Appendix - Party/Participant Positions

Table of Contents

ADEQUACY OF RESOURCES	1
INSPECTION AND MAINTENANCE OF JOINT POLES	
TIMELY PLACEMENT AND REMOVAL OF POLES	
DOUBLE POLES	
INTERCOMPANY COMMUNICATION AND NOTIFICATION	
POLE LINE TRIMMING	31

ADEQUACY OF RESOURCES

PSNH states that it has 111 trucks assigned to its 18 garage locations in New Hampshire. Included in this total are 15 digger trucks and 96 line trucks. PSNH also provided information on the number of line employees in New Hampshire, stated as Full Time Equivalents (FTE's) assigned to line activities. According to PSNH, there were 199 employees assigned to pole setting, transfer and removal activities at its 18 garage locations in New Hampshire in 2005. PSNH also uses qualified contractors during emergency response situations, and has the option to use contractors for double poles, pole placements, etc.

National Grid has 13 trucks assigned to 3 garage locations in New Hampshire; included in this total are 3 digger trucks and 10 line trucks. National Grid states that it had 19 full time employees assigned to pole setting, transfer and removal activities at its three garage locations in 2005. National Grid also uses qualified contractors to supplement its workforce when the volume of work and the timeline for completion exceeds what is determined to be acceptable. National Grid reviews work load on a regular basis via a planning and scheduling group and indicates that the internal workforce is their first choice for such work. Outside contractors may

be used for such activities as emergency response, double pole removals, pole replacements, and routine line construction.

Unitil has 19 trucks assigned to its two garage locations in New Hampshire; included in this total are 4 digger trucks and 15 line trucks. Unitil states that it has 26 full time employees in 2005 assigned to pole setting, transfer and removal activities at its two locations. Unitil also uses qualified contractors to perform all aspects of line work when insufficient internal resources preclude it from achieving need dates imposed by company driven work or for customer driven work. In addition, the company regularly utilizes outside resources for storm work.

Verizon does not have a set number of employees assigned to specific functions.

According to Verizon, the number of employees assigned to specific functions varies by the work activities required each day and may be supplemented from other areas as service demands shift (Staff 3-4). Resource allocation decisions, such as between core and Fiber-To-The-Premises (FTTP) work activities, are prioritized by customer demand and strategic requirements.

Verizon provided information showing there are 27 digger trucks and 37 placer trucks assigned to its 11 garage locations in New Hampshire, or 64 trucks total, as of December 2005 (Staff 1-25). Verizon also provided information showing that the total line force assigned to New Hampshire between January 2005 and December 2005 fluctuated between 70 and 125, averaging 101(Staff 3-5F Follow Up Errata Reply). Verizon makes limited use of outside contractors to supplement its workforce in accordance with its labor contract when, for example, placing poles in ledge where blasting is required or where special equipment is necessary in order to gain access and place poles in the right-of-way.

INSPECTION AND MAINTENANCE OF JOINT POLES

NESC rule 214 specifies that utilities must perform inspections at such intervals as experience has shown to be necessary (and may perform inspections while performing other duties); should perform practical tests to determine required maintenance when considered necessary; should record and maintain records of defects until the defect(s) are corrected if they are not corrected promptly; and shall promptly correct defects that could reasonably be expected to endanger life or property. Thus, the requirement under rule 214 is broken into four parts:

- 1. Inspection intervals
- 2. Practical Tests
- 3. Records of defects
- 4. Prompt remedy of hazardous conditions

As noted in the NESC Handbook 5th Edition, the NESC "recognizes that facilities placed in service may have various opportunities and propensities to wear, break, become damaged, or otherwise be affected adversely by conditions such that continued service in that state would be inappropriate for safety reasons." It further notes that the rule cannot be made specific with regard to inspection intervals as the need for inspections are a function of both the type of equipment and the specific location and environment. In the case of poles, the Handbook offers the following specific guidance regarding inspection intervals:

"... if the concern is only with decay and weakening of pole timber, experience shows that some treated poles have lasted, while others have lasted half that time. Also, there is definite evidence that decay is influenced by the amount of rainfall, and hence moisture, in the soil. This, of course, varies from one part of the country to another. Other factors, such as woodpecker, insect, and lightning damage, vary considerably from one area to another. Salt spray or industrial atmospheres may contaminate insulators or cause accelerated corrosion of guys, hardware, etc. Again, these factors vary from one area to another; inspection procedures and intervals must be tailored to fit the local situation, based upon experience with such

-

¹ NESC Handbook 5th Edition, guidance for Rule 214, page 166.

installations under such conditions. What is reasonable and necessary in one area may be unsound or unduly burdensome in another area."²

In addition to NESC requirements, the utilities are governed by the specific provisions of their Joint Ownership and Joint Use Agreements and IOP's. These agreements do not necessarily ensure compliance with NESC requirements, nor do they conflict with NESC requirements.

It is not within the scope of this proceeding to define the specific inspection intervals that "experience has shown to be necessary" or to recommend specific test methods. It is left to the utilities to define such intervals and test methods based on the results of studies and their own practical experience. The following is a discussion of the parties' positions on the four parts of the NESC described above.

Inspection Intervals:

PSNH. PSNH inspects roadside facilities (including those associated with joint ownership) in accordance with its Circuit Patrol Policy ED-3018. PSNH's goal is to perform routine circuit patrols annually for 25 percent of its company-wide circuitry. This program ensures that the "backbone" portions of all circuits are patrolled on a four-year cycle, with additional circuits and additional portions of circuits patrolled on an as-needed basis.

National Grid. National Grid inspects, evaluates and treats wood distribution poles that have been in service for 15 or more years, in accordance with National Grid Standard MS 2015. That standard specifies the qualifications of the personnel doing the inspections, inspection, evaluation and treatment methods, record keeping, quality control and related processes.

National Grid employs an overhead distribution feeder patrol that visibly inspects all of its

-

² NESC Handbook 5th Edition, page 167.

wooden poles annually. In addition, National Grid generally follows a 10-year inspection interval for all of its joint poles, as required by its IOP with Verizon. This 10-year interval is presumably based upon historic experience, and thus would represent an interval that experience has shown to be reasonable. National Grid indicated in discussions that inspection and testing of all the poles in its New Hampshire maintenance areas is scheduled for 2007.

Unitil. Unitil inspects overhead and underground distribution facilities in accordance with its Distribution Inspections Operations Bulletin OP6.00. Unitil performs pole inspections and practical tests on a 10-year scheduled basis. This ten year inspection interval is consistent with the provisions of its IOP with Verizon.

Verizon. Verizon performs pole inspections on an ongoing basis in conjunction with planned work rather than on a defined schedule. Over a 10 year period, according to Verizon, the vast majority of poles are inspected using routine work practices. This position is based on estimates of the number of poles inspected by technicians performing planned construction work, as outlined in Verizon Training Course no. TT10098. This training includes guidance on how to identify which poles should be tested, in order to ensure adequate strength to support loads resulting from proposed work operations (e.g., unbalanced loads). Technicians are also instructed to perform a pre-climbing check of each pole to be climbed. The training includes specific methods for inspecting and testing poles and tagging those poles found to be unsafe. Verizon further states that technicians inspect poles at their work location independent of the need to climb the pole. As a result of these routine and on-going inspections performed in the normal course of business, Verizon states that a set pole inspection schedule is not required.

⁻

³ An unbalanced condition can exist at a pole during construction where a cable suspension strand is being tensioned and the force applied in one direction from a pole exceeds the force applied in the other direction. A pole in good physical condition is not usually affected by this temporary force imbalance.

Practical Tests:

PSNH. PSNH employs contractors who carry out practical testing by excavating and boring poles to provide data for the purpose of determining remaining pole strength as specified in NESC rules 253 and 261.

National Grid. National Grid inspects poles both above and below grade, and performs practical tests of wood distribution poles using a variety of methods including visual inspection, chipping, sounding, boring and measurement to confirm and evaluate any deterioration in circumference and the remaining strength of the pole. Minimum strength requirements are evaluated in accordance with the latest ANSI 05.1 and NESC. Poles experiencing decay are evaluated to determine the appropriate treatment and reinforcement methods. Poles below the minimum strength or with less than a 2 inch shell are rejected and scheduled for replacement. *Unitil.* Unitil performs pole tests using several methods including visual inspection; tests above and below grade level; sounding with a hammer, mechanical sounding tool, or electronic sonic pulse tester to detect internal decay; and boring to confirm the presence and determine the degree of decay. Measurements of the remaining circumference at ground level, as well as the reduction in circumference due to other types of deterioration, are used to assess the remaining strength of the pole and determine serviceability. Tables derived from NESC rules 253 and 261 are used to estimate the strength and on-going serviceability of the pole. Poles are rejected if deterioration reduces the pole strength to levels requiring replacement, as specified in these rules. Verizon. Verizon trains its technicians in several methods of testing poles including a visual inspection to identify rot, splits and damage, and sound and prod tests to further identify rotting. The sound test involves sounding the pole with a hammer to detect hollow or decayed wood. In the prod test, a screwdriver is driven into the pole below grade to detect rotting at the base of the pole.

Technicians also employ a handline test, or pike pole test, to further test the pole for damage or stability. These tests are intended to identify defective poles that may represent a physical hazard to worker safety.

Records of Defects:

PSNH. PSNH records all defects found during the course of distribution inspections on forms contained within its Circuit Patrol Policy ED-3018. Conditions requiring resolution are tracked using an Engineering Work Request (EWR), for which a log is created that describes the item, date initiated, circuit, and due date. Deficiencies are recorded, prioritized and tracked until corrective action has been completed and documented.

National Grid. National Grid records deficiencies and corrective actions in a spreadsheet maintained by the divisional overhead coordinator. All findings are logged and corrected within a reasonable timeframe, according to National Grid. Defects are recorded and tracked until corrective action has been completed and documented.

Unitil. Unitil records all defects found during the course of distribution inspections on forms contained within its Distribution Inspections Operations Bulletin OP6.00. Records of defects found during pole inspections as well as corrective actions taken are recorded and retained for one complete cycle, but not less than six years.

Verizon. Verizon does not keep specific records of inspections or deficiencies found, nor does Verizon record or track defects until corrected. As Verizon stated in its reply to Staff 3-39, "As hazardous conditions are corrected immediately, there is no need to track deficiencies, as they do not exist." Verizon's inspections focus on hazardous conditions, consistent with NESC 214.A.5. Accordingly, Verizon's responses to data requests regarding the recording of defects

7

Appendix

are qualified with the phrases "found to be hazardous," "hazardous" or "hazardous conditions." Hazardous conditions (those conditions that could reasonably be expected to endanger life or property) are a subset of all defects that may be found during the course of inspections, not all of which represent a hazardous condition, and not all of which require immediate replacement.

NESC Rule 214 states that those conditions that could reasonably be expected to endanger life or property be addressed immediately, while other defects affecting compliance with the code be recorded and tracked until the defects are corrected.

Prompt remedy of hazardous conditions:

PSNH, National Grid, Unitil, and Verizon all replace poles on an immediate basis if found to be hazardous (could reasonably be expected to endanger life or property). The only disagreement between the parties is with respect to poles that have been "made safe."

PSNH, National Grid and Unitil all view poles that have been "made safe" as conditions generally requiring prompt repair. Verizon states that if a pole is "made safe," no need exists for immediate repair, and replacement may be scheduled following the normal scheduling process.

In some cases, an extended period of time passes before such poles are replaced.

Table 2 summarizes the relative positions if the four utilities on the subject of pole inspections.

-

⁴ Reference Verizon responses to Staff 2-25, 3-39, 3-47

Table 2

	IOP/NESC Standard	PSNH	National Grid	Unitil	Verizon
Pole Inspection Program / Practice		Circuit Patrol Policy ED-3018	Standard MS 2015	Distribution Inspections Operations Bulletin OP6.00	Verizon Training Course TT10098
Initial Inspection Interval (IOP)		20 years	15 years	20 years	15 years w/N. Grid; 20 years w/PSNH & Unitil
Subsequent Inspection Interval (IOP)		10 years	10 years	10 years	10 years
Present Inspection Interval		4 years	Generally 10 years	10 years	Ongoing with planned work
Visual Test		Yes	Yes	Yes	Yes
Practical Test	Above & below ground inspection for remaining strength	Yes	Yes, when applied	Yes	Partial ⁵
Documentation of inspections		Yes	Yes	Yes	No
Prompt replacement of hazardous poles		Yes	Yes	Yes	Yes

⁵ Verizon performs a prod test at the base of a pole to determine whether the pole has deteriorated.

TIMELY PLACEMENT AND REMOVAL OF POLES

PSNH. PSNH states that, on average, it is able to write, issue, schedule, and install a single pole within its own maintenance area in about 7-10 working days depending on whether the pole is a solely owned PSNH pole or a jointly owned pole. A solely owned PSNH pole can be set in approximately seven working days, while a jointly owned pole can be set in approximately ten working days from the date of customer request. The additional time associated with a jointly owned pole reflects the additional step of scheduling an on-site meeting with Verizon, a process that typically takes 3-4 days. PSNH stated that the process can be delayed by the need to procure private property easements or a municipal/state pole license for a pole or guy and anchor on private property or public highway.

PSNH does not have a formal written "prioritization policy" for pole sets. The timeline or priority for each project is determined by need. PSNH management regularly conducts scheduling meetings in each work center to schedule projects, coordinate overall schedules and assign the resources necessary to meet customer need dates. PSNH also has the option to use contractors for pole replacements and other types of work if necessary.

In Verizon's maintenance area, PSNH indicates that the length of time involved in having poles set by Verizon can be considerably longer. PSNH provided extensive documentation dating back to 2004 of 96 specific projects where PSNH experienced delays in providing service to customers due to delays in having poles set in the Verizon maintenance area. According to PSNH's records, the duration of these delays ranged from 8 days to 469 days. In those instances where PSNH was able to document both the notification date and the date of the pole set by Verizon (48 projects), the average delay was 139 days, or 4.5 months. In some cases, PSNH ultimately set the poles.

National Grid. National Grid states that it can schedule and set a pole within its maintenance area in 5 to 10 days. However, the average time it takes National Grid to set a solely owned pole is approximately 55 days from the day a customer requests a new pole. According to National Grid, there are a number of steps and requirements that need to be met prior to the actual installation of a pole, making the estimation of an average difficult. Some of the tasks which result in delay include the time needed for a customer to grant an easement; the time needed to draft the easement and perform a title search; and the time needed for the customer to sign the easement and return it. National Grid routinely experiences uncontrollable delays in these areas.

National Grid does not have a formal policy for the prioritization of pole sets. The priority for pole sets is determined by a need date that has been established by the customer and the National Grid engineer. The need dates are managed through the scheduling process. Scheduling meetings are held weekly by the Area Resource Coordinator with engineers and department supervisors. National Grid uses qualified contractors to perform work such as emergency response, double pole removals, pole replacements, and routine line construction when it becomes apparent that the volume of work and the timeline for completion will require extra help to meet need dates.

National Grid states the average time it takes Verizon to set a jointly owned pole in a Verizon maintenance area from the customer request date is approximately 90 days. This varies by engineer and job. National Grid also experiences occasional delays in its normal work waiting for pole sets by Verizon. While National Grid does not keep specific records identifying when work has been held up this way or for how long, ten specific projects were provided as

examples of such delays in 2005. The delays associated with these ten projects ranged from 60 days to 240 days, averaging 120 days.

Unitil. Unitil's objective is to set a single pole within 10 days in its own maintenance area, from the time of the request or work order to the final setting of the pole. It estimates that, on average, it actually takes approximately fifteen working days. Unitil also indicated that this timeline may be elongated by additional time needed to arrange on-site meetings with Verizon, as well as field conditions that may delay the ability to stake or install the pole. Unitil is not aware of public works jobs, or other types of jobs, where poles were not set, moved, or removed in the timeframe originally requested as a result of Unitil's own actions or inactions.

Unitil does not have a formal policy for the prioritization of pole sets. In situations other than emergencies, Unitil strives to meet the need dates of customers, state and municipal government entities, and other utilities. Work is prioritized on an on-going basis to meet need dates and internal project expectations. Unitil uses qualified contractors to supplement its workforce when insufficient internal resources preclude Unitil from achieving company or customer need dates.

Unitil reports that Verizon sets joint poles in its maintenance areas only after repeated requests for scheduling status and continued pressure on Verizon's engineering and construction management. In some cases, Unitil has set poles in Verizon's maintenance area in order to complete required construction before customer electric load jeopardized its facilities. In other cases, Unitil experienced significant cost overruns as a result of pole setting delays by Verizon.

Unitil alleges that at field meetings with customers and Unitil representatives, Verizon typically quotes 56 days (8 weeks) in the field, and almost always fails to meet this timeframe.

Unitil also provided a data response of a February 2006 email communication from Verizon

management with wording that Unitil interpreted to signify that all future pole sets in the Verizon maintenance area would take 84 days, or 12 weeks. The "clock" on the 84-day timeframe was to begin when the two companies' representatives met in the field, and not at the time of the original request for a pole set. Verizon asserts that this was a misreading of the email communication and that the 12 week time frame requested applied solely to a particular electric transmission upgrade involving multiple pole sets.

Unitil then provided a data response with attached emails regarding delays when attempting to coordinate meetings in the field with Verizon representatives. While such meetings are normally accomplished within 5-10 business days, Unitil notes that in its recent experience, meetings can take more than 30 days to schedule, reportedly due to supervisory coverage and scheduling issues at Verizon. Verizon states that this was an isolated situation, and that the problem was addressed by a rearrangement of engineering responsibilities

Verizon. Verizon states that it does not track the average time to engineer and place a single pole in the normal course of business. Referring to the process used to fulfill a line extension request for a new service pole(s) on private property, Verizon determined that the average time it takes for Verizon to complete a customer-requested pole set is 39 days. The start date of this time period is dependent on whether it involves a single pole set or two or more poles. For a single pole set (for which there is no charge to the customer), the clock starts at the customer's initial request date. If a customer requests two or more poles, the clock starts when Verizon receives payment for the requested pole work. Verizon does not separately track any other work involving jointly owned and solely owned poles, and does not track the average time it takes for the electric company to set a jointly-owned pole. Verizon could not identify instances of pole setting delays caused by other entities, including the joint owner, as such

information is not maintained in the normal course of business. However, Verizon did note that delays by other attachees can prevent it from completing its work within anticipated timeframes (see Staff 3-10). Further, Verizon noted in responses to Staff 3-12, 3-13, 3-14, 3-18 and 3-19 that problems with the present intercompany notice process can lead to delays in Verizon NH performing its work. For this reason, Verizon has developed and implemented an electronic notification system that it has shared with all the electric utility parties. For a further discussion, see *Intercompany Communication and Notification*, below. Finally, as part of Topic 3, Verizon NH did document a number of instances associated with various DOT projects where delays by others, including in certain circumstances electric utilities, prevented Verizon NH from completing its work. See Verizon NH responses to Staff 4-21A and 4-21 B.

According to Verizon, all pole sets are prioritized by the service order date requested by the customer and scheduled in accordance with available technician hours in Verizon's internal 30-day construction schedule. Once the work is entered into the schedule, Verizon's objective is for pole sets to be completed within 30 days. If a particular job cannot be completed in the 30-day window, the work is pushed into a subsequent 30-day scheduling period. Verizon does not employ contractors to supplement its workforce when internal resources are insufficient to meet work demands, stating there are no such provisions in its contract with its labor unions allowing such use of contractors at this time.

Verizon does not agree with the assumption that "long lead times" occur in setting poles in its maintenance area. Verizon states that it manages its business to ensure that pole setting lead times are kept to a minimum. This involves compliance with a work scheduling process; regular monitoring of work progress through monthly status meetings for larger projects and

daily intervention by the Construction Control Center for smaller jobs; and adjusting force levels as required to meet required construction completion dates.

The IOPs give Verizon between 14 and 30 days, depending on the particular agreement, to respond to a notice from an electric company asking Verizon to agree to set a joint pole in its custody area. The same notice interval applies when Verizon receives a notice from an electric company asking Verizon to allow the electric company to set a joint pole in a Verizon maintenance area before the notice interval has expired.

Verizon's labor agreements do not have provisions that permit it to allow a joint owner to set a joint pole in Verizon's maintenance area in the event Verizon is unable to do so in a timely manner. Verizon allows an electric company to proceed with a pole set within a Verizon maintenance area only where Verizon has no business relationship with the electric company's customer. There are also no provisions in the joint ownership agreements that provide for compensation to one joint owner due to delay on the part of the other joint owner.

Table 3 summarizes the relative positions of the four utilities in this section.

Table 3 Timely Pole Sets

	PSNH	National Grid	Unitil	Verizon
Time to set solely- owned pole	7 work days	5-10 days	0-10 work days	Not tracked
Time to coordinate design of joint pole set	3-4 work days	Not stated	5-10 work days	Not tracked
Time for customer completion of requirements (easement, trim, etc.)	No time estimate given	approximately 40days (not under the control of N. Grid)	Not stated	Not tracked
Avg. time total to set joint pole	7-10 work days	5-10 days	15 work days	39 days ⁶
Average actual time joint owner takes to set pole	96 tracked projects averaged 139 days	90 days average; ten specific projects averaged 120 days	Not recorded but VZ quotes 8 weeks in field	Not tracked
Schedule governed by	Customer need date	Customer & N. Grid engineer need date	Customer & other need dates	Customer need date & available hours of Verizon labor pool
Work prioritized by	Customer need date	Customer & N. Grid engineer need date	Need dates & project expectations	Customer need date
Additional external resources available to fulfill schedule	Option to use contractors	Option to use contractors	Option to use contractors	None
Can joint owner set poles in partner's set area	Occasion does not arise	Occasion does not arise	Occasion does not arise	No, if Verizon has a customer request
Delay costs reimbursed by cost- causing joint owner?	No, not covered in joint agreements	No, not covered in joint agreements	No, not covered in joint agreements	No, not covered in joint agreements

-

⁶ This is a figure supplied by Verizon representing the time to set a service pole as Verizon does not track times to set other poles in the normal course of business.

All of the utilities describe planning and scheduling processes intended to manage and prioritize the scheduling of pole placements. In all cases, the utilities indicate they manage the process to meet customer need dates, and to ensure that pole setting lead times are kept to a minimum. Each of the utilities, at one time or another, experiences delays in setting poles and other planned work. The utilities readily acknowledge delays they may encounter outside of their immediate control that may extend this time frame, but work to keep such delays to a minimum. Despite the apparently reasonable management efforts of the utilities, complaints occur with respect to pole setting delays.

The intercompany agreements between the joint owners do not directly address the question of timeframes for placement of jointly owned poles. The agreements specify a timeframe for the company receiving an Exchange of Notice to determine if it desires ownership in the new pole. The time to reply to the request for ownership is 14 days in the case of Verizon's IOP with National Grid, and 30 days in Verizon's agreements with PSNH and Unitil. There are also timeframes specified in the agreements with PSNH and Unitil for each party to transfer facilities; such transfers must be accomplished within 60 days. No time interval is specified for the actual placement of poles once the parties determine that joint ownership is desired.

Verizon confirms there are no timeframes applicable to the placement of poles in the agreements with the electric companies in its response to Staff 3-5. In this same data response, Verizon states that it would not permit the electric companies to place poles in its maintenance areas, so long as it received a valid customer service request within the time frames specified in the IOP, due to the provisions of its collective bargaining agreements. Verizon also states there

are no provisions in the joint ownership agreements that provide for compensation to one joint owner due to delay on the part of the other joint owner.

DOUBLE POLES

Each party was asked to report on the number of poles awaiting transfer work in the state of New Hampshire, resulting in so-called "double pole" locations. PSNH reported that as of December 7, 2005, there were 122 poles in both PSNH and Verizon maintenance areas that have been in the queue for 15 or more days waiting for PSNH to complete transfer work. According to PSNH, this represents a typical backlog of ongoing pole transfer work. National Grid reported that there are currently 76 poles waiting for National Grid to complete transfer work in its service territory in the state. They also clarified that this is a dynamic number that changes based on construction activities. Unitil stated that it has a total of 21 double poles waiting for transfer work between its Capital and Seacoast territories. Combined, the electric utilities have 219 poles awaiting transfer of electric facilities.

Verizon reported that is does not track the requested data in the normal course of business. However, Verizon was able to report on the number of poles in its own maintenance areas that are pending removal, as well as the number of poles with pending Verizon transfers in electric maintenance areas. Verizon could not respond specifically as to whether those poles are currently waiting only for Verizon to transfer as there may be other parties (CATV, municipal and electric attachments) that must be transferred before Verizon is able to complete its own transfers. Verizon reports that as of November 30, 2005, there were 3,254 poles pending removal in Verizon's pole maintenance areas. Similarly, Verizon reports that as of November 30, 2005, there were 3,277 pending Verizon transfers required on 2,149 poles in electric maintenance

areas. More than half of the total backlog of double poles in Verizon's maintenance areas have been pending for more than a year.

In response to a data request that attempted to assess the "aging" of double poles awaiting transfer or removal, Verizon provided figures (Table 4) for pending pole transfers and removals, noting that the table identifies poles where it has pending transfer activity. The data, however, do not imply that those locations are ready for Verizon to transfer.

Table 4 Pending Pole Transfers for Pole Removal

	Category	Total
Verizon Set	1 Under 60 Days	219
Area	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 years	1,280
Sub-Total		3,113
Electric Set	1 Under 60 Days	375
Electric Set Area	1 Under 60 Days 2 Between 60 and 90 days	375 77
	•	
	2 Between 60 and 90 days	77
	2 Between 60 and 90 days 3 Between 90 and 180 days	77 117
	2 Between 60 and 90 days 3 Between 90 and 180 days 4 Between 180 and 1 yr	77 117 220
	2 Between 60 and 90 days 3 Between 90 and 180 days 4 Between 180 and 1 yr 5 Between 1 yr and 2 yrs	77 117 220 439

When asked whether problems had been experienced with third party transfers, Unitil responded that it is not aware of any such problems. PSNH states that the process works reasonably well, except that it can be cumbersome to check on the status of third party transfers. National Grid noted that the failure of an attached party to make its transfer in a timely manner is not always readily or rapidly apparent. Verizon responded that the burden generally falls on it to coordinate the transfer of third party plant among the respective parties so that Verizon may, in

turn, transfer its plant and, if required, remove the old pole. Delays in timely transfers have occurred that prevent Verizon from completing work within anticipated timeframes.

In a follow up data request, the parties were asked to report on the status and history of seven specific double pole locations. All of the locations except one were located in Concord (Unitil's service area), with the remaining location being in Dover (PSNH). In all but one case, the new pole had been installed in the time period between 2000 and 2003, and the double pole situation had existed for 3 to 6 years. In all cases, the electric company was the maintaining party, and had installed the new pole. The electric companies generally accomplished their own transfers in a timely manner.

With respect to communication and coordination among parties, the electric utilities involved were generally not able to find a copy of the initiating contact memo at the time of the original pole set, or stated that a contact memo was not used. In such cases, the initial contact between the parties was a field visit between company representatives. In all cases, the electric company was not able to identify when municipal and cable transfers had been accomplished. In three cases, fire alarm and/or cable attachments were still awaiting transfer, preventing Verizon from completing its transfers. Of the remaining four locations ready for Verizon to complete its transfers, Verizon had not received a transfer notice requesting it to transfer in three of the cases. In the one case that Verizon did receive a faxed transfer notice, the notice was not faxed until roughly 4.5 years after the new pole had been installed and the electric company had completed its transfers. Verizon then completed its transfers approximately 3 months after receiving notice, but the old pole remained in place waiting to be removed until the electric company removed it some 5 months thereafter.

The responses to this request are instructive. They generally reflect a breakdown in the communication and coordination process as necessary to accomplish the sequential transfer of facilities in a timely manner. The timely placement and removal of poles requires a strong communication process between the joint owners and other attaching parties to ensure that work involving all the parties is completed in a timely manner. This is explored in greater detail in the Section VI of the report.

Verizon's pole placement and removal data covering the past ten years further illustrates the double pole issue. During discussions, Verizon recalled its 1996 agreement with NHPUC Staff to remove 400 more poles from its system backlog in 1996 than the number of new poles set on its system, including replacements and new construction. Table 5 lists Verizon's placing and removal figures post 1996 for the past ten years:

Table 5 Verizon Pole Work 1996-2005

Year	Poles Placed	Poles	Net change
		Removed	
1996	2794	3527	(733)
1997	3779	4243	(464)
1998	4069	3951	118
1999	4166	4743	(577)
2000	4077	4229	(152)
2001	Data	Unavailable	
2002	3703	4254	(551)
2003	3602	2896	706
2004	3577	3718	(141)
2005	2809	2028	781
TOTAL	32576	33589	(1013)

In addition to 1996, Verizon met the 1996 400-pole net removal objective in three of the eight years for which data was available after 1996. Data in one year (2001) was unavailable due to a computer system change over.

In a technical session, Verizon stated that the number of double poles has risen to nearly 7,000. It has field checked approximately 2,500 of that number and, as of the September 20, 2006 technical session, Verizon reported a current removal rate of 60-70 poles per month.

Subsequently Verizon reported the removal of 2,395 poles in 2006.

INTERCOMPANY COMMUNICATION AND NOTIFICATION

The discussion that follows reflects the conditions as of March-April 2006, the period of the relevant workshops. In June-July 2006, Verizon NH implemented its electronic notification system with the intervening electric utility parties, which are in various stages of their own implementation. As a result, some of this discussion is historical only and not reflective of actual practice today.

1. Coordination of Work Requests and Notification of Pole Sets

PSNH. When PSNH replaces a pole, a PSNH field technician contacts his or her joint owner counterpart and requests a job site meeting to discuss requirements for the replacement pole. Upon agreement of what needs to be done, the maintaining utility writes up the job, schedules the work and sets the pole. When PSNH receives a request for service that requires placement of a new pole, the procedure is similar except that in some cases the field meeting does not take place unless and until Verizon has received an official request for telephone service. With verbal or email agreement of pole requirements between joint owners (or if Verizon has elected not to participate in joint ownership), and when all customer prerequisites are met, PSNH schedules and installs the pole. In Verizon's maintenance areas, Verizon schedules and sets the pole once it obtains a verbal or email agreement of pole requirements between joint owners, a secured request for telephone service, and assignment of a valid 911 location address.

PSNH notes that, historically, getting a pole set in Verizon's maintenance area may involve multiple calls from the customer or PSNH to Verizon inquiring about the schedule date and/or requesting to expedite the job. Sometimes the customer notifies PSNH directly once the pole is installed; in other instances, the PSNH field technician will see that the pole is set and initiate completion of the job. In some cases, PSNH receives a telephone call from the Verizon construction foreman that the pole has been set.

According to PSNH, Form 605A – Exchange of Notice has historically been used to document installation, transfer and removal information. On or about May 1, 2005, through mutual agreement with Verizon, PSNH and Verizon began exchanging Excel Spreadsheets containing new pole installation data as well as transfer data for replacement poles. The exchange of spreadsheets is made via email. Documentation of final pole sizing data and intercompany billing are accomplished through an Exchange of Notice (EON) process involving a particular form specified for that purpose under the IOPs.

National Grid. Officially, National Grid follows an EON process pursuant to its IOPs. When a customer initiates a work request that will require new poles or pole replacements, a site meeting is typically set up with Verizon. In Verizon maintenance areas, Verizon sends an Exchange of Notice Form 605 (605 notice) to National Grid indicating that the poles have been set and are awaiting National Grid transfer. In National Grid maintenance areas, National Grid sends a 605 notice to Verizon indicating the pole is set and National Grid has transferred its facilities.

For a National Grid initiated project, National Grid sends a 605 notice to Verizon indicating that a pole in a Verizon set area is in need of replacement. A site meeting is set up and proposed pole and anchor locations are staked. In National Grid maintenance areas, the 605

notice is sent to notify Verizon when National Grid has set a new pole, transferred its facilities, and is ready for Verizon to transfer. For a Verizon initiated project, the process is reversed. In actuality, most of the communication for coordination and design is done unofficially through phone calls, site meetings and email. The EON process is used to administer billing and to establish joint pole ownership between the utilities.

According to National Grid, if it requests a pole in a Verizon maintenance area and Verizon does not set the pole in a timely manner, National Grid can send a letter of default to Verizon in accordance with its joint ownership agreement. If Verizon does not set the poles within 60 days from the day the letter is sent, National Grid states it has the right under its IOP to set the poles and charge Verizon for the work, for which a \$1,000 fee is charged.

Unitil. Unitil uses the Exchange of Notice Form 605A for the transmittal to Verizon of intercompany pole installation, transfer and removal information. Communication and coordination, however, are accomplished primarily through other means. If Unitil receives a customer request for electric service in the electric maintenance area, it initially obtains preliminary information from the customer, and then provides the customer with a general overview of the next steps and other requirements in the process. If the location is within Verizon's pole maintenance areas, Unitil informs the customer of the appropriate Verizon contact and phone number. Regardless of whether the maintenance area is telephone or electric, Unitil conducts a site visit within five business days to determine the availability of electric facilities, and the status of housing construction or land development. If the location is within Verizon's maintenance area, the field review may prompt a phone call to Verizon to inform them of the readiness of the project as well as Unitil's requirements.

Once the project is ready for pole staking, a Unitil field representative will normally stake a single pole within 3 days, in conjunction with the customer, and will notify Verizon of the stake being placed. On occasion, Verizon may become involved with the pole staking if there are complications with the location, customer, or existing facilities. On larger projects involving multiple pole sets, Unitil arranges a field meeting with Verizon to stake the poles together. In this case, the field meeting and pole staking will normally be accomplished in about 5-10 days.

According to Unitil, most communication is accomplished through informal means, using a combination of telephone, e-mail, and in-person contact. The EON Form 605A is not typically exchanged until after the project has already been coordinated and all required field meetings have been accomplished. In fact, in many cases, Form 605A may not be sent until after the pole has been set.

Verizon. Verizon states that the notification process follows IOP requirements for joint owners/users with respect to the installation of a new pole or pole line extension. An EON form is prepared by the party initiating the work and accepted by the receiving party. Details of the EON vary by agreement. Verizon states that the EON process is the primary vehicle for one joint owner to notify the other of pole work it will be doing or to request the placement of a pole. The EON generally reflects what had been agreed to by Verizon and the electric company as a result of a field visit. The company receiving the EON form is responsible for responding appropriately. Again, in actual practice, most pole work is coordinated between companies with a combination of calls, email and site visits. Verizon notes that it recently moved to an electronic notification process with PSNH and believes the system is a vast improvement over the prior process. In fact, starting in June/July 2006, all electric companies are now being notified via email of pole set completions by Verizon.

The response time requirements associated with the above vary under each IOP, from 14 days to 30 days. In discussions, Verizon indicated that it must respond to an EON within the IOP-specified timeframes or the electric utility may move ahead and set the pole as a solely owned pole. If Verizon does not respond at all, it can be assumed that Verizon has no business relationship with the customer requesting the pole.

Table 6 illustrates the positions of the four utilities on coordination of work requests.

Table 6 Coordination of Work Requests

	PSNH/VZ	Unitil/VZ	National Grid/VZ
Inter-company work request IOP	IOP #9	IOP #19	IOP P
Form specified	Form 605A, EON	Form 605A, EON	Form 605, EON
Use Specified	Request / document joint Pole work & other	Request / document joint Pole work & other	Request / document joint Pole work & trimming
EON response time by IOP	30 days	30 days	Within 5 days if signed in the field
Actual coordination methods historically used	Calls, emails, site meetings	Calls, emails, site meetings	Calls, emails, site meetings
EON actually used	To confirm joint ownership, joint trimming & administer billing	To confirm joint ownership, joint trimming & administer billing	To confirm joint ownership, joint trimming & administer billing

2. Transfer Notification and Coordination

PSNH. In its own maintenance areas, PSNH notifies licensees when poles are ready to transfer. PSNH communicates this notification by telephone or email after PSNH has completed its own transfer work. Once it has received confirmation that all third party attachers have

completed their transfers, PSNH notifies Verizon that facilities are ready for transfer. In Verizon's maintenance areas, PSNH notifies Verizon when PSNH has accomplished its transfer. It is then Verizon's responsibility to make any necessary notifications to third-party attachers and coordinate the balance of the transfer process. According to PSNH, it accomplishes coordination of transfers using a "shift and repair" notice. In its own maintenance areas, PSNH issues a shift and repair notice by Fax, mail, email, or phone to the next attacher on the pole, notifying that attacher that it should shift its facilities to the new pole. PSNH notes the date that the notification was made. The successive attachers are then expected to notify PSNH when they have shifted their facilities. Because Verizon occupies the lowest position on the pole, it is notified last using the same procedure. In accordance with the PSNH-Verizon IOP #10, if Verizon has not replied to PSNH within 60 days of notification, PSNH sends Verizon a notice via email or paper mail that Verizon now has the responsibility to remove and dispose of the pole. In Verizon maintenance area, this process is coordinated by the Verizon.

PSNH believes the process works reasonably well, except that it can be cumbersome to check on the status of all third-party attachment transfers and there is room for improvement. The problem is with policing to verify that the requested transfers have taken place. This sometimes requires several visits to job locations located throughout the PSNH maintenance areas. PSNH believes that an electronic transfer notification database shared between pole owners and licensees would be beneficial to all parties, and to customers, by making the communications process simpler and speeding up the process. In fact, in June/July of 2006, PSNH began migrating to electronic notification.

National Grid. National Grid states that it notifies all parties attached to an existing pole when it sets a new pole. National Grid relies on Verizon to notify all parties attached to an

existing pole when Verizon installs the new pole. According to National Grid, when a joint pole is replaced, all parties, pole owners and third parties attached to the existing pole are notified via a written Joint Construction Notice by the joint owner that installs the new pole. After this notification, each party is responsible for transferring its own facilities from the existing pole to the new pole. Under its joint ownership agreement with Verizon, it is the responsibility of the last co-owner transferring to expedite the transferring of any third party attachments.

In general, National Grid is satisfied with the current transfer process, but recognizes that it can be improved. National Grid has experienced mixed results with an electronic notification database shared between pole owners and third parties attached to poles. Where all the attached parties, including electric, telecommunications service providers cable operators, and municipal fire alarm signal systems, actively participate in the operation of such a system, it is useful in managing transfers. Where even one of these parties fails to participate, or is unreliable or untimely in updating its information, the system rapidly becomes a source of confusion requiring repeated trips to poles to update information.

Unitil. Unitil communicates among pole owners and attachers in different ways. In its Seacoast service area, Unitil issues a written Request to Transfer Construction (Form 57) to each of the parties on the pole to coordinate transfer activity. When each party completes its work, Form 57 is signed and returned, indicating the facilities have been transferred. Unitil sends the signed Form 57 to Verizon once all other attachers have transferred, thus informing Verizon the pole is ready for telephone transfer. Once Verizon completes its transfer work, it is then responsible for notifying Unitil when the pole is ready for removal, which it now does electronically.

In Unitil's Capital work location, communication is accomplished informally, without the use of Form 57. After completing transfer work, Unitil supervisory personnel call the applicable cable company representatives informing them the pole is ready for attachment transfer. Once the third-party attachers have completed their work, Unitil supervisory personnel call Verizon's local engineering group and inform them the pole is ready for the transfer of telephone attachments.⁷

With respect to the current transfer notification process, Unitil indicates that it is satisfied with the outbound notification process. However, Unitil indicates that Verizon frequently does not complete the notification process as prescribed in the IOPs. Unitil also expressed interest in discussing improvements to the process, including the establishment of a shared electronic database. This was initiated with Unitil in June/July 2006.

Verizon. Verizon indicates that the notification process for "joint owners/users" with respect to the transfer of facilities varies by the individual agreements between Verizon and the power companies. Although a few of the agreements require some written means of communication, most do not outline a specific process. Where a notification process is specified, the maintaining party is responsible for notifying the joint owner/user and each authorized attacher of the need to transfer, as well as when a pole is ready for transfer work. Upon receipt of a transfer request each company is responsible for transferring its facilities within 60 days. The notice of a completed transfer is handled without formal notification. This, of course, is no longer true with the implementation of electronic notification in June/July 2006.

According to Verizon, the relevant power company provides a "notice to transfer" request to all attached third party licensees and Verizon to transfer their respective plant to the

29

⁷ Staff 3-9A Follow Up demonstrated that this "informal" process may not always work well.

new pole(s), once the power company has completed its own transfer work to the new pole. From this point forward, there is typically no follow-up by the electric company of licensee activity and progress. Verizon states that its New Hampshire pole attachment agreements specify that each licensee has 15 days to complete the work upon receipt of notification. The burden generally falls on Verizon to coordinate the transfer of the third party plant among the respective parties so that, in turn, Verizon may transfer its plant and, if required, remove the pole. Delays in timely transfers have occurred that have prevented Verizon from completing work within anticipated timeframes.

Verizon states that there is currently no uniform process in place for transfer notifications between the utilities and/or licensees. The current system relies on faxes, phone calls, field verifications and e-mail. The consistency of notification varies between companies and departments within those companies. As already noted, Verizon recently moved to an electronic version of transfer notification with PSNH and states the system is a vast improvement over the prior process. Because setting up a similar program for transfer work would offer benefits to all pole attachees, Verizon did so in June/July 2006.

Verizon asserts that the electric companies need to take ownership of the notification process to ensure that all third parties are transferred prior to notifying Verizon to transfer and remove the pole. The present process negatively impacts the 60-day window that determines the responsibility of removal which applies under Verizon's agreements with PSNH and Unitil, because Verizon, in effect, becomes the coordinator for transfers, as all attachees are being notified at the same time. Verizon asserts that if it did not take on this coordinating role, the number of poles awaiting transfers would significantly increase, particularly in the urban areas where the number of attachees on poles is greater than in rural areas.

POLE LINE TRIMMING

PSNH. PSNH has a comprehensive maintenance trimming program under which circuits are trimmed on a cyclical basis, taking into consideration voltage levels, growing conditions and circuit performance. Distribution facilities (those facilities generally associated with joint ownership) are trimmed on defined schedules differentiated by voltage class. Circuits originating at 34.5 kV are scheduled to have a cycle duration of no more than six years; those originating at 12.47 kV have a scheduled maintenance interval of no more than seven years; and those originating at 4.16 kV have a maximum cycle of no more than eight years. PSNH's trimming program also has a second component based on tree-related reliability performance. Circuits which have historically exhibited poor performance in terms of tree-related outages are scheduled for a shorter cycle length. PSNH also estimates that it removes approximately 3,000 "danger trees" annually as part of this program, and an additional several hundred danger trees are removed annually as a result of circuit patrols and customer requests.

PSNH performs maintenance trimming for all the lines in its service territory, irrespective of custodianship or maintenance area. With respect to construction trimming, PSNH performs such trimming when setting poles in its own maintenance areas while Verizon performs the trimming when setting poles for new construction in Verizon maintenance areas.

With respect to its IOP with Verizon, PSNH does not believe Verizon is in compliance with the Joint Trimming Agreement as it relates to Maintenance of Jointly Owned Poles due to the fact that they have not historically agreed to participate in joint maintenance trimming costs as specified in their IOP. PSNH reports that Verizon has not participated in the costs of maintenance trimming for at least the past fifteen years. PSNH notes that Verizon has historically taken the position that maintenance trimming is of no benefit to Verizon's system.

PSNH believes that Verizon complies with the Construction Trimming portion of its IOP as they routinely agree to participate in the sharing of construction trimming costs. PSNH has had some limited success in sharing with Verizon the costs for heavy storm work and removal of hazardous trees.

PSNH reports that they have had serious discussions concerning maintenance trimming responsibilities with Verizon beginning in 2005. As a result of those discussions, Verizon began sharing in the costs of trimming associated with heavy storm work. Verizon also began sharing in the costs of some hazardous tree removals, agreeing to participate in the removal of about half of the trees PSNH identified as jeopardizing the facilities of both parties. According to PSNHH, Verizon has not participated in the costs (75% electric/25% telephone) of on-going maintenance trimming, but recently expressed interest in doing so. As a result, PSNH submitted Exchange of Notice forms requesting Verizon's participation in the joint trimming of 1,792 miles of line in 2006. During the course of the technical sessions on this topic, PSNH was still awaiting a response. ⁸

PSNH owns and maintains approximately 12,568 pole miles of overhead distribution lines in the State of New Hampshire. According to information provided by PSNH, for the 5-year period covering 2001 to 2005, PSNH spent an average of \$6,335,005 annually for maintenance trimming activities (exclusive of construction). This amount includes cyclical trimming, hot spot trimming, storm work, and removal of danger trees. On average, PSNH has trimmed more than 2,300 miles of line in each of the past five years.

32

⁸ Subsequent to the conclusion of technical sessions in this proceeding, Verizon informed Staff that it had processed and paid in full all invoices for maintenance trimming it received from PSNH in 2006, and that an additional \$6,288 in invoices for 2006 trimming received in 2007 is under review.

National Grid. National Grid performs trimming in accordance with its New England Distribution Line Clearance Specifications, which are further detailed in National Grid's New England Vegetation Management Distribution Line Maintenance Program Manual. National Grid's clearance specifications and vegetation management program provide comprehensive written specifications and procedures for the maintenance of distribution line clearances and apply to the maintenance trimming of jointly owned facilities. National Grid does not differentiate trimming cycles or spot trimming by voltage; all NH feeders are trimmed on a 5 year cycle. In addition to cycle trimming, National Grid performs hazardous tree removal to enhance reliability performance. National Grid's specifications also call for a three year interim trim, which is implemented by identifying those feeders that are halfway through the cycle. These feeders are surveyed for growth and hazard situations and interim trimming is performed accordingly.

National Grid performs maintenance trimming of all the feeders in its service territory, irrespective of custodianship or maintenance area. Construction trimming is initiated by whichever company is responsible for the setting of poles associated with such construction. With respect to trimming standards, National Grid states that the company who initiates trimming applies their standards and specifications. Historically, trimming initiated by Verizon performed by its trimming contractor and using its standards/specifications, does not meet the clearance requirements of the electric company. This can result in additional trimming expenses by one or both utilities. Trimming initiated by the electric company using its standards and specifications meets or exceeds Verizon's requirements. If the electric company is constructing a new line addition in a Verizon set area, Verizon would be responsible to initiate the trimming

in their set area to the electric company specifications as the electric company pays the higher percentage of the cost.

With respect to its IOP with Verizon, National Grid does not believe that Verizon is responding to tree trimming and removal issues in the spirit of the IOP. On numerous occasions Verizon has not been responsive to requests for sharing in the costs of tree removals. National Grid further alleges that Verizon has never responded to any requests for cost sharing of maintenance trimming as set forth in Section J of their IOP. National Grid reports that attempts have been made to discuss these types of issues with Verizon, but they have not been resolved to date.

National Grid provided data showing that over the 6-year period between 2000 and 2006, it identified and removed 2,241 hazardous trees. Of these, it requested participation from Verizon on 241 hazardous trees. According to National Grid, Verizon agreed to participate in the removal of 124 of these (51%), denied participation for 60, and never responded to 57 other such requests. Furthermore, National Grid reported that, on average, it takes Verizon over a year to respond to their requests for joint removal of hazardous trees. Overall, National Grid spent \$414,191 for removal of hazardous trees and received \$24,200 in financial participation from Verizon (5.8%).

National Grid owns and maintains approximately 882 pole miles of overhead primary lines in the State of New Hampshire. According to information provided by National Grid, for the 5-year period covering 2001 to 2005, National Grid spent an average of \$680,504 annually for maintenance trimming activities (exclusive of construction), and has trimmed an average of 131 miles of line annually over this timeframe.

Unitil. Unitil performs trimming in accordance with its policy on Vegetation Management, Operations Bulletin OP5.00. This policy details vegetation management practices for both transmission and distribution, and covers the maintenance trimming of jointly owned facilities. The policy provides guidance on trim cycles; "hot spot" trimming; removal of danger trees; heavy storm work; trimming of services; and handling of customer trimming requests. Distribution facilities (those facilities generally associated with joint ownership) are trimmed on defined schedules differentiated by voltage class. Distribution trimming is performed on an 8-year cycle for 4 kV circuits, a 5-year cycle for 13.8 kV circuits, and a 4-year cycle for 34.5 kV circuits. Hot spot trimming may be performed between cycles when required, due to tree contact or outages resulting from tree contact. Unitil's Vegetation Management policy also includes instruction for joint participation under its IOP with Verizon; applicable clearance standards; performance measures; budgeting; supervision; and recordkeeping.

Unitil performs maintenance trimming of all the lines in its service territory, irrespective of custodianship or maintenance area. Such trimming includes cyclical trimming, hot spot trimming (when required), removal of danger trees, and heavy storm work. According to Unitil, construction trimming is handled differently in terms of responsibility and coordination.

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. 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. Such costs are shared in accordance with the IOP.

In terms of its agreement with Verizon, Unitil asserts that Verizon is not participating in the costs of maintenance trimming for joint lines. Unitil argues that all utilities have an

obligation to maintain line clearances in order to protect their facilities, and points to the existence of its IOP with Verizon as evidence that the parties recognized this need for ongoing trimming of joint pole lines and desired to share in the cost of such trimming. According to Unitil, the 75-25 cost split reflects the negotiated allocation of trimming costs between the electric company and Verizon. Unitil further states that Verizon's participation in the sharing of maintenance trimming costs in the Unitil service area has not been satisfactory. Unitil believes that Verizon has generally followed the IOP with respect to construction trimming and storm work, with one exception: Verizon is not properly coordinating construction trimming with the electric company when trimming for new cable placement.

According to Unitil, discussions have taken place between the companies concerning maintenance trimming responsibilities. Unitil provided a lengthy summary of efforts that have been made to coordinate trimming with Verizon and obtain their participation in the costs of the trimming. Unitil claims these effort met with little success as Verizon generally refused participation. As a result, Unitil curtailed its coordination and billing efforts with Verizon during 2003 and 2004. These efforts were resumed in 2005 as a result of operational meetings between the parties. According to Unitil, three meetings held between Verizon and Unitil did not lead to a resolution of the issues, nor did further escalation of this issue to the management of both companies. Unitil argues that Commission intervention is required to make a determination as to Verizon's responsibility for tree trimming costs.

Unitil owns and maintains approximately 1,145 pole miles of primary overhead lines in the State of New Hampshire. According to information provided by Unitil for the 5-year period covering 2001 to 2005, Unitil spent an average of \$716,044 annually for maintenance trimming activities (exclusive of construction). This amount includes cyclical trimming, hot spot

trimming, storm work, and removal of danger trees. On average, Unitil has trimmed 151 miles of line annually over the past five years.

Verizon.

Verizon does not dispute the general need for maintenance tree trimming. Verizon coordinates and participates in joint trimming with a power company when it agrees there is a benefit to its facilities in the location to be trimmed, such as in situations where heavy growth has encroached on its facilities or prevents access to its distribution terminals. Verizon determines its need for maintenance trimming using several criteria, including density and number of limbs in the area of the cable or cables; the potential for damage to Verizon's facilities; and the ability to access its distribution terminals. Verizon recognizes its need for maintenance trimming to safeguard its facilities and to allow access for its workers. However, Verizon does not agree that it has a need to participate in the electric companies' system-wide maintenance trimming efforts, citing the principal differences in the vegetation-proximity standards of the communications and electric utilities.

Verizon does not employ a cyclical maintenance trimming program in the same manner as the electric companies, due to the difference in the susceptibility of its facilities to the proximity of foliage. Verizon generally does not perform maintenance trimming of lines on jointly owned poles, whether the area to be trimmed is in the electric maintenance area or its own maintenance area. Instead, the electric companies perform such maintenance trimming, independent of custodianship and maintenance areas. Verizon agrees it may benefit from joint trimming, and therefore participates in those instances where there is a need for trimming heavy foliage in a pole line for Verizon to place a new pole or because of storm or hazardous conditions.

Verizon does, therefore, review the maintenance trimming lists provided by the power companies and participates in trimming where there is heavy tree growth encroaching on telephone facilities or preventing access to its distribution terminals. Verizon also accepts joint trimming associated with a "hot spot" or a "hazard" tree resting on a cable. Verizon states that the need for tree trimming is based on conditions presenting a hazard to its aerial plant and is not based solely on the proximity of foliage, and contends that the vegetation management requirements of the power companies are best addressed by them due to the different characteristics of electric lines and the higher voltage transmission.

Verizon also performs construction trimming for purposes of placing new cables, typically needing only a four-foot by four-foot window trimmed for such purposes. When Verizon adds a cable to an existing jointly owned pole line, the trimming is performed independently of custodianship and maintenance areas. In such situations, Verizon does not coordinate this trimming with the electric companies, and instead only trims a four-foot by four-foot window for its own needs. If the location to be window trimmed is also on the planned trimming list of an electric company, or if the electric company is willing to reprioritize locations in its vegetation management program, Verizon would proceed with joint trimming and participate in the planned trimming of the electric company.

In the specific situation where lines are to be extended for purposes of serving a new customer or customers, Verizon places all jointly owned poles in its maintenance area, and performs associated trimming based upon the specifications laid out in the applicable IOP. If a power company were placing a solely owned pole line in Verizon's maintenance area, the power company would be responsible for all trimming.

Verizon disagrees with the assertions of the electric companies that it is not complying with its obligations for maintenance trimming under the IOP, or that it is not responding to tree trimming or removal in the spirit of the IOP. According to Verizon, the majority of the joint trimming agreements between Verizon and the power companies provide that either party can participate or refuse participation in joint trimming if it does or does not feel there will be a benefit to maintenance trimming. For example, Verizon states that its IOP with Unitil provides both companies with the option of choosing not to participate in maintenance tree trimming if either party does not feel there is a benefit to joint participation. When it is agreed that both the electric company and Verizon are in need of trimming, this trimming is performed in accordance with the standards defined in the IOPs relative to tree trimming. Thus, Verizon asserts, it is complying with the IOP.

Discussions have taken place between the companies concerning maintenance trimming responsibilities. Specifically, Verizon confirms that it has discussed maintenance trim responsibilities and procedures with Unitil and PSNH. These discussions focused on the notification process to ensure both companies participate in joint trimming when applicable, acquisition and response to maintenance trimming lists, the need to ensure there is accuracy in the invoicing, and the need for back-up documentation to support trim charges.

Verizon owns and maintains approximately 16,634 pole miles⁹ of aerial cable in the State of New Hampshire. According to information provided by Verizon, for the 5-year period

_

⁹ Verizon's response to a data request asking how many miles of overhead line the company owns and maintains in NH, was 23,079 sheath miles − a figure derived from the 2005 VZ-NH ARMIS 43-08 report Table 1.A. Since sheath miles are not a good indicator of pole or route miles, Staff has used pole data from the same ARMIS report and made several reasonable assumptions to derive Verizon route mileage. 237,050 poles; 5% assumed solely-owned (11,853 equivalent and actual); 95% assumed owned 50% (225,197 equivalent, 450,394 actual); sub total poles = 462,247; Less 5% service poles where neither electric nor VZ trim = 439,135 total poles; average pole span assumed 200'; total poles x average span ÷ 5,280 = 16,634 pole miles.

covering 2001 to 2005, Verizon spent an average of \$339,244 annually for construction trimming, \$198,970 annually for maintenance trimming, \$3,946 annually for hazard trimming, and \$12,191 annually for storm trimming. These figures reflect a significant increase in construction trimming in 2005, as well as an increase in storm trimming. Prior to 2005, construction trimming averaged \$161,203 annually, while storm trimming averaged \$4,679 annually. Other categories were roughly the same.

All of the Intercompany Operating Procedures contain cost allocation factors for maintenance trimming, storm trimming, hazardous tree removal, and construction trimming. These allocations are identical across all of the agreements, and were established through negotiation between Verizon and each of the electric companies. Thus, the defined allocation factors for maintenance trimming (75% electric/25% telephone), hazard tree removal (50% electric/50% telephone), and heavy storm trimming (50% electric/50% telephone) represent amounts the parties have historically honored as appropriate division of costs when sharing in maintenance trimming activities. These allocations were not disputed by any of the parties, nor did any of the utilities express a concern that this division of costs is outdated, inaccurate or otherwise inappropriate.

All of the electric companies employ arborists to assist in the development of appropriate methods, specifications, and standards employed in vegetation management programs and to make determinations about hazardous tree that jeopardize the facilities of both parties. For Verizon, decisions involving maintenance trimming and hazardous tree removal are the responsibility of its engineering managers. Verizon engineers use various criteria to make decisions about joint participation. All of the electric utilities described problems when attempting to coordinate their maintenance trimming and hazard tree removals with Verizon.

With respect to construction trimming, the electric companies believe that when Verizon plans its extensive fiber overlay projects, it is not making a good faith effort to coordinate trimming that might benefit the joint owner. The electric companies believe this is not consistent with the intent and spirit of the Joint Ownership Agreements, which is to minimize the overall costs of joint ownership to the mutual benefit of the owners and their customers.

The electric companies also expressed dissatisfaction with the inconsistency of Verizon trimming in its maintenance areas for other construction work, claiming that Verizon does not trim to appropriate specifications and that work is often delayed to correct trimming problems.

Table 7 summarizes electric company and Verizon data responses as well as data derived from them.

Table 7 Trimming (2001-2005)

	PSNH	National Grid	Unitil	Electric Total	Verizon
\$ Operational Trimming Yearly Avg.	\$6,335,005	\$749,536	\$716,044	\$7,800,585	\$215,107
Pole Miles Trimmed per Year	2,355	139	151	2,645	N/A
\$ Operational Trim per Pole Mile	\$2,690	\$5,392	\$4,742	\$2,949	N/A
Pole Miles	12,568	882	1,145	14,595	16,634 ¹⁰
Total Operational Trim Expense per Mile of Line Owned	\$504	\$850	\$625	\$558	\$13

¹⁰ Estimate by staff – see fn. 9.

10

Type of Professional Trimming Specialist	Arborists	Arborists	Arborists	Engineers & Work Inspectors
Trimming Philosophy	Preventative	Preventative	Preventative	Where needed