step instructions for obtaining telemetering
- Information Transfer: Description on how information will be exchanged between Supplier and Distribution Company (i.e. electronically, forms, etc.)

**G. INFORMATION EXCHANGE**

In order to begin the required electronic information interchange between Suppliers and Distribution Companies, a Supplier will have participated in training, will have acquired the necessary EDI capability and successfully completed tests of electronic transactions and equipment, will have executed a trading partner agreement with the appropriate Distribution Company(s), and, will have obtained authorization of the Customer for enrollment.

**1. Electronic Business Transactions**

The table below lists the business processes and the electronic exchanges that will enable the implementation of retail competition:

Electronic Business Transactions

EBT	Business Processes	Number	Flow	Data Format
Account Administration	Enroll Customer	1	NS⇒DC	I - Enroll
	Change Enrollment Detail	2	ES⇒DC	I - Change
	Change Enrollment Detail	3	DC⇒ES	I - Change
	Successful Enrollment	4	DC⇒NS	I - Success
	Customer Move	5	DC⇒ES	I - Move
	Error	6	DC⇒NS,ES	I - Error
	Customer Drops Supplier	7	DC⇒OS	I - Cust. Drop
	Supplier Drops Customer	8	ES⇒DC	I - Supp. Drop
	Confirm Drop Date	9	DC⇒ ES	I - Confirm
Usage/Billing	Customer Usage Information (Passthrough Option)	10	DC⇒ES	II - Customer Usage
	Customer Usage and Billing Information (Complete Option)	11	DC⇒ES	II - Customer Usage/Billing
Payments & Adjustments	Customer Payment/Adjustment	12	DC⇒ES, OS	III - Payment/Adjustment
Customer Usage	Customer Usage History	15	DC⇒NS, ES	V – History

**Electronic-Mail Transaction**

Settlement	Aggregate Load Estimate	13	DC⇒ES	IV - Load
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Legend:

DC - Distribution Company      ES - Existing Supplier      OS- Old Supplier      NS-New Supplier



## **2. EDI GUIDELINES**

The electronic transactions defined to support the exchange of information between Distribution Companies and Suppliers require standardized formats and a reliable protocol for the transmission of data between the parties. In addition, due to the importance and monetary value represented by these transactions, their time sensitivity, and concerns for privacy of information, certain standards must be met regarding security, auditability, data recovery, and time stamping of transactions.

The methods established to support the electronic business transactions for competitive supply of electricity in New Hampshire employ the standards specified by the Accredited Standards Committee (ASC) of the American National Standards Institute (ANSI) using the X12 Standards for Electronic Data Interchange (EDI). This section of the Supplier Training Manual describes the EDI transactions for the business processes listed in the prior Electronic Business Transactions table.

### *Requirements for EDI*

The following hardware and software components are critical to support EDI:

- Interface to and from Customer Information/Billing Systems (CIS)
- Computer and communications hardware
- EDI Translation software (translator)
- ASC X12 Standards, version 3070
- Configuration (mapping ) of the EDI translator for the New Hampshire business transactions
- A means of transmitting and receiving EDI transaction files
- Electronic funds transfer (EFT) capability

EDI components displayed graphically on following page.

### *Transaction Sets*

The following ASC X12 transaction sets have been specified to support the New Hampshire Electronic Business Transactions:

#### **TS 814-Administrative Format I Transactions**

- Enroll
- Change - (Supplier to DisCo)
- Change - DisCo to Supplier
- Successful Enrollment
- Customer Move
- Error

- Customer Drops Supplier
- Supplier Drops Customer
- Confirm Drop Date
- Customer Usage History Request

**TS 810-Usage and Billing Format II Transactions**

- Standard Billing Option – usage
- Consolidated Billing Option - usage & billing

**TS 820-Customer Payment/Adjustment Format III Transactions**

- Payment/Adjustment

**TS 867 - Product Transfer and Resale Report**

- Transmission of customer usage history

**TS 997- Functional Acknowledgment**

- A standard EDI transaction which acknowledges receipt of an EDI transmission

The transaction mapping implementation guidelines defined in the EDI Appendix were based on the Utility Industry Group (WG), a voluntary standards organization which establishes best practice guidelines for use of X12 transactions by the Utility industry. (*EDI Process Overview following page*).

**3. EDI Implementation Information**

*EDI References*

As an introduction to EDI, hardware & software suitable for the volume of transactions can be located in the resource listing in this section.

*EDI Implementation Task List*

The proposed sample workplan in this section could be considered as a guideline for implementing an EDI system.

**4. ELECTRONIC DATA TRANSMISSION**

Consistent with the requirements of the NHPUC's restructuring order, each Distribution Company must communicate with Suppliers through a Value Added Network (VAN). Using the EDI transactions, a Supplier may utilize any VAN it chooses provided it interconnects with the VAN(s) supported by the Distribution Companies in whose service territories it operates. Allocation of transactional fees associated with VANs (or other approved transport methods) shall be as specified in

each distribution companies compliance filing and as agreed upon in the trading partnership agreements.

#### *VAN Overview*

A VAN is a network shared by a wide range of users for the exchange of information.

Each company which utilizes a VAN must have a means of accessing it. This can be as simple as a single modem dialing over phone lines from a P.C. or in the case of high volume users, a dedicated high-speed line. VANs are currently the most common vehicle for the exchanging electronic data between businesses. Each user of the VAN has an account with it's VAN provider and one or more user i.d.'s. The user i.d. is also commonly referred to as a mailbox. In order to transfer files from one mailbox to another, a trading partner profile must first be established. This profile establishes the relationship between the two parties and allows for the transfer of data.

Costs for establishing and maintaining VAN services vary depending upon the method of access to the VAN, number of user i.d.'s, the number of files sent, the number of characters sent and received, and the time of day the transmissions occur.

There may be higher charges for "peak" usage than for "off peak" usage. Typically, peak time is during business hours. Payment responsibility is defined when the trading partner profile is established.

#### *VAN Features/Services*

VANS offer several options for file transfer. Typical VAN services are outlined below:

#### *Audit Trail*

The ability to determine whether a file has been sent/received, by whom, and when is critical to the efficient management of large-volume file transmissions. VAN's provide this information on-line as well as in report format. This feature will also prove essential when researching any issues related to file transfers. It also will allow reports to corroborate your billing system for audit and control purposes.

#### *Security*

Each mailbox and file access is limited to authorized parties. While e-mail has security, mail can be sent to your mailbox by anyone on your e-mail system.

#### *Ease of Use*

The VAN can provide a simple, user-friendly means of sending and receiving files. In some options, users could send e-mails with attachment files to accomplish the file transfers. Retrieval of these files would require intervention to separate the data from the e-mail note.

#### *Network Interconnects*

Trading files with a partner on a third party network is known as an interconnect. When exchanging flat files via an interconnect, the transfer of the file can become more difficult. Also, with interconnects, the number of systems or "hops" that are required to deliver the file will increase. This may increase the time to deliver the file.

In addition, varying systems encountered in third party networks will determine the routing and path that the file will traverse. As with any interconnect, you may be dealing with dissimilar systems and protocols (i.e. - SNA, X.25, TCP/IP, X.400, etc.). Within the same network as the Distribution Companies, you are dealing with only one protocol and system. All files are delivered virtually instantaneously.

VANs are widely recognized as efficient, secure, and controlled methods for transferring files. Each Supplier however, must review its own individual needs and circumstances and discuss these with their VAN provider.

#### *VAN Enrollment/Setup*

To establish a VAN connection one should:

- Contact the chosen Van provider and ask for the EDI Marketing/Enabling Group to set up a file exchange system using the Preferred Mailbox system. Also, identify yourself as either a Distribution Company or Power Supplier. This will allow them to assist you with your trading partner profile setup.
- Let the VAN provider know on what platform you will be sending and receiving files.
- Request the software that is appropriate for your platform.
- To set up one mailbox, select the appropriate option.

- Execute the signed agreements from the VAN provider, and they will forward you a copy of the software that allows dial-in to the network.
- When the software is received and installed from the VAN provider, appropriate parameters need to be set up to enable the sending and receipt of files. If you are a power supplier, you will need to set up a trading partner profile which will bill you for all files you send and receive. If you are a distribution company which will be exchanging files with power suppliers, then you will need to setup your trading partner profiles so that the power suppliers will be billed for all file transmissions.
- Establish trading partner relationships with the companies with whom you will be sharing files.

To establish a trading partner relationship with the distribution companies, at minimum you will need to forward the following information:

- Supplier Name
- Supplier VAN contact and phone number
- Supplier VAN account
- Supplier VAN user ID

As stated in the previous section, a Supplier may utilize any VAN it may choose, provided it interconnects with the VAN(s) supported by the Distribution Companies in whose service territory(s) it operates.

## **5. ALTERNATE TRANSPORTATION OPTIONS**

VANs provide an audit trail, reliability and proven technology, as well as service the six key areas identified below.

While transaction formats have been standardized so that Distribution Companies and Suppliers can develop the business processes and automated systems to meet their specific business needs, the use of VANs may not be the only means of meeting the NHPUC's requirements. Other methods, such as dedicated, leased phone line connections, dial-up phone connections, and other computer-to-computer file transfer

mechanisms could be used through bilateral agreement and may be practical and economical transfer mechanisms under certain circumstances.

In order to utilize some alternative data transfer technology, there must be bilateral agreement between the Distribution Company and Supplier. For secure and reliable operation of the marketplace, the Supplier must demonstrate that the proposed technology meets the following minimum criteria:

- Security/encryption of transactions and customer information
- Proof of transmission and receipt
- Positive identification of sender and receiver (non-repudiation)
- Reliability
- Data and file integrity
- Network performance and availability
- Recoverability and archiving of data.

## **6. COMPUTER OPERATIONS**

This section deals with operational issues that may have a significant effect on the efficiency and consistency of business processes. The following principles have been identified for computer operations:

- Processing of data must be reliable, predictable, accurate and efficient
- Transaction processing must be equitable and verifiable
- Trading partners' daily operational schedules should be accommodated
- The entire process must be designed to detect and report errors without intervention
- There must be a clear assignment of responsibility

Computer operations issues have been categorized as follows:

### *Scheduling*

Each trading partner will have daily schedules that should be accommodated to the extent possible. Operating schedules cannot be standardized because of differences in daily transaction volumes, processing techniques, technology, etc. At the same time, there should be a baseline schedule that all trading partners can rely on that does not place an undue burden on any trading partner.

The common Distribution Company transaction-processing schedule for a normal business day is as follows:

- Supplier transactions must be received by the processing Distribution Company by noon each working day.
- Transactions received by noon of the current business day will be responded to by noon the following business day.
- Validated usage transactions will be transmitted to Suppliers by noon of the day following the corresponding Distribution Company processing cycle.

### *File Handling*

The operational Guidelines pertaining to file handling are based on the transaction and data transmission standards included elsewhere in this document.

- Distribution Companies will attempt to process all files sent by Supplier(s) unless specific action is taken by the Supplier(s) to avert processing (i.e., delete files, replace files). Refer to the Error Handling section for additional information.
- The recipient of a file (Supplier or Distribution Company) is responsible for reviewing (editing) file contents to prevent adverse impact on the recipient's operations or systems (data errors, duplicate files, illogical conditions, etc.). The recipient of a file has the right to reject the file in whole or in part due to content or protocol errors. In the event that a file is rejected, the detail transactions will not be processed.
- The creator of a file is responsible for the accuracy and authenticity of the contents.
- All data exchanges will be done in a pre-established manner to ensure data security and integrity.
- Each file will have one recipient, and should contain transactions intended only for that recipient. A file may contain multiple transactions of the same or different type for the same customer account.
- Files will be processed by the recipient according to the recipient's operating schedule. Distribution Companies will sweep the input queue at least once each business day and will process all files that are available by the cut-off and up to the time of the last sweep.

- Files will be processed in chronological order. To ensure accurate and consistent posting of individual transactions, Distribution Companies will validate them in physical sequence as presented on the input files. Errors and confirmations (e.g., Successful Enrollments) will be returned to Suppliers no later than the first business day following the processing of the transactions by the Distribution Companies.
- Daily transaction exchange between Suppliers and Distribution Companies will generally not be limited in terms of the total number of files or transactions processed on a daily basis.

#### *ERROR HANDLING*

Each trading partner must establish two points of contact: one for operational issues and another for business issues. Each trading partner should establish appropriate procedures for problem resolution such that problems are identified, documented, properly classified and resolved in a timely manner.

Because access to and manipulation of data must be controlled, the creator of a file is responsible for correcting any errors in the data. No transaction that contains error(s) will be accepted.

#### *Recovery*

A sound operation includes data recovery procedures that can be invoked in the event of unexpected situations that require transactions to be recreated or resubmitted for any reason. The primary purpose of these recovery procedures is to protect the originator of a file from damages related to loss of the data.

No matter what data transfer method is used, the originator needs procedures so a file can be recreated and/or retransmitted or simply omitted from the job stream (unreadable data, invalid header, file control error, etc.). Supplier will have to coordinate with the Distribution Company in order to omit a file (in accordance with posted electronic operating schedules). Other conditions are addressed in the "File Handling" section.



It is the responsibility of the originator of a file to maintain the ability to recover or recreate the data. In lieu of regulations that may specify data retention requirements, the specific recovery guidelines are left up to each trading partner. The minimum recovery criteria based on the normal file creation scheduled is:

- Files created daily, recover or recreate up to 10 files
- Files created weekly, recover or recreate up to 5 files
- Files created monthly, recover or recreate up to 3 files
- Daily input and validation of Supplier input transactions (Enrollments, etc.)
- Distribution Company billing cycle
- ISO New England load estimating and reporting
- Daily output to the Suppliers (Successful Enrollments, Usage and Billing, Customer Payments, Errors, Load Settlement, etc.).

## 7. TESTING REQUIREMENTS

Prior to providing generation supply service to any Customer in New Hampshire's retail electric market, a Supplier must demonstrate its capability to electronically send and receive data to and from each Distribution Company in whose service area it intends to do business. *Successful testing must be completed prior to submittal of the first enrollment transaction, or any other electronic transaction, to the Distribution Company.*

The purpose of testing is to verify that the Supplier is capable of complying with the data transfer standards specified in this document and has the necessary software and hardware required to send, receive, and translate the standard transactions required to do business in New Hampshire.

The selection, installation, and configuration of computers and software for EDI, and mapping of transaction sets, establishment of communications, and basic testing are the responsibility of the Supplier prior to initiating the required testing process.

The Distribution Companies will assist in testing transactions and establishing trading partner relationships once the Supplier has completed its EDI hardware, software, and interfaces, has mapped the transactions as specified in the Implementation Guidelines, has completed internal testing and is ready to exchange test files.

Compliance testing for Suppliers will be accomplished by exchanging a standard set of test transactions (see Section H, EDI Appendices) with **each** Distribution Company in whose service territory it intends to do business. After the basic hardware and software components are in place, Distribution Companies will require two weeks notice to set up the test with a Supplier.

The test will utilize transactions from the standard transaction sets described herein, and verification of 100% error free transmission, receipt, and translation of the data by both Supplier and Distribution Company is required. An approved data transfer system will be used for the data exchange tests. Prior to the effective date for retail competition, each Distribution Company must demonstrate its capability to send and receive the transactions specified herein without modification to format or data elements.

#### *Standard Set of Test Scenarios - Distribution Company to Supplier*

The Supplier must contact the Distribution Companies in whose service areas it intends to do business and arrange for the exchange of test transactions. Distribution Companies will provide test procedures and a set of standard test scenarios to the Supplier.

#### *Testing - Supplier to Distribution Company*

The Supplier will initiate the test by creating the test transaction files with its software and posting the files to the Distribution Company's electronic mailbox. The Distribution Company will retrieve and translate the test transactions and verify the accuracy of the received data. This test will be repeated until satisfactory results are attained prior to proceeding with the "Distribution Company to Supplier" phase of testing.

#### *Testing - Distribution Company to Supplier*

Once the foregoing test is satisfactorily completed, the Distribution Company will send a set of test transactions to the Supplier's electronic mailbox. The Supplier will retrieve and translate the test transactions and verify the accuracy of the received data.

#### *Discrepancy Resolution - Repeated Testing*

The Distribution Company and Supplier will work to resolve any discrepancies in transmitted or received data and confirm correctness by repeating the test data exchanges described above until both parties are satisfied that consistently error free results can be accomplished.

#### *Test Completion - Commission Notification*

Upon *successful* completion of the test, the Distribution Company will activate the Supplier on its production business system. The details of the test data scenarios and transactions may vary over time. A detailed description of standard test scenarios is presented in Section H, EDI Appendices.

## **E. E.D.I. Appendices**

### **Insert:**

1. EDI Data Formats
2. EDI Glossary
3. EDI Implementation Guidelines
4. Compliance Test Standards
5. Compliance Test Conditions
6. Change Control Process