Unitil
Unitil Service Corp.

August 1, 2007

Debra A. Howland
Executive Director and Secretary
New Hampshire Public Utilities Commission
21 South Fruit Street
Concord, NH 03301

Re: NHPUC Docket No. DT 07-011 (Joint Petition of Verizon NH and FairPoint Communications)

Dear Secretary Howland:

Enclosed, on behalf of Unitil Energy Systems, Inc. ("Unitil") is the original and seven copies of the testimony and exhibits of Thomas P. Meissner, Chief Operating Officer, Unitil Corp. An electronic version of this filing is being delivered via electronic mail to all parties of record in this proceeding. Any party wanting a hard copy of this filing is requested to contact me directly.

Thank you for your attention to this matter. Please let me know if you have any questions.

Sincerely,

Gary Epler
Attorney for UES

Enclosure

cc: Service List (via e-mail)

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UNITIL ENERGY SYSTEMS, INC.

DIRECT TESTIMONY OF

THOMAS P. MEISSNER JR.

New Hampshire Public Utilities Commission

Docket No. DT 07-011

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I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Thomas P. Meissner Jr. My business address is 6 Liberty Lane West, Hampton, New Hampshire 03842.

Q. For whom do you work and in what capacity?

A. I am Senior Vice President and Chief Operating Officer of Unitil Corporation, and Senior Vice President of its principal subsidiaries, Unitil Energy Systems, Inc. ("Unitil") and Fitchburg Gas and Electric Light Company ("FG&E"). My responsibilities are primarily in the areas of utility operations and engineering.

Q Please summarize your professional and educational background.

A. I have over 20 years of professional experience in the utility industry and an extensive background in all areas of energy delivery including distribution engineering; system planning; construction and maintenance; safety; inventory and supply chain management; emergency response and restoration; fleet and facilities management; metering and meter reading; system operations; and related technology and asset management systems. I joined Unitil in 1994 as a design engineer and was named Director of Engineering in 1996, Senior Vice President of Operations and Engineering in 2003, and assumed my current responsibilities as COO of Unitil Corporation in 2005. Prior to joining Unitil, I was employed for 10 years at Public Service of New Hampshire where I advanced through a variety of positions in Distribution Engineering, Southern Division

Engineering, Seacoast Division Engineering, and Key Accounts. The last position I held prior to joining Unitil was that of Electrical Superintendent in Portsmouth. I hold Bachelor of Science degrees in Electrical Engineering and Mechanical Engineering from Northeastern University. I also completed the Power Technology Course ("PTI Course"), a two year certificate program taught by Power Technologies, Inc. of Schenectady, NY, and earned an MBA from the University of New Hampshire. **Unitil Exh. 1 P**

Q. Do you have any licenses that qualify you to speak to issues related to engineering?

A. Yes, I am a registered Professional Engineer in the state of New Hampshire.

Q. Have you previously testified before the New Hampshire Public Utilities Commission ("Commission")?

A. Yes, I have previously testified before this Commission.

Q. What is the purpose of your testimony in this proceeding?

A. The current utility paradigm is that most utility poles in the public right-of-way are jointly owned by the electric companies and the incumbent local exchange carriers under joint ownership or joint use agreements. On January 31, 2007, Verizon New England, Inc., Bell Atlantic Communications, Inc., NYNEX Long Distance Company, Verizon Select Services, Inc. (collectively "Verizon"), and FairPoint Communications, Inc. ("FairPoint") filed a Joint Application seeking

approval for the transfer of certain assets from Verizon to FairPoint which, if consummated, would result in FairPoint acquiring the Verizon franchise to provide wireline telecommunication services in New Hampshire and owning the network used to provide those services. Upon approval of the proposed transaction, it is my understanding that Verizon's ownership interest in all poles jointly owned with Unitil will be transferred to FairPoint, who will then assume all of Verizon's joint ownership rights and obligations, including placement, replacement, and maintenance of jointly owned poles. Therefore, we are concerned with how these ownership responsibilities will be carried out by the successor company. The purpose of my testimony is to identify a number of operational concerns arising from our joint ownership of utility poles with Verizon, and to request that Commission approval of the proposed transfer of these assets be conditioned on reasonable terms and conditions to ensure these issues do not negatively impact the cost, quality, and safety of electric service to our customers after the merger.

Q. Please summarize and provide a general description of your testimony.

A. My testimony is organized as follows:

Section II provides an overview of joint ownership of utility poles;

Section III covers inspection and maintenance of jointly owned poles;

Section IV discusses emergency response;

Section V deals with the timely placement and removal of utility poles;

Section VI discusses double poles;

Section VII discusses pole line trimming;

Section VIII covers the need for a dispute resolution procedure;

and Section IX concludes my testimony.

II. OVERVIEW OF JOINT OWNERSHIP

Q. What is Joint Ownership and why is it relevant to this proceeding?

A. With few exceptions, utility poles installed for electric supply and communication lines are jointly owned by the electric companies and the incumbent local exchange carriers, though they may be occupied by other parties including cable TV and broadband service providers, competitive local exchange carriers and other telecommunication service providers, as well fire alarm and municipal attachments. Unitil jointly owns most of the poles in its franchise territory in combination with Verizon. The division of ownership between Unitil and Verizon is accomplished by means of a "joint ownership" agreement, through which both parties own a half interest in each jointly owned pole in our shared areas. Because Unitil and Verizon own these assets in common and share in construction and maintenance responsibilities, and because, under the transaction contemplated by the Joint Petition filed by Verizon and FairPoint, Fairpoint intends to assume Verizon's interests in the joint pole agreements with the electric utilities (including the agreement between Unitil and Verizon), if the Joint Petition is approved we believe existing issues related to the joint ownership of this utility pole plant will continue to have a significant impact upon the cost, quality of

service and safety of service to the electric customers and the communities served by Unitil. **Unitil Exh. 1 P**

Q. Please describe your understanding of the structure of the joint ownership agreement between Verizon and Unitil.

A. Certainly. Unitil is party to an agreement with Verizon that provides for joint ownership of poles and anchors when and where such joint ownership is of mutual advantage. There are two parts to this agreement: 1) the Joint Ownership Agreement (JOA) which specifies the division of rights and obligations of the parties with respect to pole ownership and maintenance; and 2) Intercompany Operating Procedures (IOPs) which provide the detailed administrative, operational and maintenance procedures associated with the agreement. The IOPs are attached to, and integral to, the JOA, collectively forming the Agreement. In addition, the JOA is subject to applicable industry codes and regulations, and state and local laws and zoning requirements, and more stringent standards may apply. A copy of the JOA and IOPs between Verizon and Unitil is attached as UES Schedule TPM-1.

It is my general understanding that the joint pole ownership agreements between Verizon and the other electric utility companies in New Hampshire may be similar in structure and scope to the JOA between Verizon and Unitil. My testimony, however, is limited to a discussion of the Verizon-Unitil JOA and IOPs.

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Q. How are installation and maintenance responsibilities divided between the Joint Owners?

A. Responsibility for the installation and maintenance of jointly owned poles is divided between the owners into specific geographic areas defined in our IOPs with Verizon and are referred to as "maintenance areas." Each joint owner is responsible for maintaining all jointly owned poles in its maintenance areas in safe and serviceable condition, and for replacing or repairing poles that become deteriorated or defective, or are of insufficient size or strength for existing or proposed attachments. It is generally intended that each joint owner is responsible for placing and removing all jointly owned poles within its designated maintenance areas. In other words, Verizon installs all the poles in its designated maintenance areas, and Unitil installs all the poles in its designated maintenance areas.

Q. What will happen when Verizon's local exchange and long distance business in New Hampshire is transferred to FairPoint?

A. It is my understanding that Verizon's ownership interest in all poles jointly owned with Unitil will be transferred to FairPoint, who will then assume all of Verizon's rights and obligations under the JOA with Unitil. FairPoint will then be responsible for maintaining all jointly owned poles in its maintenance areas in safe and serviceable condition, and for placing and removing all jointly owned poles in its designated maintenance areas.

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Q. Has Unitil been concerned about Verizon's performance of its obligations under the JOA?

A. Yes. We have experienced a number of issues with Verizon's performance of its obligations under our JOA. Since November 2005, we have participated as a mandatory party in Docket DM 05-172, Investigation Into Utility Poles, before this Commission. During this investigation, multiple complaints were raised by customers, municipalities, the Department of Transportation, and other parties with regard to pole installations, removals and maintenance. In addition, Unitil has specific issues with Verizon's performance under the JOA and IOPs in such areas as pole inspections, tree trimming, emergency response, and timeliness of pole placements and removals.

These important performance issues related to safety, cost, and quality of service remain unresolved, and we believe it is critical that they be fully considered in this proceeding, and that reasonable conditions be imposed on Verizon's transfer of pole assets to FairPoint to ensure the surviving company is prepared and compelled to undertake the duties and responsibilities commensurate with ownership of these assets.

Q. Why have these issues surfaced after decades of joint ownership?

A. Joint ownership of utility poles by electric and telephone utility companies is a relic of a regulatory model that no longer fits today's circumstances. Joint

ownership agreements date back to a time when both electric and telephone utilities were natural monopolies under cost of service regulation, with limited competitive pressures, when both companies had a mutual interest in occupying the same poles and sharing in the construction costs and on-going maintenance obligations of pole infrastructure. Joint ownership arrangements served the companies equitably for many decades, but the environment today has changed dramatically from that which existed when joint ownership agreements were first established to gain efficiencies through joint planning and construction of new lines.

Today, the electric and telephone companies share a huge infrastructure of in-service pole plant that must be inspected, maintained and replaced. Local exchange carriers are no longer exclusive providers of telecommunication services, and face increasing competitive pressures, forcing operational adjustments that may conflict with their obligations to the other joint owner and the needs of other parties reliant on the pole-based infrastructure. Other competitive providers of telecommunication services also place their facilities on the same poles, and have a right to non-discriminatory access to these poles. Yet, the joint ownership agreements and intercompany operating procedures have remained largely unchanged for decades, and were never designed to meet the needs of today's business environment. The competitive environment in the telecommunication industry today was unimaginable at the time joint ownership was initiated.

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Q. How have these issues directly impacted Unitil?

A. At least in part as a result of competitive pressures on Verizon, with whom we share pole ownership, there has been a subtle shifting of costs and obligations onto us, the electric company. Inspection and maintenance practices once undertaken by Verizon have been abandoned; participation in programs such as tree trimming has been curtailed; response to emergencies is subject to lengthy delays, even as electric crews wait at the scene at premium rates of pay; restoration of service to customers may be delayed; the time needed for Verizon to set new poles has increased significantly, negatively impacting our own construction schedules and the need dates of customers; and the increasing number of double poles represents a mounting financial liability. As a result, Unitil customers who reside in the Verizon maintenance areas may experience a lower standard of service even though they pay the same rates as customers in the Unitil maintenance areas. Even the burden of administering joint ownership has increased significantly, as we no longer enjoy a cooperative working relationship with our joint ownership partner.

Q. What are the specific issues that should be considered by the Commission?

A. UES believes that it is not in the public interest to continue an ownership model in which one party facing competitive pressures is able to make operational adjustments that conflict with its ownership obligations, and which effectively shift costs onto the other joint owner. It is also not in the public interest for one

competitive provider of telecommunication services to own the poles upon which other competitive telecommunication providers are attached, or are seeking to attach. Unitil believes that many of the issues discussed in this testimony would be permanently resolved through sole ownership of all pole plant in the public right-of-way by the electric companies. We have expressed to both Verizon and FairPoint our interest in purchasing Verizon's portion of the pole plant located in the Unitil service territory, but neither party has expressed interest in such a transaction. Thus, as an alternative to sole ownership, we are requesting instead that the Commission impose conditions on the sale to FairPoint to address a number of important issues.

There are six specific issues that we feel should be considered and addressed through reasonable conditions imposed on the transfer of assets:

- Inspection and maintenance of jointly owned poles
- Emergency response
- Timely placement and removal of poles
- Double poles
- Pole line trimming
- Dispute resolution

UES does not oppose the transfer of assets so long as each of these issues is adequately addressed. A more detailed discussion of each issue, including recommendations, is provided below in the sections that follow.

III. INSPECTION AND MAINTENANCE OF JOINTLY OWNED POLES

Q. Does the Joint Ownership Agreement have specific requirements regarding the inspection and maintenance of jointly owned poles?

A. Yes. Intercompany Operating Procedure #16 of the IOP specifies that all joint poles shall be initially inspected at or before the age of 20 years. Thereafter, poles shall be re-inspected at intervals not to exceed 10 years. Each company is to be responsible for the inspection and treatment of all jointly owned poles in its respective maintenance areas, and the cost of inspection and treatment is to be borne individually by each company for its respective maintenance areas. In addition, Article 5 of the JOA specifies that construction and maintenance of all poles and anchors conform to the latest edition of the National Electrical Safety Code (NESC).

Q. Does the National Electrical Safety Code have specific requirements regarding the inspection and maintenance of jointly owned poles?

A. Yes. National standards pertinent to the inspection and maintenance programs of each company are set forth in rules 214, 253, and 261 of the NESC. A copy of these rules is attached as UES Schedule TPM-2. NESC Rule 214.A.2. requires that inspections be performed at such intervals as experience has shown to be necessary and may be performed in a separate operation or while performing other duties. NESC Rule 214.A.3. requires that poles and equipment be subjected to practical tests to determine required maintenance. Rules 253 and 261 specify the strength requirements and overload factors of structures when installed, and

"at replacement." The minimum strength requirements "at replacement" determine the on-going serviceability of the pole. In other words, if inspections reveal defects or deterioration, rules 253 and 261 set forth standards for determining whether a pole retains sufficient strength for existing or proposed attachments, or whether replacement or rehabilitation are required.

Q. Does Unitil have inspection and maintenance programs meeting the applicable requirements?

A. Yes. We inspect all jointly owned poles in our maintenance areas on a 10 year cycle. All poles are visually inspected and are tested at and below grade to determine the structural integrity of the wood, estimate remaining pole strength, and evaluate ongoing serviceability. Records of inspections and any defects found are recorded on applicable inspection sheets, and are maintained for one complete cycle, but not less than six years. Identified deficiencies are prioritized and scheduled for corrective action as appropriate; conditions that are found to represent a hazardous condition are corrected immediately. All deficiencies identified through this inspection program are recorded and tracked until corrective action has been completed. This inspection and test schedule is consistent with the provisions of IOP #16, and meets all the requirements of NESC rules 214, 253, and 261.

Q. Does Verizon have inspection and maintenance programs meeting the applicable requirements.

A. No. It is our understanding that Verizon abandoned its systematic pole inspection program many years ago, replacing it with a jobsite inspection program intended to safeguard worker safety. Verizon claims that it performs pole inspections on an ongoing basis in conjunction with planned work, yet its jobsite inspection program is designed only to identify conditions that may represent a physical hazard to Verizon workers. Inspections are limited to those poles that are climbed or worked on, visual inspections of adjacent poles on either side of the pole worked on, and those that are subject to heavy, unbalanced loads during construction work. Furthermore, the tests carried out by Verizon technicians are intended only to identify "hazardous conditions" and do not ensure compliance with the structural safety requirements of NESC as they do not include methods to evaluate the remaining pole strength. Verizon is unable to provide any documentary evidence of a systematic inspection program meeting the requirements of either NESC or IOP #16 with Unitil, and does not keep any records of inspections, or of deficiencies found, nor does Verizon record or track all defects until corrected.

Q. What is your recommendation for this issue?

A. I recommend that FairPoint be required to develop and implement a comprehensive pole inspection program for all jointly owned poles in its maintenance areas fully meeting the requirements of IOP #16 and all applicable provisions of National Electrical Safety Code. Such a program shall ensure that all jointly owned poles are initially inspected at or before the age of 20 years, after

which poles shall be re-inspected at intervals not to exceed 10 years. The program should include visual inspections and practical tests at and below grade to determine the structural integrity of the wood and estimate remaining pole strength and ongoing serviceability. Records of inspections should be recorded and maintained to demonstrate compliance with the applicable inspection intervals, and records of any defects found should maintained at least until corrective actions are taken.

IV. EMERGENCY RESPONSE

Q. Does the Joint Ownership Agreement have specific requirements regarding emergency response?

A. There are no specific provisions related to emergency response in the JOA, except that it is generally intended that each joint owner is responsible for placing and removing all jointly owned poles within its designated maintenance areas, and both parties must cooperate in the execution of work to make facilities safe and accomplish any necessary transfer work. Therefore, for emergencies involving a broken pole in Verizon's maintenance area, Verizon is responsible for responding to the emergency to set a new pole. For emergencies involving a broken pole in Unitil's maintenance area, Unitil is responsible for setting the new pole. Both utilities may be required to respond to the scene, regardless of maintenenace area, to secure their facilities and ensure public safety.

Q. Under what circumstances is emergency response necessary?

A. Emergency response involves such situations as vehicle accidents, including those resulting in a broken utility pole, outages affecting electric or telephone service, trees across power lines, wires down, or other types of emergencies involving joint facilities in the public right-of-way. These situations often result in emergency response from local municipal emergency personnel (police, fire), and prompt response from utilities may be necessary to ensure public safety. Utility companies who license poles in the public right-of-way must be able to respond to emergencies in a timely fashion 24 hours per day, 365 days per year.

Q. Does Unitil have specific arrangements and procedures for responding to emergencies in the public right-of-way?

A. Yes. Unitil has a number of arrangements and procedures in place to ensure prompt response to emergency calls. First and foremost, we have a standby system under which both supervisors and line crews are on paid standby outside of regular business hours to ensure there are personnel available to respond at all times. We have personnel on paid standby at each of our operating locations. In addition, all line personnel are subject to a residency requirement requiring them to live within 18 miles of their respective reporting location to ensure they are able to respond quickly to emergencies. We also have a 2nd shift crew covering the hours of 3:00 PM to 11:00 PM Monday through Friday, when many emergencies occur. Our customer service center is staffed 24/7 to ensure that anyone reporting an emergency is able to immediately reach a company representative. Customer service representatives are able to page or otherwise call

in either a supervisor or a repair crew. As a result of these arrangements, we are typically able to respond to the scene of an emergency within one hour of the initial call, on average.

Q. Does the Verizon have similar arrangements and procedures for responding to emergencies in the public right-of-way?

A. No. Verizon has no technicians or superviors on paid standby or otherwise on-call, nor is there any requirement that Verizon technicians live within a specified distance or a maximum drive time from their reporting garages. When notified of an emergency, Verizon uses an overtime list to systematically call technicians, starting with the garage covering the accident scene, and proceeding through subsequent garages until they solicit a sufficient number of technicians to respond to the emergency. This process may take an extended period of time as all of the technicians may need to be called at as many as three different garages. Even after calling all of the technicians at multiple garages, Verizon may not be able to secure a sufficient number of technicians. Furthermore, for those technicians that do respond, they may reside far from the location of the emergency, thus resulting in further delays.

As a direct consequence of this system, and the lack of standby arrangements or residency requirements, Verizon's average response time to emergencies is substantially different than Unitil's. In response to data requests in DM 05-172, Verizon produced data (collected in a ten month period in 2005) that

demonstrated a 142 minute average response time to the trouble scene for emergencies in southern New Hampshire, compared to an average response time of 53 minutes for Unitil. Verizon has provided updated data in this docket for the period from August 2006 through December 2006 which states that its response times have improved to an average of 105 minutes, or 98 minutes in the area south of the Lakes Region and 117 minutes for the area north of the Lakes Region. This same data shows that the average response times for those garages serving Unitil averaged 112 minutes for the Greenland garage and 128 minutes for the Concord garage, and the data often omits response times when Verizon is unable to solicit a sufficient number of technicians and must instead call in a contractor, which presumably results in a lengthy delay. Individual response times in some cases exceeded four hours.

Q. How does this disparity in response time affect emergency response?

A. In the event of a broken pole in Verizon's maintenance areas, the responding electric crew must wait for a Verizon crew to arrive on scene and set a new pole before proceeding with restoration and repairs. Unitil crews often wait an extended period of time before a Verizon crew arrives to set the pole. In our own maintenance area we arrive on scene promptly, fully prepared to set a pole, and proceed with repairs. As a result of this disparity in response time, two different levels of service have emerged. Customers in Verizon's maintenance areas are subject to lengthy delays in restoration due to Verizon's much slower response time. Customers in Unitil's maintenance areas can expect faster restoration as the

electric company is able to immediately set the pole and proceed with repairs. Furthermore, in situations where the electric crew and telephone crew must work together to hold or transfer facilities, there may be delays in securing public safety. The municipalities have argued that the safety of first responders and the free flow of traffic is compromised when different response standards exist.

Q. Are there other issues involving emergency response?

A. Yes. When poles are damaged due to vehicle accidents or other causes, our typical practice is to replace the damaged pole and transfer facilities to a new pole during the initial emergency. On occaision, there are times when the responding crew may determine that the pole does not represent an immediate hazard, or the pole may be "made safe" by affixing temporary bracing. In such situations, it is our practice to replace such poles as soon as practicable, typically within a few days. Verizon's practice is that once a pole has been "made safe," it concludes that the pole is no longer a hazard and replacement can wait for normal scheduling. The damaged pole is placed in Verizon's scheduling queue, to be replaced when Verizon's schedule permits, often after lengthy delays. Further delays may be experienced once the electric facilities and other attachments are transferred to the new pole, as Verizon may not return to complete its own transfers and remove the old pole. This gives rise to situations where broken or damaged poles are tied off or braced to new poles in the public right-of-way for extended periods of time. The municipalities have argued that the term "make safe" is inappropriate in these circumstances as the repaired pole is not

structurally sound and may now be more of a safety hazard than it was before the accident. We agree.

Q. What are the recommendations or remedies for these issues?

A. First of all, it is recommended that the Commission require FairPoint to meet the same average response time standards as the electric utilities. The Commission should allow FairPoint's management discretion as to how this standard be met, such as by implementing standby arrangements, residency requirements or other systems and procedures to ensure prompt response. In addition, for those poles that are temporarily made safe, FairPoint should be required to complete transfers and repairs, and remove the defective pole on an expedited basis. These reasonable conditions will ensure that customers and municipalties will receive equal or similar levels of service and response, irrespective of the maintenance areas of the Joint Owners.

V. TIMELY PLACEMENT AND REMOVAL OF POLES

Q. Does the Joint Ownership Agreement have specific requirements regarding timely placement and removal of poles?

A. There are provisions in the IOP governing the placement and removal of poles, including the operational and administrative procedures to be followed. These include procedures governing construction and joint ownership of new poles and anchors (IOP #2); procedures governing pole replacement (IOP #3); and the administrative "Exchange of Notice" procedure that is to be followed to initiate

requests for work and joint ownership in new poles (IOP #19). However, these procedures are largely silent with respect to schedules and timeframes. The administrative procedures specify that if either party receives a request for work and/or joint ownership, it has 30 days to respond by signing and returning the notice. Other than this requirement to sign and return the originating request, there are no other timeframes in our JOA with Verizon specifying when, or how quickly, the work should be completed. Furthermore, as it is intended that each joint owner is responsible for placing and removing all jointly owned poles within its designated maintenance areas, Verizon claims a sole and exclusive right to set all jointly owned poles within its maintenance areas if it has signed and returned the notice requesting such work. Verizon asserts that the electric companies cannot set poles in its maintenance area, irrespective of customer need date, priority, or the inability of Verizon to complete the work in the necessary timeframe. Thus, whether it takes 1 week, 1 month, or 1 year to have a pole set in Verizon's maintenance area is entirely subject to Verizon's priorities, schedules, and available technician hours.

Q. What has been your experience with the timeliness of pole placements?

A. Pole placements in Verizon's maintenance areas have been subject to long and unreasonable delays. At field meetings with customers and Unitil representatives, Verizon has typically quoted 8 weeks to complete pole sets, and almost always fails to meet this timeframe. It has been our experience that Verizon sets poles only after our repeated requests for scheduling status and constant pressure on

Verizon's engineering and construction management. In some cases, we have had to set poles ourselves in Verizon's maintenance area in order to complete required construction before customer electric load jeopardized continuity of service to our customers. In other cases, we have experienced significant cost overruns as a result of pole setting delays by Verizon. Customers requesting electric service may be subject to long delays in receiving such service if they are dependent on pole set(s) in Verizon's maintenance area. Relocations in the public right-of-way have been similarly delayed by Verizon's untimely pole placements and transfers.

Issues with untimely pole sets were perhaps best reflected in the frustrations of the various parties in DM 05-172. Customers, contractors, state and municipal government representatives and other parties claimed that pole placements are not being accomplished in a timely manner. Since pole installations are part of the critical path for any construction job, project delays caused by untimely pole placements by Verizon impacts our ability to deliver service. In some cases, project delays may jeopardize the physical integrity of our plant, or cause us to incur unnecessary costs, due entirely to the inaction of Verizon.

Q. Does Unitil have a scheduling process to manage and prioritize the scheduling of pole placements?

A. Yes. We maintain schedules and manage our work to meet "need dates." Work is prioritized on an on-going basis to meet the need dates of customers, as well as our own internal project schedules. If our internal resources are insufficient to

meet customer or company schedules in the required timeframe, crews may work overtime, and we also supplement our internal workforce with qualified external line contractors. In essence, the need date is "fixed," and the available resource hours to achieve scheduled dates is "variable."

Q. Does Verizon have a scheduling process to manage and prioritize the scheduling of pole placements?

A. Verizon also claims to prioritize pole sets by the the service order date requested by the customer. However, Verizon's schedules are limited by the available technician hours in Verizon's internal 30-day construction schedule. Verizon does not supplement its workforce with external contractors or other means, so for all practical purposes, the available resource hours are fixed, regardless of the amount of work to be completed and the need dates of customers. Verizon's scheduling paradigm assumes that available resources are "fixed," and need dates must necessarily be "variable." If a particular job cannot be completed in the 30-day scheduling window, the work is simply pushed into the next 30-day scheduling period. If the same job is once again not completed in that 30-day scheduling window, it is again pushed into a subsequent 30-day scheduling period.

Q. What is your recommendation for this issue?

A. The Commission should require that FairPoint be required to provide Unitil with specific timeframes tied to need dates for accomplishing pole placements and

removals. Such timeframes should be clearly specified in the IOPs. To the extent either joint owner is unable to complete pole placements within a reasonable timeframe as necessary to meet customer or company need dates, the Commission should require that the IOPs provide that the company needing the work completed may move forward with placing such poles.

VI. DOUBLE POLES

Q. What is a "double pole"?

A. A double pole is a situation that exists when a new pole and an old pole are set side-by-side in the same location, for the same facilities. This occurs when an existing pole in the public right-of-way is being replaced with a new pole. The new pole is initially set next to the old pole, at which point all parties on the pole, including cable and municipal attachments, must then transfer their facilities from the old pole to the new pole before the old pole can be removed. For practical reasons, the transfer of facilities begins with the facilities located at the top of the pole and proceeds sequentially down the pole. Electric facilities are normally located at the top of the pole, and are therefore the first to be transferred. Municipal and other licensee attachments must be transferred next, followed, finally, by the telephone company's facilities. A delay in the transfer of any of these facilities, in turn, delays the removal of the old pole, resulting in a so called "double pole."

Q. Does the Joint Ownership Agreement have specific requirements regarding double poles?

A. Yes, IOP #13 establishes the protocol to be followed to coordinate the transfers of the joint owners and other attachees. This procedure requires that the maintaining owner be responsible for coordinating the transfer of attachments, and stipulates that each company is responsible for transferring its facilities within 60 days. If transfers are not completed within the agreed time limits, the company that is the last one to remove its attachments from a jointly-owned pole is responsible to remove and dispose of it.

Q. Why is this a significant issue?

A. By some counts, there are as many as 7,000 double poles in the state of New Hampshire. According to Verizon's own response to DM 05-172, Staff 3-23 (attached as UES Schedule TPM-3), Verizon reports that it has 5,479 poles pending transfer activity, of which 3,356 have been pending for more than one year. Furthermore, Verizon reports 3,113 poles pending removal in Verizon's own pole maintenance areas, for which it is solely responsible for coordinating the timely transfer of attachments including its own, and removing the old pole. These figures were provided as of November 30, 2005, and the number of double poles have likely increased since that time. In a technical session in DM 05-172, Verizon estimated that the number of double poles had risen to nearly 7,000.

Municipalities are concerned that the proliferation of double poles within the public right-of-way represents a public safety issue, as well as an aesthetic concern within their communities. This reflects poorly upon both joint owners, and muncipalities are finding it necessary to pursue increasingly aggressive actions through licensing or other means to control the proliferation of double poles within the public right-of-way. This causes operational concerns for Unitil, and damages our relationship with the communities we serve.

Q. How should this issue be addressed?

A. I recommend that Commission approval of the Verizon/FairPoint transaction be conditioned on a plan to eliminate the existing backlog of double poles within 36 months of the closing date. Thereafter, each party shall effect their transfers in a manner consistent with IOP #13 to ensure that such a backlog does not occur again.

VII. POLE LINE TRIMMING

Q. Does the Joint Ownership Agreement have specific requirements regarding pole line trimming?

A. Yes. Intercompany Operating Procedure #17 of our IOP with Verizon establishes a definite method of allocating the costs of trimming associated with the construction and maintenance of joint pole lines. The division of costs is specified for maintenance trimming, heavy storm work, removal of hazardous trees, and construction trimming. For maintenance trimming, the division of costs

is 75 percent Unitil and 25 percent Verizon. Clearance standards are provided for both maintenance trimming and construction trimming specifying the extent of trimming for each. The IOP also provides procedures for administration and billing.

Q. Does Unitil have defined programs for construction and maintenance trimming of joint pole lines?

A. Yes. We perform maintenance trimming of all the lines in our service territory, irrespective of maintenance area. This includes cyclical trimming, hot spot trimming (when required), removal of danger trees, and heavy storm work. Construction trimming is coordinated with Verizon, and the responsibility for performing such trimming is divided between the parties in accordance with the maintenance areas defined in the IOP.

Q. Does Verizon have defined programs for construction and maintenance trimming of joint pole lines?

A. Verizon does not employ cyclical maintenance trimming programs in the same manner as Unitil, and does not perform maintenance trimming, hot spot trimming, or removal of danger trees in its maintenance areas. Verizon may agree to participate in the cost of such trimming if performed by Unitil, though the level of this participation is inadequate, often in dispute, and not in accordance with the IOP. With respect to new construction, when Verizon places jointly owned poles in its maintenance area it performs the associated trimming based upon the

specifications laid out in the applicable IOP and shares such costs in accordance with the IOP. Verizon also shares in the cost of heavy storm work.

Q. Do you believe that Verizon conforms to the IOP for pole line trimming?

A. No. Verizon interprets its IOP with Unitil as providing it with the option of choosing not to participate in maintenance tree trimming if Verizon does not feel there is a benefit to joint participation. As a result, Verizon simply states that it has no need for trimming, or that it receives no benefit, and refuses to participate in the costs of such trimming. This interpretation of the IOP makes little sense, as there would never be a reason for Verizon to agree to pay for trimming if it can simply decline and avoid the expense.

It is our position that all utilities with pole and line facilities are responsible for regular and ongoing tree trimming and tree removal to maintain clearances and protect their lines in accordance with statutory and industry standards. The intent of IOP #17 is for Unitil and Verizon to share in the cost of maintenance trimming for all jointly owned lines. Since maintenance trimming is required to maintain line clearances, there will always be a "mutual benefit" to such trimming. We recognize there is a greater need to maintain clearances around electric lines, but submit that the 75-25 cost split reflects this greater need and appropriately allocates the benefits and costs between the telephone and electric companies. If IOP #17 is interpreted as to allow Verizon to decline to participate in the cost of

maintenance trimming of joint facilities, it permits them to benefit from these services without sharing in their cost.

Q. What is the total value of amounts outstanding for tree trimming services that has not been paid by Verizon for the period from 2005 through 2007 to date?

A. The total arrearage outstanding as of July 11, 2007 is $340, 748.23. The amount in arrearage continues to grow each month as additional tree trimming is completed. Details of amounts invoiced and paid are provided in the table below:

	Capital		Seacoast		Total	
Year	Invoiced	Paid	Invoiced	Paid	Invoiced	Paid
2005	57,175.21	9,809.51	78,125.43	-	135,300.64	9,809.51
2006	55,234.72	31,866.13	127,961.69	-	183,196.41	31,866.13
2007	15,285.45	1,679.08	50,330.45	-	65,615.90	1,679.08
Total	127,695.38	43,354.72	256,417.57	-	384,112.95	43,354.72

Q. How much has Unitil spent in total on tree trimming during this time period?

A. Since 2005, we have spent over $1.7 million on maintenance tree trimming. This amount is detailed in the table below.

Year	Capital	Seacoast	Total
2005	$ 345,634.00	$ 349,745.00	$ 695,379.00
2006	339,864.00	356,090.00	695,954.00
2007	135,653.00	195,755.00	331,408.00
Total	$ 821,151.00	$ 901,590.00	$ 1,722,741.00

Q. Why has Verizon paid some amounts, but not others?

A. We have no explanation for why certain amounts have been paid, and others have not. For example, while Verizon has paid some amounts in Capital, it has paid nothing in Seacoast. This includes not only maintenance trimming, but also amounts for storm trimming and construction trimming. Some of these amounts were agreed to by Verizon representatives in the field, but then were subsequently refused. There has been no explanation for this. When paperwork is exchanged to coordinate joint trimming, it is often declined with the notation "not interested." Efforts to coordinate trimming in advance have proved fruitless. When payments are made, they are often are paid many months after the invoice date. Instead of paying the amount on the invoice, Verizon often chooses to pay a lesser amount, again with no explanation. Our efforts to coordinate trimming with Verizon are best characterized as an exercise in futility. In general, Verizon simply chooses to pay what it wants, when it wants.

Q. What are the recommendations or remedies for these issues?

A. First, I am recommending that Commission approval of the transaction be conditioned on Verizon agreeing to pay Unitil any amounts outstanding for tree trimming services performed by Unitil and still owed by Verizon, consistent with the division of costs specified in the JOA. Second, I recommend that approval also be conditioned on FairPoint's agreeing to participate monetarily in tree trimming programs to maintain line clearances and protect joint lines in accordance with statutory and industry standards, and in accordance with the

Unitil-Verizon JOA. This condition should reflect the understanding that a) FairPoint has an ongoing obligation, consistent with good utility practice, to perform maintenance tree trimming around its poles and wires, b) FairPoint benefits from maintenance tree trimming performed by Unitil where there are jointly owned facilities, and c) to the extent FairPoint benefits from any such trimming perfomed by Unitil, it should reimburse Unitil for the reasonable value of such trimming in accordance with the division of costs specified in the IOP.

VIII. DISPUTE RESOLUTION

Q. Does the Joint Ownership Agreement have a dispute resolution procedure?

A. Not specifically. There is an article in our JOA pertaining to default with respect to any work that is the responsibility of the other joint owner under the Agreement, and outlining a remedy if the default is not cured. However, since many issues arise out of a fundamental disagreement over the interpretation of the Agreement itself, this section is often difficult to apply. The other party may simply disagree that it is in default with respect to any such work. Furthermore, because the Agreement is premised on a cooperative and mutually beneficial relationship between the parties, there is a lack of specificity about a great many details, such as timeframes. Therefore, for most of the issues that we have outlined, the primary recourse is litigation. This is impractical for most day to day operational issues and concerns.

Q. What would be a more practical dispute resolution procedure?

A. The joint owners should develop a dispute resolution procedure beginning with appropriate designees at each company. To the extent any issues arising under the Agreement cannot be resolved at this level, the disagreement should be escalated within the management of each company. If management of the respective joint owners is unable to reach agreement, then either party should be permitted to submit the dispute to the Commission, and the Commission should hear and resolve these disputes pursuant to its general supervisory powers to ensure safe and reasonable service. This is far more practical than attempting to litigate disagreements involving operational concerns.

Q. What is your recommendation?

A. As a condition to the Commission's approval of the transaction, FairPoint should be directed to work with Unitil to devise a multi-step dispute resolution process that would ultimately provide for the submission of disputes involving the JOA to the Commission.

IX. CONCLUSION

Q. Please summarize your conclusions.

A. As previously stated, Unitil does not believe that it is in the public interest to continue a pole ownership model under which one party facing competitive pressures is able to make operational adjustments that conflict with its ownership obligations, and which effectively shifts costs onto the other joint owner. Electric and telephone utilities operate in a different competitive environment and have

differing priorities in terms of safety, reliability, customer service, and strategic direction. Fundamentally changing this model is the best long term solution to the issues arising out of joint ownership.

As an alternative to a fundamental change in the ownership model, I am recommending instead that the Commission impose reasonable conditions on the sale to FairPoint to address a number of important issues. These conditions are summarized as follows:

1. That FairPoint be required to develop and implement a comprehensive pole inspection program for all jointly owned poles in its maintenance areas meeting the requirements of IOP #16 and all applicable provisions of National Electrical Safety Code;

2. That FairPoint be required to meet the same emergency response expectations as the electric utilities; and further, that FairPoint be required to replace and remove poles that have been damaged and/or "made safe" on an expedited basis;

3. That FairPoint be required to define specific timeframes tied to need dates for accomplishing pole placements and removals, and that such timeframes be clearly specified in the IOPs, with provision for the

company needing the work to move forward with pole placements if the timeframes are not met;

4. That FairPoint be required to develop and implement a plan to eliminate the existing backlog of double poles within 36 months of the closing date;

5. That FairPoint be required to participate in maintenance tree trimming programs to maintain line clearances and protect joint lines, consistent with good utility practice, and to share in the cost of such programs in accordance with the Unitil-Verizon JOA;

6. That FairPoint be directed to work with Unitil to devise a multi-step dispute resolution process that would ultimately provide for the submission of disputes involving the JOA to the Commission;

7. And, that Verizon be compelled to pay Unitil any amounts outstanding for tree trimming services performed by Unitil and still owed by Verizon, consistent with the division of costs specified in the JOA.

Q. Does that conclude your testimony?

A. Yes, it does.

JOINT OWNERSHIP AGREEMENT

BETWEEN

NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY

AND

CONCORD ELECTRIC COMPANY

EXETER & HAMPTON ELECTRIC COMPANY

FITCHBURG GAS AND ELECTRIC LIGHT COMPANY

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AMENDMENT TO JOINT OWNERSHIP AGREEMENTS

This AMENDMENT made this 3 RD day of March, 2003 by and between Concord Electric Company, Exeter and Hampton Electric Company, Fitchburg Gas and Electric Light Company and Verizon New England Inc

WITNESSETH:

WHEREAS, Unitil Distribution Companies - Concord Electric Company and Exeter and Hampton Electric Company, and Fitchburg Gas and Electric Light Company and New England Telephone and Telegraph Company entered into an agreement covering joint ownership of poles, dated November 1, 1996; and

WHEREAS, the name New England Telephone and Telegraph Company has been changed to Verizon New England Inc.; and

WHEREAS, Exeter & Hampton Electric Company is merging into Concord Electric Company whose name has been changed to Unitil Energy Systems, Inc.; and

WHEREAS the name of two of the Unitil Distribution Companies – Concord Electric Company and Exeter and Hampton Electric Company has been changed to Unitil Energy Systems, Inc. while Fitchburg Gas and Electric Light Company will retain it's name ; and

NOW THEREFORE, in consideration of the premises and mutual covenants contained herein, effective as of the date of this amendment, the parties hereby covenant and agree as follows:

1. The joint ownership agreement between Unitil Distribution Companies - Concord Electric Company and Exeter and Hampton Electric Company, and Fitchburg Gas and Electric Light Company and New England Telephone and Telegraph Company, dated November 1, 1996 is amended as follows;

   a. The words "New England Telephone and Telegraph Company" are replaced by "Verizon New England Inc." at each place they appear in the document.

   b. The words "Concord Electric Company" are replaced by "Unitil Energy Systems, Inc." at each place they appear in the document.

   c. The words "Exeter and Hampton Electric Company" are replaced by "Unitil Energy Systems, Inc." at each place they appear in the document.

IN WITNESS WHEREOF, the parties have hereinto caused these presents to be executed by their respective officers thereunto duly authorized, as of the day and year first above written.

Unitil Exh. 1 P

VERIZON NEW ENGLAND INC.

By: George A. Belcher

Title: Specialist Joint Use

Date: March 14, 2003

UNITIL ENERGY SYSTEMS, INC.
FITCHBURG GAS & ELECTRIC LIGHT COMPANY

By: Robert A. Conser

Title: DIRECTOR, OPERATIONS SERVICES

Date: 14Feb03

AGREEMENT

This AGREEMENT, made this 1st day of November, 1996, between New England Telephone and Telegraph Company, d/b/a NYNEX, a corporation organized and existing under the laws of the State of New York, having its principal office in the City of Boston, in the Commonwealth of Massachusetts, and the following Unitil Distribution Companies,

CONCORD ELECTRIC COMPANY, a New Hampshire corporation with a principal place of business in Concord, in the State of new Hampshire;

EXETER & HAMPTON ELECTRIC COMPANY, a New Hampshire corporation with a principal place of business in Kensington, in the State of New Hampshire;

FITCHBURG GAS AND ELECTRIC LIGHT COMPANY, a Massachusetts corporation with a principal place of business in Fitchburg, in the Commonwealth of Massachusetts, hereinafter sometimes called "the parties".

WITNESSETH THAT:

WHEREAS, the parties desire to provide for the joint ownership of poles and anchors when and where such joint ownership will be of mutual advantage;

NOW THEREFORE, in consideration of the premises and the mutual agreements herein contained, the parties do, for themselves, and their successors and assigns, mutually covenant and agree as follows:

Scope of Agreement

Article 1. This Agreement shall be in effect in the areas in the State of New Hampshire and the Commonwealth of Massachusetts, in which both parties have the right to operate on the effective date hereof and thereafter.

Permission for Joint Ownership

Article 2. Each party permits the joint ownership of any of its poles and anchors now standing or hereafter erected within said areas to the extent that the poles and anchors have been or are brought under this Agreement, under the terms and conditions of this agreement and of Intercompany Operating Procedures adopted pursuant to this Agreement, except that each party reserves the right to exclude from joint ownership poles and anchors which are, in its judgment, necessary for its sole use or its use together with attachments of municipalities or other third parties referred to in Article 4.

Rights and Obligations; IOP's

Article 3. To carry out the purpose of this Agreement to facilitate the joint ownership of poles, the Agreement sets forth the rights and obligations of the parties with respect to such ownership, including without limitation their rights and obligations with respect to the following matters:

A. Allocation of ownership and allocation of space
B. Division of costs and expenses
C. Acquisition of Joint Ownership
D. Construction standards
E. Performance of work
F. Payment and billing
G. Custody and maintenance areas
H. Changes in character of circuits
I. Termination of joint ownership
J. Administration of Agreement

Certain of the basic contractual provisions of this Agreement are not set forth in the body of the Agreement, but are set forth with operational or administrative procedures in Intercompany Operating Procedures (IOP's). IOP's in effect at any time shall be attached hereto and shall be part of the Agreement. The IOP's in effect or taking effect upon the effective date of this Agreement are listed in the Index attached hereto.

The provisions of IOP's in effect at any time shall be subject to review upon the written request of either party given to the other. Amendments to IOP's, including elimination of any effective IOP's or addition of new IOP's, shall be made effective by written instrument signed on behalf of each party by a duly authorized officer of such party or by some other representative designated herein or by such officer by written notice to the other party.

Sole Agreement

Article 4. This Agreement and the Intercompany Operating Procedures constitute the entire agreement between the parties respecting joint ownership and joint use of poles and anchors; provided, however, the parties have jointly contracted and may in the future jointly contract with community antenna TV companies and other companies for joint use or space rental of poles covered by this Agreement and nothing herein contained is intended to prevent such third-party contracts.

Construction Standards

Article 5. Construction and maintenance of all poles and anchors and of all attachments of both parties under this Agreement shall conform to the applicable provisions of the latest edition of the National Electrical Safety Code and to all applicable governmental requirements.

Municipal Space

Article 6. Upon each of the poles covered by this Agreement, a reasonable amount of space shall, if so desired by municipal authorities or deemed desirable by the parties hereto, be reserved for the municipal fire alarm and police signal wires or cables, owned by the municipality and used exclusively for municipal purposes.

Attachments

Article 7. When temporary construction on jointly owned poles does not conform to the requirements of Article 5. and is unsafe or restrictive to one of the parties, the parties will cooperate in correcting the unsafe or restrictive conditions. Irrespective of which party may be financially responsible for the costs of any transfer or rearrangement of any attachments, each party, through its own personnel or through its agents or contractors, shall place, maintain, rearrange and transfer its own attachments.

Electrical Interference

Article 8. Each party shall so construct, operate and maintain its facilities so that electrical interference with the facilities of the other is avoided or minimal and shall, at its own expense, correct any such electrical interference caused by its facilities which is more than minimal, when it occurs.

Work Responsibility

Article 9. The work of installation, replacement, relocation or removal of new or existing jointly owned poles and anchors shall be divided equitably between the parties. The division of this work shall be by the establishment of maintenance areas in which one party or the other is assigned the responsibility for such work.

Payment of Taxes

Article 10. Each of the parties hereto shall be liable for taxes, fees and governmental charges levied or assessed upon the jointly owned property covered by this agreement, in accordance with its ownership therein, and shall make such reports to governmental authorities as may be required for the proper listing of its said ownership and for the determination of the taxes, fees and charges thereon; but any tax, fee or charge imposed on such jointly occupied property solely because of ownership or the use thereof by one of the parties shall be paid by that party.

Bills and Payment for Work

Article 11. Within 60 days after the completion by one party of work for which the other party is to be partially or wholly responsible financially, the party that did the work shall render to the other party an itemized statement of charges showing the cost of the work, and if found to be correct, the charges shall be promptly paid.

Existing Rights of Other Parties

Article 12. If either of the parties hereto has, prior to the execution of the Agreement, conferred upon others, not parties to the Agreement, by contract or otherwise, rights in or privileges to use any poles covered by this Agreement, nothing herein contained shall be construed as affecting said rights or privileges, and either party hereto shall have the right, by contract or otherwise, to continue and extend such existing rights, or privileges; it being expressly understood, however, that for the purpose of this Agreement, the attachments of any such outside party shall be treated

as attachments belonging to the grantor, and the rights, obligations and liabilities hereunder of the grantor in respect to such attachments shall be the same as if it were the actual owner thereof. Attachments made by third parties under community antenna TV contracts or under other contracts executed by both parties to this Agreement, and fire and police signal attachments of municipalities or other public authorities, shall not be considered to be covered by this Article.

Assignment of Rights

Article 13. Except as otherwise provided in this Agreement, neither party hereto shall assign or otherwise dispose of this Agreement or any of its rights or interests hereunder, or in any of the jointly owned poles or the attachments or rights-of-way covered by this Agreement, to any firm, corporation or individual, without the written consent of the other party; provided, however, that nothing herein contained shall prevent or limit the right of either party to mortgage any or all of its property, rights, privileges and franchises, or to lease or transfer any of them to another corporation organized for the purpose of conducting a business of the same general character as that of such party, or to enter into any merger or consolidation; and in case of the foreclosure of such mortgage, or in case of such lease, transfer, merger, or consolidation, its rights and obligations hereunder shall pass to and be acquired and assumed by, the purchaser on foreclosure, the transferee, lessee, assignee, merging or consolidating company, as the case may be; and provided, further, that subject to all of the terms and conditions of the Agreement, either party may permit any corporation conducting a business of the same general character as that of such party, and owned, operated, leased and controlled by it, or associated or affiliated with it in interest, or connecting with it, the use of all or any part of the space reserved hereunder for such party on any pole covered by this Agreement for the attachments used by such party, in the conduct of its said business; and for the purpose of this Agreement, all such attachments maintained on any such pole by the permission as aforesaid of either party hereto shall be considered as the attachments of the party granting such permission, and the rights, obligations and liabilities of such party under this Agreement, in respect to such attachments, shall be the same as if it were the actual owner thereof.

Liability for Damages

Article 14. Whenever any liability is incurred by either of the parties or both for damages resulting from injury to the employees or for damage to the property of either party, or for injuries to other persons or property, arising out of the joint use of poles, anchors or guys whether or not jointly owned, or due to the proximity of the wires and fixtures of the parties attached to jointly used poles, anchors, or guys, the liability for such damage, as between the parties hereto, shall be as follows:

A. Each party shall be liable for injuries to persons other than its own employees or for damage to property other than its own caused in whole or in part by its negligence, or by its failure to comply at any time with the specifications referred to in Article 5 of this Agreement, or by its failure to perform its obligations hereunder, when so caused without any negligence or any such failure by the other party. The party that is liable agrees to indemnify, hold harmless and defend the other party on account thereof.

B. Each party shall be liable for all damages for injuries to its employees or damage to its property caused solely by its negligence or by its failure to comply with the specifications referred to in Article 5 of this Agreement or by its failure to perform its obligations hereunder or caused by the concurrent negligence or failure of both parties and agrees to indemnify, save harmless and defend to other party on account thereof. When either party hereto, or its insurer, shall make any payments to an employee or to his relatives or representatives on account of an injury caused in a manner described in this Article, in conformity with (1) the provisions of any workmen's compensation act or any act creating a liability in the employer to pay compensation for personal injury to an employee by accident arising out of or in the course of the employment whether based on negligence on the part of the employer or not or (2) any plan for employee's disability benefits or death benefits now established or hereafter adopted by the parties hereto or either of them, such payments shall be construed to be damages within the terms of this paragraph.

C. In the case of damages resulting from injuries to persons other than employees of either party, or from damage to property not belonging to either party that are caused in part by each party, whether through such party's negligence or through its failure to comply with the specifications referred to in Article 5 of this Agreement or by its failure to perform its obligations hereunder or are due to causes which cannot be traced solely to the sole negligence of one party or failure of one party to comply with said specifications or perform its obligations hereunder, each party shall be liable for said damages in proportion to the amount of negligence attributable to it and each party shall indemnify, hold harmless and defend the other party for its proportionate share of said damages.

D. Where the claimant desires to settle any such claim upon terms acceptable to one of the parties hereto but not to the other, the party to which said terms are acceptable may, at it's election, pay to the other party one-half (½) of the expense which such settlement would involve and thereupon said other party shall be bound to indemnify, save harmless and defend the party making such payment from all further liability and expense on account of such claim or in any way connected therewith.

E. Where a jointly owned pole is to be replaced or abandoned and one of the parties has removed all its construction from the old pole, it shall notify the other party thereof in writing. If the other party fails to remove its attachments from the old pole or fails to remove the old pole within sixty (60) days from the receipt of such notice, it shall become solely responsible for said pole, and shall be solely liable for injury to persons not in the employ of either of the parties hereto, or of their contractors, and for damage to property not belonging to either of the parties hereto, if such injury or damage occurs after the end of the 60 days.

Liability and Damages Jointly Owned but not Jointly Used

Article 15. Whenever any liability is incurred by either party or both for damages for injuries to the employees or damage to the property of either party or for injury or damage to other persons or their property arising out of the use of poles or anchors jointly owned but not jointly used, the liability for such damages, as between the parties hereto, shall be as follows:

The Party using the poles or anchors agrees to indemnify, save harmless and defend the party not using the poles or anchors from any liability in connection therewith, except liability arising out of the negligent erection or maintenance thereof by the party claiming indemnity and liability arising out of the location thereof.

Contractors Engaged by Either Party

Article 16. All contractors and their employees engaged by either party to do any work in connection with jointly owned poles or attachments thereon shall, as between the parties hereto only and not for the benefit of any third party, be considered the agent of the party employing them.

Default

Article 17. Whenever either party is in default with respect to any work that is its responsibility under this Agreement and has not cured the default within 60 days after receipt of written notice thereof from the other party, the other party may have such work performed and shall be reimbursed promptly for all its costs by the defaulting party.

Term of Agreement

Article 18. This Agreement shall take effect upon the day and year first above written and shall be in effect for an initial period of two years from the effective date and shall continue thereafter until terminated by either party by giving not less than one year's notice in writing to the other party, provided however, that the provisions of the Agreement relating to poles jointly owned shall nevertheless continue in full force and effect as to such poles until joint ownership thereof is terminated.

Waiver of Portions of Agreement

Article 19. The failure of either party to enforce or insist upon compliance with any of the terms or conditions of this agreement, or its waiver of the same in any instance or instances, shall not be construed to be a general waiver or relinquishment of any of such terms or conditions, but the same shall be and remain at all times in full force and effect.

Ownership of Poles, Guys and Anchors

Article 20. Title to poles shall be determined as follows, and in each case one-half undivided interest as tenant in common shall pass from the party erecting the pole to the other party:

A. With respect to any existing pole that the parties have installed prior to the effective date hereof and determined is to be jointly owned, but for which the addendum has not been completely processed, title shall pass, or be considered to have passed, upon payment of the bill relating to the pole.

B. With respect to poles that are installed after the effective date of this Agreement and that the parties shall have determined are to be jointly owned, title shall pass upon the completion of the work of setting the pole in place.

C. With respect to solely-owned poles that are now in existence or that are installed in the future and are subsequently determined should be jointly owned, title shall pass upon payment of the bill.

D. With respect to poles that were previously jointly owned by one of the parties hereto and a third party whose interest has been acquired by the other party hereto, and that are not covered by any addendum between the parties hereto, it is hereby agreed that each party has held and now holds a one-half undivided interest therein as tenant in common.

E. With respect to jointly owned poles that one party desires to abandon pursuant to this Agreement, title shall pass from the party terminating its interest to the remaining party upon the completion of the removal of all the attachments of the party that is terminating its ownership.

F. When a pole is removed from service and both parties have determined to abandon it, the last party to remove its attachments shall sell or otherwise dispose of the pole and for that purpose each party hereby grants to the other the right to convey its interest to any third party or parties.

G. Reference to "poles" in this Article 20 shall be considered to include both poles and anchors.

Cancellation of Existing Agreement

Article 21. Concord Electric Company, this Agreement dated August 1, 1979, Exeter and Hampton Electric Company, this Agreement dated January 1, 1978 and Fitchburg Gas and Electric Light Company, this Agreement dated January 31, 1917, between the parties including supplements and amendments thereto, relating to jointly owned and jointly used poles and anchors heretofore entered into between the parties to the Agreement within the territory covered by this Agreement is hereby terminated as of the effective date of this Agreement except as to liabilities already accrued and all of the poles covered under that agreement are hereby brought under this Agreement and hereafter shall be subject to the terms and conditions hereof.

Establishing Joint Use

Article 22. If, in specific situations, joint ownership in accordance with the provisions of this Agreement is unattractive to one of the parties, even though joint ownership may be desirable or economical from the overall standpoint, nothing herein shall preclude the establishment of joint use on such terms or such basis (including a rental basis in lieu of joint ownership) as may be agreed upon in writing by designated representatives of the parties hereto.

Inconsistency Between Agreement and IOP

Article 23. In the event of an inconsistency or disagreement between the terms of this Agreement and the provisions of any Intercompany Operating Procedures the terms of this Agreement shall govern, unless as otherwise agreed to by each party in writing.

Periodical Review of IOP

Article 24. The provisions of any Intercompany Operating Procedure shall be subject to review at the request of either company made in writing to the other company. In case of revision following such review, the new arrangements mutually agreed upon shall remain in effect until again revised.

Notices; Designated Representatives

Article 25. Notices under this Agreement shall be sent by mail, postage prepaid, to the parties at the following addresses or to such other address as either party may, from time to time, designate in writing:

New England Telephone and Telegraph Company
900 Elm Street
Manchester, New Hampshire 03101
Attention: Staff Manager - Joint Lines

New England Telephone and Telegraph Company
125 High Street Rm. 1406
Boston, Massachusetts 02110
Attention: Staff Manager - Joint Lines

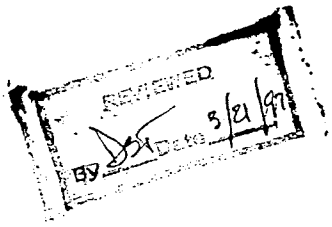
Unitil Service Corp.
6 Liberty Lane West
Hampton, NH 03842-1720
Attention: Stewart E. Aither

Concord Electric Company
One McGuire Street
Concord, New Hampshire 03301-4665
Attention: Eric Werner

Exeter & Hampton Electric Company
114 Drinkwater Road
Kensington, New Hampshire 03833-5602
Attention: Raymond A. Letourneau Jr.

Fitchburg Gas and Electric Light Company
285 John Fitch Highway
Fitchburg, Massachusetts 01420-5993
Attention: Dale C. Nudd

IN WITNESS WHEREOF, each party has caused this Agreement to be signed in its name and its corporate seal to be affixed by an officer thereunto duly authorized as of the day and year first above written.



New England Telephone and Telegraph Company d/b/a NYNEX

By _____ 5/5/97
Massachusetts and Rhode Island

By _____ 4/14/97
Northern States

Unitil Service Corp.

By _____
Vice-President Distribution Systems

Concord Electric Company

By _____
Vice-President and General Manager

Exeter & Hampton Electric Company

By _____
Vice-President and General Manager

Fitchburg Gas and Electric Light Company

By _____
Vice-President and General Manager

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MEMORANDUM OF PROCEDURE

Unitil Distribution Companies

and

NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY

Purchase and Sale of existing plant authorized by Exchange of Notice (Form 605A) dated prior to November 1, 1996, and all work that was authorized by such forms and physically completed prior to that date shall be billed at the old Flat Rate Schedule.

Work physically completed on and after November 1, 1996, shall be billed at the new Flat Rate Schedule regardless of the date of the Exchange of Notice authorizing the work.

All billable items authorized on Exchange of Notice forms dated on and after November 1, 1996, will be billed at the new Flat Rate Schedule.

NEW ENGLAND TELEPHONE
AND TELEGRAPH COMPANY
d/b/a NYNEX

By _____
(Title) Gen Mgr Eng+Const - NYNEX North
Date of Execution: 11/6/96

By _____
(Title) Staff Director E/C - MA/RI
Date of Execution: 12/5/96

Unitil Distribution Companies
Concord Electric Company
Exeter & Hampton Electric Company
Fitchburg Gas and Electric Light Company

By _____
(Title) Sr. Vice President
Date of Execution: 9/16/96

IOP # 1

INTERCOMPANY OPERATING PROCEDURE #1

Unitil Distribution Companies

and

NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY

ACQUIRING JOINT OWNERSHIP IN EXISTING POLES AND ANCHORS

EFFECTIVE DATE November 1, 1996

Whenever either Company desires to acquire joint ownership in an existing pole or anchor owned by the other Company, it shall make written application specifying the location of the pole or anchor in question. Within thirty (30) days after the receipt of such application, the owner shall notify the Applicant in writing whether or not said pole or anchor is among those excluded from joint occupancy under the provisions of Article 2 of the agreement. Upon receipt of notice from the owner that said pole or anchor is not among those excluded, joint ownership shall be established as follows:

Where joint ownership of poles is to be established along a route where there is an existing pole line of only one of the parties, the following conditions shall be observed:

1. POLES AND ANCHORS NOT SUITABLE FOR JOINT OCCUPANCY

A. POLES THAT HAVE BEEN IN PLACE FOR THREE (3) YEARS OR LESS:

(1) If within three (3) years the second company desires, and it is mutually agreed, that a solely occupied pole and/or pole line be reconstructed so that it is suitable for joint occupancy, on receipt of proof, (Exchange of Notice, 605A, will be the document of proof), of its refusal to participate in joint ownership at the time of construction the second company shall be obligated to pay the first company:

a. The full flat rate cost of the poles and anchors to be replaced.

b. The full cost of the first company's transfer and rearrangement work.

c. The full cost of any additional trimming necessary to provide the same amount of line clearances that existed just prior to the premature pole replacement.

d. Its proportionate share of the cost of the initial trimming, reduced by one-third for each full year elapsed since the trimming was done. Billing for this trimming shall be accompanied by a copy of the initial contractor's bill.

e. Its share of the flat rate cost of the new poles placed as outlined in the then current Intercompany Operating Procedure Flat Rate Billing.

(2) If there is no proof of refusal by either company to participate in joint ownership at the time of construction, the second company shall be obligated to pay the first company only:

a. Its proportionate share of the cost of the initial trimming, reduced by one-third for each full year elapsed since trimming was done.

b. Its share of the flat rate cost of new poles placed as outlined in the then current Intercompany Operating Procedure on Flat Rate Billing.

B. POLES THAT HAVE BEEN IN PLACE MORE THAN THREE YEARS

Poles that have been in place for more than three (3) years: that owner shall replace such poles with poles which are suitable for joint occupancy.

(1) The original owner of the replaced poles shall be entitled to receive from the party desiring joint ownership, an amount equal to the Flat Rate Billing for pole(s) 20 years old or less of the replaced poles.

(2) In addition, each party shall pay its share of the Flat Rate cost of the new poles as specified in the Intercompany Operating Procedure on Flat Rate Billing. The owner will be responsible for the removal of the pole.

2. POLES AND ANCHORS SUITABLE FOR JOINT OCCUPANCY:

A. If the pole is suitable for joint use, the company desiring the Joint Ownership shall acquire it by paying the owner in accordance with the schedule below. If within three (3) years of the construction of the pole(s), the owner may recover trimming expense incurred at the time of pole placement according to the following schedule:

	Yr. 1	Yr. 2	Yr. 3	Thereafter
Pole & Anchor	full flat rate	full flat rate	full flat rate	full flat rate
Trimming Costs	full expense	2/3 expense	1/3 expense	no recovery

Note: Billing for this trimming shall be accompanied by a copy of the initial contractor's bill.

NEW ENGLAND TELEPHONE
AND TELEGRAPH COMPANY
d/b/a NYNEX

By _____
(Title) Gen Mgr Eng+Const - NYNEX North
Date of Execution: 11/6/96

By _____
(Title) STAFF Director E/K - MA/RI
Date of Execution: 11/6/96

Unitil Distribution Companies
Concord Electric Company
Exeter & Hampton Electric Company
Fitchburg Gas and Electric Light Company

By _____
(Title) Sr. Vice President
Date of Execution: 9/16/96

Unitil Exh. 1 P

INTERCOMPANY OPERATING PROCEDURE #2

Unitil Distribution Companies

and

NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY

CONSTRUCTION AND JOINT OWNERSHIP OF NEW POLES AND ANCHORS

EFFECTIVE DATE November 1, 1996

The purpose of this Intercompany Operating Procedure is to attain better advance planning of new pole line construction, to divide new pole work more equally between companies and to restrict the purchase of poles on an individual basis. Because of the mutual advantages to be gained by the companies through joint planning and construction of new lines, it shall be the general policy of the companies to construct new pole lines as jointly owned lines in cases where it appears reasonable that both companies will use the line within three (3) years from the date of construction. This policy shall not, however, be deemed to require the construction of joint pole lines where the company first having a requirement for new poles desires to construct the line and exclude the other from joint ownership, or where the party not having received a service request does not wish to participate in the ownership of a joint line. In order to carry out this policy, the companies agree to the following provisions:

1. EXCHANGE OF NOTICE

A. When it has been determined that new poles are required by either company it shall so communicate its need to the other company as soon as practicable.

B. The decisions arrived at as a result of joint coordination shall be documented in a timely manner by an Exchange of Notice form as outlined in IOP Exchange of Notice Procedure.

C. Normally, within thirty (30) working days from the date of receipt of the written notification the second company shall notify the initiating company whether or not it desires to have the new line constructed as a joint line.

D. It is the intent of this practice that each company shall place and remove all joint poles within it designated maintenance area, with the following exceptions:

(1) When the company not having a service request (Maintaining Company) is unable to complete the pole work in time to meet a reasonable service date established by the party holding the service request the co-owners must mutually discuss and agree which will do the work.

(2) Nothing in this IOP will prevent either co-owner from providing on time customer needs.

(3) The Unitil Companies will entertain requests to set poles greater than 45 feet in height.

(4) If the placing, replacing, or removal of poles under a transmission line shall be done by or assisted by electric company personnel, the co-owners must mutually discuss and agree on how best to accomplish the work.

NEW ENGLAND TELEPHONE
AND TELEGRAPH COMPANY
d/b/a NYNEX

By [signature]
(Title) Gen Mgr Eng+Const-NYNEX North
Date of Execution: 11/6/96

By [signature]
(Title) STAFF DIRECTOR EIC-MA/RI
Date of Execution: 12/5/96

Unitil Distribution Companies
Concord Electric Company
Exeter & Hampton Electric Company
Fitchburg Gas and Electric Light Company

By [signature]
(Title) Sr. Vice President
Date of Execution: 9/16/96

INTERCOMPANY OPERATING PROCEDURES

BETWEEN

NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY

AND

CONCORD ELECTRIC COMPANY

EXETER & HAMPTON ELECTRIC COMPANY

FITCHBURG GAS AND ELECTRIC LIGHT COMPANY

INTERCOMPANY OPERATING PROCEDURE #3

Unitil Distribution Companies

and

NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY

POLE REPLACEMENT

EFFECTIVE DATE November 1, 1996

The purpose of the Intercompany Operating Procedure is to reaffirm one of the principles of joint occupancy of poles, i.e. that each Company shall cooperate with the other Company so that each, in carrying out its duties, shall give proper consideration to the mutual problems which may arise and so that the Companies can jointly determine the best solution in situations where the facilities of both are involved.

When difficulties are encountered in the replacement of existing joint poles due to the type of construction employed by either or both Companies, the two Companies shall cooperate in the execution of the work involved in a timely manner which normally will be within five (5) working days following notification. There will be no intercompany billing for the increased costs that may be experienced by either Company when it is necessary for each company to have a crew present to facilitate the placement or removal of joint poles.

When it is necessary to set a replacement pole in a different location than that occupied by the existing pole, due consideration must be given to the transfers and rearrangements required by both Companies. Such new locations shall be field coordinated and covered by an Exchange of Notice form 605A, with sufficient detail showing the proposed location of the new pole, prior to replacement. In cases of emergency, verbal notice will be given and subsequently confirmed in writing.

If a replacement pole is set in a new location without coordination with and agreement by the other Company, and the new location is such that the other Company would incur greater costs in transferring its facilities to the new pole than it would have incurred had the pole been replaced in its existing location, field representatives of the two Companies shall attempt to reach a mutually acceptable solution to the problem, including resetting the new pole in a mutually acceptable location.

Those situations that cannot be resolved by the field representatives, shall be escalated through lines of organization, if necessary, to the Operations Manager of the Electric Company and the Director Construction - Engineering of the Telephone Company.

NEW ENGLAND TELEPHONE
AND TELEGRAPH COMPANY
d/b/a NYNEX

By _____
(Title) Gen Mgr Eng+Const-NYNEX North
Date of Execution: 11/6/96

By _____
(Title) STAFF DIRECTOR E/C - MA/RI
Date of Execution: 12/5/96

Unitil Distribution Companies
Concord Electric Company
Exeter & Hampton Electric Company
Fitchburg Gas and Electric Light Company

By _____
(Title) Sr. Vice President
Date of Execution: 9/16/96

INTERCOMPANY OPERATING PROCEDURE #4

Unitil Distribution Companies

and

NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY

CUSTODY AND MAINTENANCE OF JOINTLY OWNED POLES AND ANCHORS

EFFECTIVE DATE November 1, 1996

1. Custodianship and maintenance of jointly owned poles and anchors shall be as indicated on the appropriate distribution company - Attachment #1, DIVISION OF MAINTENANCE, which is made a part of this Intercompany Operating Procedure.

2. The custodian shall maintain all poles and anchors in its custody in safe and serviceable condition in accordance with the provisions of Article 5 of the Agreement; the expense thereof is to be proportioned between the parties hereto in accordance with the division of ownership except as otherwise expressly provided in Construction and Joint Owernship of New Poles and Anchors.

3. The custodian shall replace such poles as become defective or are of insufficient size or strength for existing or proposed attachments, and the cost thereof shall be borne as provided in the Intercompany Operating Procedure Flat Rate billing Schedule.

4. Upon notice in writing, it shall be the duty of the custodian to replace promptly any pole that may be considered unsafe by the other party and if the custodian does not do so within a reasonable time, the other party may replace said pole and the custodian shall bear its proportionate part of the expense.

NEW ENGLAND TELEPHONE
AND TELEGRAPH COMPANY
d/b/a NYNEX

By /s/ Lorraine N. Tomb
(Title) Gen Mgr Eng + Const - NYNEX North
Date of Execution: 11/6/96

By Russell A. Jones
(Title) STATE DIRECTOR E/C - MA/RI
Date of Execution: 12/5/96

Unitil Distribution Companies
Concord Electric Company
Exeter & Hampton Electric Company
Fitchburg Gas and Electric Light Company

By Stewart E. Aither
(Title) Sr. Vice President
Date of Execution: 9/16/96

ATTACHMENT #1

CONCORD ELECTRIC COMPANY
AND
NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY

DIVISION OF MAINTENANCE

EFFECTIVE DATE November 1, 1996

Electric Company Maintenance Area	Telephone Company Maintenance Area
Boscawen	Allenstown
Canterbury	Bow
Chichester	*Concord
*Concord (Inc. Penacook)	Dunbarton
	Epsom
	Hopkinton
	Loudon
	Pembroke

* Location of Division in City of Concord only

Power Company - Area north of Highway #202 and Pleasant Street from Hopkinton-Concord Town Line to Main Street, west of Main Street to Bridge Street and area north of Highway #4 and Bridge Street to Concord-Chichester Town Line, but not including poles on Highway #202 and Pleasant Street, and Highway #4 and Bridge Street.

Telephone Company - South of and including poles on Highway #202 and Pleasant Street from Hopkinton-Concord Town Line to Main Street, area south of Highway #4, from Bridge and Main Streets to the Chichester-Concord Town Line, including poles on Highway #4 and Bridge Street.

The number of poles within each of the above described areas is now substantially equal. The numbers of poles will be checked periodically at the request of either party and the areas revised to keep them substantially equal.

ATTACHMENT #1

Unitil Exh. 1 P

EXETER & HAMPTON ELECTRIC COMPANY
AND
NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY

DIVISION OF MAINTENANCE

EFFECTIVE DATE November 1, 1996

Electric Company Maintenance Area	Telephone Company Maintenance Area
Brentwood	Atkinson
Danville	Derry
East Kinston	Hampstead
Exeter	Hampton Falls
Hampton	Kensington *
Newton	Kingston
North Hampton	Newfields
South Hampton *	Plaistow
	Seabrook *
	Stratham

The number of poles within each of the above described areas is now substantially equal. The number of poles will be checked periodically at the request of either party and the areas revised to keep them substantially equal.

* Poles within these municipalities are administered by both Manchester, New Hampshire, and Salem, Massachusetts, telephone engineering offices.

Unitil Exh. 1 P

ATTACHMENT #1

FITCHBURG GAS AND ELECTRIC LIGHT COMPANY
AND
NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY

DIVISION OF MAINTENANCE

EFFECTIVE DATE November 1, 1996

Electric Company Maintenance Area	Telephone Company Maintenance Area
Ashby	Fitchburg *
Fitchburg *	Lunenburg
Townsend **	Townsend **

* Location of Division in City of Fitchburg

Power Company - Area northeast of the Boston & Maine railroad tracks.

Telephone Company - Area southwest of the Boston & Maine railroad tracks.

** Location of Division in Townsend

Telephone Company - Fitchburg Rd. - from Lunenburg Town line to the intersection of Main St. Main St. to the Pepperell Town Line (South East Corner of Townsend)

Unitil Exh. 1 P

INTERCOMPANY OPERATING PROCEDURE #5

Unitil Distribution Companies

and

NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY

ASSIGNED SPACE

EFFECTIVE DATE November 1, 1996

1. Assigned space on a joint pole shall be for the exclusive use of each Company respectively, except that certain attachments may, in accordance with the provisions of the latest edition of the National Electrical Safety Code, be located in space assigned to the other Company, however, if such attachments should interfere with the use of such space by said other Company, the first Company shall at its own expense make such changes or replacements as may be necessary to make the space available.

2. Minimum pole height for joint poles will be forty foot class four (40'-4), unless mutually agreed otherwise.

3. Use of thirty (30) foot poles for stub poles, private property poles, etc., are acceptable unless mutually agreed otherwise.

4. Excess height on new poles may be purchased for sole use by either utility, based on the Flat Rate Reciprocal Billing Agreement. Excess height purchased by a utility shall be noted in both Company's pole records.

5. Replacement of poles will require that utilities jointly review current space and height requirements. Billing will be based upon these requirements.

6. Joint Pole space allocation will be as described in attachment A.

7. CLEARANCES - Minimum vertical clearances of communications conductors are shown on attachments B and C.

IOP # 5

8. Mutual excess height requirements for joint owners resulting from requirements for additional ground clearance such as railroad and road crossing, shall be mutually agreed upon to achieve minimum clearance, in the best interest of both owners. There will be occasions where a pole, because of a clearance problem, will need to be taller than normally required to provide the proper separations required by the NESC or Company Standards. This is referred to as "Mutual Excess Height" and the space allocation to each company would be as if the smaller pole were placed. In these situations, the Telephone Company recognizes it obligation to lower its plant, if possible, at some future date to allow the Electric Company, or Licensee to perform work that would otherwise necessitate a pole change out.

NEW ENGLAND TELEPHONE
AND TELEGRAPH COMPANY
d/b/a NYNEX

By Lorraine N. Tomb
(Title) Gen Mgr Eng+Const - NYNEX North
Date of Execution: 11/6/96

By Russell Gamm
(Title) STAFF Director E/C - MA/RI
Date of Execution: 12/5/96

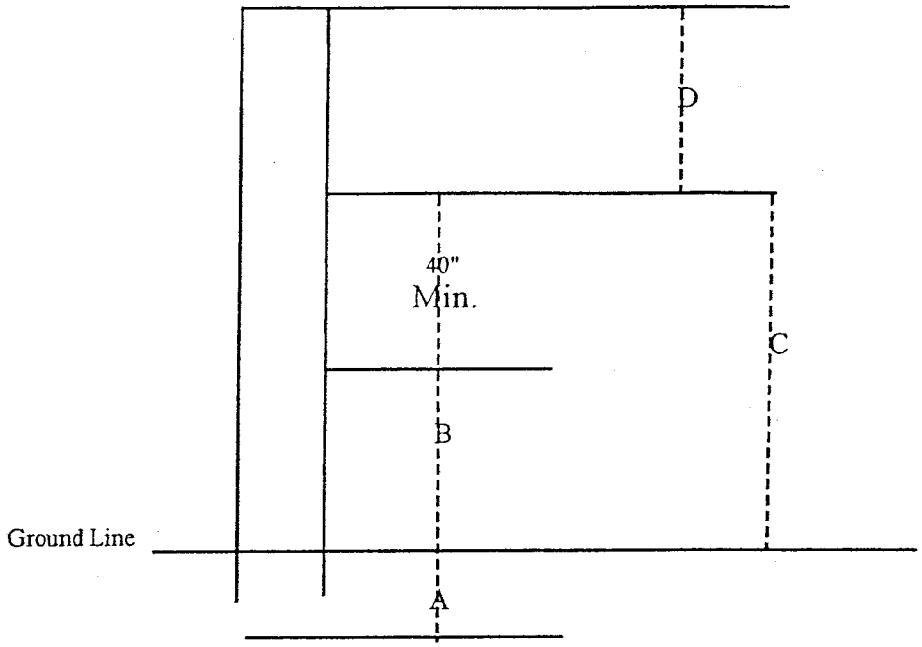
Unitil Distribution Companies
Concord Electric Company
Exeter & Hampton Electric Company
Fitchburg Gas and Electric Light Company

By Stewart E. Arthur
(Title) Sr. Vice President
Date of Execution: 2/16/96

IOP # 5

Unitil Exh. 1 P

JOINT POLE SPACE ALLOCATION



Pole Length	Pole Ownership Elec/Comm. Note 1	A Normal Setting Depths Note 2	B Communication Max/Height Note 3	C Electric Minimum Height Note 3	D Electric Maximum Space Note 3
35	35/35	6'-0"	21'-2"	24'-6"	4'-6"
40	40/40	6'-0"	23'-8"	27'-0"	7'-0"
40	40/35	6'-0"	21'-2"	24'-6"	9'-6"
40	35/40	6'-0"	26'-2"	29'-6"	4'-6"
45	40/45	6'-6"	28'-2"	31'-6"	7'-0"
45	45/45	6'-6"	25'-11"	29'-3"	9'-3"
45	45/40	6'-6"	23'-8"	27'-0"	11'-6"
45	45/35	6'-6"	21'-2"	24'-6"	14'-0"
50	45/50	7'-0"	30'-5"	33'-9"	9'-3"
50	50/50	7'-0"	28'-2"	31'-6"	11'-6"
50	50/45	7'-0"	25'-11"	29'-3"	13'-9"
50	50/40	7'-0"	23'-8"	27'-0"	16'-0"
50	50/35	7'-0"	21'-2"	24'-6"	18'-6"

1. Municipal space and/or space for other authorized licenses shall be made available through equal contribution by each owner, whenever possible. 45/40 indicates a 45' pole however NYNEX pays for and occupies the space as if it were a 40' joint pole. 40/45 indicated a 45' pole where the power company pays for and occupies space as if it were a 40' joint pole.

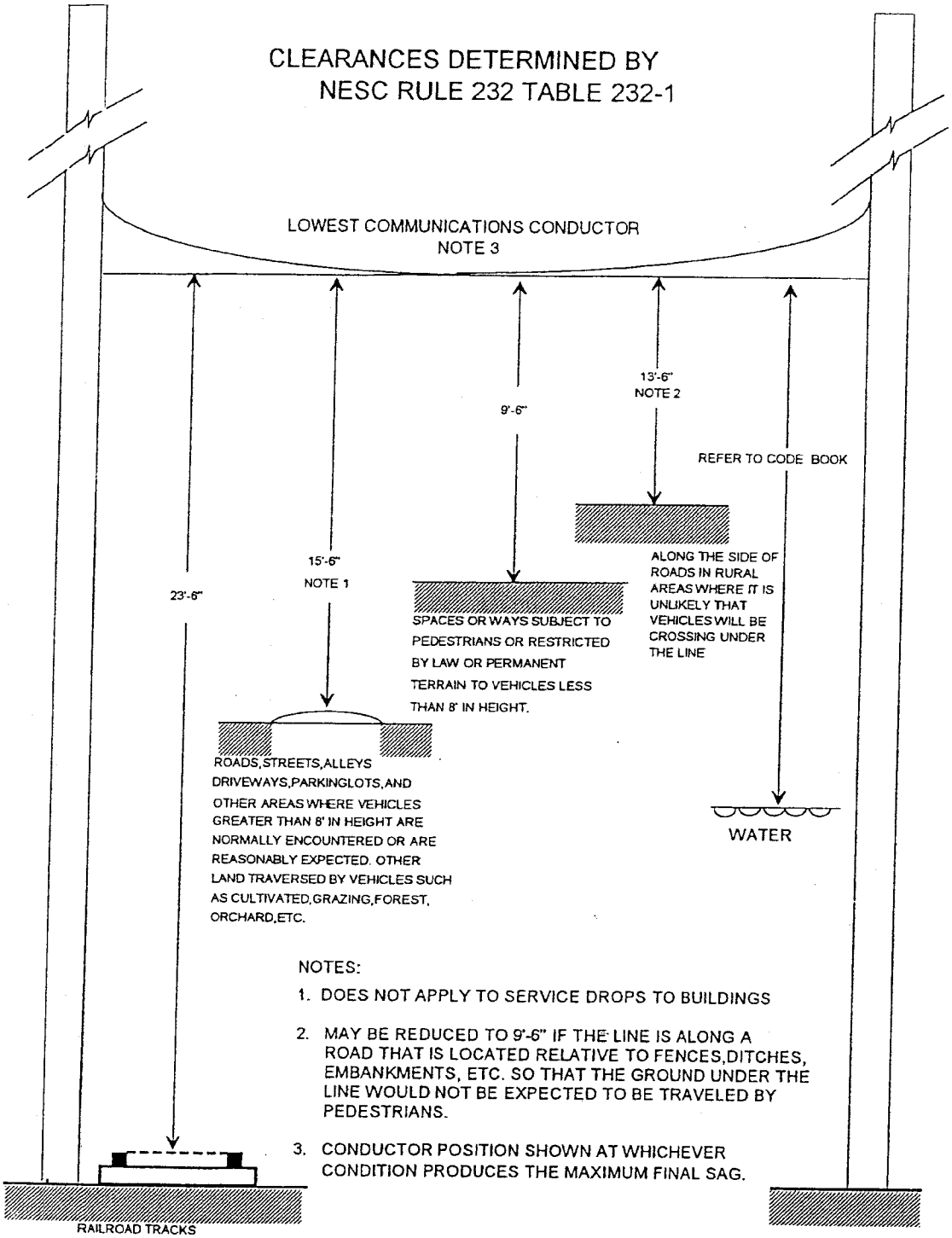
2. Minimum pole setting depth.

3. Dimensions B, C, or D may be adjusted by mutual agreement between the joint owners to avoid a pole change out if the field and code conditions permit.

ATTACHMENT A

POLE LINES BASED ON NESC RULES 232 & 235

CLEARANCES DETERMINED BY NESC RULE 232 TABLE 232-1

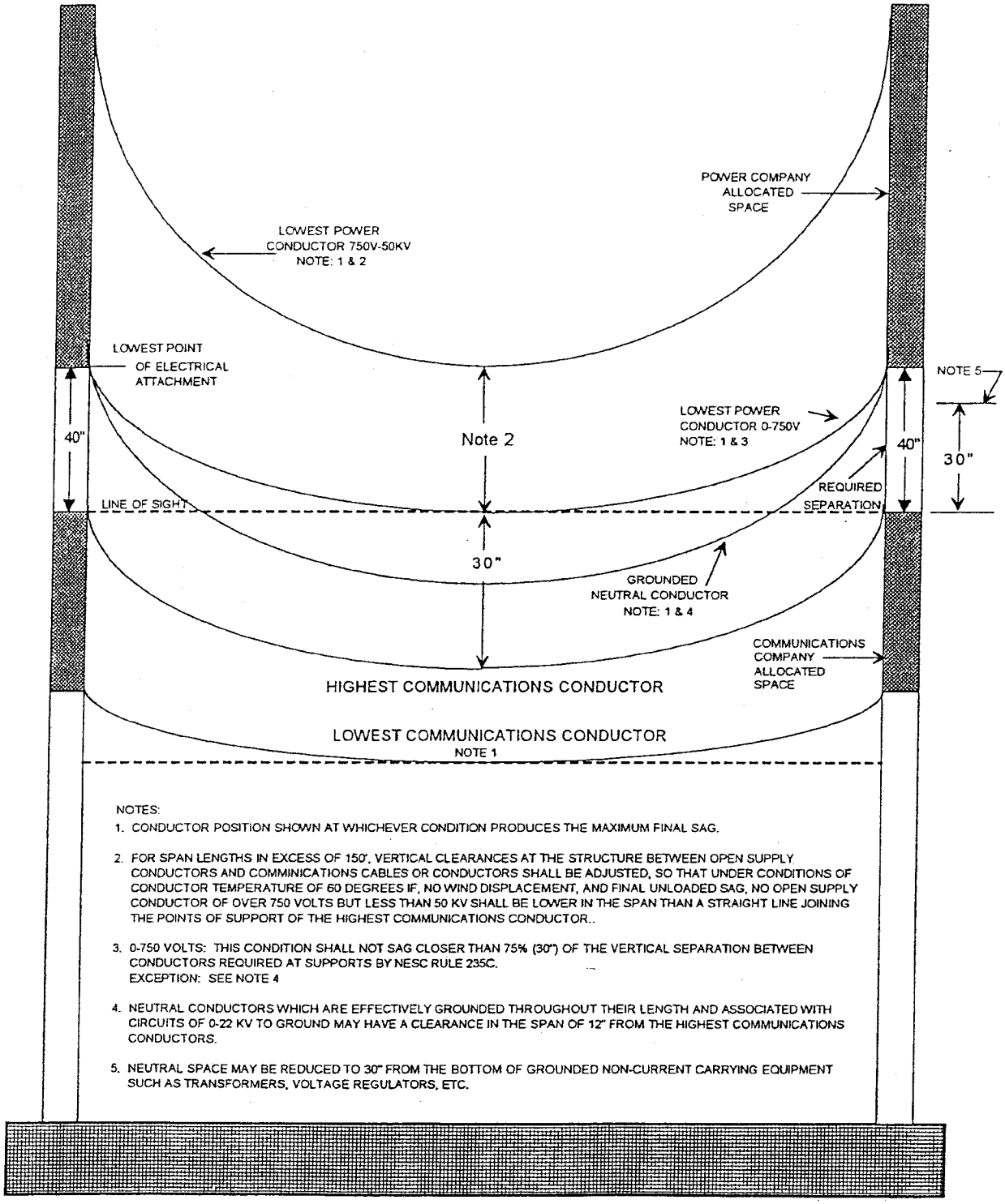


NOTES:

1. DOES NOT APPLY TO SERVICE DROPS TO BUILDINGS
2. MAY BE REDUCED TO 9'-6" IF THE LINE IS ALONG A ROAD THAT IS LOCATED RELATIVE TO FENCES, DITCHES, EMBANKMENTS, ETC. SO THAT THE GROUND UNDER THE LINE WOULD NOT BE EXPECTED TO BE TRAVELED BY PEDESTRIANS.
3. CONDUCTOR POSITION SHOWN AT WHICHEVER CONDITION PRODUCES THE MAXIMUM FINAL SAG.

POLE LINES BASED ON NESC RULES 232 & 235

Unitil Exh. 1 P



NOTES:

1. CONDUCTOR POSITION SHOWN AT WHICHEVER CONDITION PRODUCES THE MAXIMUM FINAL SAG.
2. FOR SPAN LENGTHS IN EXCESS OF 150', VERTICAL CLEARANCES AT THE STRUCTURE BETWEEN OPEN SUPPLY CONDUCTORS AND COMMINICATIONS CABLES OR CONDUCTORS SHALL BE ADJUSTED, SO THAT UNDER CONDITIONS OF CONDUCTOR TEMPERATURE OF 60 DEGREES IF, NO WIND DISPLACEMENT, AND FINAL UNLOADED SAG, NO OPEN SUPPLY CONDUCTOR OF OVER 750 VOLTS BUT LESS THAN 50 KV SHALL BE LOWER IN THE SPAN THAN A STRAIGHT LINE JOINING THE POINTS OF SUPPORT OF THE HIGHEST COMMUNICATIONS CONDUCTOR..
3. 0-750 VOLTS: THIS CONDITION SHALL NOT SAG CLOSER THAN 75% (30") OF THE VERTICAL SEPARATION BETWEEN CONDUCTORS REQUIRED AT SUPPORTS BY NESC RULE 235C.
   EXCEPTION: SEE NOTE 4
4. NEUTRAL CONDUCTORS WHICH ARE EFFECTIVELY GROUNDED THROUGHOUT THEIR LENGTH AND ASSOCIATED WITH CIRCUITS OF 0-22 KV TO GROUND MAY HAVE A CLEARANCE IN THE SPAN OF 12" FROM THE HIGHEST COMMUNICATIONS CONDUCTORS.
5. NEUTRAL SPACE MAY BE REDUCED TO 30" FROM THE BOTTOM OF GROUNDED NON-CURRENT CARRYING EQUIPMENT SUCH AS TRANSFORMERS, VOLTAGE REGULATORS, ETC.

ATTACHMENT C

Unitil Exh. 1 P

INTERCOMPANY OPERATING PROCEDURE #6

Unitil Distribution Companies

and

NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY

GUYS AND ANCHORS

EFFECTIVE DATE November 1, 1996

1. All jointly occupied line poles and solely occupied line poles that will be jointly occupied at a later date shall be guyed and anchored to hold the combined load of both companies and any other 3rd party attachments, in accordance with provisions of Article 5 of the agreement.
2. On jointly occupied poles, each Company shall place guy strands to hold its plant. Each company shall determine the size of its own guy strand in accordance with its own practices. There shall be no jointly owned guy strands. All jointly required anchors will be placed by the maintaining Company with no billing to the joint owner.
3. When guying is required by both Companies, the proper size triple thimble rod(s) and anchor(s) to hold the combined loads of both Companies shall be placed by the maintaining company.
4. A 1" triple thimble rod will be minimum standard for both companies. NYNEX standard screw anchor will be 10" and the power company will be 10" depending on soil condition.
5. When existing line poles are to become jointly occupied and the existing anchors are determined to be suitable for the combined loads of both Companies, such anchors will be made jointly owned in accordance with the terms of the then current Intercompany Operating Procedure on Acquiring Joint Ownership of New Poles and Anchors. Guy rod adapters will not be used under any circumstances.
6. If the rod will not accommodate another guy strand, an additional rod and anchor must be installed to accommodate the additional guy strand. When placing additional facilities on existing jointly occupied poles, the Company doing so will place any additional anchors required, because of its additional attachments there will be no billing to the joint owner.
7. When one Company places an anchor which will be sole owned by the other Company, the other Company will then be billed full flat rate cost.

NEW ENGLAND TELEPHONE
AND TELEGRAPH COMPANY
d/b/a NYNEX

By [signature]
(Title) Gen Mgr Eng + Const - NYNEX North
Date of Execution: 11/6/96

By [signature]
(Title) Staff Director E/C - MA/RE

Unitil Distribution Companies
Concord Electric Company
Exeter & Hampton Electric Company
Fitchburg Gas and Electric Light Company

By [signature]
(Title) Sr. Vice President
Date of Execution: 9/16/96

Unitil Exh. 1 P

INTERCOMPANY OPERATING PROCEDURE #7

Unitil Distribution Companies

and

NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY

WORK ON JOINT POLES

EFFECTIVE DATE November 1, 1996

1. This Intercompany Operating Procedure covers work on Joint Poles between the two companies.

2. Under the current Joint Ownership Agreement, Articles 5 and 7 deal with placing, maintaining and transferring attachments. They include the provision that each Company shall place and maintain its own attachments in accordance with the requirements of the National Electrical Safety Code and other applicable codes.

3. This I.O.P is issued to emphasize the need to observe this requirement on the part of both Companies; each Company shall perform its work promptly and in such a manner as not to interfere with the service of the other Company. As examples; the placing and tensioning of telephone cable strand, if not done properly, might cause the tops of jointly occupied poles to move thereby creating a problem with the electric companies' wire ties; the placing and tensioning of electric conductors and tensioning of guy strands, if not done properly, might cause telephone guy strands to become slack.

4. Whenever one Company tensioning causes the other Company to perform additional work; i.e., re-tensioning, the Company creating the problem will do whatever is necessary to correct the problem.

5. The construction methods employed by each Company must take into account what effect they could have on the other Company's facilities. When placing or replacing new poles, the Maintaining Company (the Co. doing the placing), must take into consideration transformer locations, terminal locations, cross arms, closure locations and riser locations that would add significant cost to the other Company when performing their transfer work.

NEW ENGLAND TELEPHONE
AND TELEGRAPH COMPANY
d/b/a NYNEX

By Norman N. Nault
(Title) Gen Mgr Eng+Const-NYNEX North
Date of Execution: 11/6/96

By Russell Gow
(Title) Staff Director E/C-MA/RI
Date of Execution: 12/5/96

Unitil Distribution Companies
Concord Electric Company
Exeter & Hampton Electric Company
Fitchburg Gas and Electric Light Company

By Stewart E. Arthur
(Title) Sr. Vice President
Date of Execution: 9/16/96

Unitil Exh. 1 P

INTERCOMPANY OPERATING PROCEDURE #8

Unitil Distribution Companies

and

NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY

TERMINATION OF THE JOINT OWNERSHIP
AND USE OF A POLE OR ANCHOR

EFFECTIVE DATE November 1, 1996

1. Either co-owner may at any time abandon the use of a jointly owned pole by giving due notice thereof in writing to the other co-owner and by removing therefrom any and all attachments it may have thereon.

2. If either party desires at any time to abandon a jointly owned pole or anchor, the abandoning party shall give the other party notice in writing to the effect, not less than sixty (60) days prior to the date on which it intends to abandon such pole or anchor, and offer to sell its interest to the other party. The other party shall reply to the above notice in ten (10) days and state if it desires to continue the use of such pole or anchor. If it does, it shall, upon the removal of all the attachments of the party abandoning the pole or anchor, assume sole ownership of such pole or anchor, and shall thereafter save harmless the party abandoning the pole from all obligation under Article 14 of the Agreement, except with respect to injuries or damages resulting from incidents which occurred prior to the abandonment. The remaining party shall purchase the pole in accordance to the current Flat Rate Billing Schedule.

NEW ENGLAND TELEPHONE
AND TELEGRAPH COMPANY
d/b/a NYNEX

By /Lawrence N. Tomlinson
(Title) Gen Mgr Eng+Const-NYNEX North
Date of Execution: 11/6/96

By Ronald Gross
(Title) Staff Director Elc-MA/RI
Date of Execution: 12/5/96

Unitil Distribution Companies
Concord Electric Company
Exeter & Hampton Electric Company
Fitchburg Gas and Electric Light Company

By Edward E. Clothier
(Title) Sr. Vice President
Date of Execution: 9/16/96

Unitil Exh. 1 P

INTERCOMPANY OPERATING PROCEDURE #9

Unitil Distribution Companies

and

NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY

REMOVAL OF JOINTLY OWNED POLES

EFFECTIVE DATE November 1, 1996

Removal of Jointly Owned Poles - (See Diagram for Pole Terminology)

1. Removal of Jointly Owned poles will be in accordance with the maintenance areas as assigned in Intercompany Operating Procedure - Custody and Maintenance of Jointly Owned Poles and Anchors and in accordance with article #9 of the joint ownership agreement.

2. The maintaining Company is responsible to notify the co-owner and each attachee when a pole is ready to be transferred. A pole will be considered ready to be transferred as defined in Intercompany Operating Procedure - Request to Transfer Construction

3. Upon receipt of the notification of the request to transfer facilities each company is responsible for transferring its facilities within sixty (60) days, unless otherwise agreed.

4. The last party off the pole(s) is responsible to notify the maintaining company that the pole(s) is ready for removal. Notification will normally be accomplished by Telephone Company form 57 and the appropriate Electric Company form. Advance notice may be made by telephone with forms to follow.

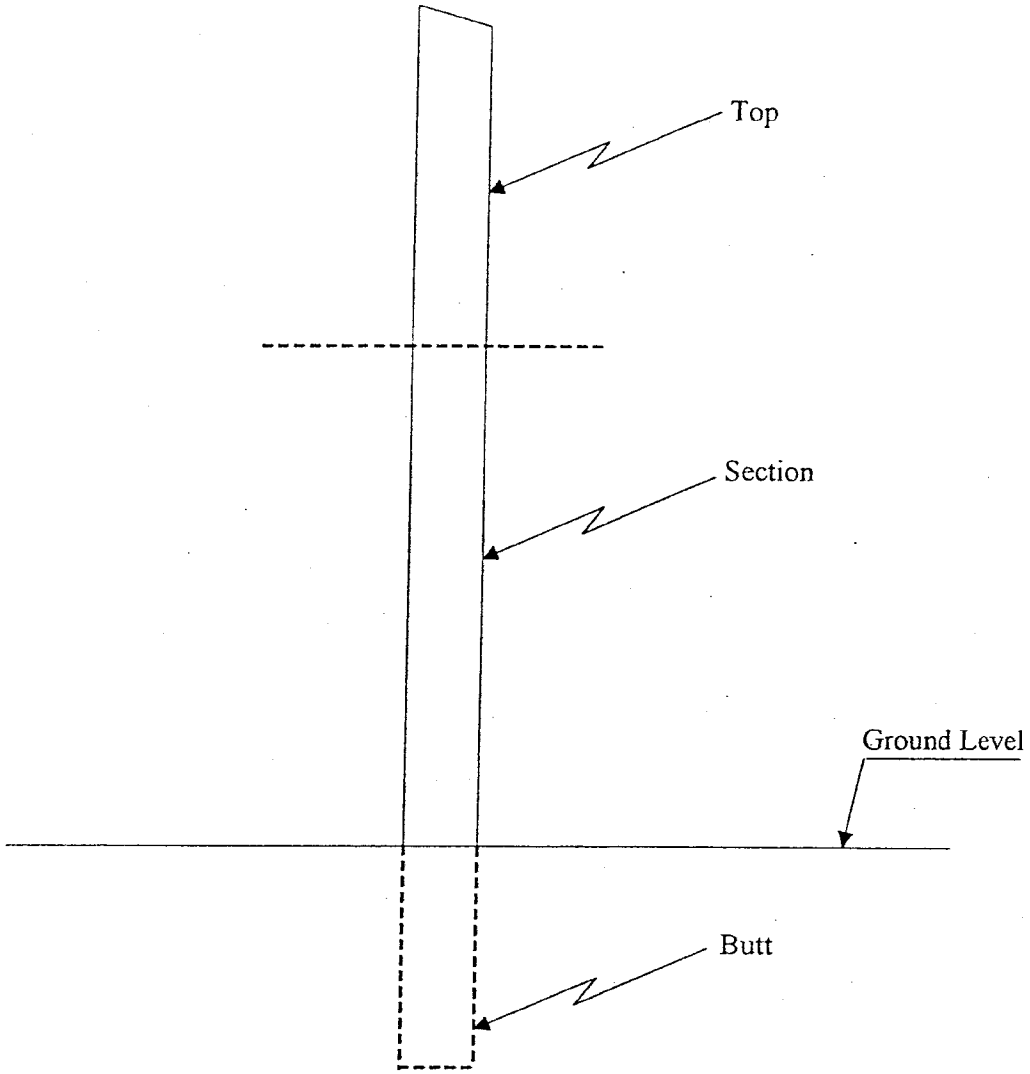
5. When it is mutually agreed that a pole is to be replaced using the "cut & kick" method (same hole or close enough to lash) the pole butt and pole section will be removed by the maintaining party. However, the last party to transfer its attachments may remove and dispose of the pole section, should the pole section be considered a safety hazard. No billing will be associated with this work.

6. The Telephone Company will not remove any jointly owned pole(s) that extend into a Electric Company's energized wires where minimum approach distances cannot be maintained.

7. The Electric Company will top all poles that are mutually agreed to, on the Exchange of Notice (605A) prior to placing / replacing any poles that would facilitate the transfer of such poles. Billing will only be for pole(s) topped in the NYNEX Maintenance Area and at the established flat billing rate in effect at that time.

IOP # 9

Unitil Exh. 1 P



NEW ENGLAND TELEPHONE
AND TELEGRAPH COMPANY
d/b/a NYNEX

By _____
(Title) Gen Mgr Eng + Const - NYNEX North
Date of Execution: 11/6/96

By _____
(Title) Staff Director E/C - MA/RI
Date of Execution: 12/5/96

Unitil Distribution Companies
Concord Electric Company
Exeter & Hampton Electric Company
Fitchburg Gas and Electric Light Company

By _____
(Title) Sr. Vice President
Date of Execution: 9/16/96

IOP # 10

Unitil Exh. 1 P

INTERCOMPANY OPERATING PROCEDURE #10

Unitil Distribution Companies

and

NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY

USE OF EXTRA LENGTH POLE TOP PIN

EFFECTIVE DATE November 1, 1996

The purpose of this Intercompany Operating Procedure is to establish a practice whereby mutual benefits to both Companies may be obtained through the use of an extra length pole top pin to avoid the premature replacement of a jointly owned pole when additional ground clearance is required.

In certain instances, the Power Company's Distribution Standards permit the installation of a 36 inch fiberglass pole top pin which could provide an additional 18 inches of pole space beyond that available when a standard length pin is used. For the purposes of this Procedure, the consideration of using such a pin for the mutual benefit of both Companies will be limited to installations on existing joint poles with voltages not exceeding 20,000 volts, phase to ground and where additional ground clearance is required by the current edition of the National Electrical Safety Code.

When the Power Company's Distribution Standards permit the installation of the 36 inch pin and the Companies mutually agree that its use would be beneficial to both parties, the Power Company will install the 36 inch pole top pin and both Companies will move their facilities upward, where necessary, a distance not to exceed 18 inches on the pole.

The Power Company will bill the Telephone Company its share of the cost for the placement of extra length pole top pins as specified in the current Flat Rate Billing Schedule.

NEW ENGLAND TELEPHONE
AND TELEGRAPH COMPANY
d/b/a NYNEX

By _____
(Title) Gen Mgr Eng+Const · NYNEX North
Date of Execution: 11/6/96

By _____
(Title) Staff Director E/C - MA/RI
Date of Execution: 12/5/96

Unitil Distribution Companies
Concord Electric Company
Exeter & Hampton Electric Company
Fitchburg Gas and Electric Light Company

By _____
(Title) Sr. Vice President
Date of Execution: 9/16/96

Unitil Exh. 1 P

INTERCOMPANY OPERATING PROCEDURE #11

Unitil Distribution Companies

and

NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY

POLE (VERTICAL) GROUNDS AND BONDING

EFFECTIVE DATE November 1, 1996

Pole (vertical) grounds and bonds between the Telephone Company cable strand and the Power Company multi-grounded neutral will be provided in accordance with NESC as follows:

1. For the purpose of this Intercompany Operating Procedure, the following definitions will apply:

   A. Pole (vertical) grounds - Will consist of a 7 to 8 inch diameter copper plate attached to the pole butt or an 8' x 5/8" copperplated or 8' x 3/4" galvanized steel ground rod driven in the ground vertically, full length, except where rock bottom is encountered, at a point not less than 12 inches from the butt of the pole with the head of the ground rod not less than 3 inches under the surface of the earth. A bare ground wire will be attached securely with staples to the quarter of the pole away from the flow of traffic and covered with molding for a minimum distance of 8 feet above the earth surface. Ground wires will have a minimum conductivity equivalent to #6 copper conductor, and will be connected to the butt plate or ground rod at one end and to the neutral wire of the Power Company's multi-grounded system at the other end.

   B. Bond - Will have a minimum conductivity of #6 copper conductor connected to the Telephone Company cable strand or to its open wire, C rural, or multiple wire protectors at one end to a vertical ground which in turn is connected to the Power Company's multi-grounded system neutral.

2. No intercompany billing is required with this Intercompany Operating Procedure.

3. Pole grounds - new construction; the two companies will coordinate their respective requirements for pole grounds per NESC requirements. The Company installing the joint pole will also furnish and install all pole grounds at such locations as required by both companies or solely by either Company unless mutually agreed otherwise.

4. Pole grounds - existing poles.

   A. When replacing an existing pole on which there is a pole ground, the Company setting the new pole will furnish and install a new pole ground.

   B. When replacing an existing pole on which there is no pole ground, the Company setting the pole will furnish and install a new pole ground as per paragraph 3. above.

   C. Any pole ground to be added to an existing pole will be installed by the Company requiring such ground.

5. Any pole grounds installed by the Telephone Company under paragraph 3. and 4. will be extended to the top of its assigned space with sufficient length of conductor for connection to the Power Company's multi-grounded system neutral.

6. Bonds between Telephone Company cable strand or protectors associated with multiple, C rural, or open wire, and Power Company's multi-grounded system neutral:

   A. If required at a location where there is a pole ground, the Telephone Company will provide the bonding conductor and make the connection to both the strand or protector and the pole ground.

   B. If no ground is present and a ground is required by the Telephone Company, the Telephone Company will install a vertical ground and extend the ground wire to the top of the communication space with sufficient length of conductor for connection to the power company multi-grounded system neutral.

7. In all cases, the connection of either a pole ground or a bonding conductor to the Power Company's multi-grounded system neutral will be done by the Power Company within thirty (30) days of receipt of written notice.

8. A pole ground will be maintained by the Company that maintains the pole, except that the Power Company will maintain all pole grounds above the Telephone Company space regardless of maintenance areas.

9. This Intercompany Operating Procedure is applicable to joint occupancy of pole lines supporting Power Company facilities in the 0 to 60 KV range only. Joint occupancy with higher voltages, if encountered, will be subject to special consideration.

NEW ENGLAND TELEPHONE
AND TELEGRAPH COMPANY
d/b/a NYNEX

By _____
(Title) Gen Mgr Eng+Const-NYNEX North
Date of Execution: 11/6/96

By _____
(Title) Staff Director for E/C-MA/RI
Date of Execution: 12/5/96

Unitil Distribution Companies
Concord Electric Company
Exeter & Hampton Electric Company
Fitchburg Gas and Electric Light Company

By _____
(Title) Sr. Vice President
Date of Execution: 9/16/96

Unitil Exh. 1 P

INTERCOMPANY OPERATING PROCEDURE #12

Unitil Distribution Companies

and

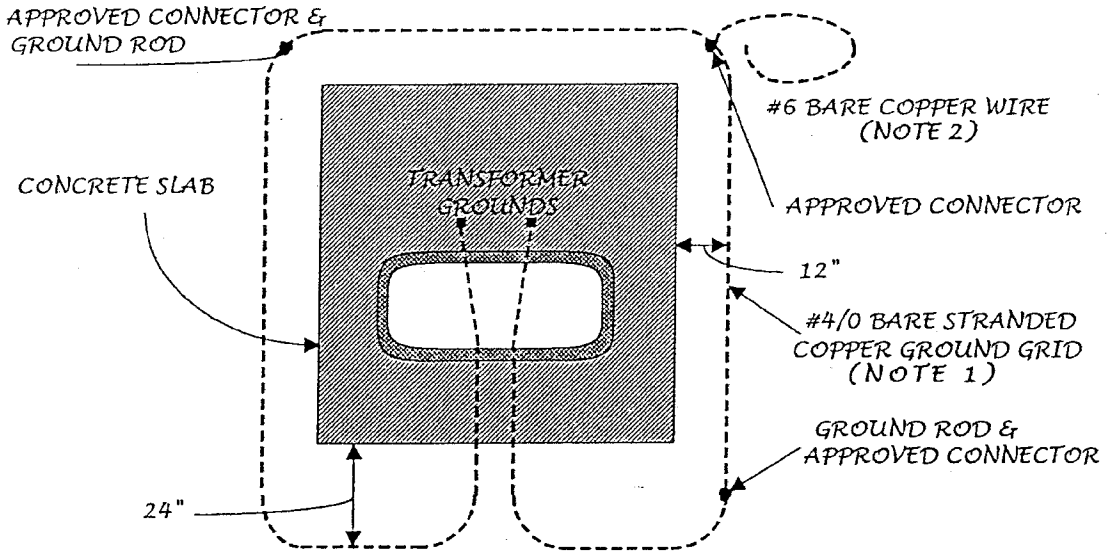
NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY

PADMOUNT TRANSFORMER AND PEDESTAL BONDING

EFFECTIVE DATE November 1, 1996

Both companies will endeavor to coordinate the placing of their buried facilities so that Bonding and/or Grounding can be performed simultaneously prior to the energizing of the conductors. If this cannot be accomplished the following will apply.

1. At all padmounted transformer locations a twelve (12) inch section of #6 bare copper wire will be connected to the electric company's grounding grid. The location of the wire is at twelve (12) inches from the rear right hand corner of the transformer pad, looking from the roadside direction, at a depth not to exceed six (6) inches. The specification will be part of the Electric Company's standard for the installation of the grounding grid. The Telephone Company is then responsible to bond this coil to their plant in compliance with current practices.



TYPICAL PADMOUNT TRANSFORMER GROUNDING GRID

NOTE:

1. THE GROUND GRID SHALL BE BURIED AT LEAST 1'-0" BELOW GRADE. SIX FEET OF EXTRA WIRE FOR EACH GROUND GRID LEG SHALL BE LEFT EXPOSED IN THE CABLE COMPARTMENT

TO ALLOW FOR THE CONNECTION TO THE TRANSFORMER. THE TWO EIGHT FOOT BY 5/8" GROUND RODS MAY BE EITHER GALVANIZED STEEL OR COPPERWELD AND THEY SHALL BE CONNECTED TO THE GRID WITH APPROVED CONNECTORS.

2. A 12 INCH SECTION OF #6 BARE SOLID COPPER WIRE INSTALLED AT THE REAR RIGHT HAND CORNER OF THE TRANSFORMER PAD AT A DEPTH NOT TO EXCEED 6 INCHES.

NEW ENGLAND TELEPHONE
AND TELEGRAPH COMPANY
d/b/a NYNEX

By Terrance N. Tenn
(Title) Gen Mgr Eng + Const. - NYNEX North
Date of Execution: 11/6/96

By Ronald J. Gross
(Title) Staff Director for E/C-MA/RI
Date of Execution: 12/5/96

Unitil Distribution Companies
Concord Electric Company
Exeter & Hampton Electric Company
Fitchburg Gas and Electric Light Company

By Stewart E. Arthur
(Title) Sr. Vice President
Date of Execution: 9/16/96

Unitil Exh. 1 P

IOP # 13

INTERCOMPANY OPERATING PROCEDURE #13

Unitil Distribution Companies

and

NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY

REQUEST TO TRANSFER CONSTRUCTION

EFFECTIVE DATE November 1, 1996

1. Upon completion of pole and/or anchor work that necessitates transfer notices, the constructing Company shall issue a Request to Transfer Construction Form #57 to the other Joint Owner and to the other Parties involved, such as the Municipality and/or Cable Television Companies.

   A. The maintaining company is responsible to notify the co-owner and each attachee when its attachments are ready to be transfered. A pole will be considered ready to be transfered when all pole attachments above have been transferred and no obstructions exist.

   B. Upon receipt of the Notification of Request to Transfer facilities each company is responsible for transferring its facilities within 60 days, unless otherwise agreed. After one of the joint-owners has given notice to the other owner in accordance with paragraph "A" above that a pole is ready to be transferred, all liability for the pole including removal will be that of the other company if that company does not remove its facilities within the agreed upon time.

   C. In the event transfers are not completed within the agreed time limits, the company that is the last one to remove its attachments from a jointly-owned pole will remove and dispose of it. There will be no billing, associated with the removal, to the other company.

NEW ENGLAND TELEPHONE
AND TELEGRAPH COMPANY
d/b/a NYNEX

By _____
(Title) Gen Mgr Eng + Const - NYNEX North
Date of Execution: 11/6/96

By _____
(Title) Staff Director E/C-MA/RE
Date of Execution: 12/5/96

Unitil Distribution Companies
Concord Electric Company
Exeter & Hampton Electric Company
Fitchburg Gas and Electric Light Company

By _____
(Title) Sr. Vice President
Date of Execution: 2/16/96

INTERCOMPANY OPERATING PROCEDURE #14

Unitil Distribution Companies

and

NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY

STREET SIDE COMMUNICATION ATTACHMENTS

EFFECTIVE DATE November 1, 1996

The Electric Company and the Telephone Company agree that the Telephone Company may locate its cable strands, and other longitudinal runs of paired conductors, on either or both sides of jointly owned poles in the Telephone Company's assigned space as follows:

1. Boxing in of poles should be kept to a minimum.

2. The cables may be located on the alley side in alleys where poles are located close to buildings

The above attachments shall have a minimum vertical spacing of one (1) foot at the pole, and be confined to no more than four (4) strands per pole. Where difficulties would be encountered by the Electric Company in the installation or removal of a pole, due to Telephone Company attachments on both sides of the pole, the two Companies shall cooperate in the execution of the work involved. Where such difficulties are encountered there will be no intercompany billing for any increased costs that may be experienced by either Company when it is necessary for each Company to have a crew to facilitate the placement or removal of joint poles.

Intercompany billing will be in accordance with the appropriate Flat Rate Billing Schedule for the work operations involved.

It is not the intent of this Intercompany Operating Procedure to include the setting of poles for the sole purpose of rearranging cables or strand from one side of the pole to the other.

NEW ENGLAND TELEPHONE
AND TELEGRAPH COMPANY
d/b/a NYNEX

By _____
(Title) Gen Mgr Eng+Const-NYNEX North
Date of Execution: 11/6/96

By _____
(Title) Sta Mgr Director Tel-MA/RI
Date of Execution: 12/5/96

Unitil Distribution Companies
Concord Electric Company
Exeter & Hampton Electric Company
Fitchburg Gas and Electric Light Company

By _____
(Title) Sr. Vice President
Date of Execution: 9/16/96

INTERCOMPANY OPERATING PROCEDURE #15

Unitil Distribution Companies

and

NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY

UNAUTHORIZED ATTACHMENTS

EFFECTIVE DATE November 1, 1996

The purpose of this Intercompany Operating Procedure is to provide a program to effect joint ownership of poles and anchors upon which either party is attached without authorization.

1. Effective the date of this agreement the penalty for all unauthorized attachments discovered by either party will be billed at twice the current flat rate schedule in effect at the date of discovery.

2. Billing for acquiring joint ownership will be in accordance to IOP - Acquiring Joint Ownership of Existing Poles and Anchors.

3. The joint owner billing for the unauthorized attachments must show that joint ownership was refused. The Exchange of Notice (Form 605A) will be the document of proof. This burden of proof will only be required for poles installed/replaced on or after the effective date of this IOP.

NEW ENGLAND TELEPHONE
AND TELEGRAPH COMPANY
d/b/a NYNEX

By _____
(Title) Gen Mgr Eng + Const - NYNEX North
Date of Execution: 11/6/96

By _____
(Title) Staff Director E/E-MA/RI
Date of Execution: 12/5/96

Unitil Distribution Companies
Concord Electric Company
Exeter & Hampton Electric Company
Fitchburg Gas and Electric Light Company

By _____
(Title) Sr Vice President
Date of Execution: 9/16/96

INTERCOMPANY OPERATING PROCEDURE #16

Unitil Distribution Companies

and

NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY

INSPECTION AND TREATMENT OF STANDING POLES

EFFECTIVE DATE November 1, 1996

The purpose of the Intercompany Operating Procedure is to provide a uniform practice by both Companies for the inspection and treatment of jointly owned poles in order to lengthen the life of pole plant and obtain mutual benefits for each Company.

1. Initially all joint poles shall be inspected at or before the age of 20 years. Poles shall be re-inspected at intervals not to exceed 10 years.

2. Each Company shall be responsible for the inspection and treatment of all jointly owned poles within their respective maintenance areas. Within each maintenance area all such poles shall be inspected and treated in accordance with that respective Company's standards, specifications or procedures. Inspection and treatment may be performed by company employees or authorized agents or contractors.

3. The cost of inspection and treatment shall be borne individually by each Company for their respective maintenance areas.

NEW ENGLAND TELEPHONE
AND TELEGRAPH COMPANY
d/b/a NYNEX

By Howard N. Tenney
(Title) Gen Mgr Eng+Const-NYNEX North
Date of Execution: 11/6/96

By Ronald O. Jones
(Title) Staff Director Ek-MA/RI
Date of Execution: 12/5/96

Unitil Distribution Companies
Concord Electric Company
Exeter & Hampton Electric Company
Fitchburg Gas and Electric Light Company

By Edward E. Arthur
(Title) Sr. Vice President
Date of Execution: 9/16/96

INTERCOMPANY OPERATING PROCEDURE #17

Unitil Exh. 1 P

Unitil Distribution Companies

and

NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY

JOINT TRIMMING

EFFECTIVE DATE November 1, 1996

The purpose of this Intercompany Operating Procedure is to establish a definite method of allocating the costs of trimming and any related basal ground spraying of tree and brush stumps associated with the construction and maintenance of a joint pole line.

1. Maintenance Trimming

   A. Maintenance trimming shall be done on a joint basis when both companies have a need. When it is agreed that both parties will benefit in such Joint Tree Trimming the division of cost will be 75% Electric Company and 25% Telephone. (see Attachment #1)

   B. Heavy storm work such as hurricanes, wet snow, tornadoes, and ice storms will be handled immediately without prior review. Field representatives of the two companies, as soon as practicable, after each major storm, will meet to communicate which cities/towns, streets, and lines were trimmed as a result of a heavy storm. Billing will include the same information. The parties agreed to reciprocal acceptance of each other's tree contractors for heavy storms on a 50%/50% basis.

   C. Removal of weakened or toppled trees and large limbs which threaten both parties' plant will be removed on a 50%/50% basis, subject to prior field review, wherever possible.

2. Construction Trimming

   A. Trimming for addition, extension or reconstruction shall be surveyed in the field and a determination made whether both parties have a need. The division of cost will be 60% Electric Company and 40% Telephone (see Attachment #2).

   B. The cost of trimming in connection with increased pole height, at the time of replacement, shall be borne as follows:

      (1) Mutual Benefit Replacement - Power Company - 50%
      - Telephone Company - 50%

      (2) Sole Benefit Replacement - Full cost to be borne by the party for whose benefit the pole is replaced.

3. Ground Cutting

   A. The cost of removal of roadside brush and small trees shall be done on a joint basis when both companies have a need and borne at the same percentages as is stated in Item #1 and #2 of this Agreement

4. Chemical Treatment

   A. The cost of basal ground spraying of tree and brush stumps at the time of ground trimming and chemical treatment shall be borne at the same percentages as is stated in paragraph #1 and #2.

   B. All chemical treatment must be done in accordance with all applicable local, state and federal regulations.

5. Administration

   A. All trimming agreements will be performed via the Exchange of Notice Form 605A.

   B. Maintenance contracts that will exceed $5,000 in cost to NYNEX will be awarded to the lowest of at least three (3) qualified bidding contractors.

   C. Each Company will annually furnish the other Company with a list of its approved Trimming Contractors.

   D. For work done by Contractor that is not on both companies' list of approved Contractors, the constructing Company will pay the full cost of the Trimming bill and then bill the other Company its share of the total cost. Such bill shall be accompanied by a copy of the Contractor's bill.

   E. The full cost of any uncoordinated trimming, except for storms, shall be borne by the Company that arranged for same.

   F. When work is done by mutually approved contractors, the contractor will bill each Company separately for its share of the trimming costs. Bills rendered by the contractor to each Company will show the total cost of the job and the percentage and cost billed to the other Company.

NEW ENGLAND TELEPHONE
AND TELEGRAPH COMPANY
d/b/a NYNEX

By _____
(Title) GenMgr Engr Const-NYNEX North
Date of Execution: 11/6/96

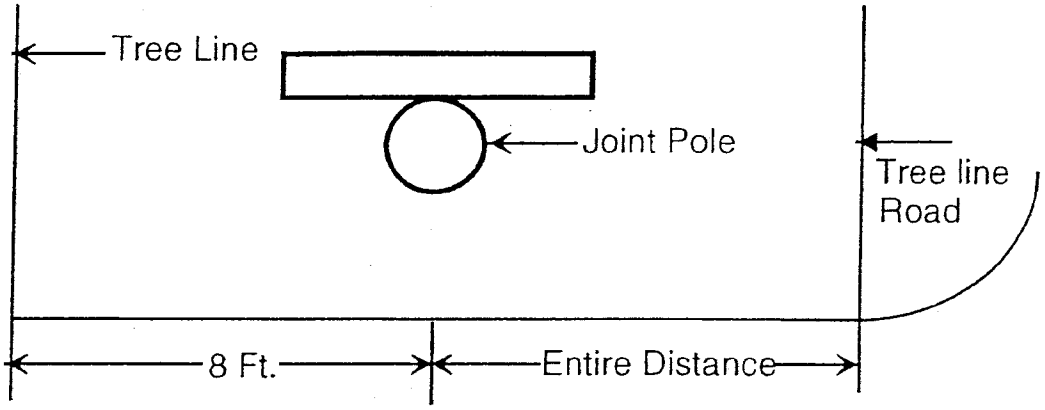
By _____
(Title) Staff Director E/C-MA/RI
Date of Execution: 12/5/96

Unitil Distribution Companies
Concord Electric Company
Exeter & Hampton Electric Company
Fitchburg Gas and Electric Light Company

By _____
(Title) Sr. Vice President
Date of Execution: 9/16/96

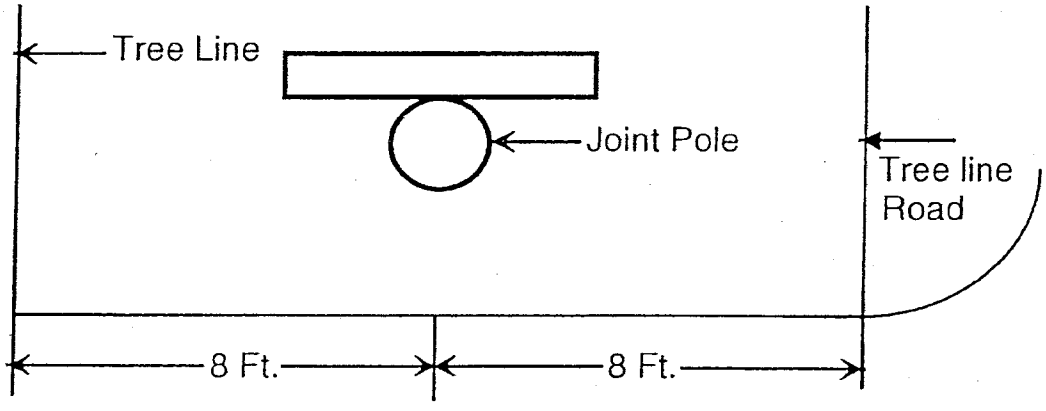
MAINTENANCE TRIMMING

Roadside Trimming, Highway or Private Way



Division of Trimming Costs
Electric Company = 75%
NYNEX = 25%

Off Road (R.O.W.) Trimming



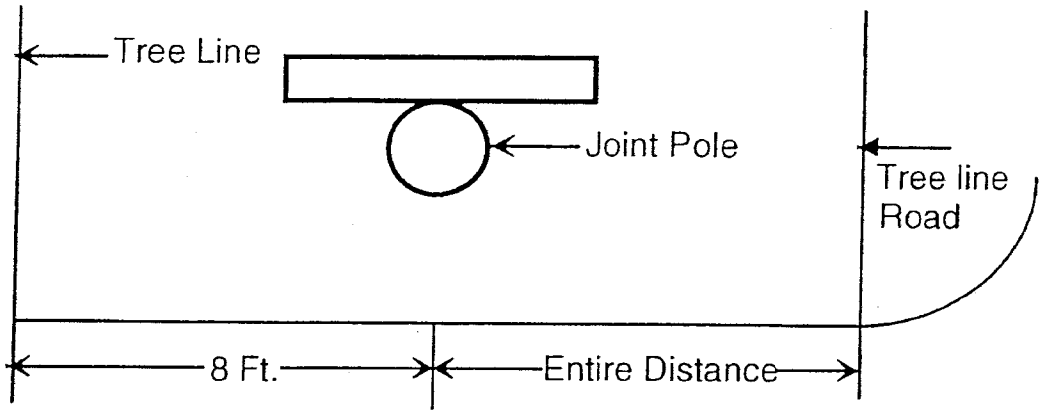
Division of Trimming Costs
Electric Company = 75%
NYNEX = 25%

IOP # 17

Unitil Exh. 1 P

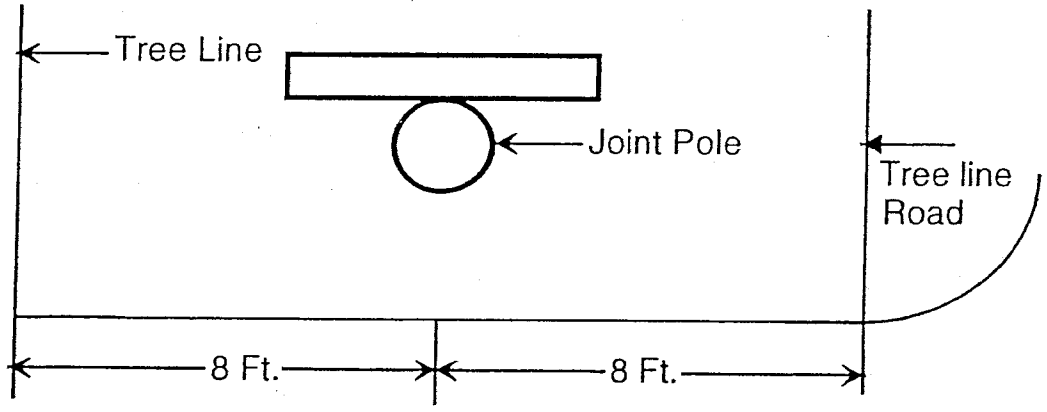
CONSTRUCTION TRIMMING

Roadside Trimming, Highway or Private Way



Division of Trimming Costs
Electric Company = 60%
NYNEX = 40%

Off Road (R.O.W.) Trimming



Division of Trimming Costs
Electric Company = 60%
NYNEX = 40%

Unitil Exh. 1 P

INTERCOMPANY OPERATING PROCEDURE #18

Unitil Distribution Companies

and

NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY

RIGHTS-OF-WAY, EASEMENTS AND LICENSES

EFFECTIVE DATE November 1, 1996

1. DEFINITIONS

For the purposes of this I.O.P. the following definitions apply:

A. Right-of-Way - a legal right of passage across, over and/or under another person's realty. (May be an easement, a license, or a permit).

B. Easement - An interest in realty owned by another that entitles its holder to a specific use of enjoyment of the realty or a portion thereof.

2. EXISTING LINES

If desired, the Company acquiring an interest in existing poles shall, with the necessary cooperation of the other Company, unless otherwise agreed, secure necessary rights-of-way, easements, and licenses from property owners and public authorities in accordance with 5.C.

3. NEW LINES

A. The Company erecting new joint poles and anchors shall, with the necessary cooperation of the other Company, unless otherwise agreed, secure necessary rights-of-way, easements, and licenses from property owners and public authorities. All such rights obtained by either Company shall be in the joint names of both Companies. Where possible, a blanket easement, right-of-way, or license will be obtained for all poles, anchors, guys and stubs. Where necessary, each Company shall obtain easements, rights-of-way and licenses for poles, anchors, guys and stubs required for sole use.

B. Exceptions to the above are the crossing of State owned public waters and the crossing, or occupancy, of Railroad property or rights-of-way. In such instances, or similar ones, unless otherwise agreed, each Company will obtain whatever permits are necessary to fulfill its own requirements.

C. An easement will not ordinarily be required for a pole line that is to be located on the property of the customer being served, or if the customer is a tenant of the owner of the property on which the pole line is to be located. If, however, such a pole line probably will be used or extended at a future date to supply other customers,

permanent easements shall be obtained. It is the policy of both Companies not to make payment for these easements.

4. RECORDING AND RECORDING FEES

A. All joint documents shall be recorded promptly, and a copy, where required, shall be furnished to the other Company.

B. The recording fees for municipal grants, licenses, rights-of-way and private property easements will be paid by the Company obtaining same.

5. OTHER PAYMENTS

A. Nominal payment paid to property owners for easements, etc. will be paid by the Company obtaining same.

B. Payments other than "nominal", when mutually agreed in advance, will be shared equally by the two Companies.

C. When the maintaining Company fails to get the easement and/or partial mortgage release, and the non-maintaining Company obtains these, than the maintaining Company will be charged an administration fee of $50.00.

6. FORMS

Each Company will use the appropriate forms for acquiring easements, rights of way, and licenses.

NEW ENGLAND TELEPHONE
AND TELEGRAPH COMPANY
d/b/a NYNEX

By _____
(Title) Gen Mgr Eng + Const. NYNEX North
Date of Execution: 11/6/96

By _____
(Title) Staff Director E/C-MA/RE
Date of Execution: 12/5/96

Unitil Distribution Companies
Concord Electric Company
Exeter & Hampton Electric Company
Fitchburg Gas and Electric Light Company

By _____
(Title) Sr. Vice President
Date of Execution: 9/16/96

IOP# 19 Page 1 of 3

INTERCOMPANY OPERATING PROCEDURE #19
UNITIL DISTRIBTUION COMPANIES
AND
NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY

EXCHANGE OF NOTICE PROCEDURE

EFFECTIVE DATE : June 1, 2001
(Revises IOP #19 dated November 1,1996)

1. The party requesting the work to be performed or requesting Joint Ownership shall initiate the attached revised Exchange of Notice. Form 605A.

2. In the case where the work is a mutual need to both parties (i.e. road job) the Exchange of Notice shall be initiated by the custodian of the specified maintenance area.

3. The party initiating the work will issue to the other party the Exchange of Notice and two copies of the same for the proposed work. Before the Exchange of Notice is written, contact must be made between representatives of each company to discuss the proposed work. This can be done by a telephone call or a joint field survey. The receiving party will verify the Exchange of Notice regarding the proposed work.

4. The receiving party, upon verification that the proposed work depicted on the Exchange of Notice is necessary, will return the notice signed within 30 days for the following type of work (items are as they appear on the Exchange of Notice form 605A included as Attachment A of this IOP)

Item	Nature of Notice or Request
1.	Application of purchase/sell interest in solely owned poles/anchors.
2.	Application to sell interest in jointly owned poles/anchors.
3.	Notice of intent to place new poles.
4.	Notice of need to replace jointly owned poles/anchors.
5.	Notice of need to relocate jointly owned poles/anchors.
6.	Notice of intent to abandon poles/anchors.
7.	Notice of increase or change voltage.
8.	Notice of non-standard conditions.
9.	Notice to custodian of pole in need of replacement.
10.	Request to transfer.
11.	Other
12.	Future

5. The receiving party upon completion of the work covered by items 8 and 9 above will return the notice signed.

EXCHANGE OF NOTICE PROCEDURE

6. Response on the Exchange of Notice will be made to the originating party in accordance with items 4 and 5 above. The following conditions will apply:

   A) If the receiving party is in agreement with the notice, the original will be signed and returned to the originating party.

   B) If the notice is unacceptable to the receiving party, corrections shall be discussed between the representatives of the companies. The original and the revised copy should be returned to the originating party within 30 days.

   C) If the originating party agrees to corrections made on the notice by the receiving party, the engineer will initial such changes or reissue the Exchange of Notice, whichever is appropriate. At all times, agree or not, the Exchange of Notice must be signed and returned, within 30 days or when the work has been completed.

   D) If the receiving party requests changes in the Exchange of Notice which are unacceptable to the originating party, the Engineers for both companies will coordinate to resolve the problem.

7. With the issuance of various Intercompany Operating Procedures between the two companies, the Exchange of Notice form 605A that is exchanged by the two companies, takes on added significance and is, in effect, a legal document indicating agreements reached between representatives of the two companies.

   A) The form 605A shall be signed in the upper section by an authorized representative of the initiating company and shall be signed in the lower section by an authorized representative of the other company. Typed or stamped names are not acceptable.

   B) When changes are made in, or notes are added to an Exchange of Notice form, the individual making such changes or notes shall initial and date them and return the revised form to the other company..

APPROVED:	APPROVED:
Verizon New England Inc	Concord Electric Company Exeter & Hampton Electric Company Fitchburg Gas and Electric Light Comapny
BY: Richard W. Hall	BY: Glenn A. Appleton
TITLE: Director-Outside Plant Engineering	TITLE: Vice President, Operations Systems
DATE: June 4, 2001	DATE: May 15, 2001

IOP #19 Page 3 of 3

See Attached 605A (2-98) Forms to be used for Joint Ownership – Exchange of Notice

Unitil Exh. 1 P

verizon

Joint Ownership - Exchange of Notice

To: (Name of Company)	Location	Tel Notice #
For CO. Rep.	Date	Tel Order #
From: (Name of Company) **VERIZON NEW ENGLAND INC**	Location	Elec Notice #
By CO. Rep.	Municipality	Elec Order #
Schedule		Maintenance Area TEL E

V	Item	Nature of Notice Or Request	V	Item	Nature of Notice Or Request
	1	Initial Interest		7	Notice To Install/Replace JO Anchor
	2	Remaining Interest		8	Notice Of Non-Standard Conditions
	3	Notice Of Intent to Erect New Poles		9	Notice To Custodian Of Pole In Need Of Replacement
	4	Notice Of Intent to Replace JO Poles		10	Request To Transfer
	5	Notice Of Intent To Relocate JO Poles		11	Pole Reinforcement
	6	Notice Of Intent To Abandon Poles		12	Other As Detailed

Give Location And Description Of Item(s) Checked

Exchange	Exchange Code	Tel Route # / Street	Elec Ln Name / Street

Sketch / Instructions

Voltage	Prepared By		
Agreed By	Date	Company	VERIZON NEW ENGLAND INC
Agreed By	Date	Company	

Reverse Side

e of Work Code
stall Mutual Height
stall Excess Height
itial Interest
emaining Interest
emove
amaged Pole
istall Anchor
acrifice Life

Tel Notice #	Elec Notice #
Tel Order #	Elec Order #

Number				Existing Plant									NOTES	Proposed Plant							
										Billing									Billing		
any	Elec Company 2	Work Code 3	Owner-ship 4	Length 5	Class 6	Wood Treat-ment 7	% Cond	Anch. Size 8	Year Placed 9	Tel Pay 10	Elec Pay 11	✓ 12	13	Excess Hgt footage	Length 14	Class 15	Wood Treat-ment 16	Anch. Size 17	Tel Pay 18	Elec Pay 19	✓ 20

Unitil Exh. 1 P

UNITIL LOGO

Joint Ownership - Exchange of Notice

To: (Name of Company)	Location	Tel Notice #
VERIZON NEW ENGLAND INC		
For CO. Rep.	Date	Tel Order #
From: (Name of Company)	Location	Elec Notice #
By CO. Rep.	Municipality	Elec Order #
Schedule		Maintenance Area / TEL

V	Item	Nature of Notice Or Request	V	Item	Nature of Notice Or Request
	1	Initial Interest		7	Notice To Install/Replace JO Anchor
	2	Remaining Interest		8	Notice Of Non-Standard Conditions
	3	Notice Of Intent to Erect New Poles		9	Notice To Custodian Of Pole In Need Of Replacement
	4	Notice Of Intent to Replace JO Poles		10	Request To Transfer
	5	Notice Of Intent To Relocate JO Poles		11	Pole Reinforcement
	6	Notice Of Intent To Abandon Poles		12	Other As Detailed

Give Location And Description Of Item(s) Checked

Exchange	Exchange Code	Tel Route # / Street	Elec Ln Name / Street

Sketch / Instructions

Voltage	Prepared By		
Agreed By	Date	Company	
Agreed By	Date	Company	VERIZON NEW ENGLAND INC

e of Work Code
stall Mutual Height
stall Excess Height
itial Interest
emaining Interest
emove
amaged Pole
stall Anchor
acrifice Life

Reverse Side

Tel Notice #	Elec Notice #
Tel Order #	Elec Order #

Number				Existing Plant									NOTES	Proposed Plant							
										Billing									Billing		
ny	Elec Company 2	Work Code 3	Owner-ship 4	Length 5	Class 6	Wood Treat-ment 7	% Cond	Anch. Size 8	Year Placed 9	Tel Pay 10	Elec Pay 11	✓ 12	13	Excess Hgt footage	Length 14	Class 15	Wood Treat-ment 16	Anch. Size 17	Tel Pay 18	Elec Pay 19	✓ 20

UES Schedule TPM-1
Page 60 of 77
Until Exh. 1 P

Unitil Exh. 1 P

Joint Ownership - Exchange of Notice

(Return Within 14 Days For Items 1 To 7 & 12)
(Return Upon Completion Of Work For Items 8 To 11 Inc.)

To: (Name of Company) ①	Location ②	Notice # ③
For CO. Rep. ④	Order # (Telephone) ⑤	Sequence # (Elect.) ⑥
From: (Name of Company) ⑦	Location ⑧	Date ⑨
By CO. Rep. ⑩	Municipality ⑪	Town Code ⑫

Schedule ⑬

V	Item	Nature of Notice Or Request	V	Item	Nature Of Notice Or Request
	1	Initial Interest		7	Notice To Install/Replace JO Anchor
	2	Remaining Interest		8	Notice Of Non-Standard Conditions
	3	Notice Of Intent To Erect New Poles		9	Notice To Custodian Of Pole In Need Of Replacement
	4	Notice Of Intent To Replace JO Poles		10	Request To Transfer
	5	Notice Of Intent To Relocate JO Poles		11	Pole Reinforcement
	6	Notice of Intent To Abandon Poles		12	Other As Detailed Below

Give Location And Description Of Item(s) Checked

Exchange ⑭	Street ⑮	Route # ⑯

Sketch/Instructions

⑰

Voltage	⑱	Prepared By	⑲		
Agreed By	⑳	Date	㉑	Company	㉒
Received By	㉓	Date	㉔	Company	㉕
Refused By	㉖	Date	㉗	Company	㉘

Unitil Exh. 1 P

PREPARING OF THE FRONT OF A JOINT OWNERSHIP - EXCHANGE OF NOTICE FORM 605A

1.	TO:	THE COMPANY THE 605A IS BEING SENT TO.
2.	LOCATION:	THE COMPANY OFFICE THE 605A IS SENT.
3.	NOTICE #:	N.E.T.'S MEMO NUMBER.
4.	FOR CO. REP.:	THE COMPANY'S ENGINEER.
5.	WORK ORDER #:	N.E.T.'S USE. WORK ORDER/DAMAGE CASE NUMBER.
6.	SEQUENCE #:	POWER COMPANY'S USE.
7.	FROM:	COMPANY'S NAME.
8.	LOCATION:	OFFICE THAT IS SENDING THE 605A.
9.	DATE:	DATE ISSUING WORK.
10.	BY CO. REP.:	THE NAME OF THE ENGINEER INITIATING THE WORK
11.	MUNICIPALITY:	THE TOWN/MUNICIPALITY THE WORK IS BEING DONE.
12.	TOWN CODE:	POWER COMPANY USE ONLY.
13.	SCHEDULE:	THE NATURE OF NOTICE OR REQUEST.
14.	EXCHANGE:	N.E.T.'S USE ONLY. N.E.T.'S EXCHANGE THE WORK IS BEING DONE.
15.	STREET:	THE NAME OF THE STREET THE WORK IS BEING DONE.
16.	ROUTE #:	POWER COMPANY USE ONLY.
17.	SKETCH:	A DRAWING OF THE WORK BEING DONE.

THE FOLLOWING MUST BE INCLUDED IN THE SKETCH:

THE ROUTE AND POLE NUMBER, THE SPAN BETWEEN POLES, THE REASON THE WORK IS BEING DONE.

WHETHER THE POLE IS PUBLIC OR PRIVATE, IF IT IS PRIVATE INCLUDE THE NAME OF THE OWNER.

IF PETITION/RIGHTS ARE REQUIRED, MAKE A NOTE, "PETITION TO FOLLOW" OR, "PETITION ATTACHED".

18. VOLTAGE:	POWER COMPANY USE.
19. PREPARED BY:	THE SIGNATURE OF ENGINEER INITIATING THE WORK.
20. AGREED BY:	THE SIGNATURE OF THE ENGINEER AGREEING.
21. DATE:	THE COMPANY'S SIGNATURE DATE.
22. COMPANY:	THE NAME OF THE COMPANY.
23. RECEIVED BY:	A SIGNATURE FROM THE INDIVIDUAL WHO RECEIVED THE 605A, IF DIFFERENT FROM THE APPROVAL SIGNATURE.
24. DATE:	THE RECEIVERS' SIGNATURE DATE.
25. COMPANY:	THE COMPANY NAME.
26. REFUSED BY:	THE SIGNATURE OF THE COMPANY'S ENGINEER.
27. DATE:	THE COMPANY'S SIGNATURE DATE
28. COMPANY:	THE COMPANY NAME
29. DATE RETURNED:	THE DATE THE COMPANY RETURNS THE 605A.
30. DATE RECEIVED:	THE RECEIVED DATE.

ature Of Wor Je (21)
= Install Mutual Height
= Install Excess Height
= Initial Interest
= Remaining Interest
= Remove
= Damaged Pole
= Install Anchor
= Sacrifice Life

Not .o. (22)	Seq. # (23)
Order No. (Tel.) (24)	Elec. (25)

Pole Number				Existing Plant								Street	Proposed Plant							
									Billing								Billing			
Telco ompany (1)	Power Company (2)	Work Code (3)	Owner-ship (4)	Length (5)	Class (6)	Wood Treat (7)	Anch. Size (8)	Year Placed (9)	Tel. Pay (10)	Elect. Pay (11)	✓ (12)	When Poles Are On Private Property Show Property Owners Name (13)	Length (14)	Class (15)	Wood Treat (16)	Anch. Size (17)	Tel. Pay (18)	Elect. Pay (19)	✓ (20)

UES Schedule TPM-1
Page 64 of 77

Unitil Exh. 1 P

PREPARING THE BACK OF A JOINT OWNERSHIP - EXCHANGE OF NOTICE FORM 605A

1. POLE NUMBER/ TELCO CO.:	N.E.T.'S POLE NUMBER.
2. POLE NUMBER/ POWER CO.:	THE POWER COMPANY'S POLE NUMBER.
3. WORK CODE:	THE NATURE OF WORK AS DETAILED IN SECTION 21.
4. OWNERSHIP:	THE PERCENTAGE OF THE POLE OWNED BY N.E.T.
5. LENGTH:	THE HEIGHT OF THE EXISTING POLE.
6. CLASS:	THE DIAMETER OF THE EXISTING POLE.
7. WOOD TREAT:	THE TYPE AND TREATMENT OF WOOD FOR THE EXISTING POLE.
8. ANCHOR SIZE:	THE SIZE OF THE EXISTING ANCHOR.
9. YEAR PLACED:	THE YEAR THE EXISTING POLE OR ANCHOR WAS PLACED.
10. BILLING/ TEL. PAY:	THE DOLLAR AMOUNT N.E.T. PAYS FOR AN EXISTING POLE.
11. BILLING/ ELECT. PAY:	THE DOLLAR AMOUNT THE POWER COMPANY PAYS FOR AN EXISTING POLE.
12. CHECK MARK:	PLACE A CHECK MARK WHEN THE EXISTING ITEM HAS BEEN BILLED. THIS COLUMN MAY ALSO BE USED FOR THE FIELD CODES (1C, 1X, 1XS).
13. PRIVATE PROPERTY/ STREET NAME:	FILL IN THE STREET NAME THE ITEM IS FOUND ON, AND LIST THE OWNERS NAME IF THE ITEM IS ON PRIVATE PROPERTY.
14. LENGTH:	THE HEIGHT OF THE PROPOSED POLE.
15. CLASS:	THE DIAMETER OF THE PROPOSED POLE
16: WOOD TREAT:	THE TYPE AND TREATMENT OF WOOD FOR THE PROPOSED POLE.
17. ANCH. SIZE:	THE SIZE OF THE PROPOSED ANCHOR.

18. BILLING/ TEL. PAY: THE DOLLAR AMOUNT N.E.T. WILL PAY FOR A PROPOSED POLE.

19. BILLING/ ELECT. PAY: THE DOLLAR AMOUNT THE POWER COMPANY WILL PAY FOR A PROPOSED POLE.

20: CHECK MARK: PLACE A CHECK MARK WHEN THE EXISTING ITEM HAS BEEN BILLED. THIS COLUMN MAY ALSO BE USED FOR THE FIELD CODES (1C, 1X, 1XS).

21: NATURE OF WORK CODES:

A = INSTALL MUTUAL HEIGHT: AN ITEM OF NEW POLE PLANT BEING INSTALLED AS JOINTLY OWNED AT A MUTUALLY AGREED TO HEIGHT

B = INSTALL EXCESS HEIGHT: AN ITEM OF NEW POLE PLANT BEING INSTALLED AS JOINTLY OWNED WITH EITHER COMPANY PURCHASING ADDITIONAL HEIGHT FOR ITS SOLE BENEFIT.

C = INITIAL INTEREST: THE SALE OF INTEREST IN AN EXISTING POLE PLANT BY ONE COMPANY, WHOSE PRESENT OWNERSHIP IS 100% RESULTING IN THE ITEM BECOMING JOINTLY OWNED.

D = REMAINING INTEREST: THE SALE BY ONE OF THE EXISTING JOINT OWNERS OF THEIR ENTIRE INTEREST IN AN ITEM OF POLE PLANT TO THE CO-OWNER, RESULTING IN THE ITEM BECOMING 100% OWNED BY THE COMPANY BUYING THE REMAINING LIFE.

E = REMOVE: THE JOINTLY OWNED POLE PLANT REMOVED

F = DAMAGED POLE: A JOINTLY OWNED POLE DAMAGED BY A THIRD PARTY (MOTOR VEHICLE).

G = INSTALL ANCHOR: AN ANCHOR INSTALLATION.

S = SACRIFICE LIFE: THE REMAINING DOLLAR VALUE OF AN EXISTING POLE THAT IS BEING REMOVED PREMATURELY.

22. NOTICE NO.: N.E.T.'S MEMO NUMBER

23. SEQ. #: USED BY THE POWER COMPANY ONLY.

24. ORDER NO. (TEL): N.E.T.'S WORK ORDER/DAMAGE CASE NUMBER

25. ELEC.: USED BY THE POWER COMPANY ONLY.

Unitil Exh. 1 P

IOP # 20

INTERCOMPANY OPERATING PROCEDURE #20

Unitil Distribution Companies

and

NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY

BURIED CABLE SIGNS

EFFECTIVE DATE November 1, 1996

1. Each Company grants permission to the other Company to install buried cable signs on poles that are solely owned by the Company having aerial construction. These signs can be installed under the following provisions.

   A. Metal signs shall not be installed higher than three (3') feet above ground line and shall conform to the contour of the pole.

   B. Plastic signs shall not be installed higher than five feet (5') on the pole.

   C. When poles on which there are buried cable signs are replaced, the pole owner shall notify the owner of the sign that the pole has been replaced.

   D. The attachment of these signs is to be permitted without billing between companies.

2. When both companies have aerial construction and the poles are jointly owned, and buried construction is also present, buried cable signs can be placed on the poles as outlined in 1.A. and 1.B. above.

NEW ENGLAND TELEPHONE
AND TELEGRAPH COMPANY
d/b/a NYNEX

By _____
(Title) Gen Mgr Eng+Const-NYNEX North
Date of Execution: 11/6/96

By _____
(Title) Staff Director E&C - MA/NE
Date of Execution: 12/5/96

Unitil Distribution Companies
Concord Electric Company
Exeter & Hampton Electric Company
Fitchburg Gas and Electric Light Company

By _____
(Title) Sr. Vice President
Date of Execution: 9/16/96

Unitil Exh. 1 P

IOP # 21

INTERCOMPANY OPERATING PROCEDURE #21

Unitil Distribution Companies

and

NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY

FLAT RATE BILLING

EFFECTIVE DATE: April 1, 2003

1. This procedure provides for establishing Flat Rates for Reciprocal intercompany billing, between the Joint Owners. These rates may be reviewed annually or less frequently, as required, at the request of one of the Joint Owners.

2. Definition of Terms:

   A. Full Flat Rate — The average of both Joint Owners' total costs associated with pole and anchor work.

   B. Flat Rate — Flat Rate is the equal to 50% of the Full Flat Rate.

3. In order to establish standardized costs, a Flat Rate Reciprocal billing amount of $575.00 per pole, which includes removal cost, will take effect on the effective date of this I.O.P. and will be applied to all poles placed on or after that date, regardless of size.

4. In the event that additional height beyond a standard pole is to be for the exclusive use of one Joint Owner, that Joint Owner will be billed an additional $125.00 for each 5 foot increment that will be exclusively used by that Joint Owner. When these poles are replaced thereafter for any reason, use of space will be re-evaluated and billing will be based on the agreed upon allocation of space.

5. When an anchor is set by one Joint Owner solely for the benefit and exclusive use of the other Joint Owner, the company setting the anchor shall bill the other at the Full Flat Rate of $230.00 per anchor.

6. Upon mutual agreement of the Joint Owners, in the event that the non-maintaining company removes a pole, the removing party will bill the joint owner the Full Flat Rate of $335.00.

7. These rates will apply to new installations and replacements. There will be no billing associated with plant sacrifice, transfers or straight removal.

8. When one company desires to purchase interest in an existing non-joint pole, the following billing procedure will apply:

   A. For poles 20 or less years old, billing will be at the current Flat Rate Reciprocal billing amount for a new pole regardless of size.

   B. For poles more than 20 years old, no billing will occur.

IOP # 21

9. A. When a co-owner requests the pole be Topped, the Topping will be billed at the current flat rate of $45.00 noted on the Exchange of Notice 605A.

   B. Any pole topping not requested on the original Exchange of Notice Form 605A that is subsequently requested by the joint owner, and requires an additional trip, will be billed at the Full Flat Rate of $90.00

10. No extra charges are to be made for hand digging, blasting, sidewalk repairs or straightening of poles in connection with any of the above work on poles and anchors.

11. Fiberglass pole top pins will be billed at the Full Flat Rate of $258.00. This type of construction would only be used in special cases.

12. Trenching will be billed at actual cost.

For billable items other than those included above, billing will be done on an actual cost basis.

NEW ENGLAND TELEPHONE
AND TELEGRAPH COMPANY
d/b/a VERIZON-NEW ENGLAND INC.

By: _____
(Title): Director of Outside Plt. Eng.-Mass.
Date: 3-14-03
By: _____
(Title): Director of Outside Plt. Eng.-MeNHVtRI
Date: 3·10·03

UNITIL DISTRIBUTION COMPANIES

Unitil Energy Systems, Inc.
Fitchburg Gas and Electric Light Company

By: _____
(Title): DIRECTOR, OPERATIONS SERVICES
Date: 14 FEB 03

INTERCOMPANY OPERATING PROCEDURE #22

Unitil Distribution Companies

and

NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY

POLE ACCIDENT AND OTHER THIRD PARTY POLE BILLINGS

EFFECTIVE DATE November 1, 1996

The purpose of this procedure is to establish a common method to be used by each Company for billing for pole accidents and other third party work.

1. Normally the maintaining Company will replace the damaged pole, remove the old pole and transfer its own attachments. There may be instances when the non-maintaining Company will either replace the damaged pole, remove the old pole or perform both operations.

   A. POLE ACCIDENTS

      (1) When joint poles are damaged by the actions of a third party, the pole custodian will, (a) determine if the pole needs replacement and (b) replace the pole if necessary. The pole custodian should recover full pole replacement costs including removals (labor, equipment and materials) from the party causing the pole damage. There will be no pole billing to the join owner. Each owner should bill the third party for their transfer costs.

      (2) If the bill is uncollectible from the third party, the joint owner will be billed by the Company doing the work in accordance with the current flat rate cost.

   B. REIMBURSABLE HIGHWAY PROJECTS

      (1) The pole custodian will replace the necessary poles, with no billing to the joint owner. All billing to the Federal, State or Municipal Agencies by the company will be based on statutory requirements.

      (2) The non custodian will bill the governmental body for the full cost of transferring it attachments.

   C. CITY / TOWN ORDERED RELOCATION PROJECTS

      In general, city / town ordered relocations are not reimbursable projects, therefore, the pole custodian will replace the necessary poles and bill the joint owner, based upon the current flat rate cost.

D. POLE RELOCATION REQUESTED BY DEVELOPERS OR PROPERTY OWNER

In the event that a developer or property owner requests pole relocations, whether required by the city / town or not, the developer or property owner will reimburse the pole custodian the full cost (labor, equipment and material) of relocating the pole(s). There will be no pole billing to the join owner. Each owner should bill the developer or property owner for their transfer costs.

NEW ENGLAND TELEPHONE
AND TELEGRAPH COMPANY
d/b/a NYNEX

By _____
(Title) Gen Mgr Eng+Const-NYNEX North
Date of Execution: 11/6/96

By _____
(Title) Staff Directed E/C - MA/RE
Date of Execution: 12/5/96

Unitil Distribution Companies
Concord Electric Company
Exeter & Hampton Electric Company
Fitchburg Gas and Electric Light Company

By _____
(Title) Sr. Vice President
Date of Execution: 9/16/96

Unitil Exh. 1 P

INTERCOMPANY OPERATING PROCEDURE #23

Unitil Distribution Companies

and

NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY

PUSHBRACES

EFFECTIVE DATE November 1, 1996

When a jointly-owned pushbrace is required on an energized line, the pole being affected is normally braced in the power company's allocated space. In order to preclude the necessity of having crews from each company work together during installations, the following shall apply:

1. NYNEX shall place all pushbraces on de-energized lines in its custodianship areas.

2. The power company shall place all pushbraces on energized lines except in those instances where the pushbrace is for the sole benefit and installed in the assigned space of NYNEX.

3. Whenever it is necessary to place a pushbrace in one of NYNEX's custodianship areas, the power company via established Exchange of Notice Procedures, shall be requested to install it.

4. When this work has been completed, the power company shall bill NYNEX the current flat rate cost for such an installation (new pole costs).

NEW ENGLAND TELEPHONE
AND TELEGRAPH COMPANY
d/b/a NYNEX

By _____
(Title) Gen Mgr Eng & Const - NYNEX North
Date of Execution: 11/6/96

By _____
(Title) Staff Director E/C - MA/RI
Date of Execution: 12/5/96

Unitil Distribution Companies
Concord Electric Company
Exeter & Hampton Electric Company
Fitchburg Gas and Electric Light Company

By _____
(Title) Sr. Vice President
Date of Execution: 9/16/96

INTERCOMPANY OPERATING PROCEDURE #24

Unitil Distribution Companies

and

NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY

MONTHLY NET BILLING PROCEDURE

EFFECTIVE DATE November 1, 1996

This Intercompany Operating Procedure sets forth the method to be followed in processing intercompany billing between NYNEX and the power company on a monthly net billing basis.

1. DEFINITIONS

A. Net Billing - for the purposes of the Intercompany Operating Procedure, the term "net billing" shall describe the accounting procedure by which the charges rendered by the two companies are computed, adjusted, totaled and compared each month. The company owing the greater total gross charges each month will pay to the other company the net difference only.

B. District - the term district as used herein shall mean the District of NYNEX and the Operating Department of the power company.

2. MONTHLY NET BILLING PROCEDURE

A. Negotiations prior to the determination of a net bill are carried out by use of:

(1) Form 605A, Joint Line Exchange of Notice and Memorandum.

(2) Form 1045-M, Monthly Summary of Intercompany Billing and Memorandum.

(3) Form 3037, Billing Adjustment Claim and Memorandum.

B. As per the agreement between the companies, the monthly billing arrangement provides for assimilating all charges accumulated by both companies into one (1) net bill for each month, covering the entire territory served jointly by both companies. The net billing procedure requires the accumulation of all charges rendered by both companies each month into one (1) Statement of Charges (Form 1045-M) for each district. It does not require payments by either company for small individual undertakings until receipt of monthly bill. The monthly net bill will be rendered by the creditor company to the debtor

3. PROCESSING OF FORM 1045-M

A. In accordance with the provisions of the Joint Agreement, the company performing the work shall by the third (3) working day of the subsequent month render to the other company, as a package, an original and duplicate itemized statement of charges

B. By the eighteenth (18) day of the month, all entries on Form 1045-M shall have been verified with the executed copies of previously rendered Joint Line Exchange of Notice and Memorandum, and by mutual agreement, discrepancies shall be adjusted or deleted on all copies of Form 1045-M. Deletions and/or adjustments will be documented by completing Form 3037, Billing Adjustment Claim and Memorandum. Deleted items will be resubmitted and included in the net billing in the second month following the month in which they were submitted.

C. By the twenty fifth (25) day of the month, the approved original Form(s) 1045-M, and Form(s) 3037, shall be returned to the company submitting the charges. The duplicate copies of Forms 1045-M and 3037 shall be retained by the company receiving the charges.

D. After billing and details have been determined and certified as correct, they will be final.

4. SETTLEMENT OF DISPUTED BILLS

A. Deleted an/or adjusted items which cannot be settled in accordance with Section 3, Part B, of the Intercompany Operating Procedure shall be resolved by strict compliance with the Intercompany Operating Procedure(s). Resolution of disputed items shall be made by the second month following the month in which the dispute arose.

B. Disputed items that cannot be resolved as herein stated shall be referred to the power company representative and the NYNEX Staff Manager for final and binding resolution.

5. FINAL NET BILL

A. Upon completion of the process set forth in Section 3, Parts B and C for intercompany net billing, the designated supervisor or corporate coordinator for each company, on reaching agreement will, by the 28th of the month in which the itemized statement of charges is submitted, make arrangements for the debtor company to render payment to the other company.

NEW ENGLAND TELEPHONE
AND TELEGRAPH COMPANY
d/b/a NYNEX

By _____
(Title) Gen Mgr Engr Const - NYNEX North
Date of Execution: 11/6/96

By _____
(Title) Staff Director Ele-MA/RI
Date of Execution: 12/5/96

Unitil Distribution Companies
Concord Electric Company
Exeter & Hampton Electric Company
Fitchburg Gas and Electric Light Company

By _____
(Title) Sr Vice President
Date of Execution: 9/16/96

MONTHLY STATEMENT OF INTERCOMPANY BILLING AND MEMORANDUM

1045M

SHEET _____ OF _____

NATURE OF WORK CODE (18)
A. INSTALL MUTUAL HEIGHT
B. INSTALL EXCESS HEIGHT
C. INITIAL INTEREST
D. REMAINING INTEREST
E. REMOVE
F. DAMAGED POLE
G. INSTALL ANCHOR
S. SACRIFICE LIFE

TO: (19)

FROM: (20)

PRIVATE PROPERTY: ALL / PARTIAL / NONE

MN/YR (21) | MONTHLY WORK ORD NO. (22)

DISTRICT (23)

		POLE NBR										BILLING				TELCO	POWER CO
EST. OR WORK ORDER (1)	CODE (2)	TELCO ..... POWER (3)	MUNICIPALITY MUNI CODE STREET (4)	PP Y/ N (5)	% OWN (6)	LENGTH CLASS (7)	WOOD TREAT (8)	YR (9)	ANCH SIZE (10)	TAX & (11)	EXCHANGE OF NOTICE # (12)	PLACING OR SALE INTEREST (13)	REMOVAL COST (14)	EXCESS HEIGHT (15)	CREDIT (16)	FIELD CODE (17)	
									TOTAL	(24)	TOTAL	(25)	(26)	(27)	(28)		

APPROVED FOR POWER COMPANY (29)	DATE (30)	APPROVED FOR TELEPHONE COMPANY (31)	DATE (32)	$ TOTAL THIS SHEET (33)

PREPARING THE 1045M

MONTHLY SUMMARY OF INTER-COMPANY BILLING AND MEMORANDUM

1	ESTIMATE OR WORK ORDER	TELCO WORK ORDER NUMBER
2	WORK CODE	NATURE OF WORK CODES I.E., A=INSTRALL MUTUAL HEIGHT
3	TELCO POLE NUMBER --- POWER CO POLE NUMBER	ROUTE AND POLE NUMBER
4	MUNICIPALITY AND STREET	THIS CAN B WRITTEN ACROSS ALL COLUMNS; I.E., WATERTON 6224-1 SMITH STREET
5	PRIVATE PROPERTY Y/N	PRIVATE PROPERTY TO BE ENTERED FOR TAX PURPOSES
6	% OWN	% OF POLE OWNED BY NYNEX
7		OF POLE - I.E., 35'3
8	WOOD TREATMENT	OF POLE - I.E., SPC, SPP
9	YEAR	YEAR POLE SET OR REMOVED
10	ANCHOR SIZE	SIZE OF ANCHOR - I.E., 1",2", ETC.
11	TAX	FROM POWER COMPANY ONLY - NO TAX FROM NYNEX TO POWER CO.
12	EXCHANGE OF NOTICE	MEMO # FROM LOG IN DISTRICT
13	PLACING OR SALE OF INTEREST	ENTER $ AMOUNT FROM I.O.P.
14	REMOVAL COST	ENTER $ AMOUNT FROM I.O.P.
15	EXCESS HEIGHT	ENTER $ AMOUNT FROM I.O.P.
16	CREDIT	ANY CREDIT DUE - I.E., SALV.
17	FIELD CODE	NYNEX FIELD CODE - I.E., 1C, 1X, 1M
18	NATURE OF WORK CODE	WORK CODES TO BE USED IN CODE COLUMN (#2) ON 1045M
19	TO	COMPANY THE 1045M IS BEING SENT TO
20	FROM	COMPNAY SENDING THE 1045M
21	MONTH/YEAR	DATE BILL SENT
22	MONTHLY WORK ORDER #	NO LONGER NEEDED OR USED
23	DISTRICT	RESPONSIBILITY CODE OF DISTRICT (NYNEX ONLY)
24	TOTAL TAX	TOTAL TAX $
25	TOTAL PLACING OR SALE OF INTEREST	TOTAL $ AMOUNT
26	TOTAL REMOVAL COST	TOTAL $ AMOUNT
27	TOTAL EXCESS HEIGHT	TOTAL $ AMOUNT
28	TOTAL CREDIT	TOTAL $ AMOUNT

Unitil Exh. 1 P

29	APPROVED FOR POWER CO.	SIGNATURES REQUIRED OF POWER CO.
30	DATE	DATE OF APPROVAL SIGNATURE
31	APPROVED FOR NYNEX	SIGNATURE OF NYNEX EMPLOYEE
32	DATE	DATE OF APPROVAL SIGNATURE
33	TOTAL THIS SHEET	$ AMOUNT OF TOTAL COLUMNS ON THIS SHEET

Unitil Exh. 1 P

Section 21.
General Requirements

210. Referenced Sections

The Introduction (Section 1), Definitions (Section 2), References (Section 3), and Grounding Methods (Section 9) shall apply to the requirements of Part 2.

211. Number 211 not used in this edition.

212. Induced Voltages

Rules covering supply-line influence and communication-line susceptiveness have not been detailed in this code. Cooperative procedures are recommended in the control of voltages induced from proximate facilities. Therefore, reasonable advance notice should be given to owners or operators of other proximate facilities that may be adversely affected by new construction or changes in existing facilities.

213. Accessibility

All parts that must be examined or adjusted during operation shall be arranged so as to be accessible to authorized persons by the provision of adequate climbing spaces, working spaces, working facilities, and clearances between conductors.

214. Inspection and Tests of Lines and Equipment

A. When In Service

1. Initial Compliance With Rules

   Lines and equipment shall comply with these safety rules when placed in service.

2. Inspection

   Lines and equipment shall be inspected at such intervals as experience has shown to be necessary.

   NOTE: It is recognized that inspections may be performed in a separate operation or while performing other duties, as desired.

3. Tests

   When considered necessary, lines and equipment shall be subjected to practical tests to determine required maintenance.

4. Record of Defects

   Any defects affecting compliance with this code revealed by inspection or tests, if not promptly corrected, shall be recorded; such records shall be maintained until the defects are corrected.

5. Remedying Defects

   Lines and equipment with recorded defects that could reasonably be expected to endanger life or property shall be promptly repaired, disconnected, or isolated.

B. When Out of Service

1. Lines Infrequently Used

   Lines and equipment infrequently used shall be inspected or tested as necessary before being placed into service.

2. Lines Temporarily Out of Service

   Lines and equipment temporarily out of service shall be maintained in a safe condition.

3. Lines Permanently Abandoned

   Lines and equipment permanently abandoned shall be removed or maintained in a safe condition.

a. Conductors with Rated Breaking Strength of 13.3 kN (3000 lb) or less

The pull of two-thirds, but not less than two, of the conductors having a rated breaking strength of 13.3 kN (3000 lb) or less. The conductors selected shall produce the maximum stress in the support.

b. Conductors with Rated Breaking Strength of more than 13.3 kN (3000 lb)

The pull resulting from one conductor when there are eight or less conductors (including overhead ground wires) having rated breaking strength of more than 13.3 kN (3000 lb), and the pull of two conductors when there are more than eight conductors. The conductors selected shall produce the maximum stress in the support.

2. Jointly Used Poles at Crossings Over Railroads, Communication Lines, or Limited Access Highways

Where a joint line crosses a railroad, a communication line, or a limited access highway, and Grade B is required for the crossing span, the tension in the communication conductors of the joint line shall be considered as limited to one-half their rated breaking strength, provided they are smaller than Stl WG No. 8 if of steel, or AWG No. 6 if of copper.

3. Deadends

The longitudinal load on a supporting structure at a deadend shall be an unbalanced pull equal to the tensions of all conductors and messengers (including overhead ground wires); except that with spans in each direction from the dead-end structure, the unbalanced pull shall be the difference in tensions.

4. Unequal Spans and Unequal Vertical Loads

The structure should be capable of supporting the unbalanced longitudinal load created by the difference in tensions in the wires in adjacent spans caused by unequal vertical loads or unequal spans.

5. Stringing Loads

Consideration should be given to longitudinal loads that may occur on the structure during wire stringing operations.

6. Longitudinal Capability

It is recommended that structures having a longitudinal strength capability be provided at reasonable intervals along the line.

7. Communication Conductors on Unguyed Supports at Railroad and Limited Access Highway Crossings

The longitudinal load shall be assumed equal to an unbalanced pull in the direction of the crossing of all open-wire conductors supported, the pull of each conductor being taken as 50% of its rated breaking strength in the heavy loading district, 33-1/3% in the medium loading district, and 22-1/4% in the light-loading district.

D. Simultaneous Application of Loads

Where a combination of vertical, transverse, or longitudinal loads may occur simultaneously, the structure shall be designed to withstand the simultaneous application of these loads.

NOTE: Under the extreme wind conditions of Rule 250C, an oblique wind may require greater structural strength than that computed by Rules 252B and 252C.

253. Overload Factors for Structures, Crossarms, Support Hardware, Guys, Foundations, and Anchors

Loads due to the combined ice and wind loads in Rule 250B and the extreme wind loading condition in Rule 250C shall be multiplied by the overload factors in Table 253-1 or the alternate overload factors in Table 253-2. Table 253-1 shall be used with Table 261-1A. Table 253-2 shall be used with Table 261-1B.

For wood and reinforced (not prestressed) concrete, two methods for determining the capacity are included herein. Either method meets the basic requirements for safety.

Table 253-1
Overload Factors for Structures,[1] Crossarms, Support Hardware, Guys, Foundations, and Anchors to Be Used with the Strength Factors of Table 261-1A

Overload Factors		
	Grade B	**Grade C**
Rule 250B Loads		
Vertical Loads[3]	1.50	1.90[6]
Transverse Loads		
Wind	2.50	2.20[4]
Wire Tension	1.65[2]	1.30[5]
Longitudinal Loads		
At Crossings		
In general	1.10	no requirement
At deadends	1.65[2]	1.30[5]
Elsewhere		
In general	1.00	no requirement
At deadends	1.65[2]	1.30[5]
Rule 250C Loads	1.00	1.00

[1] Includes pole.

[2] For guys and anchors associated with structures supporting communication conductors and cables only, this factor may be reduced to 1.33.

[3] Where vertical loads significantly reduce the stress in a structure member a vertical overload factor of 1.0 should be used for the design of such member. Such member shall be designed for the worst case loading.

[4] This factor may be reduced to 1.75 when the span being supported is not at a crossing.

[5] For metal or prestressed concrete portions of structures and crossarms, guys, foundations, and anchors, use a value of 1.10.

[6] For metal or prestressed concrete portions of structures, crossarms, guys, foundations, and anchors, use a value of 1.50.

Table 253-2
Alternate Overload Factors for Wood and Reinforced (Not Prestressed) Concrete Structures[1,5] to Be Used with the Strength Factors of Table 261-1B

	Overload Factors			
	Grade B		Grade C	
	When Installed	At Replacement[2,3]	When Installed	At Replacement[2,3]
Rule 250B Loads				
Vertical loads[4]	2.20	1.50	2.20	1.50
Transverse loads				
Wind (at crossings)	4.00	2.67	2.67	1.33
Wind (elsewhere)	4.00	2.67	2.00	1.33
Wire tension	2.00	1.33	1.33	1.00
Longitudinal loads				
In general	1.33	1.00	No requirement	No requirement
At deadends	2.00[6]	1.33[7]	1.33	1.00
Rule 250C Loads	1.33	1.00	1.33	1.00

[1] Includes poles.

[2] Where a wood structure is built for temporary service, the overload factors at replacement may be used provided the designated fiber stress is not exceeded during the life of the structure. Where a reinforced concrete (not prestressed) structure is built for temporary service, the overload factors at replacement may be used.

[3] When structure strength deteriorates to the level of the loads multiplied by the overload factors required at replacement, the structure shall be replaced or rehabilitated. If a structure is replaced, it shall meet the "when installed" overload factors at replacement. Rehabilitated portions of structures shall have overload factors at the time of rehabilitation greater than of those required "at replacement."

[4] Where vertical loads significantly reduce the stress in a structural member, a vertical overload factor of 1.0 should be used for the design of such member. Such members shall be designed for the worst-case loading.

[5] Metal portions of a structure may be designed using the overload factors in Table 253-1.

[6] For unguyed wood poles supporting communication conductors and cables only, this factor may be reduced to 1.33.

[7] For unguyed wood poles supporting communication conductors and cables only, this factor may be reduced to 1.0.

Section 26.
Strength Requirements

260. General (see also Section 20)

A. Preliminary Assumptions

1. It is recognized that deformation, deflections, or displacement of parts of the structure may change the effects of the loads assumed. In the calculation of stresses, allowance may be made for such deformation, deflection, or displacement of supporting structures including poles, towers, guys, crossarms, pins, conductor fastenings, and insulators when the effects can be evaluated. Such deformation, deflection, or displacement should be calculated using Rule 250 loads prior to application of the overload factors in Rule 253. For crossings or conflicts, the calculations shall be subject to mutual agreement.
2. It is recognized that new materials may become available. While these materials are in the process of development, they must be tested and evaluated. Trial installations are permitted where qualified supervision is provided.

B. Application of strength factors

1. Structures shall be designed to withstand the appropriate loads multiplied by the overload factors in Section 25 without exceeding their strength multiplied by the strength factors in Section 26.
2. Unless otherwise specified, a strength factor of 0.80 shall be used for the extreme wind loading conditions specified in Rule 250C for all supported facilities.

NOTE: The latest edition of the following documents are among those available for determining structure design capacity with the specified NESC loads, overload factors, and strength factors:

ANSI/ASCE-10, Design of Latticed Steel Transmission Structures

ASCE-91, Design of Guyed Electrical Transmission Structure

ASCE-PCI, Guide for the Design of Prestressed Concrete Poles

ASCE-72, Design of Steel Transmission Pole Structures

PCI, Design Handbook-Precast and Prestressed Concrete

ACI-318, Building Code Requirements for Structural Concrete

IEEE Std 751-1990, Trial-Use Design Guide for Wood Transmission Structures

AISI, Specification for the Design of Cold-Formed Steel Structural Members

The Aluminum Association, Aluminum Design Manual

261. Grades B and C Construction

A. Supporting Structures

The strength requirements for supporting structures may be met by the structures alone or with the aid of guys or braces or both.

1. Metal, Prestressed-, and Reinforced-Concrete Structures
   a. These structures shall be designed to withstand the loads in Rule 252 multiplied by the appropriate overload factors in Table 253-1 or Table 253-2 without exceeding the permitted load.
   b. The permitted load shall be the strength multiplied by the strength factors in Tables 261-1A or 261-1B (where guys are used, see Rule 261C).
   c. All structures including those below 18 m (60 ft) shall be designed to withstand, without conductors, the extreme wind load in Rule 250C applied in any direction on the structure.
   d. Spliced and Reinforced Structures

      Reinforcements or permanent splices to a supporting structure are permitted provided they develop the required strength of the structure.

2. Wood Structures

Wood structures shall be of material and dimensions to meet the following requirements:

a. Wood structures shall be designed to withstand the loads in Rule 252 multiplied by the appropriate overload factors in Table 253-1 or 253-2, without exceeding the permitted stress level.

NOTE: When determining a fiber stress for column loads, buckling needs to be considered.

EXCEPTION 1: When installed, naturally grown wood poles acting as single-based structures or unbraced multiple-pole structures, shall meet the requirements of Rule 261A2a without exceeding the permitted stress level at the ground line for unguyed poles or at the points of attachment for guyed poles.

EXCEPTION 2: At a Grade B crossing, in a straight section of line, wood structures complying with the transverse strength requirements of Rule 261A2a, without the use of transverse guys, shall be considered as having the required longitudinal strength, providing the longitudinal strength is comparable to the transverse strength of the structure. This *EXCEPTION* does not modify the requirements of this rule for deadends.

EXCEPTION 3: At a Grade B crossing of a supply line over a highway or a communication line where there is an angle in the supply line, wood structures shall be considered as having the required longitudinal strength if all of the following conditions are met:

(a) The angle is not over 20 degrees.

(b) The angle structure is guyed in the plane of the resultant of the conductor tensions. The tension in this guy under the loading in Rule 252 multiplied by an overload factor of 2.0 shall not exceed the rated breaking strength multiplied by the strength factor in Table 261-1A.

(c) The angle structure has sufficient strength to withstand, without guys, the transverse loading of Rule 252 multiplied by the appropriate overload factors in Table 253-1 or 253-2, which would exist if there were no angle at that structure without exceeding the permitted stress level.

b. Permitted Stress Level

(1) Natural Wood Pole
The permitted stress level of natural wood poles of various species meeting the requirements of ANSI O5.1-1992 shall be determined by multiplying the designated fiber stress set forth in that standard by the appropriate strength factors in Tables 261-1A or 261-1B.

(2) Sawn or Laminated Wood Structural Members, Crossarms, and Braces
The permitted stress level of sawn or laminated wood structural members, crossarms, and braces shall be determined by multiplying the appropriate ultimate fiber stress of the material by the appropriate strength factors in Tables 261-1A or 261-1B.

c. Strength of Guyed Poles

Guyed poles shall be designed as columns, resisting the vertical component of the tension in the guy plus any other vertical loads.

d. Spliced and Reinforced Poles

Reinforcements or permanent splices at any section along the pole are permitted provided they develop the required strength of the pole.

e. Average Strength of Three Poles

A pole (single-base structure) not individually meeting the transverse strength requirements will be permitted when reinforced by a stronger pole on each side, if all of the following are met:

(1) The average strength of the three poles meets the transverse strength requirements,

(2) The weak pole shall have not less than 75% of its required strength,

(3) The sag and tension of the wires, conductors, and cables in the adjacent spans shall provide adequate additional support for the weak pole, and

(4) The average of the spans does not exceed 45 m (150 ft).

EXCEPTION 1: The span may exceed 45 m (150 ft), but shall not be greater than 91 m (300 ft), if overhead guys are run between the three poles and the line section is head-guyed and back-guyed.

An extra pole inserted in a normal span for the purpose of supporting a service drop may be ignored in this strength determination.

EXCEPTION 2: This rule does not apply to crossings over railroads, communication lines, or limited access highways.

f. All structures including those below 18 m (60 ft) shall be designed to withstand, without conductors, the extreme wind load in Rule 250C applied in any direction on the structure.

3. Transverse Strength Requirements for Structures Where Side Guying Is Required, But Can Be Installed Only at a Distance

Grade B: If the transverse strength requirements of this section cannot be met except by the use of side guys or special structures, and where it is physically impractical to employ side guys, the transverse strength requirements may be met by side-guying the line at each side of, and as near as practical to, the crossing, or other transversely weak structure, and with a distance between such side-guyed structures of not over 250 m (800 ft), provided that:

a. The side-guyed structures for each such section of 250 m (800 ft) or less shall be designed to withstand the calculated transverse load due to wind on the supports and ice-covered conductors, on the entire section between side-guyed structures.
b. The line between such side-guyed structures shall be substantially in a straight line and the average span between the side-guyed structures shall not exceed 45 m (150 ft).
c. The entire section between the structures with the required transverse strength shall comply with the highest grade of construction concerned in the given section, except as to the transverse strength of the intermediate poles or towers.

Grade C: The above provisions do not apply to Grade C.

4. Longitudinal Strength Requirements for Sections of Higher Grade in Lines of a Lower Grade Construction

a. Methods of Providing Longitudinal Strength

Grade B: The longitudinal strength requirements for sections of line of higher grade in lines of a lower grade (for assumed longitudinal loading, see Rule 252) may be met by placing a structure of the required longitudinal strength at each end of the higher grade section.

Where this is impractical, the structures of the required longitudinal strength may be located away from the section of higher grade, within 150 m (500 ft) on each side and with not more than 250 m (800 ft) between the structures of the required longitudinal strength. This is permitted provided the following conditions are met:

(1) The structures and the line between them meet the requirements for transverse strength and stringing of conductors of the highest grade occurring in the section, and
(2) The line between the structures of the required longitudinal strength is approximately straight or suitably guyed.

The longitudinal strength requirement of the structures may be met by using guys.

Grade C: The above provisions do not apply to Grade C.

b. Flexible Supports

Grade B: When supports of the section of higher grade are capable of considerable deflection in the direction of the line, it may be necessary to increase the clearances required in Section 23 or to provide line guys or special reinforcements to reduce the deflection.

Grade C: The above provision does not apply to Grade C.

B. Strength of Foundations, Settings, and Guy Anchors

Foundations, settings, and guy anchors shall be designed or be determined by experience to withstand the loads in Rule 252 multiplied by the overload factors in Table 253-1 without exceeding the permitted load. The permitted load shall be equal to the strength multiplied by the strength factors in Table 261-1A.

NOTE: Excessive movement of foundations, settings, and guy anchors or errors in settings may reduce clearances or structure capacity.

C. Strength of Guys and Guy Insulators

The strength requirements for guys and guy insulators are covered under Rules 264 and 279A1c, respectively.

1. Metal and Prestressed-Concrete Structures

Guys shall be considered as an integral part of the structure.

2. Wood and Reinforced-Concrete Structures

When guys are used to meet the strength requirements, they shall be considered as taking the en-

tire load in the direction in which they act, the structure acting as a strut only, except for those structures considered to possess sufficient rigidity so that the guy can be considered an integral part of the structure.

NOTE: Excessive movement of guys may reduce clearances or structure capacity.

D. Crossarms and Braces

1. Concrete and Metal Crossarms and Braces

Crossarms and braces shall be designed to withstand the loads in Rule 252 multiplied by the overload factors in Table 253-1 without exceeding the permitted load. The permitted load shall be equal to the strength multiplied by the strength factors in Table 261-1A.

2. Wood Crossarms and Braces

a. Strength

(1) Crossarms and braces shall be designed to withstand the loads in Rule 252 multiplied by the overload factors in Table 253-1 or 253-2 without exceeding their permitted stress level.

(2) The permitted stress level of solid sawn or laminated wood crossarms and braces shall be determined by multiplying their ultimate fiber stress by the strength factors in Table 261-1A or 261-1B.

b. Material and Size

Wood crossarms and braces of select Southern pine or Douglas fir shall have a cross section of not less than those in Table 261-2. Crossarms of other species may be used provided they have equal strength.

3. Crossarms and Braces of Other Materials

Crossarms and braces should meet the strength requirements of Rule 261D2.

4. Additional Requirements

a. Longitudinal Strength

(1) General

(a) Crossarms shall be designed to withstand a load of 3.1 kN (700 lb) applied at the outer conductor attachment point without exceeding the permitted stress level for wood crossarms or the permitted load for crossarms of other materials, as applicable.

(b) At each end of a transversely weak section, as described in Rule 261A3, the longitudinal load shall be applied in the direction of the weak section.

(2) Methods of Meeting Rule 261D2a(1)

Grade B: Where conductor tensions are limited to a maximum of 9.0 kN (2000 lb) per conductor, double wood crossarms having cross sections in Table 261-2 and properly assembled will comply with the longitudinal strength requirements in Rule 261D2a(1).

Grade C: This requirement is not applicable.

(3) Location

At crossings, crossarms should be mounted on the face of a pole away from the crossing, unless special bracing or double crossarms are used.

b. Bracing

Crossarms shall be supported by bracing, if necessary, to support expected loads, including line personnel working on them.

c. Double Crossarms or Brackets

Grade B: Where pin-type construction is used, double crossarms, each crossarm having the strength required by Rule 261D2a, or a support assembly of equivalent strength shall be used at each crossing structure, at ends of joint use or conflict sections, at deadends, and at corners where the angle of departure from a straight line exceeds 20 degrees. Under similar conditions, where a bracket supports a conductor operated at more than 750 V to ground and there is no crossarm below, double brackets shall be used.

EXCEPTION: The above does not apply where communication cables or conductors cross below supply conductors and either are attached to the same pole, or where supply conductors are continuous and of uniform tension in the crossing span and each adjacent span. This exception does not apply to railroad crossings and limited access highways except by mutual agreement.

Grade C: The above requirement is not applicable.

E. Insulators

The strength requirements for insulators are covered under Rules 277 and 279.

F. Strength of Pin-Type or Similar Construction and Conductor Fastenings

1. Longitudinal Strength

a. General

Pin-type or similar construction and ties or other conductor fastenings shall be designed to withstand the applicable longitudinal loads in Rule 252, multiplied by the overload factors in Table 253-1, or 3.1 kN (700 lb) applied at the pin, whichever is greater.

b. Method of Meeting Rules 261F1a

Grade B: Where conductor tensions are limited to 9.0 kN (2000 lb) and such conductors are supported on pin insulators, double wood pins and ties or their equivalent will be considered to meet the requirements of Rule 261F1a.

Grade C: No requirement.

c. At Deadends and at Ends of Higher Grade Construction in Line of Lower Grade

Grade B: Pins and ties or other conductor fastenings connected to the structure at a deadend or at each end of the higher grade section shall be designed to withstand an unbalanced pull due to the conductor load in Rule 251 multiplied by the overload factors in Rule 253-1.

Grade C: This requirement is not applicable except for deadends.

d. At Ends of Transverse Sections Described in Rule 261A3

Grade B: Pins and ties or other conductor fastenings connected to the structure at ends of the transverse section as described in Rule 261A3 shall be designed to withstand the unbalanced pull in the direction of that transverse section under the load in Rule 252 multiplied by the overload factors in Rule 253-1.

Grade C: No requirement.

2. Double Pins and Conductor Fastenings

Grade B: Double pins and conductor fastenings shall be used where double crossarms or brackets are required by Rule 261D4c.

EXCEPTION: The above does not apply where communication cables or conductors cross below supply conductors and either are attached to the same pole, or where supply conductors are continuous and of uniform tension in a crossing span and each adjacent span. This exception does not apply in the case of railroad crossings and limited access highway crossings except by mutual agreement.

Grade C: No requirement.

3. Single Supports Used in Lieu of Double Wood Pins

A single conductor support and its conductor fastening, when used in lieu of double wood pins, shall develop strength equivalent to double wood pins and their conductor fastenings as specified in Rule 261F1a.

G. Armless Construction

1. General

Open conductor armless construction is a type of open conductor supply line construction in which conductors are individually supported at the structure without the use of crossarms.

2. Insulating Material

Strength of insulating material shall meet the requirements of Section 27.

3. Other Components

Strengths of other components shall meet the requirements of Rules 260 and 261.

H. Open Supply Conductors and Overhead Shield Wires

1. Sags and Tensions

a. The supply conductor and overhead shield wire tensions shall be not more than 60 percent of their rated breaking strength for the load of Rule 250B in Rule 251 multiplied by an overload factor of 1.0.

b. The tension at 15 °C (60 °F), without external load, shall not exceed the following percentages of their rated breaking strength:

Initial unloaded tension	35%
Final unloaded tension	25%

EXCEPTION: In the case of conductors with a generally triangular cross section, such as cables composed of three wires, the final unloaded tension at 15 °C (60 °F) shall not exceed 30% of the rated breaking strength of the conductor.

NOTE: The above limitations are based on the use of recognized methods for avoiding fatigue failures by minimizing chafing and stress concentration. If such practices are not followed, lower tensions should be employed.

2. Splices, Taps, Dead-End Fittings, and Associated Attachment Hardware

a. Splices should be avoided in crossings and adjacent spans. If it is impractical to avoid such splices, they shall have sufficient strength to withstand the maximum tension resulting from the loads of Rule 250B in Rule 251 multiplied by an overload factor of 1.65. If Rule 250C is applicable, splices shall not be stressed beyond 80% of their rated breaking strength under the loads of Rule 250C in Rule 251 multiplied by an overload factor of 1.0.

b. Taps should be avoided in crossing spans but, if required, shall be of a type that will not impair the strength of the conductors to which they are attached.

c. Dead-end fittings, including the associated attachment hardware, shall have sufficient strength to withstand the maximum tension resulting from the loads of Rule 250B in Rule 251 multiplied by an overload factor of 1.65. If Rule 250C is applicable, deadend fittings shall not be stressed beyond 80% of their rated breaking strength under the loads of Rule 250C in Rule 251 multiplied by an overload factor of 1.0.

3. Trolley-Contact Conductors

In order to provide for wear, no trolley-contact conductor shall be installed of less size than AWG No. 0, if of copper, or AWG No. 4, if of silicon bronze.

I. Supply Cable Messengers

Messengers shall be stranded and shall not be stressed beyond 60% of their rated breaking strength under the loads of Rule 250B in Rule 251 multiplied by an overload factor of 1.0. If Rule 250C is applicable, messengers shall not be stressed beyond 80% of their rated breaking strength under the loads of Rule 250C in Rule 251 multiplied by an overload factor of 1.0.

NOTE: There are no strength requirements for cables supported by messengers.

J. Open-Wire Communication Conductors

Open-wire communication conductors in Grade B or C construction shall have the tensions and sags in Rule 261H2 for supply conductors of the same grade.

EXCEPTION: Where supply conductors are trolley-contact conductors of 0 to 750 V to ground, WG No. 12 Stl may be used for communication conductors for spans of 0 to 30 m (0 to 100 ft), and Stl WG No. 9 may be used for spans of 38 to 45 m (125 to 150 ft).

K. Communication Cables

1. Communication Cables

There are no strength requirements for communication cables supported by messengers. See Rule 261K2 for the strength requirements for messengers supporting communication cables.

2. Messenger

The messenger shall not be stressed beyond 60% of its rated breaking strength under the loads of Rule 250B in Rule 251 multiplied by an overload factor of 1.0. If Rule 250C is applicable, messengers shall not be stressed beyond 80% of their rated breaking strength under the loads of Rule 250C in Rule 251 multiplied by an overload factor of 1.0.

L. Paired Communication Conductors

1. Paired Conductors Supported on Messenger

a. Use of Messenger
A messenger may be used for supporting paired conductors in any location, but is required for paired conductors crossing over trolley-contact conductors of more than 7.5 kV to ground.

b. Sag of Messenger
Messenger used for supporting paired conductors required to meet Grade B construction because of crossing over trolley-contact conductors shall meet the sag requirements for Grade B.

c. Size and Sag of Conductors
There are no requirements for paired conductors when supported on messenger.

2. Paired Conductors Not Supported on Messenger

a. Above Supply Lines
Grade B: Sizes and sags shall be not less than those in Rule 261H1 for supply conductors of similar grade.
Grade C: Sizes and sags shall be not less than the following:
Spans 0 to 30 m (0 to 100 ft)—No sag requirements.
Each conductor shall have a rated breaking strength of not less than 0.75 kN (170 lb).
Spans 30 to 45 m (100 to 150 ft)—Sizes and sags shall be not less than required for Grade B communication conductors.
Spans exceeding 45 m (150 ft)—Sizes and sags shall be not less than required for Grade C supply conductors. (See Rule 261H2).

b. Above Trolley-Contact Conductors
Grade B: Sizes and sags shall be not less than the following:
Spans 0 to 30 m (0 to 100 ft)—No size requirements. Sags shall be not less than for AWG No. 8 hard-drawn copper. (See Rule 261H2.)
Spans exceeding 30 m (100 ft)—Each conductor shall have a rated breaking strength of not less than 0.75 kN (170 lb). Sags shall be not less than for AWG No. 8 hard-drawn copper. (See Rule 261H2.)
Grade C: Sizes and sags shall be as follows:
Spans 0 to 30 m (0 to 100 ft)—No requirements.
Spans exceeding 30 m (100 ft)—No sag requirements.
Each conductor shall have a rated breaking strength of not less than 0.75 kN (170 lb).

M. Support and Attachment Hardware
The strength required for all support and attachment hardware not covered by Rule 261F or Rule 261H2 shall be not less than the load times the appropriate overload factor given in Section 25. For appropriate strength factors, see Rule 260B.

Table 261-1A

Strength Factors for Structures,[1] Crossarms, Support Hardware, Guys, Foundations, and Anchors for Use with Overload Factors of Table 253-1

[It is recognized that structures will experience some level of deterioration after installation, depending upon materials, maintenance, and service conditions. The table values specify strengths required at installation. Footnotes specify deterioration allowed, if any. When new or changed facilities add loads to existing structures (a) the strength of the structure when new shall have been great enough to support the additional loads and (b) the strength of the deteriorated structure shall exceed the strength required at replacement. If either (a) or (b) cannot be met, the structure must be replaced, augmented, or rehabilitated.]

	Grade B	Grade C
Strength factors for use with loads of Rule 250B		
Metal and Prestressed-Concrete Structures[6]	1.0	1.0
Wood and Reinforced-Concrete Structures[2, 4]	0.65	0.85
Support Hardware	1.0	1.0
Guy Wire[5, 6]	0.9	0.9
Guy Anchor and Foundation[6]	1.0	1.0
Strength factors for use with loads of Rule 250C		
Metal and Prestressed-Concrete Structures[6]	1.0	1.0
Wood and Reinforced-Concrete Structures[3, 4]	0.75	0.75
Support Hardware	1.0	1.0
Guy Wire[5, 6]	0.9	0.9
Guy Anchor and Foundation[6]	1.0	1.0

[1] Includes poles.

[2] Wood and reinforced concrete structures shall be replaced or rehabilitated when deterioration reduces the structure strength to 2/3 of that required when installed. If a structure is replaced, it shall meet the strength required by Table 261-1A. Rehabilitated portions of structures shall have strength greater than 2/3 of that required when installed.

[3] Wood and reinforced concrete structures shall be replaced or rehabilitated when deterioration reduces the structure strength to 3/4 of that required when installed. If a structure is replaced, it shall meet the strength required by Table 261-1A. Rehabilitated portions of structures shall have strength greater than 3/4 of that required when installed.

[4] Where a wood or reinforced concrete structure is built for temporary service, the structure strength may be reduced to values as low as those permitted by footnotes (2) and (3) provided the structure strength does not decrease below the minimum required during the planned life of the structure.

[5] For guy insulator requirements, see Rule 279.

[6] Deterioration during service shall not reduce strength capability below the required strength.

Table 261-1B

Strength Factors for Structures[1, 2] and Crossarms for Use with Overload Factors of Table 253-2

[It is recognized that structures will experience some levels of deterioration after installation, depending upon materials, maintenance, and service conditions. The table values specify strengths required at installation. Footnotes specify deterioration allowed for wood and reinforced concrete structures. When new or changed facilities add loads to existing structures (a) the strength of the structure when new shall have been great enough to support the additional loads, and (b) the strength of the deteriorated structure shall exceed the strength required at replacement. If either (a) or (b) cannot be met, the structure must be replaced, augmented, or rehabilitated.]

	Grade B	Grade C
Strength factors for use with loads of Rule 250B and Rule 250C		
Wood and Reinforced-Concrete Structures	1.0	1.0

[1] Includes poles.

[2] Where a wood or reinforced-concrete structure is built for temporary service, the structure strength may be reduced to values as low as those permitted by the *at replacement* overload factors in Table 253-2, footnotes (2) and (3) provided the structure strength does not decrease below the minimum required during the planned life of the structure.

Verizon New England Inc.
d/b/a Verizon New Hampshire

State of New Hampshire

Docket No. DM 05-172

Respondent: Martin Wilkinson
Title: Manager – OSP Engineering

REQUEST: New Hampshire Utilities Commission Staff, Set 3

DATED: February 7, 2006

ITEM: Staff 3-23 Reference your response to Staff 1-15: Please identify the subset of poles that are pending Verizon NH transfers within Verizon's maintenance area. How many of these transfers have been pending in excess of 60 days? 90 days? 180 days? One year? Two years?

REPLY: The information below identifies poles where Verizon NH has pending transfer activity. The data, however, do not imply that these locations are ready for Verizon NH to transfer.

	Category	Total
Verizon Set Area	1 Under 60 Days	219
	2 Between 60 and 90 days	110
	3 Between 90 and 180 days	445
	4 Between 180 and 1 yr	560
	5 Between 1 yr and 2 yrs	499
	6 Over 2 yrs	1,280
Sub-Total		3,113
Electric Set Area	1 Under 60 Days	375
	2 Between 60 and 90 days	77
	3 Between 90 and 180 days	117
	4 Between 180 and 1 yr	220
	5 Between 1 yr and 2 yrs	439
	6 Over 2 yrs	1,138
Sub-Total		2,366
Grand Total		5,479

VZ #104