

PSNH

Reliability Enhancement Program

Docket DE 09-035

2011 Year End Report

PSNH

Reliability Enhancement Program

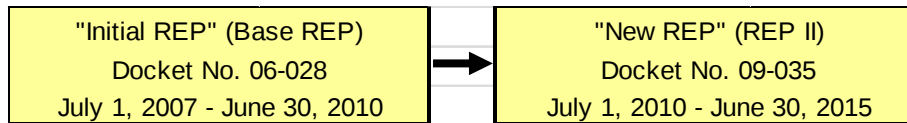
Docket DE 09-035

Executive Summary

Executive Summary
Reliability Enhancement Program
Docket DE 09-035

This report provides program-specific details for the first full calendar year of PSNH's enhanced Reliability Enhancement Program (REP II) ending December 31, 2011 as well as the Operation and Maintenance (O&M) expenditures formerly included in the Company's initial REP (Base REP). The initial REP was established as a 5-year effort under the settlement agreement approved by the Commission in Order No. 24,750 in Docket No. DE 06-028 and became effective July 1, 2007. The results of the reliability work under the initial REP were documented in the report submitted by PSNH on February 18, 2011. As part of the Settlement Agreement on Permanent Distribution Rates (the "Settlement Agreement") approved by the Commission in Order No. 25,123 issued in Docket No. DE 09-035, the settling parties agreed that PSNH should continue its existing REP expenditures from the initial REP and incorporate the revenue requirement for the O&M portion into base distribution rates. Additionally, the Settlement Agreement provided for an additional \$4 million per year of revenue for the duration of the Settlement to support enhanced O&M and capital spending under a so-called "REP II" initiative.

Reliability Enhancement Program (REP)



As noted above, this report provides results of the calendar year ending December 31, 2011 and includes all capital and O&M spending included under both the initial REP and REP II. Additionally, this report includes details on proposed capital spending now funded under REP II for calendar year 2012.

2009 RATE CASE	
Docket DE 09-035	
<u>Revenue Requirement Allocations</u>	
Initial REP O&M	\$8,200,000
REP II O&M Programs	2,500,000
Capital Financing	1,500,000
Total	\$12,200,000

The combined REP provides PSNH with \$12.2 million in annual (program year) distribution revenue requirements to stabilize reliability through enhanced distribution capital investment and operation and maintenance (O&M) expenditures.

Annual revenue was allocated between the components shown in the table to the left pursuant to agreement reached during settlement discussions for docket DE 09-035. The capital component was designed to provide for between \$12.8 and 14 million of additional capital investment annually. The

O&M component was determined by assessing various existing maintenance and repair activities as well as new activities. The base component was also O&M-related, but focused specifically on vegetation management and National Electrical Safety Code (NESC) inspections. See *PSNH Rate Case DE No. 09-035 REP Revenue Allocations* for first year detail breakdown by area and activity.

The table at the top of the next page shows actual expenditures for calendar year 2011 under the current REP. These general REP areas represent multiple tracked programs and activities.

On a total program basis, PSNH underspent its O&M budget by approximately \$1.9 million. Actual O&M results through December 31, 2011 show \$8.9 million spent, and 36,055 tasks completed. Completed tasks were approximately 9% less than planned. PSNH was behind schedule in 3rd quarter, 2011, and had planned to use the remainder of the 3rd and 4th quarters to meet the expectations set forth in the settlement agreement. Tropical Storm Irene (August) and the October snowstorm resulted in loss of productivity during the storms as well as during post-storm clean-up. The duration of the clean-up extended for weeks after each storm and meant that contract crews were unavailable to support our REP II efforts. See Section 1, *Year End 2011 Summary of PSNH Reliability Enhancement Program – O&M* for details on individual activity cost and unit count. See Section 7, *2012 O&M and Capital Summary Plan*, for details on individual activity cost and unit count to complete the 2012 program.

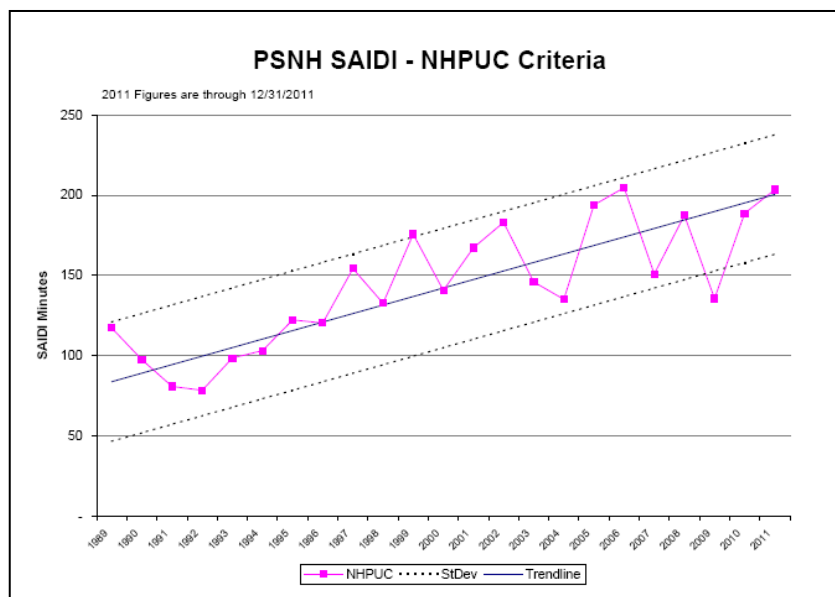
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<u>2011 EXPENDITURES</u>	
<u>REP AREA</u>	<u>12-mo Ending Dec 2011</u>
Base REP - Vegetation Management	4,059,823
Base REP - NESC Inspect/Repair	2,417,172
Base REP - O&M Activities	763,072
REP II O&M Programs	1,708,720
Total O&M	\$8,948,787
REP II Specific Capital	\$9,537,700
Capital due to Base REP	4,048,100
Specific Capital Projects	\$13,585,800
Capital Financing Required	\$1,630,296
(Annualized Carrying Charge)	
Total REP Revenue Req'ts.	\$10,579,083

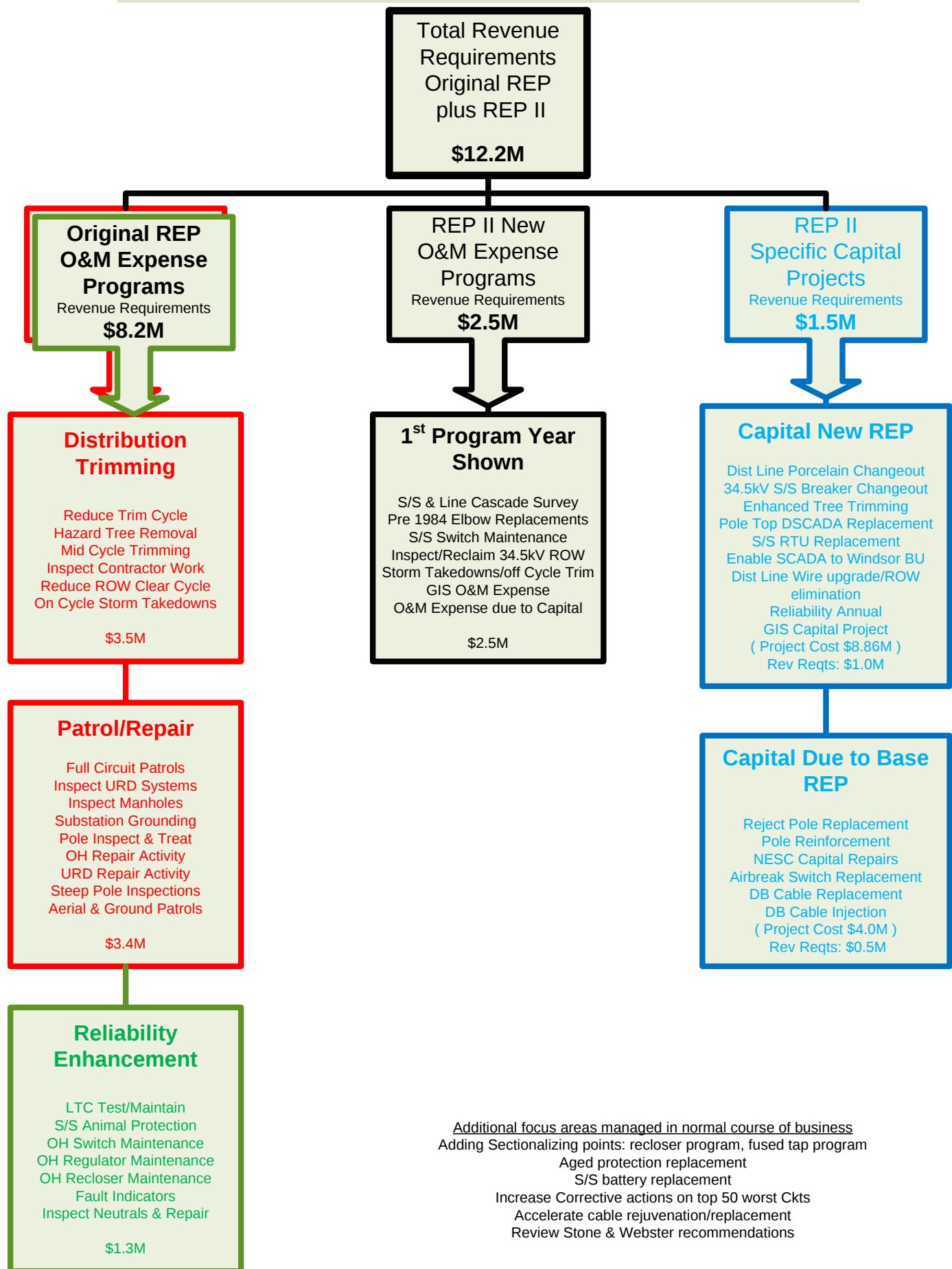
For capital expenditures, PSNH spent \$13.6 million on the stipulated 15 budget line items or projects. See Section 5, *Year End 2011 Summary of PSNH Reliability Enhancement Program – Capital* for details on budget item/project descriptions and expenditures by item or project. PSNH tracks all reliability capital projects in order to ensure the funding allocated to REP is over and above what normally would have been accomplished.

As noted above, the Settlement Agreement provides that the initial REP O&M activities discussed in this report are now included with those O&M and capital programs included under REP II. Funding for these Initial REP activities is based on a level amount of revenues annually amounting to \$8.2M.

Reliability performance as measured by SAIDI shows continued stabilization through year end 2011. During 2011, New Hampshire experienced difficult weather with numerous storm days, including the Tropical Storm Irene in August and the October snowstorm. Storm related impacts to the electric system affected PSNH's absolute SAIDI performance. We note, however, since the REP was implemented, the trend from 2006 onward has been markedly improved. We continue to see benefits from the REP activities and fully believe we are preventing problems from occurring and reducing repair effort and outage times by having the PSNH electric system work as designed. The REP activities are critical and important in concert with PSNH's continued efforts to maintain the system in the normal course of business. See *Section on NHPUC SAIDI Graphs*.



PSNH Reliability Enhancement Program (REP) Effective July 1, 2010
Rate Case DE 09-035 REP Revenue Allocations



NHPUC

RELIABILITY GRAPHS

NHPUC SAIDI Graphs Summary
Reliability Enhancement Program
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The following is a brief description of the SAIDI Graphs contained in this section and the related REP activities for them:

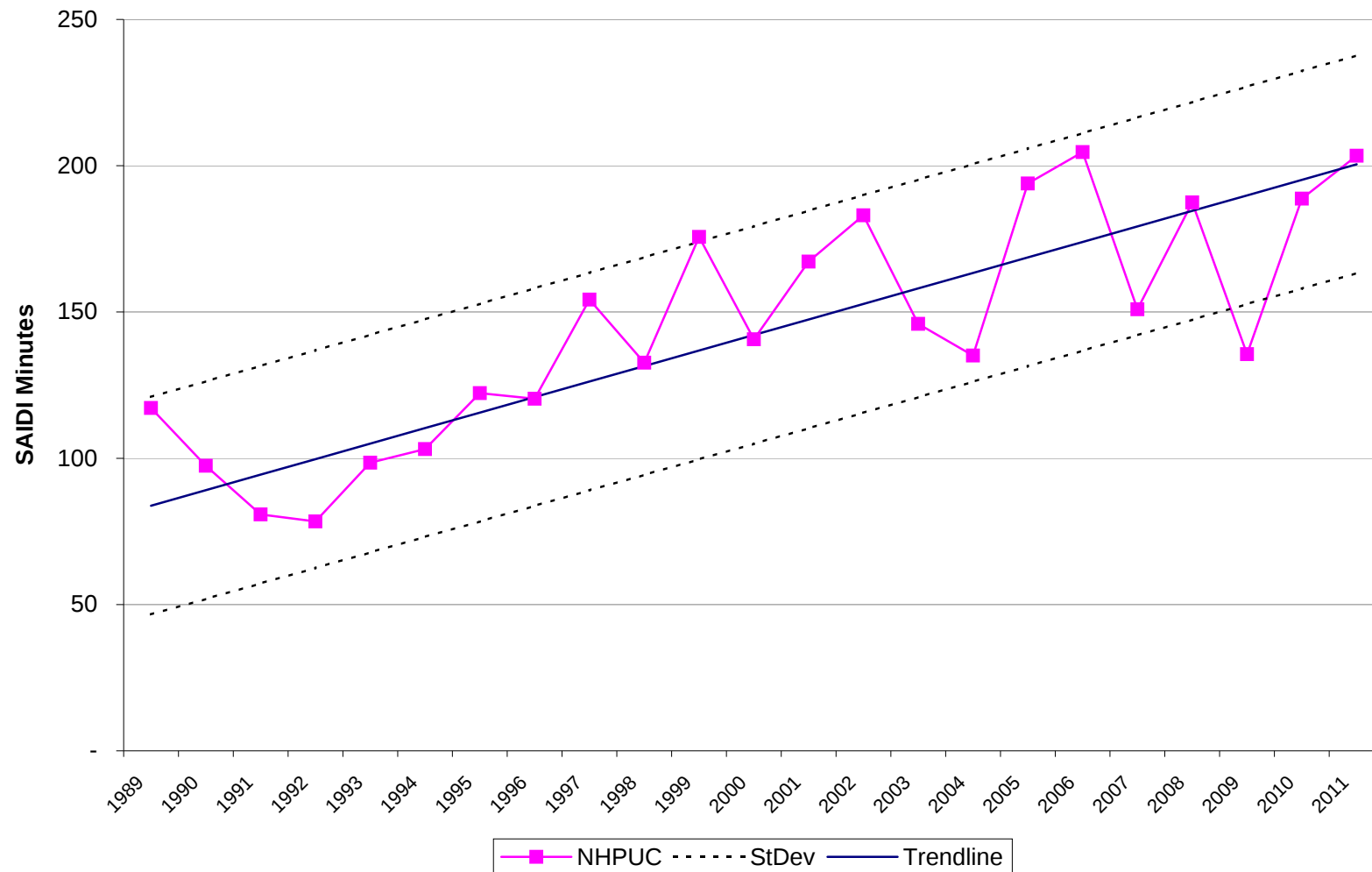
1. PSNH SAIDI – NHPUC Criteria. The company SAIDI went up in 2011 compared with 2010, but remains below 2006 performance. The trend since 2005 is generally declining and we are establishing a new improving trend. Trend lines shown are for 1989 through 2005.
2. Top 50 Hit List SAIDI Contribution from Year to Year. Each year PSNH reviews SAIDI by circuit and determines which have contributed the most minutes according to the NHPUC Criteria. Shown on this graphic are the total SAIDI minutes for the top 50 circuits in a year, the amount of SAIDI minutes for those circuits remaining on the top 50 list from the previous year, and the percentage of SAIDI these carry forward circuits represent compared to the Top 50 total. In 2011 we had a small increase in SAIDI contribution coming from the top 50, and a small increase in SAIDI from circuits remaining in the top 50 from 2010 to 2011.
 - a. *See section 6 Other summary for specific actions taken on each circuit*
3. PSNH SAIDI – NHPUC Criteria With and Without Storms. NHPUC SAIDI does not include emergency events which are booked to the storm reserve. These are catastrophic events and are shown on this chart over and above the NHPUC reported SAIDI. Off-scale impacts are shown for the December Ice Storm in 2008, the February wind storm in 2010, and the two major storms declared in 2011; Tropical Storm Irene and a major snowstorm occurred in August and October, respectively. A major storm is declared when there are 200 concurrent power outages affecting 10% of customers served or 300 concurrent power outages. PSNH also tracks minor storms when 100 or more primary power outages occur within a storm timeframe and not deemed a NHPUC major storm. PSNH experienced 10 minor storm events in 2011. This minor storm component subtracted from NHPUC reported SAIDI leaves a Weather normalized SAIDI. As shown, that component continues to be below levels present when REP was initiated in July, 2007.
4. PSNH Tree Related SAIDI. The largest cause group for SAIDI is trees and limbs either in the clearance area or outside of it. Tree related SAIDI and the NHPUC reported SAIDI trend very closely and are sensitive to weather. Weather adjusted SAIDI continues trending upward slightly with a slowing trend in recent years. There is a cumulative effect for vegetation management and we believe the effort from last half of 2007 through year end 2011 is showing results. Our efforts to establish the target 4.5 year trimming cycle for the distribution system will require an additional 2 years. REP activities relating to this are:
 - a. O&M expense Vegetation Management activities including Scheduled Maintenance trimming to shorten the maintenance cycle, Hazard tree removals, Mid cycle trimming
 - b. Capital trimming at Enhanced Tree Trimming specifications for establishing larger clearance both for existing lines and whenever new additions and upgrades are made to the system.
5. PSNH Equipment Related SAIDI. The second largest cause group for SAIDI is equipment failures in substations and on distribution lines. There is much less weather effect and the difference between them is small. A significant increase has occurred in this area in 2011 compared with 2010, but represents a 14% decrease from 2009. Performance in 2010 was unusually low. This component continues to be below levels present when REP was initiated in July, 2007. A variety of REP actions affect this and include:
 - a. Porcelain changouts
 - b. Switch maintenance and replacement programs
 - c. Recloser Maintenance, Cable testing and replacement

NHPUC SAIDI Graphs Summary
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6. PSNH SAIDI – NHPUC Criteria Substation Reliability. Power outages caused by actions or problems inside substations are typically large and widespread. The amount of SAIDI minutes relating to these events is generally declining and there is essentially no difference due to weather. There was a slight increase in SAIDI minutes in 2011, however we continue to track a very low SAIDI contribution in this area through 2011. This can be associated with REP activities such as:
 - a. 34.5 kV Substation Breaker replacement program
 - b. Animal Protection in Substations
 - c. Efforts made reducing the corrective maintenance backlog to zero.

PSNH SAIDI - NHPUC Criteria

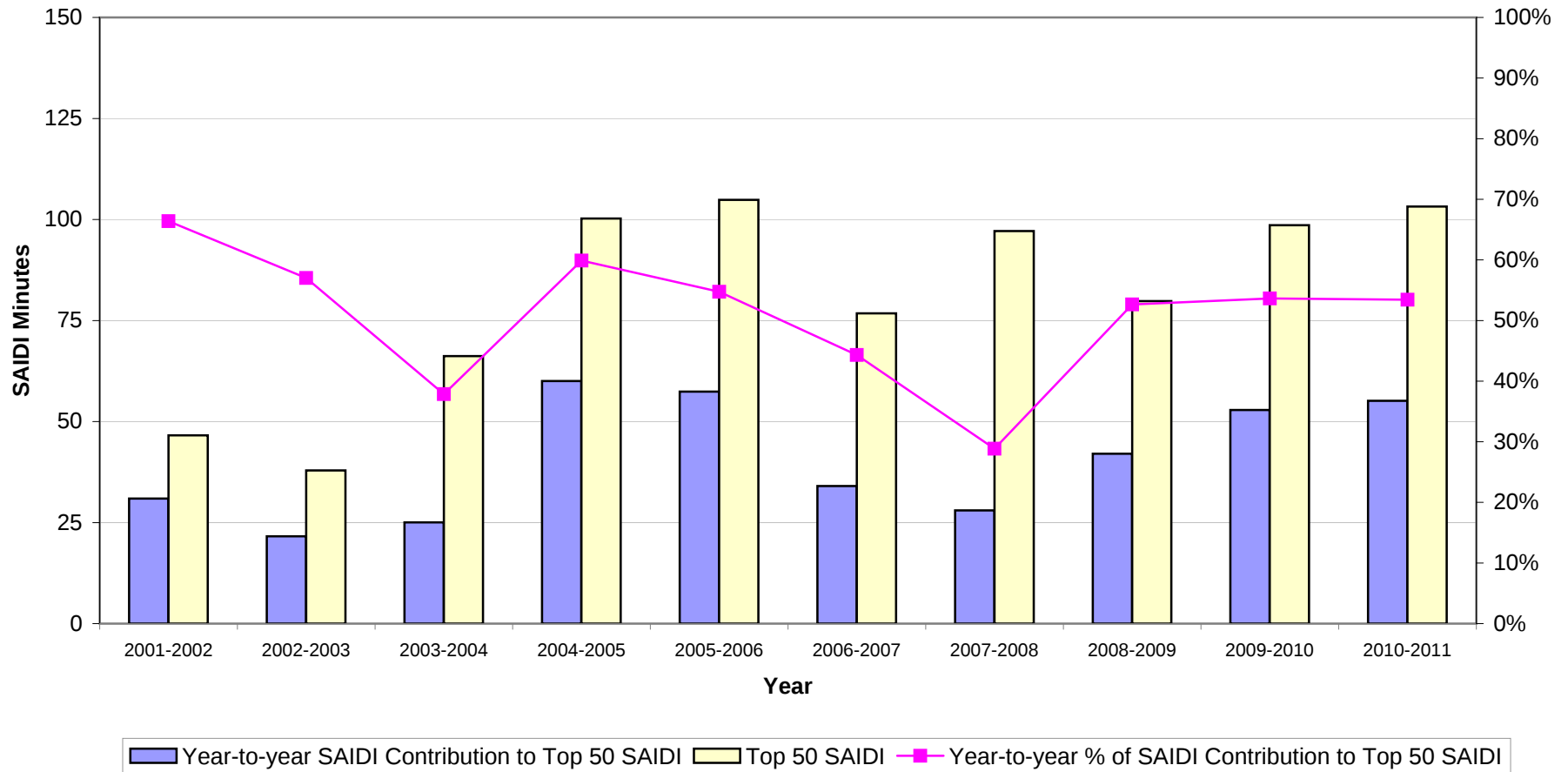
2011 Figures are through 12/31/2011



Top 50 Hit List SAIDI Contribution from year to year

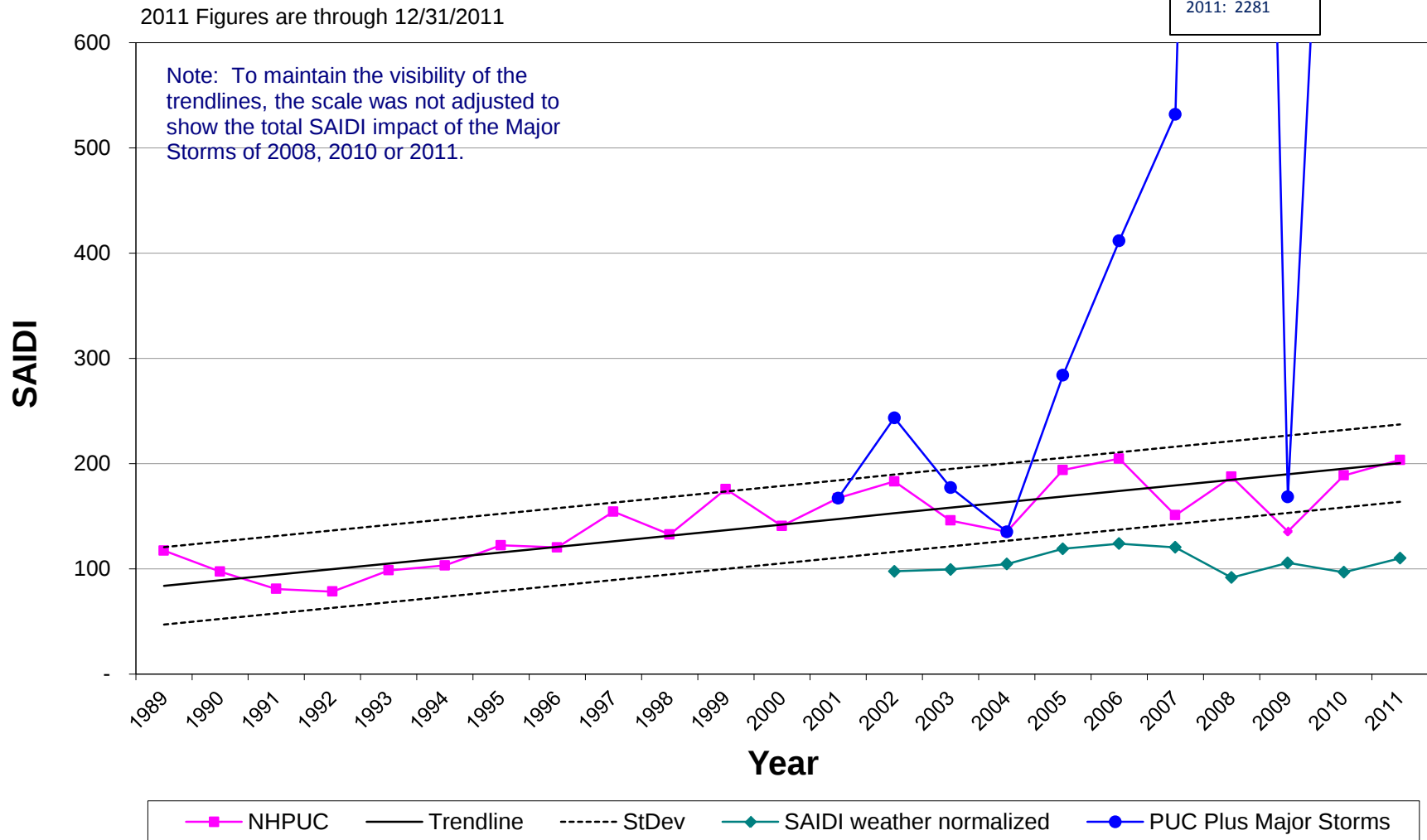
NHPUC Criteria

2011 Figures are through 12/31/2011



PSNH SAIDI - NHPUC Criteria

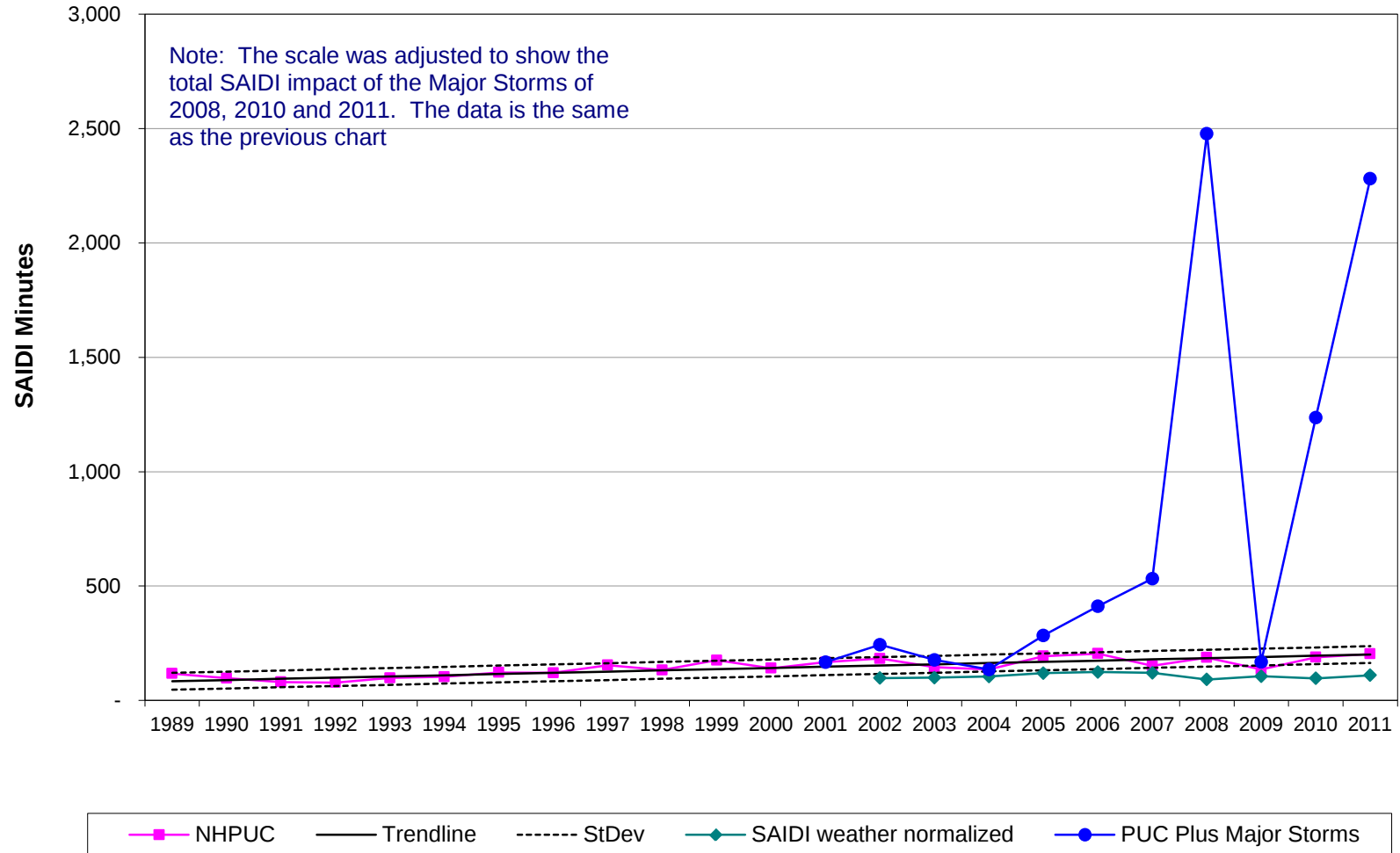
With and Without Storms



PSNH SAIDI - NHPUC Criteria

With and Without Storms

2011 Figures are through 12/31/2011

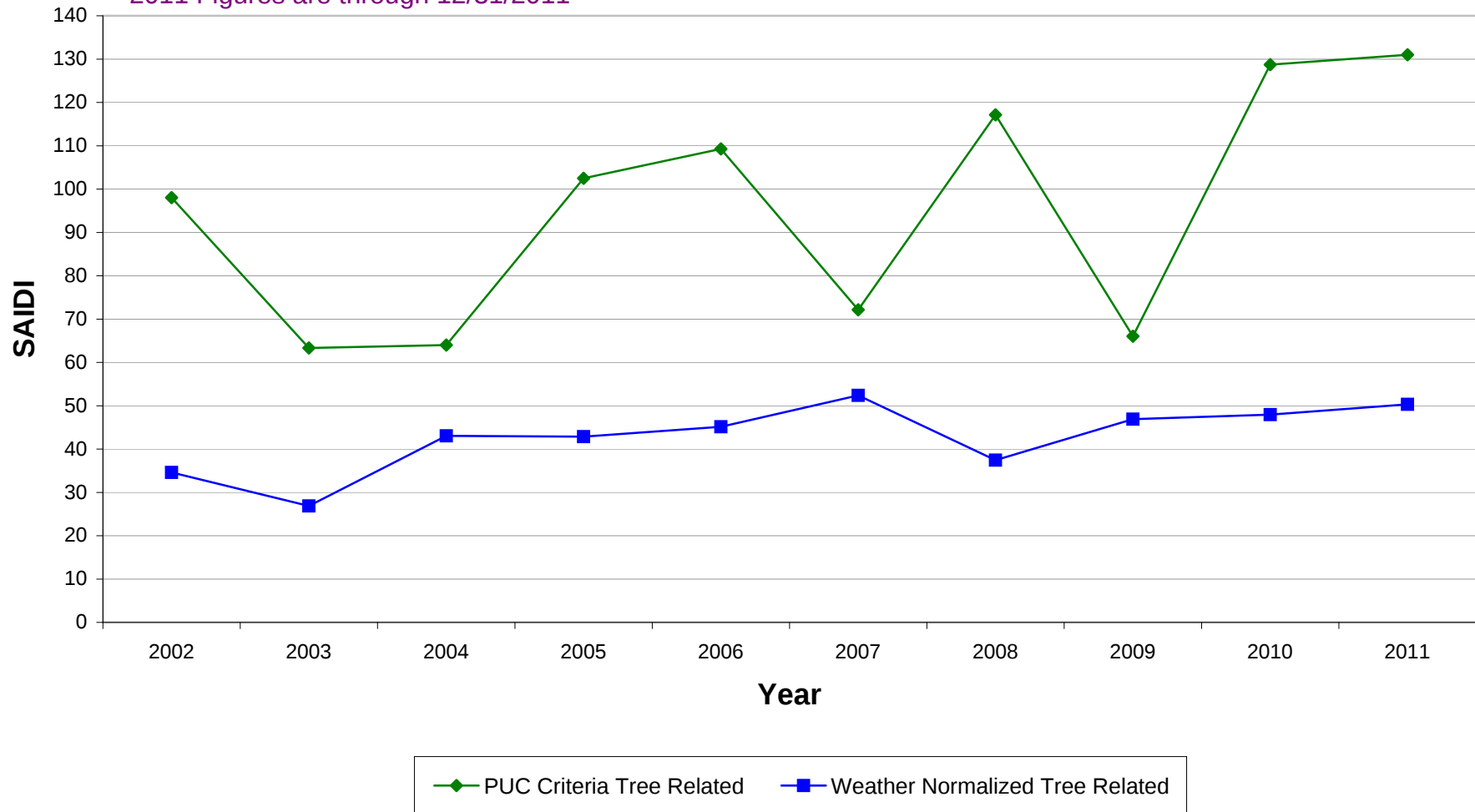


PSNH Tree Related SAIDI

NHPUC Criteria

(100% of Trees/Limbs, 50% of Ice/Sleet/Snow & Wind and 40% of Patrolled Nothing Found related troubles)

2011 Figures are through 12/31/2011

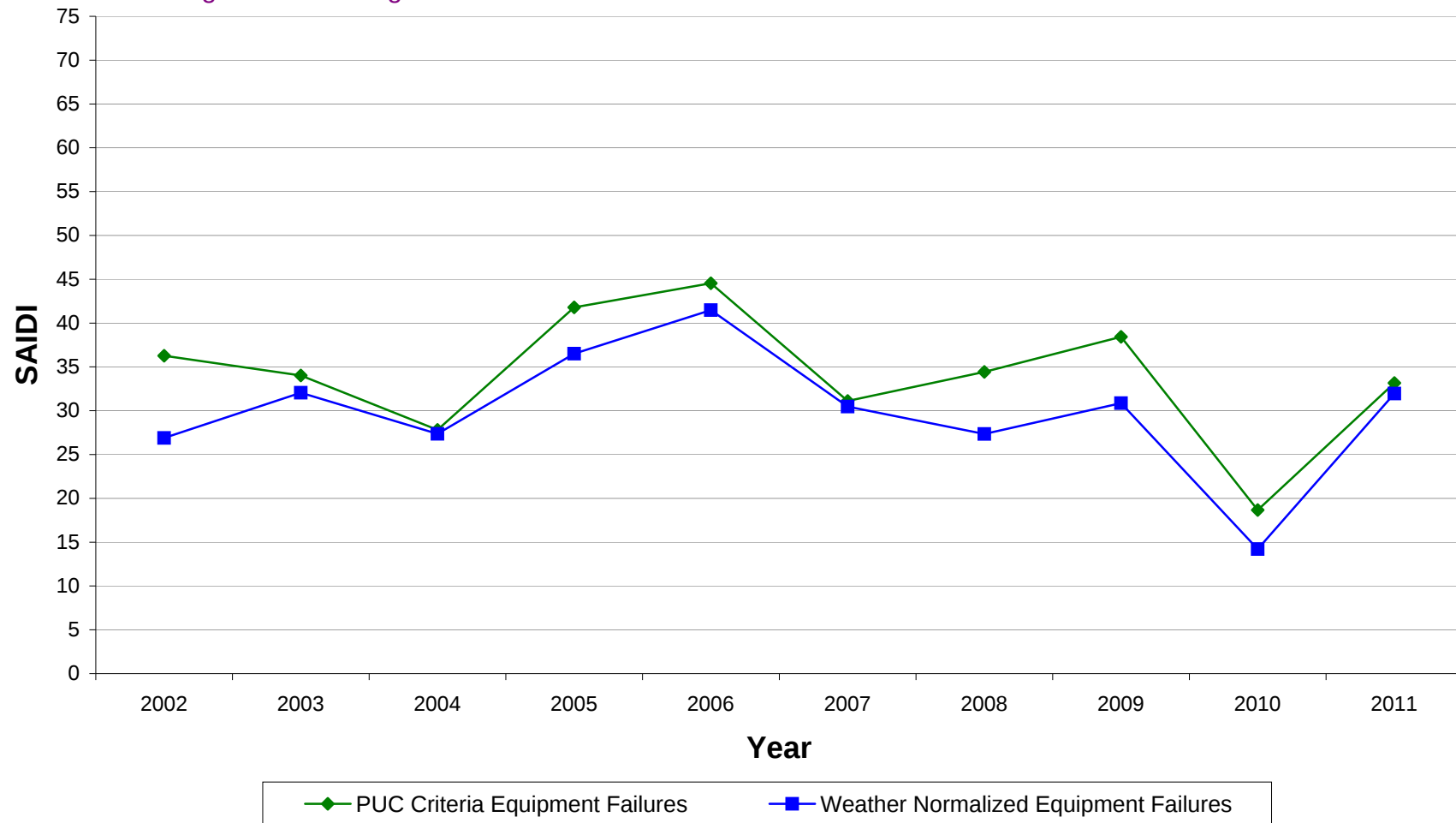


PSNH Equipment Related SAIDI

NHPUC Criteria

(100% of Equipment Failure, Improper Install, Loose Connection, Open Neutral and Overload related troubles)

2011 Figures are through 12/31/2011



PSNH SAIDI - NHPUC Criteria

Substation Reliability

2011 figures are through: 12/31/2011



PSNH 2011 YEAR END RELIABILITY ENHANCEMENT PROGRAM

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Section 1

2011 O&M Summary



Year End 2011 Summary of PSNH Reliability Enhancement Program – O&M

Public Service
of New Hampshire
The Northeast Utilities System

Docket No. DE 09-035

Jan 1 2011 - Dec 31 2011



TRIMRC - VEGETATION MANAGEMENT (O&M)

	Units	\$ Expended	Units Completed	Cost Per Unit
Reduce Scheduled Maintenance Trim Cycle	# Miles	\$2,172,194	419	\$5,184
Hazard Tree Removal	# Trees	\$1,412,157	4,477	\$315
Mid Cycle Trimming	# Miles	\$300,500	158	\$1,902
Inspect Contractor	# Miles	N/A ⁽¹⁾	2,447	N/A
Reduce Distribution Rights-of-Way Cycle	# Acres	\$174,972	403	\$434
Storm Damage Premium	N/A	N/A ⁽¹⁾	N/A ⁽¹⁾	N/A
Subtotal - Base REP		\$4,059,823	7,904	
Takedowns	# Trees	N/A ⁽¹⁾	N/A ⁽¹⁾	N/A
Cycle Impact	# Miles	N/A ⁽¹⁾	N/A ⁽¹⁾	N/A
Inspect/Reclaim ROW's	# Miles	\$622,982	29	\$21,482
ETT Maintenance Trimming	# Miles	\$317,320	78	\$4,068
S/S Perimeter Trimming	# Substations	\$73,251	40	\$1,831
Subtotal - REP II		\$1,013,553	147	
Total TRIMRC		\$5,073,376	8,051	

NESCRC - National Electrical Safety Code (O&M)

	Units	\$ Expended	Units Completed	Cost Per Unit
Full Circuit Patrol	# Miles	\$81,835	1,078	\$76
Inspect and Repair Underground Systems	# Maps	\$209,557	296	\$708
Inspect Manholes	# Manholes	N/A ⁽¹⁾	47	N/A
Substation Grounding	# Substations	\$18,978	4	\$4,745
Pole Inspection and Treatment	# Poles	\$557,750	24,209	\$23
Overhead Repair Activity	# Miles	\$1,539,562	1,424	\$1,081
Foot Patrol ROW	# Miles	\$9,490	14	\$678
Subtotal - Base REP		\$2,417,172	27,072	
Subtotal - REP II		\$0	0	
TOTAL NESCRC		\$2,417,172	27,072	

RELIM - RELIABILITY (O&M)

	Units	\$ Expended	Units Completed	Cost Per Unit
Substation Animal Protection	# Substations	\$105,420	20	\$5,271
Substation Corrective Backlog	# Maintenance Orders	N/A	N/A	N/A
Overhead Switch Maintenance	# Switches	\$96,891	50	\$1,938
Recloser Maintenance Backlog	# Reclosers	\$345,963	155	\$2,232
Fault Indicators	# Fault Ind.	\$88,615	572	\$155
Test & Repair Direct Buried Unjacketed Cable	# Runs	\$126,183	105	\$1,202
Subtotal - Base REP		\$763,072	902	
Cascade Entry	N/A	\$124,657	N/A	N/A
RTE Elbow Replacement	# Elbows	\$12,138	48	\$253
GIS O&M	N/A	\$21,125	N/A	N/A
O&M Portion of Capital	N/A	\$537,247	0	N/A
Subtotal - REP II		\$695,167	48	
TOTAL RELIOM		\$1,458,239	950	

TOTAL O&M ONGOING FROM BASE REP

\$7,240,067

35,878

NEW O&M FOR REP II

\$1,708,720

195

TOTAL O&M

\$8,948,787

36,073

(1) Data is imbedded in another category as specified in O&M Briefing Sections.

VEGETATION MANAGEMENT- O&M

REDUCE SCHEDULED MAINTENANCE TRIM CYCLE (BASE REP):

Program Description: Reduce the schedule maintenance trimming (SMT) cycle to a system average of less than 4.5 years.

Total Unit Population: PSNH is responsible for trimming approximately 11,000 miles of overhead distribution lines.

Maintenance Cycle: The current maintenance cycle ranges from 4 to 6 years for the 35 kV system, 5 to 7 years for the 15 kV system and 6 to 8 years for the 5 kV system.

Approximately 2,200 miles are trimmed each year resulting in the average trim cycle of 5 years. The Reliability Enhancement Program will reduce the trimming cycles for each voltage class, resulting in an average cycle of 4.5 years.

Reliability Benefit: Increasing the number of miles trimmed annually will reduce the number of growing seasons between maintenance trimming cycles. This will result in less tree growth toward the conductors between trimming operations. This will also result in a circuit being inspected for hazard trees more frequently, which will reduce the number of "outside the trim zone" outages.

O&M Cost:

\$ Expended	Miles Trimmed	Cost Per Mile
\$2,172,194	419	\$5,184

HAZARD TREE REMOVALS (BASE REP):

Program Description: Increase the number of hazard trees removed concurrent with the scheduled maintenance trimming (SMT) cycle.

Total Unit Population: PSNH is responsible for trimming approximately 11,000 miles of overhead distribution line. Hazard trees are field identified during the planning phase in scheduled maintenance trimming of a circuit. Additional hazard trees are identified during the trimming process. These include dead and dying trees, trees growing too close to phase conductors, and trees with defects that make them susceptible to causing a power outage.

Maintenance Cycle: The current maintenance program primarily follows the scheduled maintenance trimming cycle and removes approximately 3,500 hazard trees annually. The plan of the Reliability Enhancement Program targets the removal of additional hazard trees in each.

Reliability Benefit: Increasing the number of hazard trees removed will reduce the number of "outside the trim zone" outages.

O&M Cost:

\$ Expended	Trees Removed	Cost Per Tree
\$1,412,157	4,477	\$315

MID CYCLE TRIMMING (BASE REP):

Program Description: Perform mid-cycle trimming in areas where vegetation problems develop between maintenance cycles.

Total Unit Population: PSNH is responsible for trimming approximately 11,000 miles of overhead distribution line. Vegetation problems develop between maintenance cycles in areas where tree growth is excessive and where owners have not given permission to trim to full clearance specification.

Maintenance Cycle: The current maintenance program does not identify areas that could benefit from trimming between cycles. The Reliability Enhancement Program will target a limited mid-cycle program of approximately 50 miles in 2010 and 100 miles annually thereafter.

Reliability Benefit: Mid-cycle inspections will identify areas of vegetation problems resulting from owner refusals for full clearance trimming. More frequent trimming in these problem areas will reduce "inside the zone" outages. The mid-cycle trimming was more extensive than original estimated and thus the cost per mile was higher than budgeted. Fewer miles were completed because budgeted funds were expended.

O&M Cost:

\$ Expended	Miles Trimmed	Cost Per Mile
\$300,500	158	\$1,902

INSPECT ALL CONTRACTOR WORK (BASE REP):

Program Description: Inspect 100% scheduled maintenance trimming to ensure that the contractor is trimming to specification within the bounds of owner permissions.

Total Unit Population: PSNH is responsible for trimming approximately 11,000 miles of overhead distribution line. Inspections will be made of 100% of the miles trimmed under the scheduled maintenance trimming program.

Inspection Cycle: The current maintenance program trims approximately 2,200 miles annually with an additional 300 miles trimmed annually under the Reliability Enhancement Program. The quality assurance program currently targets inspections on approximately 80% of the circuit miles. The Reliability Enhancement Program will target inspecting 100% of the circuit miles trimmed annually.

Reliability Benefit: Performing contractor inspections on 100% of the circuit miles trimmed will ensure that trimming specifications are being met and that no area is skipped or trimmed below standards which could cause "inside the zone" outages. Additionally, it will ensure that danger trees identified for removal have been addressed.

Results: 100% of the trimmed miles (approximately 2,523 miles)

O&M Cost: No expenditures are reported here because the cost for these inspections is included within the maintenance trimming budget.

REDUCE DISTRIBUTION RIGHTS-OF-WAY (ROW) MOWING CYCLE (BASE REP):

Program Description: Reduce the average maintenance mowing cycle of 34.5 kV rights-of-way to an average of 4 years. Vegetative growth is close to conductors at the end of the current 5 year maintenance cycle. Reducing the mowing cycle to 4 years will also identify hazard trees and potential problems in wetlands, buffers and backyards on a shortened schedule. This includes mowing the deck of the rights-of-way, removal of hazard trees outside the rights-of-way and manual cutting for buffers, wetlands and other sensitive areas. This will also bring the maintenance schedule of 34.5 kV right-of-ways more in line with the transmission mowing schedule of 3 to 4 years.

Total Unit Population: PSNH is responsible for mowing approximately 7,930 acres of 34.5 kV right-of-ways. Approximately 6,641 acres are in "distribution only" rights-of-way and approximately 1,289 acres in rights-of-way shared with transmission lines.

Inspection Cycle: The current maintenance budget for mowing "distribution only" rights-of-way results in approximately 1,300 acres to be mowed every 5 years, although this varies from year to year based on the number of acres mowed in the shared rights-of way. The number of acres maintained in rights-of-way shared with transmission varies each year with an average of 230 acres per year. The Reliability Enhancement Program will reduce the mowing cycle for distribution rights-of-way to 4 years by increasing the annual number of acres to be mowed by about 330 acres annually.

Reliability Benefit: Increasing the number of rights-of-way acres maintained annually will reduce the number of growing seasons between maintenance mowing cycles. This will result in less tree growth toward the conductors and more frequent inspections for hazard trees.

O&M Cost:

\$ Expended	Acres Mowed	Cost Per Acre
\$174,972	403	\$434

STORM DAMAGE PREMIUM (BASE REP):

Program Description: The extensive damage of the December 2008 ice storm has added to the cost of planned maintenance trimming. This item will offset that cost and allow maintenance trimming to remain on cycle. This item serves to increase the Vegetation Management Budget by \$500,000 for 2011 to \$1,668,731.

Total Unit Population: There are approximately 11,000 miles of overhead lines along the street.

Inspection Cycle: Less than 4.5 years

Reliability Benefit: Reduce the potential for outages by maintaining the maintenance trimming cycle.

O&M Cost: Included in "Reduce Scheduled Maintenance Cycle" item.

TAKEDOWNS AND CYCLE IMPACT (REP II):

Program Description:	Additional tree takedowns are required due to the recent December Storm. While post storm cleanup has eliminated immediate problems, damage to vegetation will continue to cause decay and disease. This program will attempt to target the hardest hit areas during the storm and proactively remove trees and limbs outside of the normal trim zone. The Cycle Impact will be utilized to trim additional miles to reduce the trimming cycle with the goal of less than 4.5 years. This item serves to increase the Vegetation Management Budget by \$740,000 for 2011. For 2012 the budget is reduced to \$300,000.
Total Unit Population:	Approximately 11,000 miles of overhead line along the street.
Inspection Cycle:	4.5 years
Reliability Benefit:	Remove hazard trees and branches that resulted from the 2008 ice storm. Reduce the trimming cycle to less than 4.5 years.
O&M Cost:	Included in "Hazard Tree Removal" and "Cycle Impact" items.

INSPECT & RECLAIM RIGHTS-OF-WAY (REP II):

Program Description:	The Full Width ROW Clearing project requires infield and easement/ROW records assessment of PSNH's 650 miles of rights and line position within those rights. We anticipate that nearly 100 miles of our 650 miles of ROW would require added clearing to re-establish the edge. Some of this is expected to require in field survey to delineate the centerline amounting to approximately 50 miles or half of the expected clearing. Reclamation clearing is accomplished by acre. However, due to the unpredictable nature of the amount of area to be cleared, a more manageable unit of measure is miles of ROW.
Total Unit Population:	650 miles of line in ROW
Inspection Cycle:	One time inspection and assessment.
Reliability Benefit:	Clear ROW to full width of easement will reduce outages caused by trees and limbs from within the ROW.
O&M Cost:	

\$ Expended	Miles Completed	Cost Per Mile
\$622,982	29	\$21,482

ETT MAINTENANCE TRIMMING (REP II):

Program Description: The specification and bid price for scheduled maintenance trimming is insufficient to meet ETT specifications. The program is to perform maintenance trimming to ETT specifications on lines that ETT has been performed and are on cycle for maintenance trimming.

Total Unit Population: Total of 523 miles through 2011. Approximately 60 miles is being added per year.

Inspection Cycle: Trimming cycle is identical to the maintenance trimming cycle of less than 4.5 years.

Reliability Benefit: ETT provides additional clearance to conductors resulting in fewer outages.

O&M Cost:

\$ Expended	Miles Completed	Cost Per Mile
\$317,320	78	\$4,068

SUBSTATION PERIMETER TRIMMING (REP II):

Program Description: The Substation Perimeter Trimming Project requires that trees and limbs be cleared away from the perimeter of substations to ensure that conductors and bus work are not contacted.

Total Unit Population: Total number of substations is estimated at 180.

Inspection Cycle: Single year only. The 2012 contract for maintenance trimming of circuits will include all required substation perimeter trimming.

Reliability Benefit: Clearing of trees and branches away from the perimeter of substations will reduce outages.

O&M Cost:

\$ Expended	# Substations Completed	Cost Per S/S
\$73,251	40	\$1,831

NATIONAL ELECTRICAL SAFETY CODE (NESC) – O&M

FULL CIRCUIT PATROL (BASE REP):

Program Description:	Establish a full circuit patrol cycle for distribution lines to inspect for adherence to the National Electrical Safety Code including primary distribution lines, secondaries and services. Identify and log all issues requiring maintenance, additions or replacement including animal protection within a reasonable time period.
Total Unit Population:	PSNH is responsible for approximately 11,000 circuit miles of distribution lines.
Maintenance Cycle:	Initially, complete a full circuit patrol of the 11,000 miles in four years. Beyond the initial cycle, perform full circuit patrols on a cycle similar to vegetation management - scheduled maintenance trimming (SMT).
Reliability Benefit:	Proactive identification of potential problems related to safety, grounding, clearance, attachments, asset maintenance and replacement.
Results:	Most common repair items have been grounding guys, adding squirrel guards, and repairing clearance problems to communications equipment. Inspection of the entire 11,000 miles of distribution lines was completed in 2011. In 2012 10% of the system will be inspected to transition to a 10 year inspection cycle.
O&M Cost:	

\$ Expended	Miles Completed	Cost Per Mile
\$81,835	1,078	\$76

INSPECT & REPAIR UNDERGROUND SYSTEMS (BASE REP):

Program Description:	Establish an inspection cycle for underground systems to identify any issues and to install fault indicators – refer to next section on “Other Reliability – O&M – Install Fault Indicators”.
Total Unit Population:	PSNH is responsible for approximately 2,142 underground development system maps in addition to underground facilities providing service from the company's overhead system.
Maintenance Cycle:	Initially, a complete cycle of the underground system maps will be completed in 5 years. Beyond the initial cycle, perform inspections on a five year cycle as specified in the NU Maintenance Manual (NUMM).
Results:	Mostly minor repair items, corrected at the time of inspection. Some of the other items included ornamental shrubs planted in front of the doors, minor rusting of the cabinets, and updates needed to the URD maps. PSNH uses its own crews to perform these inspections. Due to crews working on other types of work, the planned quantity of inspections was not attained.
Reliability Benefit:	Proactive identification of potential problems related to transformer assets.
O&M Cost:	

\$ Expended	Maps Completed	Cost Per Map
\$209,557	296	\$708

INSPECT MANHOLES (BASE REP):

Program Description: Establish a cycle program to inspect manholes. A rating is given to each manhole to indicate the structural condition. A program has been established to replace the structurally deficient manholes.

Total Unit Population: PSNH has approximately 634 manholes.

Maintenance Cycle: Inspect on a cycle not to exceed five years per NU Maintenance Manual, except those requiring inspection more frequently.

Reliability Benefit: National Electrical Safety Code (NESC) requires facilities to be inspected on a periodic basis. Expected reliability benefits are proactively correcting structural problems and repairing cable and switch equipment prior to failure.

Results: 417 manholes had been inspected since July, 2007 and three were re-inspected. 51 were inspected in 2011. Approximately 217 remain to be inspected which are planned to be done in 2012.

O&M Cost:

\$ Expended	Manholes Inspected	Cost Per Manhole
N/A (1)	47	N/A

Note 1: Cost is included in Underground System Inspection cost.

SUBSTATION GROUNDING (BASE REP):

Program Description: Test substation ground grids up to two nodes distant from infrastructure capacity additions. Populate a computer software program (WinIGS) with the model of each PSNH substation ground grid. These models will be utilized to test the adequacy of each substation's grid.

Total Unit Population: Approximately 195 locations.

Maintenance Cycle: Once the population of all substations is in the computer program is complete, the update of computer models for new substation additions or major upgrades shall be included in the project scope.

Method: The process includes visiting and testing yards, using WinIGS software for geometric ground grid modeling, network analysis grid modeling and developing conceptual remedial grid improvements.

Reliability Benefit: This will ensure personnel safety as identified in the rate case. It may benefit reliability if insufficient grounding is found and corrected. Insufficient grounding may effect the proper operation of the system.

Results: Approximately 75% of the substation yard ground grids were found to exceed maximum allowable touch potential. 12% of the substation yards analyzed required no improvements, 37% required minor upgrades, and 51% required ground grid upgrades. Upgrading substation grounding as required will be performed as part of non-REP work prioritized based upon the findings. Analysis of the remaining four were completed in 2011.

O&M Cost:

\$ Expended	Substations Analyzed	Cost Per Substation
\$18,978	4	\$4,745

POLE INSPECT AND TREAT (BASE REP):

Program Description: Establish a long-term preventive maintenance cycle for roadside distribution poles to inspect, treat, reinforce or replace decayed or damaged poles to ensure reliable and safe use of this asset.

Total Unit Population: PSNH is responsible for 240,000 poles to inspect and treat. PSNH performs pole inspect and treatment in PSNH set areas only.

Maintenance Cycle: 10 years at 24,000 poles annually to inspect and treat (240,000 divided by 10).

Reliability Benefit: Reliable performance and safety of poles in high winds, heavy wet snow, pole accidents or other events that cause undue stress in addition to normal service of this asset.

Results: Inspection has determined that approximately 2% of the poles require either reinforcement or replacement.

O&M Cost:

\$ Expended	# Poles Inspected	Cost Per Pole
\$557,750	24,209	\$23

OVERHEAD REPAIR ACTIVITY (BASE REP):

Program Description: Complete O&M maintenance orders generated from National Electrical Safety Code (NESC) inspection including work associated with animal guards.

Total Unit Population: Dependent on program inspection results.

Maintenance Cycle: Complete maintenance orders within a reasonable period of time from initial identification.

Reliability Benefit: Proactive identification of potential problems related to safety, grounding, clearance, attachments, asset maintenance and replacement.

Results: Approximately 58% of the O&M repair orders have been completed.

O&M Cost:

\$ Expended	# Miles Completed	Cost Per Mile
\$1,539,562	1424	\$1,081

FOOT PATROL RIGHT-OF-WAY (BASE REP):

Program Description: Inspect from the ground the 841 miles of overhead line in ROW. Identify for correction all NESC code violations and reliability issues.

Total Unit Population: 841 miles

Maintenance Cycle: Based upon the results of the foot patrol, future inspections may be performed by helicopter.

Reliability Benefit: Identify for correction items that may cause an outage or an NESC violation.

Results: The annual aerial patrol of lines in ROW was completed. Foot patrol of lines in ROW was performed in conjunction with the field work associated with Inspect and Reclaim Rights of Way. The remaining 827 miles are expected to be performed in 2012.

O&M Cost:

\$ Expended	Miles Patrolled	Cost Per Mile
\$9,490	14	\$678

OTHER RELIABILITY – O&M

SUBSTATION ANIMAL PROTECTION (BASE REP):

Program Description:	Install animal protection systems in distribution substations, preventing intrusions that cause a variety of problems and faults, which can result in power outages, reduced equipment life, or severely damaged equipment.
Total Unit Population:	181 substations to complete.
Maintenance Cycle:	Based on major pieces of equipment in a substation yard and the associated maintenance frequency. 10 years for substations with transformers. 12 years for switching only substations with circuit breakers.
Reliability Benefit:	Reliable performance of substations due to the blockage of wildlife entry into high voltage areas. This could equate to a 3 minute reduction in the System Average Interruption Duration Index (SAIDI) based on historical experience.
Results:	Approximately, 91% of the substations were retrofitted with animal protection equipment under the Original REP. The remaining 20 substations were identified to be done in 2011.

O&M Cost:

\$ Expended	Substations Completed	Cost Per Substation
\$105,420	20	5,271

OVERHEAD LINE SWITCH MAINTENANCE (BASE REP):

Program Description:	Establish program to maintain and exercise overhead switches to ensure reliable operation when needed. Bypass switching will be installed as needed to facilitate this program going forward.
Total Unit Population:	PSNH has approximately 547 switches to be included in this program.
Maintenance Cycle:	NUMM specifies a six year maintenance cycle.
Reliability Benefit:	Proactive identification of potential problems related to switching. Maintenance will minimize failure of the switch to operate when called on.
Results:	546 switches were maintained prior to 12/31/10. 50 switches were maintained in 2011; approximately 99 switches will be maintained per year for the next five years to transition to the six year cycle.

O&M Cost:

\$ Expended	Switches Maintained	Cost Per Switch
\$96,891	50	\$1,938

OVERHEAD RECLOSER MAINTENANCE (BASE REP):

Program Description: Reclosers are scheduled to be maintained on a time based frequency of 6, 8, or 12 years or an operation based trigger relating to number of fault operations. A backlog of recloser maintenance has grown and is in need of addressing to ensure reliable system operation.

Total Unit Population: PSNH has 1701 reclosers installed.

Maintenance Cycle: NUMM specifies 12 years for vacuum and 6 years for oil type reclosers.

Reliability Benefit: Improved reliability due to improved operational performance of equipment.

Results: PSNH is now back on prescribed maintenance cycle.

O&M Cost:

\$ Expended	Reclosers Maintained	Cost Per Recloser
\$345,963	155	\$2,232

INSTALL FAULT INDICATORS (BASE REP):

Program Description: Install fault indicators on equipment and at locations which will facilitate the locations of faults on the distribution system. On the underground system, they will be installed at transformers and sector cabinets on outgoing primary cables. Refer to previous section on "NESC – O&M – Inspect & Repair Underground Systems." On the overhead system, locations will be determined by the Circuit Owners during trouble report, top 50 worst circuits, three or more outages, and 200 or more customer out analysis installation will reduce the outage duration.

Total Unit Population: Underground - 1:1 ratio with single phase padmount transformers, overhead to be determined.

Maintenance Cycle: Battery life is in excess of 20 years. Fault indicators will be replaced before the end of its useful life. Underground replacement will be performed during underground inspections, within an appropriate timeframe. Overhead fault indicator locations will be entered into CASCADE maintenance data base with an appropriate trigger for replacement.

Reliability Benefit: Expedited recognition of faults locations in the underground and overhead systems.

Results: Equipped PSNH underground system with fault indicators. Fault indicators are installed in conjunction with the underground systems inspection item. Because fewer underground systems were inspected than planned, fewer fault indicators were required.

O&M Cost:

\$ Expended	Fault Indicators Installed	Cost Per F.I. Installed
\$88,615	572	\$155

TEST & REPAIR DIRECT BURIED UNJACKETED CABLE - CONCENTRIC NEUTRALS (BASE REP):

Program Description:	Testing of direct buried unjacketed cable concentric neutral to determine if there is a sufficient neutral path. Determine if the underground system cable is a candidate for cable rejuvenation.
Total Unit Population:	PSNH has approximately 2,000,000 feet or 5,764 runs of direct buried cable. Not all direct buried cable is a candidate for rejuvenation. Cable which is not a candidate for rejuvenation will not be tested.
Maintenance Cycle:	Once.
Reliability Benefit:	Replacement or rejuvenation of direct buried cable will save outages to customers by preventing faults on the cable.
Results:	The failure rate (no neutral remaining) was less in 2011 than previous years, most probably as a result of testing in newer developments.

O&M Cost:

\$ Expended	# Runs Completed	Cost Per Run
\$126,183	105	\$1202

CASCADE DATABASE FIELD SURVEY AND ENTRY (REP II):

Program Description:	The CASCADE Database Field Survey requires infield survey of key equipment in substations and on distribution lines. The information about these components, manufacturer, size, rating, model, date of manufacture, location, and other items will be recorded in the CASCADE Database which is used to plan and execute maintenance and perform analysis for vintage and product problem mitigation. At the same time, these key pieces of equipment will be compared to the operating drawings used for switching and tagging, and property records for asset accuracy. It is anticipated that many of these components will require qualified electrical workers to disconnect or work within energized areas to obtain this information. Database entry and updates, map and drawing updates and property record updates will also be required.
Reliability Benefit:	Provide accurate records to ensure proper execution of the Northeast Utilities Maintenance Manual (NUMM). Provide a firm basis for the operating characteristics of key components in the electric system that will be used by a GIS or other network models. Capture basic GPS coordinate information.
Results:	Two vendors were utilized to update Cascade and perform field surveys.
O&M Cost:	\$124,657

RTE ELBOW REPLACEMENT (REP II):

Program Description: The program to replace pre-1987 RTE Elbow Terminators was terminated in 2011. Capital programs to replace or inject direct buried cables accomplish replacement of pre-1987 RTE Elbows more economically.

Total Unit Population: 1,975

Results: It was found that a significant number of pre-1987 elbows are replaced when direct buried cables are replaced or injected.

Reliability Benefit: Replacement of the elbows, feed through devices along with replacement or injection of direct buried cables provides significant reliability improvement to customers.

O&M Cost:

\$ Expended	# Elbows Replaced	Cost Per Elbow
\$12,138	48	\$253

GEOSPACIAL INFORMATION SYSTEM (GIS) O&M PORTION OF CAPITAL (REP II):

Program Description: This item represents the O&M portion (allocation) from Capital work related to the GIS project at PSNH.

Results: Significant effort and time has been dedicated to selecting the appropriate vendor and coordinating the overall installation within the NU organization. The O&M component of GIS in 2011 was primarily training.

Two reports were provided to the PUC in 2011 regarding progress on this effort:
6/24/2011 – Report to the Public Utilities Commission Detailing PSNH's Distribution Geographic Information System High Level Design and Plan
12/29/2011 – Semi-Annual Report to the Public Utilities Commission Detailing PSNH's Distribution Geographic Information System

O&M Cost: \$21,125

O&M PORTION OF CAPITAL (REP II):

Program Description: This represents the O&M portion (allocation) from Capital work related to the Reliability Enhancement Program.

Results: The O&M portion of REPII capital projects averaged 4.23% in 2011.

O&M Cost: \$537,247

Section 2

2011 O&M VEGM Programs



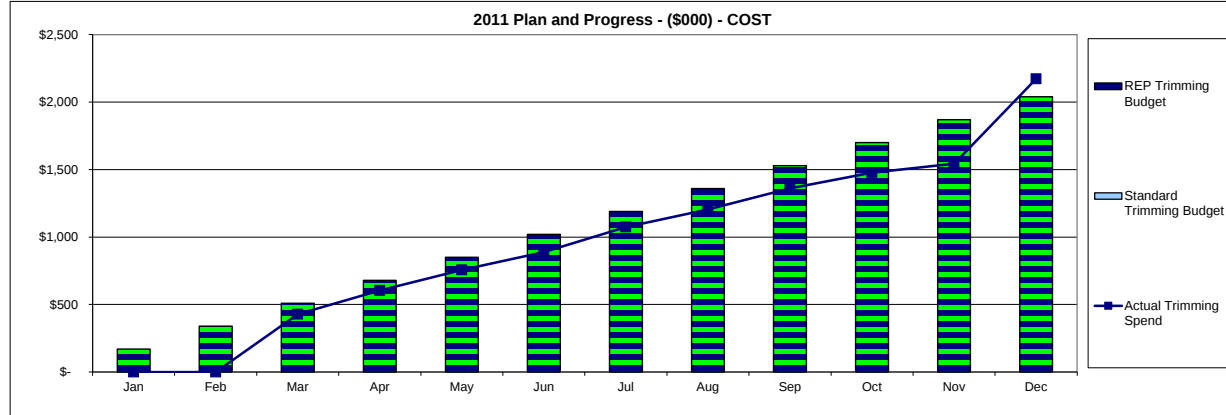
RELIABILITY ENHANCEMENT PROGRAM - VEGETATION MANAGEMENT



2011 PLAN AND PROGRESS

<u>PROGRAMS:</u>	<u>PAGE</u>
REDUCE TRIMMING CYCLE -----	1
HAZARD TREE REMOVAL -----	2
MID CYCLE TRIMMING -----	3
INSPECT CONTRACTOR -----	4
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STORM DAMAGE PREMIUM -----	6
TAKEDOWNS & CYCLE IMPACT -----	7
INSPECT/RECLAIM RIGHTS-OF-WAY -----	8
ETT MAINTENANCE TRIMMING -----	9
SUBSTATION PERIMETER TRIMMING -----	10

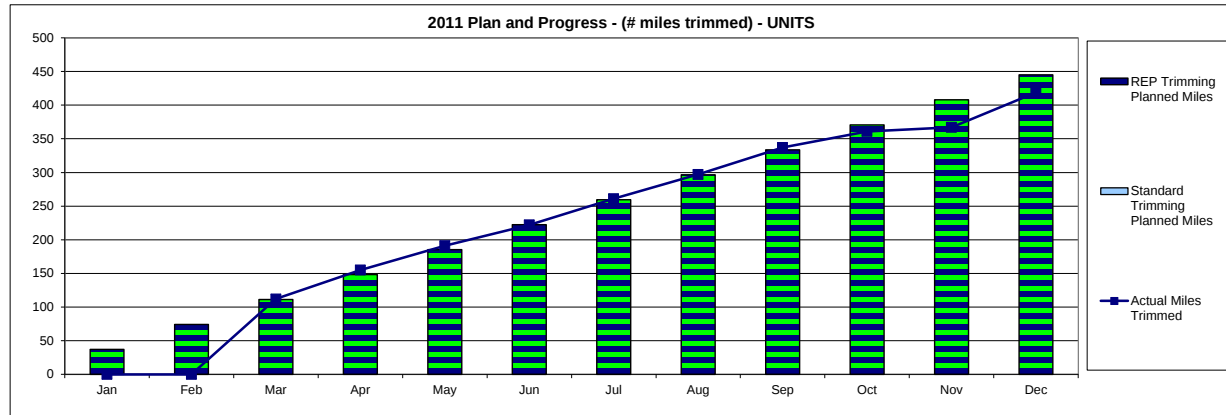
TRIMRC - RELIABILITY ENHANCEMENT PROGRAM - REDUCE TRIMMING CYCLE



	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
STANDARD TRIMMING												
Scheduled Maintenance Trimming (SMT) Plan \$000 Monthly	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Scheduled Maintenance Trimming (SMT) Plan \$000 YTD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Scheduled Maintenance Trimming (SMT) Actual \$000 Monthly	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Scheduled Maintenance Trimming (SMT) Actual \$000 YTD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Scheduled Maintenance Trimming (SMT) Variance \$000 YTD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
REP CYCLE IMPACT												
REP-Cycle Impact Plan \$000 Monthly	\$ 170	\$ 170	\$ 170	\$ 170	\$ 170	\$ 170	\$ 170	\$ 170	\$ 170	\$ 170	\$ 170	\$ 170
REP-Cycle Impact Plan \$000 YTD	\$ 170	\$ 340	\$ 510	\$ 680	\$ 850	\$ 1,019	\$ 1,189	\$ 1,359	\$ 1,529	\$ 1,699	\$ 1,869	\$ 2,039
REP-Cycle Impact Actual \$000 Monthly	\$ -	\$ -	\$ 428	\$ 176	\$ 151	\$ 133	\$ 186	\$ 129	\$ 157	\$ 117	\$ 66	\$ 629
REP-Cycle Impact Actual \$000 YTD	\$ -	\$ -	\$ 428	\$ 605	\$ 756	\$ 889	\$ 1,075	\$ 1,203	\$ 1,360	\$ 1,477	\$ 1,543	\$ 2,172
REP-Cycle Impact Variance \$000 YTD	\$ (170)	\$ (340)	\$ (81)	\$ (75)	\$ (94)	\$ (130)	\$ (115)	\$ (156)	\$ (169)	\$ (222)	\$ (326)	\$ 133
TOTAL												
Total Trim Cycle Plan \$000 YTD	\$ 170	\$ 340	\$ 510	\$ 680	\$ 850	\$ 1,019	\$ 1,189	\$ 1,359	\$ 1,529	\$ 1,699	\$ 1,869	\$ 2,039
Total Trim Cycle Actual \$000 YTD	\$ -	\$ -	\$ 428	\$ 605	\$ 756	\$ 889	\$ 1,075	\$ 1,203	\$ 1,360	\$ 1,477	\$ 1,543	\$ 2,172
Total Trim Cycle Variance \$000 YTD	\$ (170)	\$ (340)	\$ (81)	\$ (75)	\$ (94)	\$ (130)	\$ (115)	\$ (156)	\$ (169)	\$ (222)	\$ (326)	\$ 133

See Section 1 for Description and Comments

TRIMRC - RELIABILITY ENHANCEMENT PROGRAM - REDUCE TRIMMING CYCLE

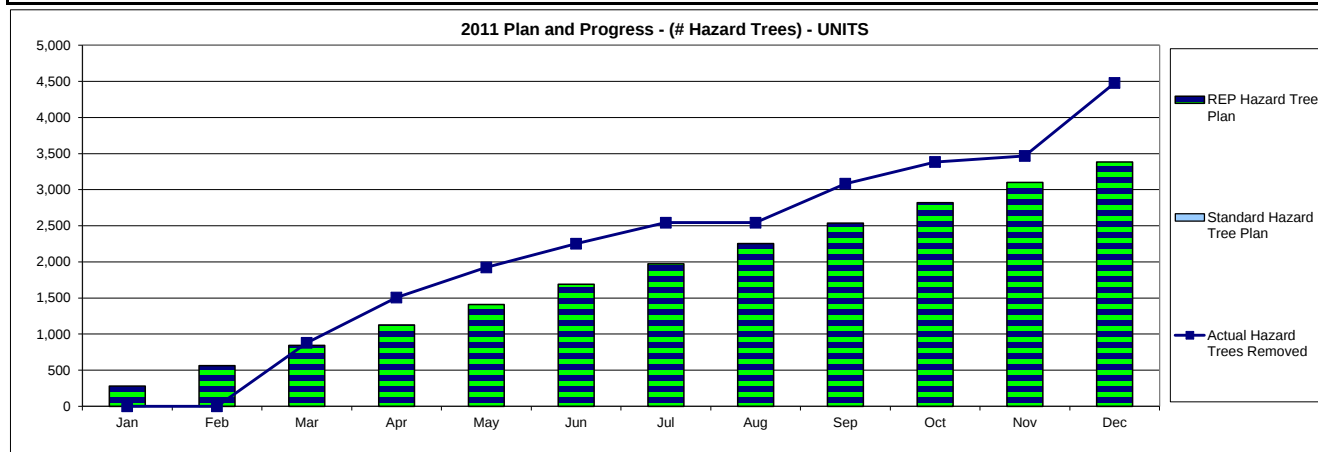


	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
STANDARD TRIMMING												
Scheduled Maintenance Trimming (SMT) Planned Miles Monthly	-	-	-	-	-	-	-	-	-	-	-	-
Scheduled Maintenance Trimming (SMT) Planned Miles YTD	-	-	-	-	-	-	-	-	-	-	-	-
Scheduled Maintenance Trimming (SMT) Actual Miles Monthly	-	-	-	-	-	-	-	-	-	-	-	-
Scheduled Maintenance Trimming (SMT) Actual Miles YTD	-	-	-	-	-	-	-	-	-	-	-	-
Scheduled Maintenance Trimming (SMT) Variance Miles YTD	-	-	-	-	-	-	-	-	-	-	-	-
REP CYCLE IMPACT												
REP-Cycle Impact Planned Miles Monthly	37	37	37	37	37	37	37	37	37	37	37	37
REP-Cycle Impact Planned Miles YTD	37	74	111	148	185	223	260	297	334	371	408	445
REP-Cycle Impact Actual Miles Monthly	-	-	112	43	36	31	39	36	40	24	6	52
REP-Cycle Impact Actual Miles YTD	-	-	112	155	191	222	261	297	337	361	367	419
REP-Cycle Impact Variance Miles YTD	(37)	(74)	1	7	6	(1)	1	0	3	(10)	(41)	(26)
TOTAL												
Total Trim Cycle Plan Miles YTD	37	74	111	148	185	223	260	297	334	371	408	445
Total Trim Cycle Actual Miles YTD	-	-	112	155	191	222	261	297	337	361	367	419
Total Trim Cycle Variance Miles YTD	(37)	(74)	1	7	6	(1)	261	297	337	361	367	419



	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<u>STANDARD HAZARD TREES</u>												
Hazard Tree Removal Plan \$000 Monthly	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Hazard Tree Removal Plan \$000 YTD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Hazard Tree Removal Actual \$000 Monthly	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Hazard Tree Removal Actual \$000 YTD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Hazard Tree Removal Variance \$000 YTD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<u>REP HAZARD TREES</u>												
REP-Takedowns Plan \$000 Monthly	\$ 123	\$ 123	\$ 123	\$ 123	\$ 123	\$ 123	\$ 123	\$ 123	\$ 123	\$ 123	\$ 123	\$ 123
REP-Takedowns Plan \$000 YTD	\$ 123	\$ 246	\$ 368	\$ 491	\$ 614	\$ 737	\$ 859	\$ 982	\$ 1,105	\$ 1,228	\$ 1,351	\$ 1,473
REP-Takedowns Actual \$000 Monthly	\$ -	\$ -	\$ 221	\$ 102	\$ 72	\$ 122	\$ 67	\$ 90	\$ 109	\$ 79	\$ 91	\$ 459
REP-Takedowns Actual \$000 YTD	\$ -	\$ -	\$ 221	\$ 323	\$ 395	\$ 517	\$ 584	\$ 674	\$ 783	\$ 862	\$ 953	\$ 1,412
REP-Takedowns Variance \$000 YTD	\$ (123)	\$ (246)	\$ (147)	\$ (168)	\$ (219)	\$ (220)	\$ (275)	\$ (308)	\$ (322)	\$ (366)	\$ (397)	\$ (61)
<u>TOTAL</u>												
Total Hazard Tree Removal Plan \$000 YTD	\$ 123	\$ 246	\$ 368	\$ 491	\$ 614	\$ 737	\$ 859	\$ 982	\$ 1,105	\$ 1,228	\$ 1,351	\$ 1,473
Total Hazard Tree Removal Actual \$000 YTD	\$ -	\$ -	\$ 221	\$ 323	\$ 395	\$ 517	\$ 584	\$ 674	\$ 783	\$ 862	\$ 953	\$ 1,412
Total Hazard Tree Removal Variance \$000 YTD	\$ (123)	\$ (246)	\$ (147)	\$ (168)	\$ (219)	\$ (220)	\$ (275)	\$ (308)	\$ (322)	\$ (366)	\$ (397)	\$ (61)

See Section 1 for Description and Comments

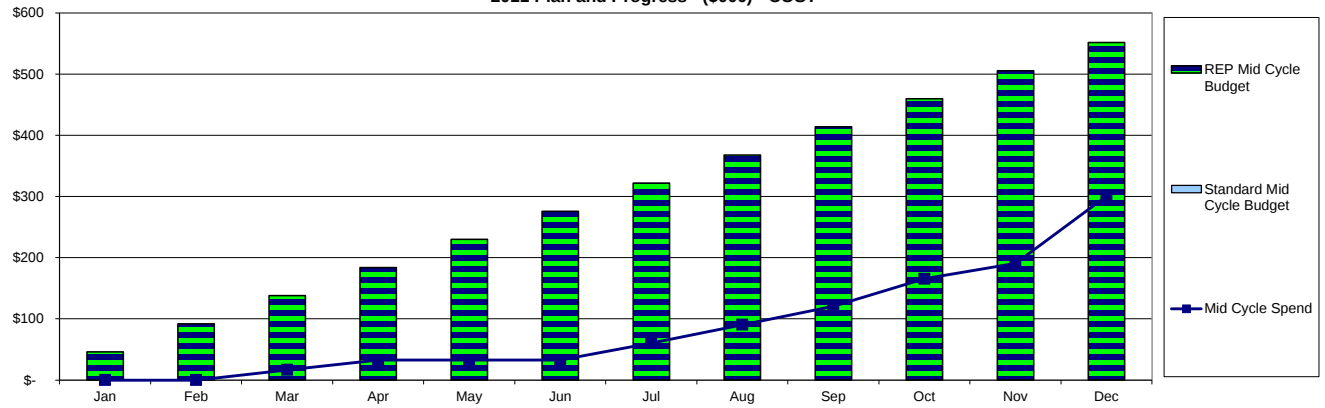


	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
STANDARD HAZARD TREES												
Hazard Tree Removal Plan # Trees Monthly	-	-	-	-	-	-	-	-	-	-	-	-
Hazard Tree Removal Plan # Trees YTD	-	-	-	-	-	-	-	-	-	-	-	-
Hazard Tree Removal Actual # Trees Monthly	-	-	-	-	-	-	-	-	-	-	-	-
Hazard Tree Removal Actual # Trees YTD	-	-	-	-	-	-	-	-	-	-	-	-
Hazard Tree Removal Variance # Trees YTD	-	-	-	-	-	-	-	-	-	-	-	-
REP HAZARD TREES												
REP-Takedowns Plan # Trees Monthly	282	282	282	282	282	282	282	282	282	282	282	282
REP-Takedowns Plan # Trees YTD	282	564	846	1,128	1,410	1,692	1,974	2,256	2,538	2,820	3,102	3,384
REP-Takedowns Actual # Trees Monthly	-	-	879	626	418	328	292		540	301	82	1,011
REP-Takedowns Actual # Trees YTD	-	-	879	1,505	1,923	2,251	2,543	2,543	3,083	3,384	3,466	4,477
REP-Takedowns Variance # Trees YTD	(282)	(564)	33	377	513	559	569	287	545	564	364	1,093
TOTAL												
Total Hazard Tree Removal Plan # Trees YTD	282	564	846	1,128	1,410	1,692	1,974	2,256	2,538	2,820	3,102	3,384
Total Hazard Tree Removal Actual # Trees YTD	-	-	879	1,505	1,923	2,251	2,543	2,543	3,083	3,384	3,466	4,477
Total Hazard Tree Removal Variance # Trees YTD	(282)	(564)	33	377	513	559	569	287	545	564	364	1,093

TRIMRC - RELIABILITY ENHANCEMENT PROGRAM - MID CYCLE TRIMMING



2011 Plan and Progress - (\$000) - COST



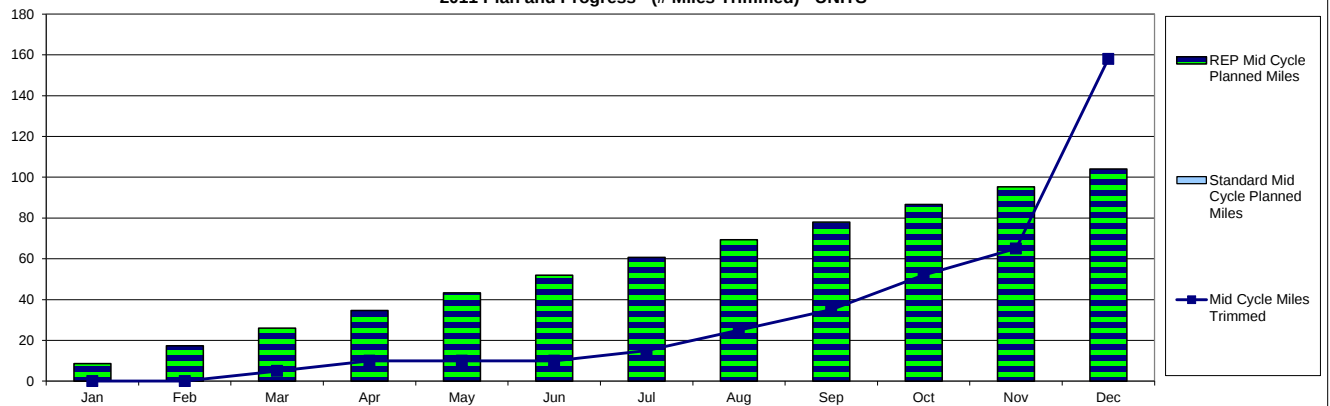
	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
BASE												
Mid Cycle Plan \$000 Monthly	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Mid Cycle Plan \$000 YTD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Mid Cycle Actual \$000 Monthly	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Mid Cycle Actual \$000 YTD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Mid Cycle Variance \$000 YTD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
REP												
REP-Mid Cycle Plan \$000 Monthly	\$ 46	\$ 46	\$ 46	\$ 46	\$ 46	\$ 46	\$ 46	\$ 46	\$ 46	\$ 46	\$ 46	\$ 46
REP-Mid Cycle Plan \$000 YTD	\$ 46	\$ 92	\$ 138	\$ 184	\$ 230	\$ 276	\$ 322	\$ 368	\$ 414	\$ 460	\$ 506	\$ 552
REP-Mid Cycle Actual \$000 Monthly	\$ -	\$ -	\$ 17	\$ 16	\$ -	\$ -	\$ 28	\$ 30	\$ 30	\$ 45	\$ 25	\$ 110
REP-Mid Cycle Actual \$000 YTD	\$ -	\$ -	\$ 17	\$ 33	\$ 33	\$ 33	\$ 60	\$ 91	\$ 121	\$ 166	\$ 191	\$ 301
REP-Mid Cycle Variance \$000 YTD	\$ (46)	\$ (92)	\$ (121)	\$ (151)	\$ (197)	\$ (243)	\$ (261)	\$ (277)	\$ (293)	\$ (294)	\$ (315)	\$ (251)
TOTAL												
Total Mid Cycle Plan \$000 YTD	\$ 46	\$ 92	\$ 138	\$ 184	\$ 230	\$ 276	\$ 322	\$ 368	\$ 414	\$ 460	\$ 506	\$ 552
Total Mid Cycle Actual \$000 YTD	\$ -	\$ -	\$ 17	\$ 33	\$ 33	\$ 33	\$ 60	\$ 91	\$ 121	\$ 166	\$ 191	\$ 301
Total Mid Cycle \$000 YTD	\$ (46)	\$ (92)	\$ (121)	\$ (151)	\$ (197)	\$ (243)	\$ (261)	\$ (277)	\$ (293)	\$ (294)	\$ (315)	\$ (251)

See Section 1 for Description and Comments

TRIMRC - RELIABILITY ENHANCEMENT PROGRAM - MID CYCLE TRIMMING



2011 Plan and Progress - (# Miles Trimmed) - UNITS



	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
BASE												
Mid Cycle Plan Miles Monthly	-	-	-	-	-	-	-	-	-	-	-	-
Mid Cycle Plan Miles YTD	-	-	-	-	-	-	-	-	-	-	-	-
Mid Cycle Actual Miles Monthly	-	-	-	-	-	-	-	-	-	-	-	-
Mid Cycle Actual Miles YTD	-	-	-	-	-	-	-	-	-	-	-	-
Mid Cycle Variance Miles YTD	-	-	-	-	-	-	-	-	-	-	-	-
REP												
REP-Mid Cycle Plan Miles Monthly	9	9	9	9	9	9	9	9	9	9	9	9
REP-Mid Cycle Plan Miles YTD	9	17	26	35	43	52	61	69	78	87	95	104
REP-Mid Cycle Actual Miles Monthly	-	-	5	5	-	-	5	10	10	17	13	93
REP-Mid Cycle Actual Miles YTD	-	-	5	10	10	10	15	25	35	52	65	158
REP-Mid Cycle Variance Miles YTD	(9)	(17)	(21)	(25)	(33)	(42)	(46)	(44)	(43)	(35)	(30)	54
TOTAL												
Total Mid Cycle Plan Miles YTD	9	17	26	35	43	52	61	69	78	87	95	104
Total Mid Cycle Actual Miles YTD	-	-	5	10	10	10	15	25	35	52	65	158
Total Mid Cycle Removal Variance Miles YTD	(9)	(17)	(21)	(25)	(33)	(42)	(46)	(44)	(43)	(35)	(30)	54

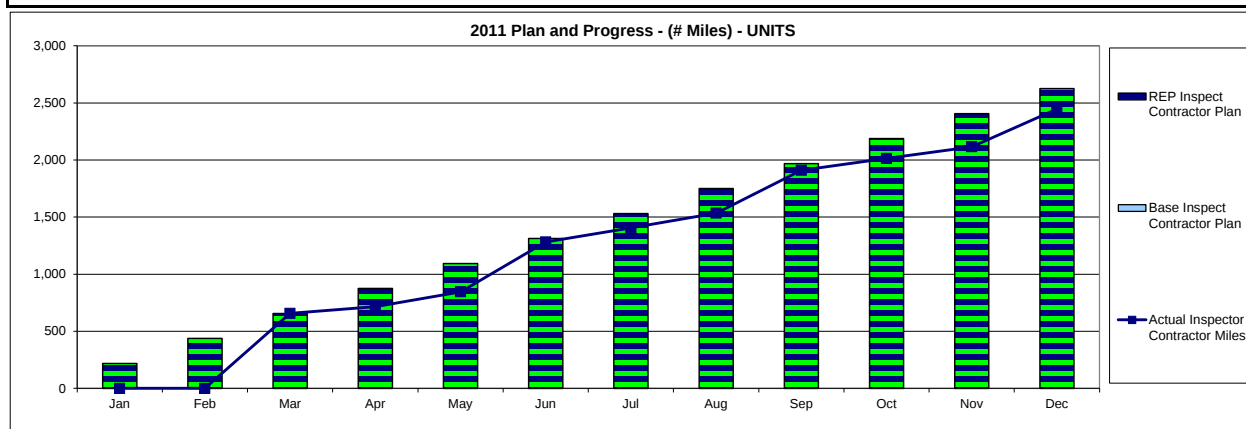
TRIMRC - RELIABILITY ENHANCEMENT PROGRAM - INSPECT CONTRACTOR



Costs for this activity are included in the Maintenance Trimming Budget.

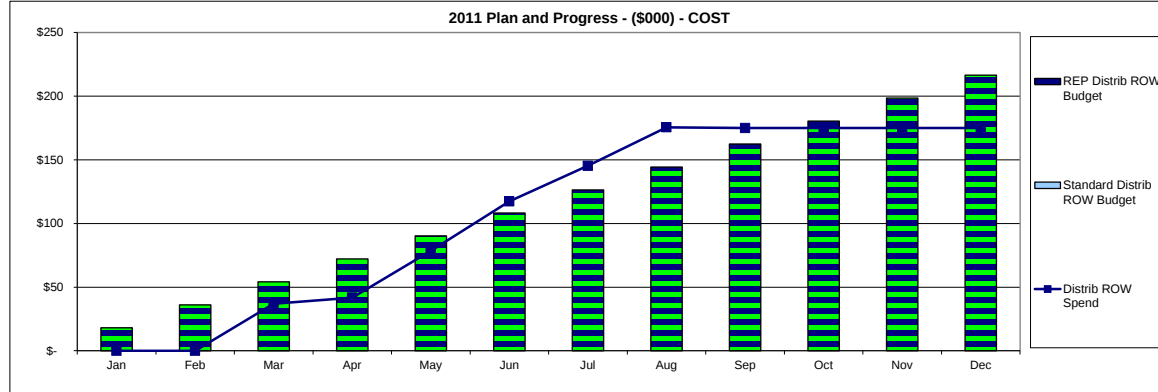
See Section 1 for Description and Comments

TRIMRC - RELIABILITY ENHANCEMENT PROGRAM - INSPECT CONTRACTOR



	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
BASE												
Inspect Contractor Plan # Miles Monthly	-	-	-	-	-	-	-	-	-	-	-	-
Inspect Contractor Plan # Miles YTD	-	-	-	-	-	-	-	-	-	-	-	-
Inspect Contractor Actual # Miles Monthly	-	-	-	-	-	-	-	-	-	-	-	-
Inspect Contractor Actual # Miles YTD	-	-	-	-	-	-	-	-	-	-	-	-
Inspect Contractor Variance # Miles YTD	-	-	-	-	-	-	-	-	-	-	-	-
REP												
REP-Incremental Inspect Contractor Plan # Miles Monthly	219	219	219	219	219	219	219	219	219	219	219	219
REP-Incremental Inspect Contractor Plan # Miles YTD	219	438	657	875	1,094	1,313	1,532	1,751	1,970	2,188	2,407	2,626
REP-Incremental Inspect Contractor Actual # Miles Monthly	-	-	657	59	130	436	124	129	376	103	102	331
REP-Incremental Inspect Contractor Actual # Miles YTD	-	-	657	716	846	1,282	1,406	1,535	1,911	2,014	2,116	2,447
REP-Incremental Inspect Contractor Variance # Miles YTD	(219)	(438)	1	(159)	(248)	(31)	(126)	(216)	(58)	(174)	(291)	(179)
TOTAL												
Total Inspect Contractor Plan # Miles YTD	219	438	657	875	1,094	1,313	1,532	1,751	1,970	2,188	2,407	2,626
Total Inspect Contractor Actual # Miles YTD	-	-	657	716	846	1,282	1,406	1,535	1,911	2,014	2,116	2,447
Total Inspect Contractor Variance # Miles YTD	(219)	(438)	1	(159)	(248)	(31)	(126)	(216)	(58)	(174)	(291)	(179)

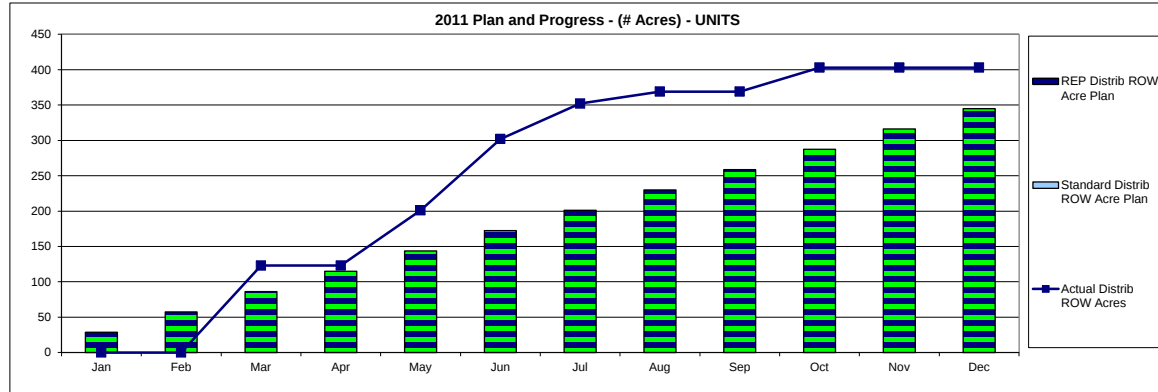
TRIMRC - RELIABILITY ENHANCEMENT PROGRAM - REDUCE DISTRIBUTION RIGHTS OF WAY CYCLE



	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
BASE												
Distribution Rights of Way Plan \$000 Monthly	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Distribution Rights of Way Plan \$000 YTD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Distribution Rights of Way Actual \$000 Monthly	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Distribution Rights of Way Actual \$000 YTD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Distribution Rights of Way Variance \$000 YTD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
REP												
REP-Distribution Rights of Way Plan \$000 Monthly	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18
REP-Distribution Rights of Way Plan \$000 YTD	\$ 18	\$ 36	\$ 54	\$ 72	\$ 90	\$ 108	\$ 126	\$ 144	\$ 162	\$ 180	\$ 198	\$ 217
REP-Distribution Rights of Way Actual \$000 Monthly	\$ -	\$ -	\$ 37	\$ 5	\$ 37	\$ 39	\$ 28	\$ 30	\$ (1)	\$ -	\$ -	\$ -
REP-Distribution Rights of Way Actual \$000 YTD	\$ -	\$ -	\$ 37	\$ 42	\$ 78	\$ 117	\$ 145	\$ 176	\$ 175	\$ 175	\$ 175	\$ 175
REP-Distribution Rights of Way Variance \$000 YTD	\$ (18)	\$ (36)	\$ (17)	\$ (30)	\$ (12)	\$ 9	\$ 19	\$ 31	\$ 13	\$ (5)	\$ (24)	\$ (42)
TOTAL												
Total Distribution Rights of Way Plan \$000 YTD	\$ 18	\$ 36	\$ 54	\$ 72	\$ 90	\$ 108	\$ 126	\$ 144	\$ 162	\$ 180	\$ 198	\$ 217
Total Distribution Rights of Way Actual \$000 YTD	\$ -	\$ -	\$ 37	\$ 42	\$ 78	\$ 117	\$ 145	\$ 176	\$ 175	\$ 175	\$ 175	\$ 175
Total Distribution Rights of Way \$000 YTD	\$ (18)	\$ (36)	\$ (17)	\$ (30)	\$ (12)	\$ 9	\$ 19	\$ 31	\$ 13	\$ (5)	\$ (24)	\$ (42)

See Section 1 for Description and Comments

TRIMRC - RELIABILITY ENHANCEMENT PROGRAM - REDUCE DISTRIBUTION RIGHTS OF WAY CYCLE



	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
BASE												
Distribution Rights of Way Plan Monthly	-	-	-	-	-	-	-	-	-	-	-	-
Distribution Rights of Way Plan # Acres YTD	-	-	-	-	-	-	-	-	-	-	-	-
Distribution Rights of Way Actual # Acres Monthly	-	-	-	-	-	-	-	-	-	-	-	-
Distribution Rights of Way Actual # Acres YTD	-	-	-	-	-	-	-	-	-	-	-	-
Distribution Rights of Way Variance # Acres YTD	-	-	-	-	-	-	-	-	-	-	-	-
REP												
REP-Distribution Rights of Way Plan # Acres Monthly	29	29	29	29	29	29	29	29	29	29	29	29
REP-Distribution Rights of Way Plan # Acres YTD	29	58	86	115	144	173	201	230	259	288	316	345
REP-Distribution Rights of Way Actual # Acres Monthly	-	-	123	-	78	101	50	17	-	34	-	-
REP-Distribution Rights of Way Actual # Acres YTD	-	-	123	123	201	302	352	369	369	403	403	403
REP-Distribution Rights of Way Variance # Acres YTD	(29)	(58)	37	8	57	130	151	139	110	116	87	58
TOTAL												
Total Distribution Rights of Way Plan # Acres YTD	29	58	86	115	144	173	201	230	259	288	316	345
Total Distribution Rights of Way Actual # Acres YTD	-	-	123	123	201	302	352	369	369	403	403	403
Total Distribution Rights of Way # Acres YTD	(29)	(58)	37	8	57	130	151	139	110	116	87	58

TRIMRC - RELIABILITY ENHANCEMENT PROGRAM -
STORM DAMAGE PREMIUM



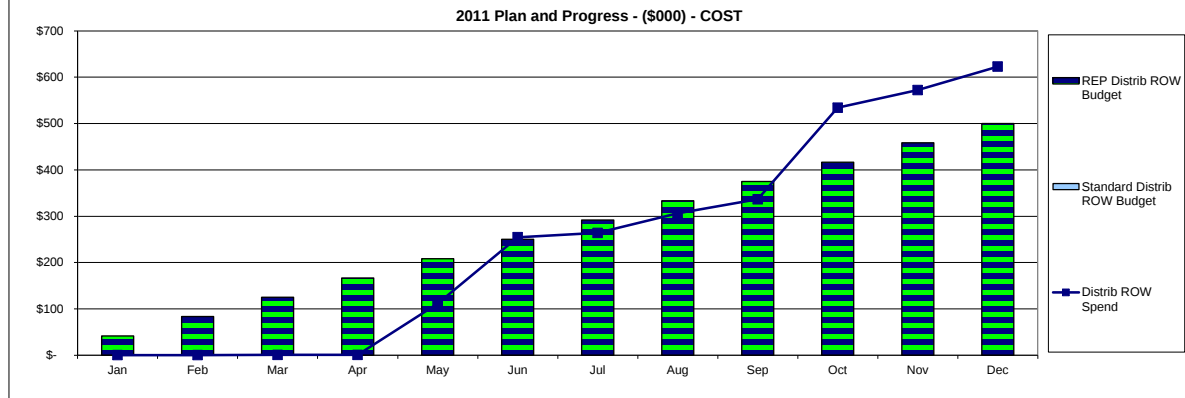
Cost and miles completed are included in “Reduce Scheduled Maintenance Cycle” item.

TRIMRC - RELIABILITY ENHANCEMENT PROGRAM - TAKEDOWNS & CYCLE
IMPACT



**Cost and miles completed are included in "Hazard Tree Removal"
and "Cycle Trimming" items.**

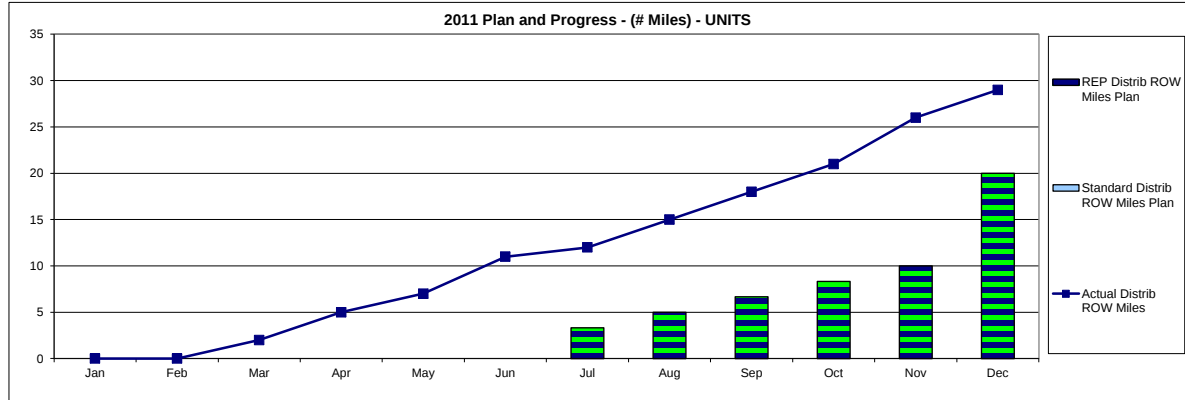
TRIMRC-RELIABILITY ENHANCEMENT PROGRAM - INSPECT/RECLAIM RIGHTS- OF-WAY



	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
BASE												
Inspect/Reclaim Rights-of-Way Plan \$000 Monthly	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Inspect/Reclaim Rights-of-Way Plan \$000 YTD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Inspect/Reclaim Rights-of-Way Actual \$000 Monthly	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Inspect/Reclaim Rights-of-Way Actual \$000 YTD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Inspect/Reclaim Rights-of-Way Variance \$000 YTD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
REP												
REP-Inspect/Reclaim Rights-of-Way Plan \$000 Monthly	\$ 42	\$ 42	\$ 42	\$ 42	\$ 42	\$ 42	\$ 42	\$ 42	\$ 42	\$ 42	\$ 42	\$ 42
REP-Inspect/Reclaim Rights-of-Way Plan \$000 YTD	\$ 42	\$ 83	\$ 125	\$ 167	\$ 208	\$ 250	\$ 292	\$ 333	\$ 375	\$ 417	\$ 458	\$ 500
REP-Inspect/Reclaim Rights-of-Way Actual \$000 Monthly	\$ -	\$ -	\$ 0	\$ (0)	\$ 111	\$ 143	\$ 9	\$ 42	\$ 30	\$ 198	\$ 38	\$ 51
REP-Inspect/Reclaim Rights-of-Way Actual \$000 YTD	\$ -	\$ -	\$ 0	\$ 0	\$ 112	\$ 255	\$ 264	\$ 306	\$ 336	\$ 534	\$ 572	\$ 623
REP-Inspect/Reclaim Rights-of-Way Variance \$000 YTD	\$ (42)	\$ (83)	\$ (125)	\$ (166)	\$ (97)	\$ 5	\$ (28)	\$ (27)	\$ (39)	\$ 117	\$ 114	\$ 123
TOTAL												
Total Inspect/Reclaim Rights-of-Way Plan \$000 YTD	\$ 42	\$ 83	\$ 125	\$ 167	\$ 208	\$ 250	\$ 292	\$ 333	\$ 375	\$ 417	\$ 458	\$ 500
Total Inspect/Reclaim Rights-of-Way Actual \$000 YTD	\$ -	\$ -	\$ 0	\$ 0	\$ 112	\$ 255	\$ 264	\$ 306	\$ 336	\$ 534	\$ 572	\$ 623
Total Inspect/Reclaim Rights-of-Way \$000 YTD	\$ (42)	\$ (83)	\$ (125)	\$ (166)	\$ (97)	\$ 5	\$ (28)	\$ (27)	\$ (39)	\$ 117	\$ 114	\$ 123

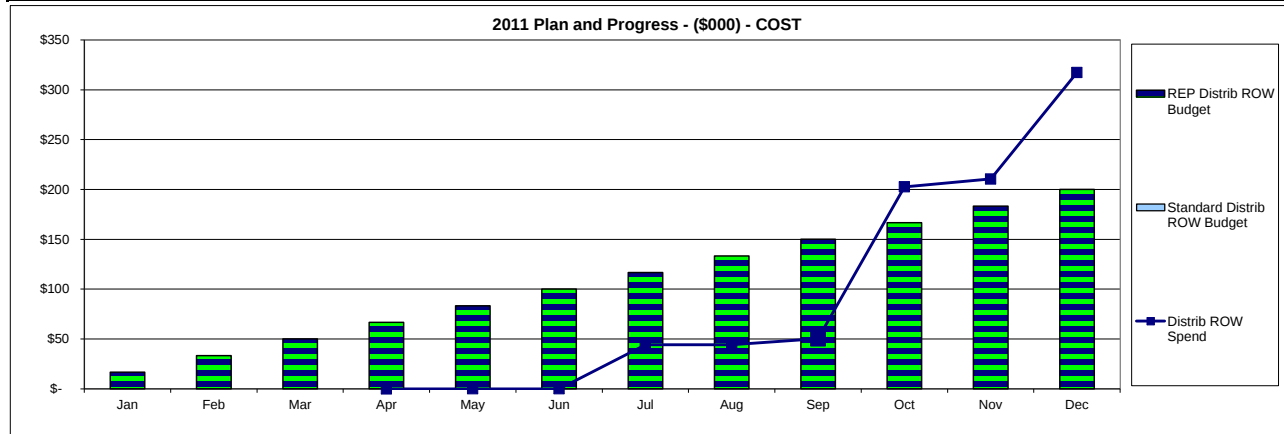
See Section 1 for Description and Comments

TRIMRC-RELIABILITY ENHANCEMENT PROGRAM - INSPECT/RECLAIM RIGHTS- OF-WAY



	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
BASE												
Inspect/Reclaim Rights-of-Way Plan Monthly	-	-	-	-	-	-	-	-	-	-	-	-
Inspect/Reclaim Rights-of-Way Plan # Miles YTD	-	-	-	-	-	-	-	-	-	-	-	-
Inspect/Reclaim Rights-of-Way Actual # Miles Monthly	-	-	-	-	-	-	-	-	-	-	-	-
Inspect/Reclaim Rights-of-Way Actual # Miles YTD	-	-	-	-	-	-	-	-	-	-	-	-
Inspect/Reclaim Rights-of-Way Variance # Miles YTD	-	-	-	-	-	-	-	-	-	-	-	-
REP												
REP-Right-of-Way Planned Miles Monthly	2	2	2	2	2	2	2	2	2	2	2	2
REP-Right-of-Way Planned Miles YTD	-	-	-	-	-	-	3	5	7	8	10	20
REP-Right-of-Way Actual Miles Monthly	-	-	2	3	2	4	1	3	3	3	5	3
REP-Right-of-Way Actual Miles YTD	-	-	2	5	7	11	12	15	18	21	26	29
REP-Right-of-Way Variance Miles YTD	-	-	2	5	7	11	9	10	11	13	16	9
TOTAL												
Inspect/Reclaim Rights-of-Way Plan # Miles YTD	-	-	-	-	-	-	3	5	7	8	10	20
Inspect/Reclaim Rights-of-Way Actual # Miles YTD	-	-	2	5	7	11	12	15	18	21	26	29
Total Inspect/Reclaim Rights-of-Way # Miles YTD	-	-	2	5	7	11	9	10	11	13	16	9

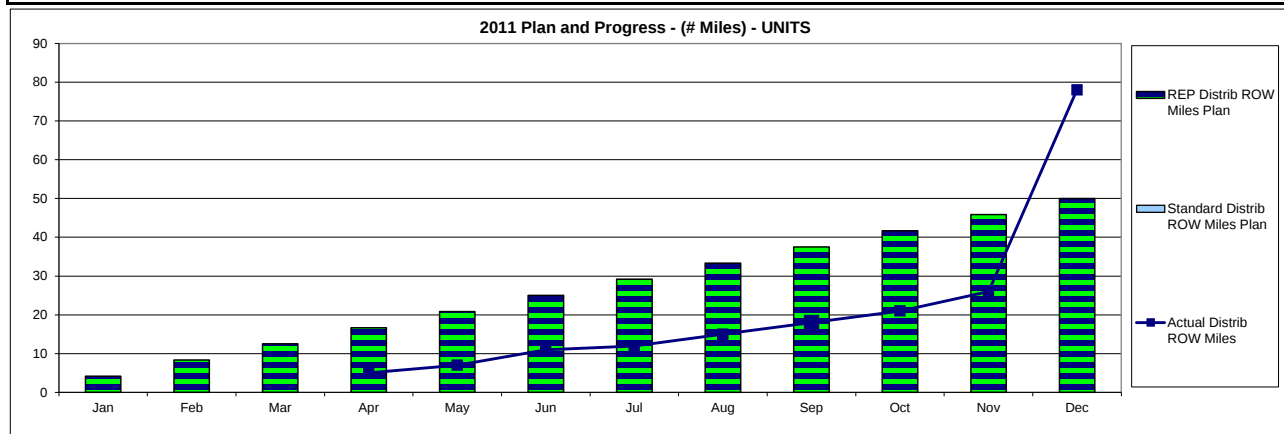
TRIMRC-RELIABILITY ENHANCEMENT PROGRAM - ETT MAINTENANCE TRIMMING



	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
BASE												
ETT Maintenance Trimming Plan \$000 Monthly	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
ETT Maintenance Trimming Plan \$000 YTD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
ETT Maintenance Trimming Actual \$000 Monthly	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
ETT Maintenance Trimming Actual \$000 YTD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
ETT Maintenance Trimming Variance \$000 YTD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
REP												
REP-ETT Maintenance Trimming Plan \$000 Monthly	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17
REP-ETT Maintenance Trimming Plan \$000 YTD	\$ 17	\$ 33	\$ 50	\$ 67	\$ 83	\$ 100	\$ 117	\$ 133	\$ 150	\$ 167	\$ 183	\$ 200
REP-ETT Maintenance Trimming Actual \$000 Monthly	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
REP-ETT Maintenance Trimming Actual \$000 YTD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
REP-ETT Maintenance Trimming Variance \$000 YTD	\$ (17)	\$ (33)	\$ (50)	\$ (67)	\$ (83)	\$ (100)	\$ (72)	\$ (89)	\$ (100)	\$ 36	\$ 27	\$ 117
TOTAL												
Total ETT Maintenance Trimming Plan \$000 YTD	\$ 17	\$ 33	\$ 50	\$ 67	\$ 83	\$ 100	\$ 117	\$ 133	\$ 150	\$ 167	\$ 183	\$ 200
Total ETT Maintenance Trimming Actual \$000 YTD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total ETT Maintenance Trimming Variance \$000 YTD	\$ (17)	\$ (33)	\$ (50)	\$ (67)	\$ (83)	\$ (100)	\$ (72)	\$ (89)	\$ (100)	\$ 36	\$ 27	\$ 117

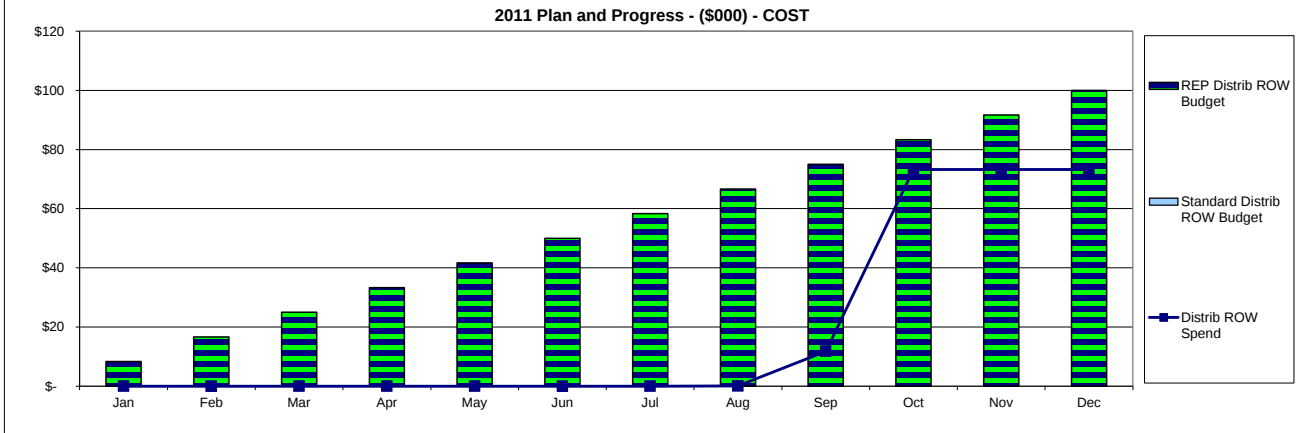
See Section 1 for Description and Comments

TRIMRC-RELIABILITY ENHANCEMENT PROGRAM - ETT MAINTENANCE TRIMMING



	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
BASE												
ETT Maintenance Trimming Plan Monthly	-	-	-	-	-	-	-	-	-	-	-	-
ETT Maintenance Trimming Plan # Miles YTD	-	-	-	-	-	-	-	-	-	-	-	-
ETT Maintenance Trimming Actual # Miles Monthly	-	-	-	-	-	-	-	-	-	-	-	-
ETT Maintenance Trimming Actual # Miles YTD	-	-	-	-	-	-	-	-	-	-	-	-
ETT Maintenance Trimming Variance # Miles YTD	-	-	-	-	-	-	-	-	-	-	-	-
REP												
REP-ETT Maintenance Trimming Planned Miles Monthly	4	4	4	4	4	4	4	4	4	4	4	4
REP-ETT Maintenance Trimming Planned Miles YTD	4	8	13	17	21	25	29	33	38	42	46	50
REP-ETT Maintenance Trimming Actual Miles Monthly	-	-	2	3	2	4	1	3	3	3	5	52
REP-ETT Maintenance Trimming Actual Miles YTD	-	-	2	5	7	11	12	15	18	21	26	78
REP-ETT Maintenance Trimming Variance Miles YTD	(4)	(8)	(11)	(12)	(14)	(14)	(17)	(18)	(20)	(21)	(20)	28
TOTAL												
ETT Maintenance Trimming Plan # Miles YTD	4	8	13	17	21	25	29	33	38	42	46	50
ETT Maintenance Trimming Actual # Miles YTD	-	-	2	5	7	11	12	15	18	21	26	78
Total ETT Maintenance Trimming # Miles YTD	(4)	(8)	(11)	(12)	(14)	(14)	(17)	(18)	(20)	(21)	(20)	28

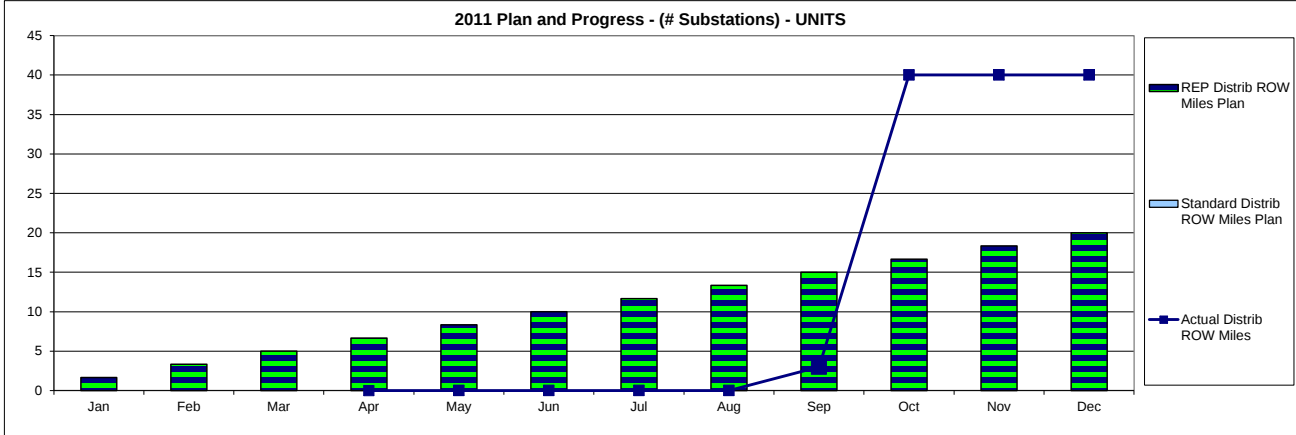
TRIMRC-RELIABILITY ENHANCEMENT PROGRAM - S/S PERIMETER TRIMMING



	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
BASE												
S/S Perimeter Trimming Plan \$000 Monthly	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
S/S Perimeter Trimming Plan \$000 YTD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
S/S Perimeter Trimming Actual \$000 Monthly	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
S/S Perimeter Trimming Actual \$000 YTD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
S/S Perimeter Trimming Variance \$000 YTD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
REP												
REP-S/S Perimeter Trimming Plan \$000 Monthly	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8
REP-S/S Perimeter Trimming Plan \$000 YTD	\$ 8	\$ 17	\$ 25	\$ 33	\$ 42	\$ 50	\$ 58	\$ 67	\$ 75	\$ 83	\$ 92	\$ 100
REP-S/S Perimeter Trimming Actual \$000 Monthly	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
REP-S/S Perimeter Trimming Actual \$000 YTD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 0	\$ 12	\$ 73	\$ 73	\$ 73
REP-S/S Perimeter Trimming Variance \$000 YTD	\$ (8)	\$ (17)	\$ (25)	\$ (33)	\$ (42)	\$ (50)	\$ (58)	\$ (67)	\$ (63)	\$ (10)	\$ (18)	\$ (27)
TOTAL												
Total S/S Perimeter Trimming Plan \$000 YTD	\$ 8	\$ 17	\$ 25	\$ 33	\$ 42	\$ 50	\$ 58	\$ 67	\$ 75	\$ 83	\$ 92	\$ 100
Total S/S Perimeter Trimming Actual \$000 YTD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 0	\$ 12	\$ 73	\$ 73	\$ 73
Total S/S Perimeter Trimming \$000 YTD	\$ (8)	\$ (17)	\$ (25)	\$ (33)	\$ (42)	\$ (50)	\$ (58)	\$ (67)	\$ (63)	\$ (10)	\$ (18)	\$ (27)

See Section 1 for Description and Comments

TRIMRC-RELIABILITY ENHANCEMENT PROGRAM - S/S PERIMETER TRIMMING



	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
BASE												
S/S Perimeter Trimming Plan Monthly	-	-	-	-	-	-	-	-	-	-	-	-
S/S Perimeter Trimming Plan # S/S YTD	-	-	-	-	-	-	-	-	-	-	-	-
S/S Perimeter Trimming Actual # S/S Monthly	-	-	-	-	-	-	-	-	-	-	-	-
S/S Perimeter Trimming Actual # S/S YTD	-	-	-	-	-	-	-	-	-	-	-	-
S/S Perimeter Trimming Variance # S/S YTD	-	-	-	-	-	-	-	-	-	-	-	-
REP												
REP-S/S Perimeter Trimming Planned S/S Monthly	2	2	2	2	2	2	2	2	2	2	2	2
REP-S/S Perimeter Trimming Planned S/S YTD	2	3	5	7	8	10	12	13	15	17	18	20
REP-S/S Perimeter Trimming Actual S/S Monthly	-	-	-	-	-	-	-	-	3	37	-	-
REP-S/S Perimeter Trimming Actual S/S YTD	-	-	-	-	-	-	-	-	3	40	40	40
REP-S/S Perimeter Trimming Variance S/S YTD	(2)	(3)	(5)	(7)	(8)	(10)	(12)	(13)	(12)	23	22	20
TOTAL												
S/S Perimeter Trimming Plan # S/S YTD	2	3	5	7	8	10	12	13	15	17	18	20
S/S Perimeter Trimming Actual # S/S YTD	-	-	-	-	-	-	-	-	3	40	40	40
Total S/S Perimeter Trimming # S/S YTD	(2)	(3)	(5)	(7)	(8)	(10)	(12)	(13)	(12)	23	22	20

Section 3

2011 O&M NESC Programs



RELIABILITY ENHANCEMENT PROGRAM - NATIONAL ELECTRICAL SAFETY CODE



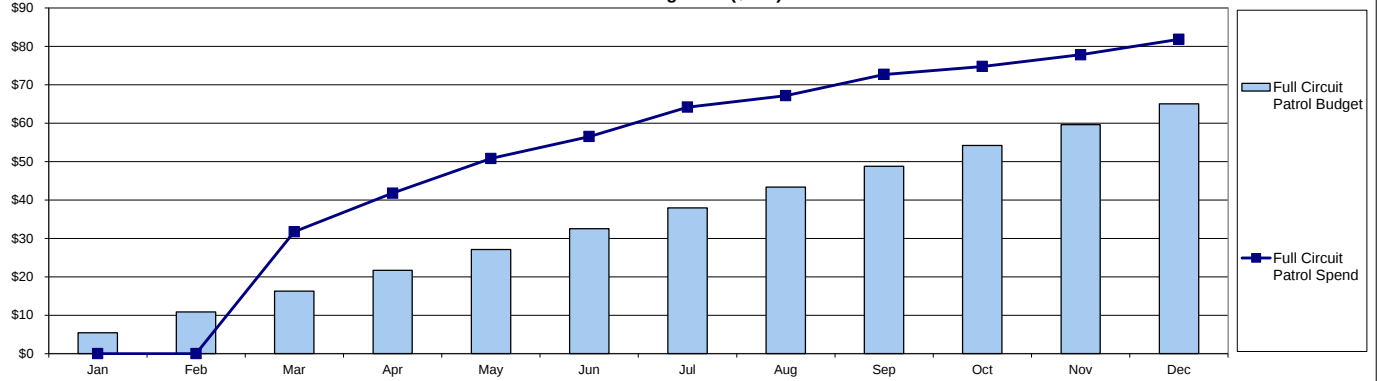
2011 PLAN AND PROGRESS

<u>PROGRAMS:</u>	<u>PAGE</u>
FULL CIRCUIT PATROL	1
INSPECT UNDERGROUND (URD) SYSTEMS	2
INSPECT MANHOLES	3
SUBSTATION GROUNDING	4
POLE INSPECT & TREAT	5
OVERHEAD REPAIR ACTIVITY	6
FOOT PATROL RIGHTS OF WAY	7

NESCRC - RELIABILITY ENHANCEMENT PROGRAM - FULL CIRCUIT PATROL



2011 Plan and Progress - (\$000) - COST



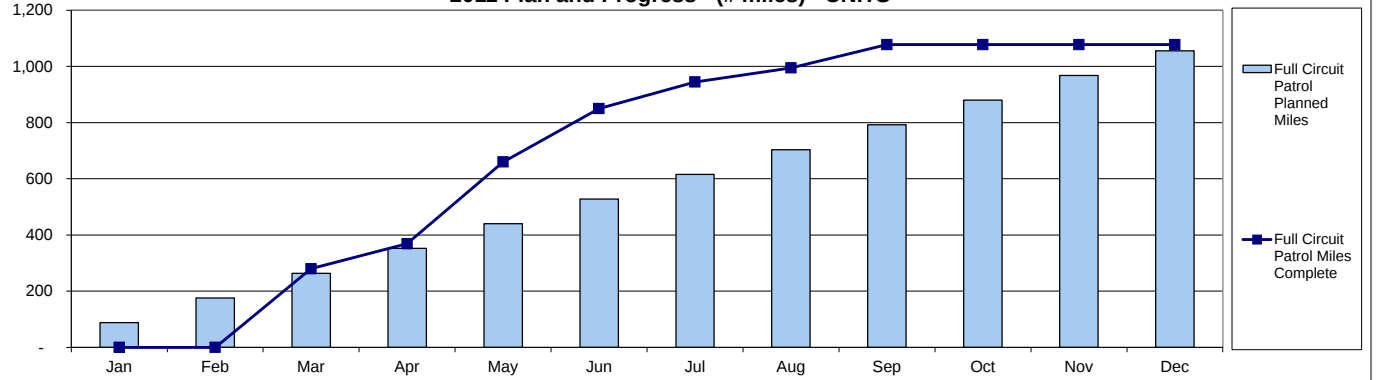
	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
REP												
REP-Full Circuit Patrol Plan \$000 Monthly	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5
REP-Full Circuit Patrol Plan \$000 YTD	\$ 5	\$ 11	\$ 16	\$ 22	\$ 27	\$ 33	\$ 38	\$ 43	\$ 49	\$ 54	\$ 60	\$ 65
REP-Full Circuit Patrol Actual \$000 Monthly	\$ -	\$ -	\$ 32	\$ 10	\$ 9	\$ 6	\$ 8	\$ 3	\$ 6	\$ 2	\$ 3	\$ 4
REP-Full Circuit Patrol Actual \$000 YTD	\$ -	\$ -	\$ 32	\$ 42	\$ 51	\$ 57	\$ 64	\$ 67	\$ 73	\$ 75	\$ 78	\$ 82
REP-Full Circuit Patrol Variance \$000 YTD	\$ (5)	\$ (11)	\$ 15	\$ 20	\$ 24	\$ 24	\$ 26	\$ 24	\$ 24	\$ 21	\$ 18	\$ 17

See Section 1 for Description and Comments

NESCRC - RELIABILITY ENHANCEMENT PROGRAM - FULL CIRCUIT PATROL

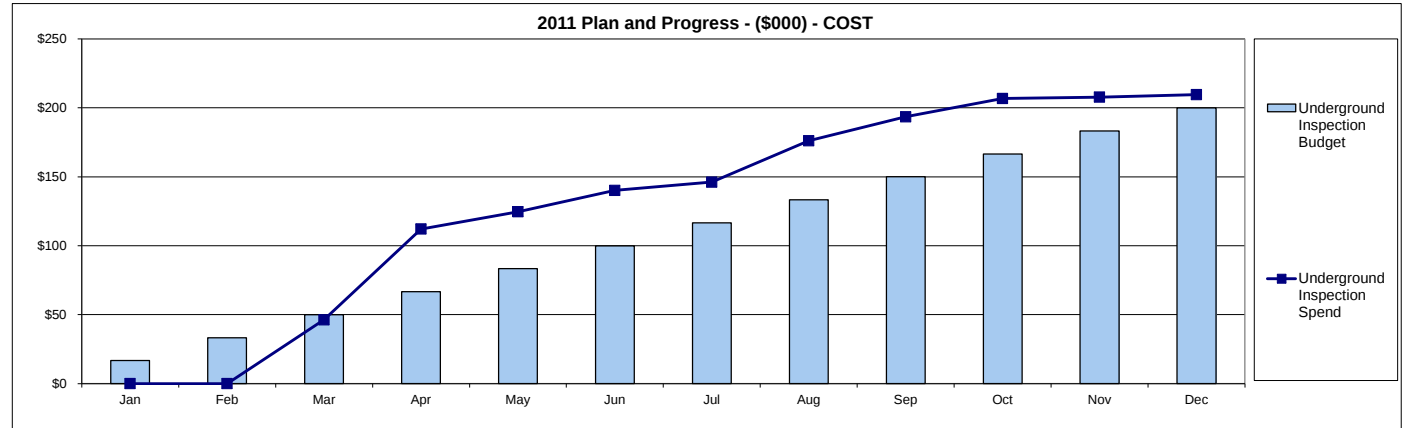


2011 Plan and Progress - (# miles) - UNITS



	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
REP												
REP-Full Circuit Patrol Planned Miles Monthly	88	88	88	88	88	88	88	88	88	88	88	88
REP-Full Circuit Patrol Planned Miles YTD	88	176	264	352	440	528	616	704	792	880	968	1,056
REP-Full Circuit Patrol Actual Miles Monthly	-	-	280	89	291	190	95	50	83	-	-	-
REP-Full Circuit Patrol Actual Miles YTD	-	-	280	369	660	850	945	995	1,078	1,078	1,078	1,078
REP-Full Circuit Patrol Variance Miles YTD	(88)	(176)	16	17	220	322	329	291	286	198	110	22

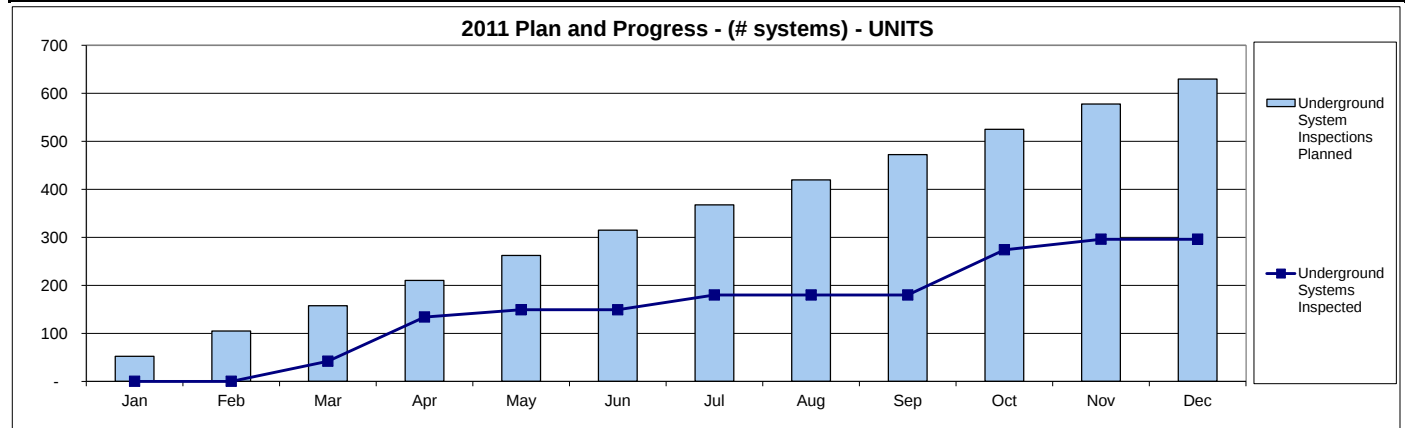
NESCRC - RELIABILITY ENHANCEMENT PROGRAM - INSPECT UNDERGROUND SYSTEMS



	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
REP												
REP-Underground System Inspect Plan \$000 Monthly	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17
REP-Underground System Inspect Plan \$000 YTD	\$ 17	\$ 33	\$ 50	\$ 67	\$ 83	\$ 100	\$ 117	\$ 133	\$ 150	\$ 167	\$ 183	\$ 200
REP-Underground System Inspect Actual \$000 Monthly	\$ -	\$ -	\$ 46	\$ 66	\$ 83	\$ 100	\$ 117	\$ 133	\$ 150	\$ 167	\$ 183	\$ 200
REP-Underground System Inspect Actual \$000 YTD	\$ -	\$ -	\$ 46	\$ 112	\$ 125	\$ 140	\$ 146	\$ 176	\$ 194	\$ 207	\$ 208	\$ 210
REP-Underground System Inspect Variance \$000 YTD	\$ (17)	\$ (33)	\$ (4)	\$ 45	\$ 41	\$ 40	\$ 29	\$ 43	\$ 44	\$ 40	\$ 25	\$ 10

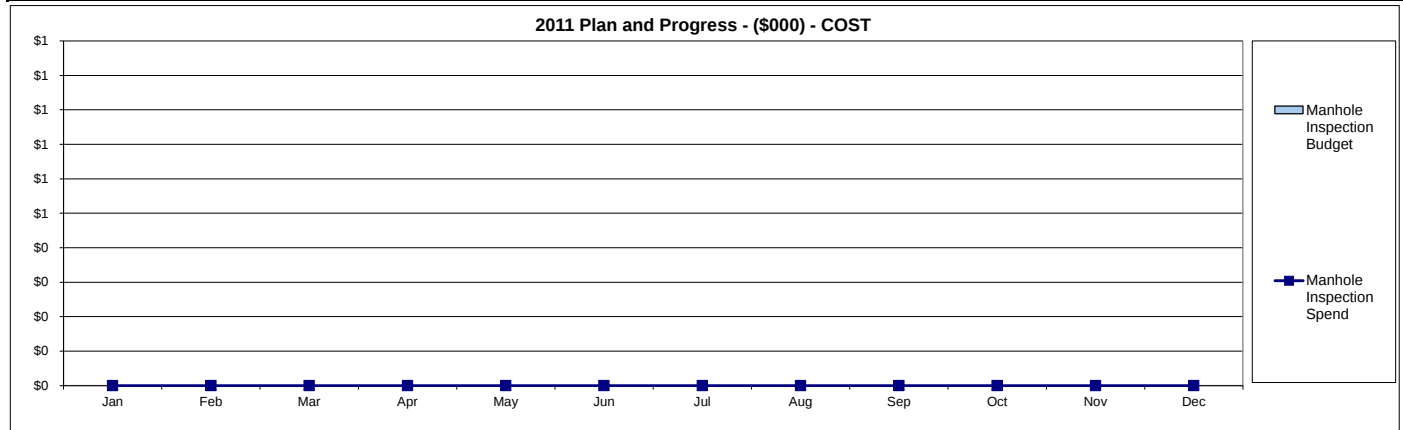
See Section 1 for Description and Comments

NESCRC - RELIABILITY ENHANCEMENT PROGRAM - INSPECT UNDERGROUND SYSTEMS



	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
REP												
REP-Underground System Inspect Planned Systems Monthly	53	53	53	53	53	53	53	53	53	53	53	53
REP-Underground System Inspect Planned Systems YTD	53	105	158	210	263	315	368	420	473	525	578	630
REP-Underground System Inspect Actual Systems Monthly	-	-	42	92	15	-	31	-	-	94	22	-
REP-Underground System Inspect Actual Systems YTD	-	-	42	134	149	149	180	180	180	274	296	296
REP-Underground System Inspect Variance System YTD	(53)	(105)	(116)	(76)	(114)	(166)	(188)	(240)	(293)	(251)	(282)	(334)

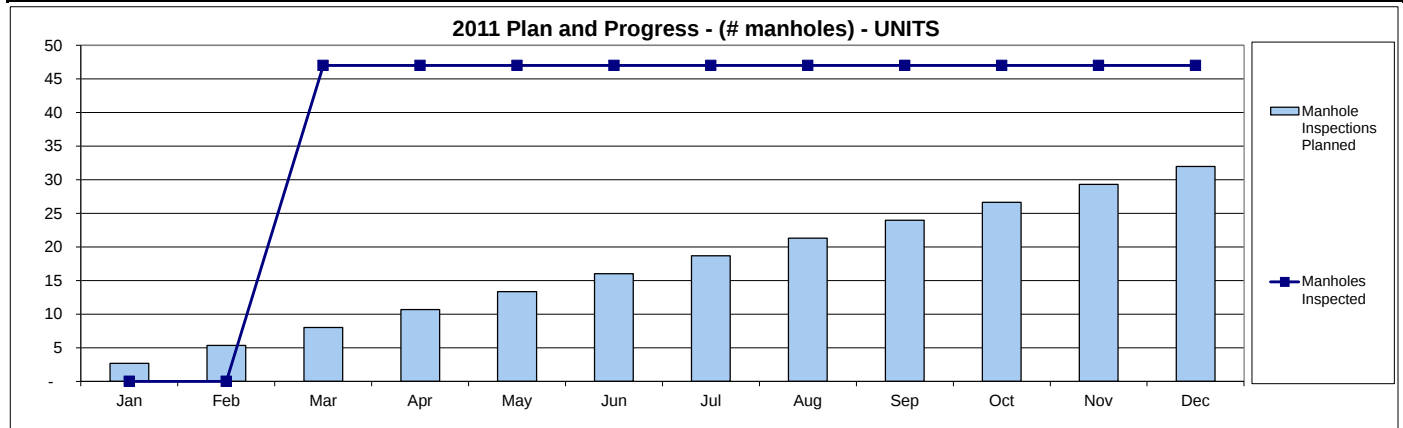
NESCRC - RELIABILITY ENHANCEMENT PROGRAM - INSPECT MANHOLES



	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
REP												
REP-Manhole Inspect Plan \$000 Monthly	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
REP-Manhole Inspect Plan \$000 YTD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
REP-Manhole Inspect Actual \$000 Monthly	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
REP-Manhole Inspect Actual \$000 YTD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
REP-Manhole Inspect Variance \$000 YTD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

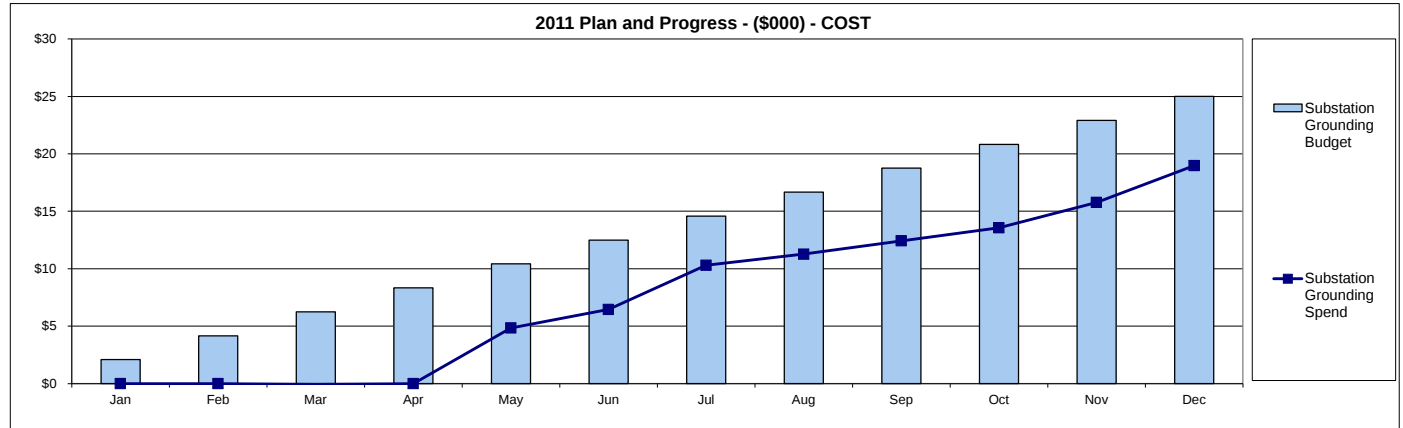
See Section 1 for Description and Comments

NESCRC - RELIABILITY ENHANCEMENT PROGRAM - INSPECT MANHOLES



	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
REP												
REP-Manhole Inspections Planned Monthly	3	5	8	11	13	16	19	21	24	27	29	32
REP-Manhole Inspections Planned YTD	3	5	8	11	13	16	19	21	24	27	29	32
REP-Actual Manhole Inspections Monthly	-	-	47	47	47	47	47	47	47	47	47	47
REP-Actual Manhole Inspections YTD	-	-	47	47	47	47	47	47	47	47	47	47
REP-Manhole Inspection Variance YTD	(3)	(5)	39	36	34	31	28	26	23	20	18	15

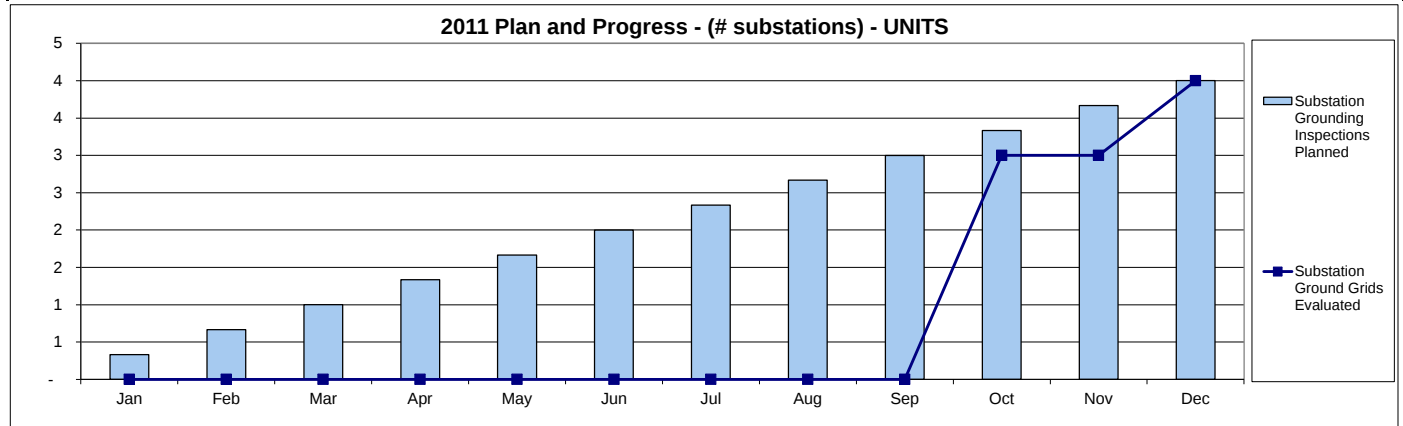
NESCRC - RELIABILITY ENHANCEMENT PROGRAM - SUBSTATION GROUNDING



	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CCC 78U												
REP-Substation Grounding Plan \$000 Monthly	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2
REP-Substation Grounding Plan \$000 YTD	\$ 2	\$ 4	\$ 6	\$ 8	\$ 10	\$ 13	\$ 15	\$ 17	\$ 19	\$ 21	\$ 23	\$ 25
REP-Substation Grounding Actual \$000 Monthly	\$ -	\$ -	\$ (0)	\$ 0	\$ 5	\$ 2	\$ 4	\$ 1	\$ 1	\$ 1	\$ 2	\$ 3
REP-Substation Grounding Actual \$000 YTD	\$ -	\$ -	\$ (0)	\$ -	\$ 5	\$ 6	\$ 10	\$ 11	\$ 12	\$ 14	\$ 16	\$ 19
REP-Substation Grounding Variance \$000 YTD	\$ (2)	\$ (4)	\$ (6)	\$ (8)	\$ (6)	\$ (6)	\$ (4)	\$ (5)	\$ (6)	\$ (7)	\$ (7)	\$ (6)

See Section 1 for Description and Comments

NESCRC - RELIABILITY ENHANCEMENT PROGRAM - SUBSTATION GROUNDING

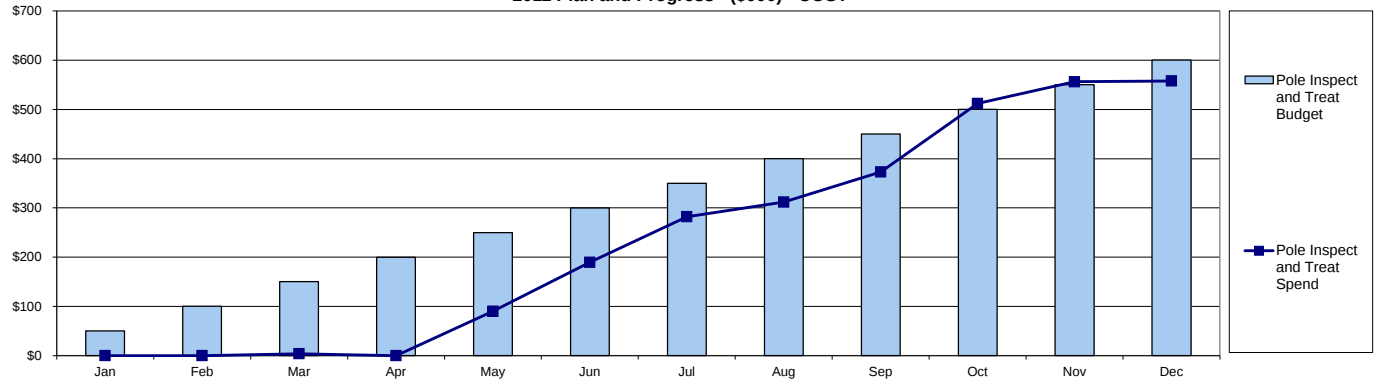


	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CCC 78U												
REP-Substation Grounding Planned Monthly	0	0	0	0	0	0	0	0	0	0	0	0
REP-Substation Grounding Planned YTD	0	1	1	1	2	2	2	3	3	3	4	4
REP-Substation Grounding Actual Monthly	-	-	-	-	-	-	-	-	-	3	-	1
REP-Substation Grounding Actual YTD	-	-	-	-	-	-	-	-	-	3	3	4
REP-Substation Grounding Variance YTD	(0)	(1)	(1)	(1)	(2)	(2)	(2)	(3)	(3)	(0)	(1)	-

NESCRC - RELIABILITY ENHANCEMENT PROGRAM - POLE INSPECT AND TREAT



2011 Plan and Progress - (\$000) - COST



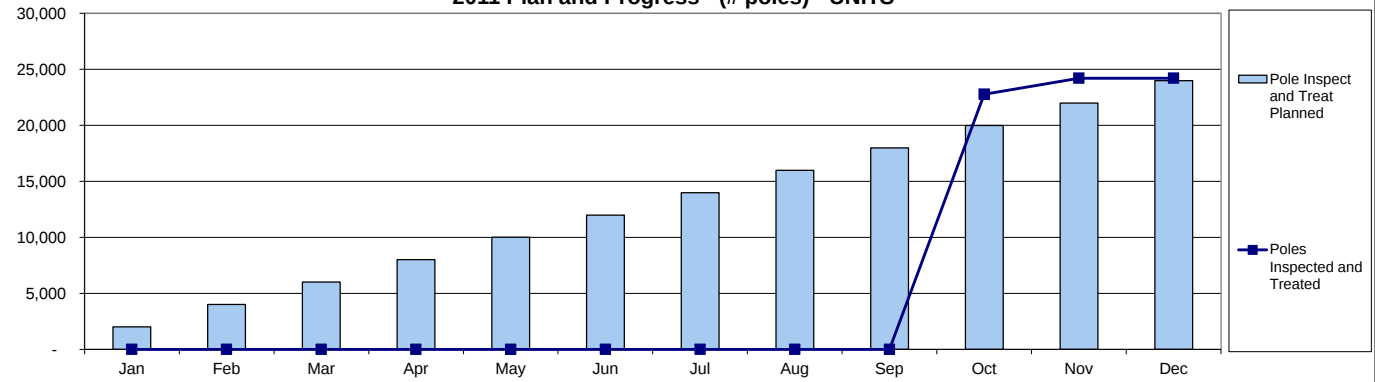
2011												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CCC 78U												
REP-Pole Inspect & Treat Plan \$000 Monthly	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50
REP-Pole Inspect & Treat Plan \$000 YTD	\$ 50	\$ 100	\$ 150	\$ 200	\$ 250	\$ 300	\$ 350	\$ 400	\$ 450	\$ 500	\$ 550	\$ 600
REP-Pole Inspect & Treat Actual \$000 Monthly	\$ -	\$ -	\$ 4	\$ (4)	\$ 90	\$ 99	\$ 93	\$ 30	\$ 61	\$ 139	\$ 44	\$ 1
REP-Pole Inspect & Treat Actual \$000 YTD	\$ -	\$ -	\$ 4	\$ -	\$ 90	\$ 189	\$ 282	\$ 312	\$ 373	\$ 512	\$ 556	\$ 558
REP-Pole Inspect & Treat Variance \$000 YTD	\$ (50)	\$ (100)	\$ (146)	\$ (200)	\$ (160)	\$ (111)	\$ (68)	\$ (88)	\$ (77)	\$ 12	\$ 6	\$ (42)

See Section 1 for Description and Comments

NESCRC - RELIABILITY ENHANCEMENT PROGRAM - POLE INSPECT AND TREAT

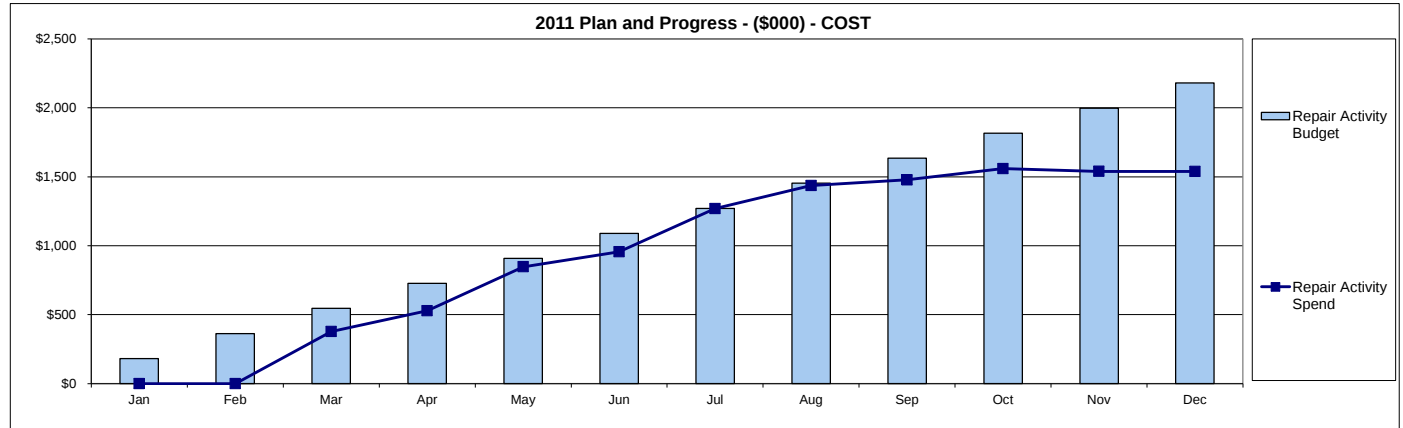


2011 Plan and Progress - (# poles) - UNITS



2011												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CCC 78U												
REP-Pole Inspect & Treat Plan # Poles Monthly	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
REP-Pole Inspect & Treat Plan # Poles YTD	2,000	4,000	6,000	8,000	10,000	12,000	14,000	16,000	18,000	20,000	22,000	24,000
REP-Pole Inspect & Treat Actual # Poles Monthly	-	-	-	-	-	-	-	-	-	-	1,425	-
REP-Pole Inspect & Treat Actual # Poles YTD	-	-	-	-	-	-	-	-	-	22,784	24,209	24,209
REP-Pole Inspect & Treat Variance # Poles YTD	(2,000)	(4,000)	(6,000)	(8,000)	(10,000)	(12,000)	(14,000)	(16,000)	(18,000)	2,784	2,209	209

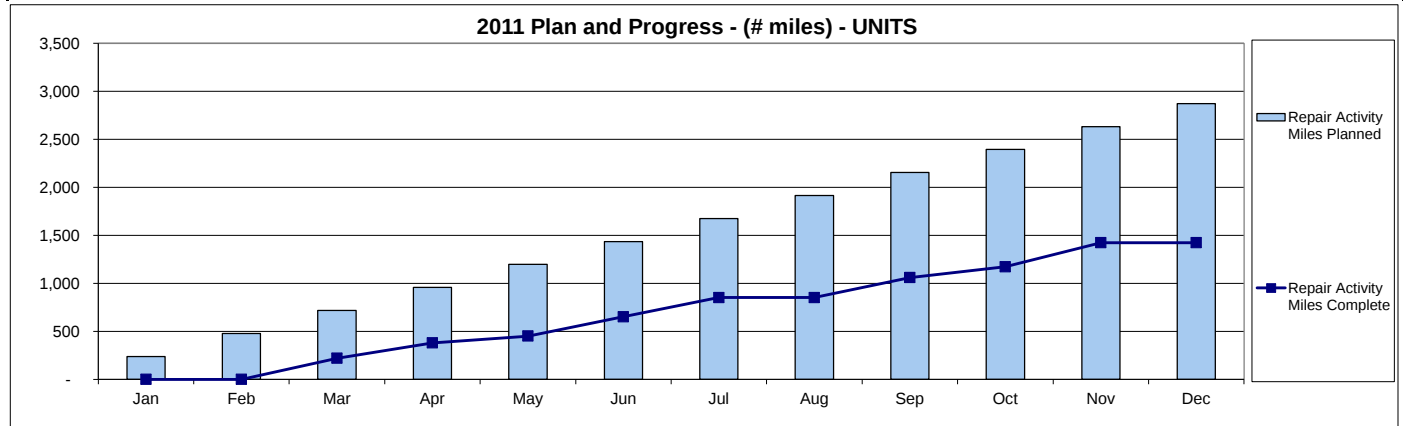
NESCRC - RELIABILITY ENHANCEMENT PROGRAM - OVERHEAD REPAIR ACTIVITY



	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CCC 78U												
REP-Repair Activity/Animal Guard Plan \$000 Monthly	\$ 182	\$ 182	\$ 182	\$ 182	\$ 182	\$ 182	\$ 182	\$ 182	\$ 182	\$ 182	\$ 182	\$ 182
REP-Repair Activity/Animal Guard Plan \$000 YTD	\$ 182	\$ 363	\$ 545	\$ 727	\$ 908	\$ 1,090	\$ 1,272	\$ 1,454	\$ 1,635	\$ 1,817	\$ 1,999	\$ 2,180
REP-Repair Activity/Animal Guard Actual \$000 Monthly	\$ -	\$ -	\$ 378	\$ 151	\$ 319	\$ 109	\$ 313	\$ 168	\$ 40	\$ 82	\$ (19)	\$ (0)
REP-Repair Activity/Animal Guard Actual \$000 YTD	\$ -	\$ -	\$ 378	\$ 529	\$ 848	\$ 956	\$ 1,269	\$ 1,437	\$ 1,478	\$ 1,559	\$ 1,540	\$ 1,540
REP-Repair Activity/Animal Guard Variance \$000 YTD	\$ (182)	\$ (363)	\$ (167)	\$ (198)	\$ (61)	\$ (134)	\$ (2)	\$ (16)	\$ (158)	\$ (257)	\$ (459)	\$ (641)

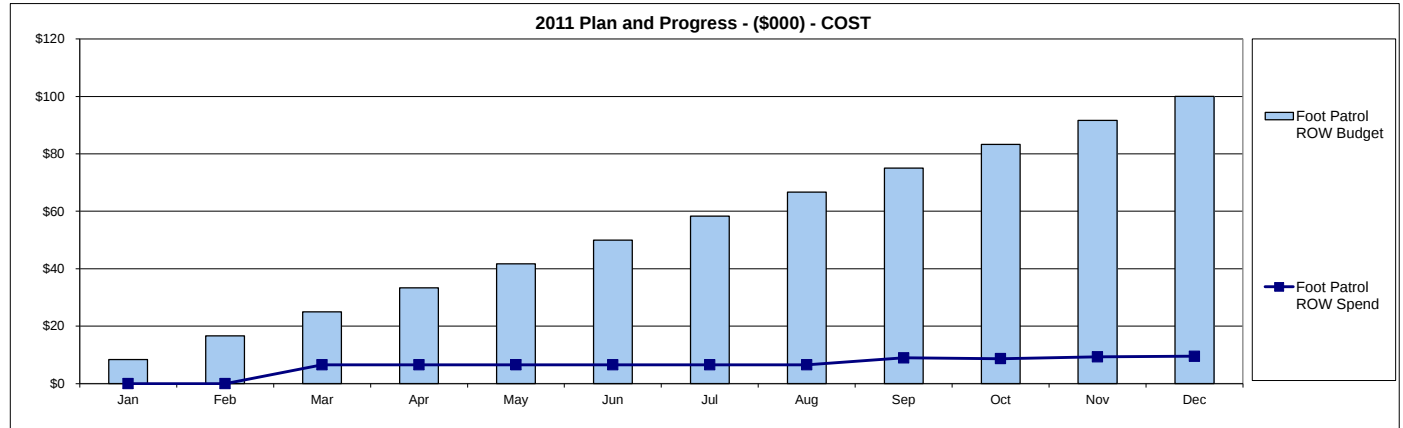
See Section 1 for Description and Comments

NESCRC - RELIABILITY ENHANCEMENT PROGRAM - OVERHEAD REPAIR ACTIVITY



	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CCC 78U												
REP-Repair Activity Planned Monthly	239	239	239	239	239	239	239	239	239	239	239	239
REP-Repair Activity Planned YTD	239	479	718	958	1,197	1,437	1,676	1,915	2,155	2,394	2,634	2,873
REP-Repair Activity Monthly	-	-	220	161	70	201	200	-	208	113	251	-
REP-Repair Activity YTD	-	-	220	381	451	652	852	852	1,060	1,173	1,424	1,424
REP-Repair Activity Variance YTD	(239)	(479)	(498)	(577)	(746)	(785)	(824)	(1,063)	(1,095)	(1,221)	(1,210)	(1,449)

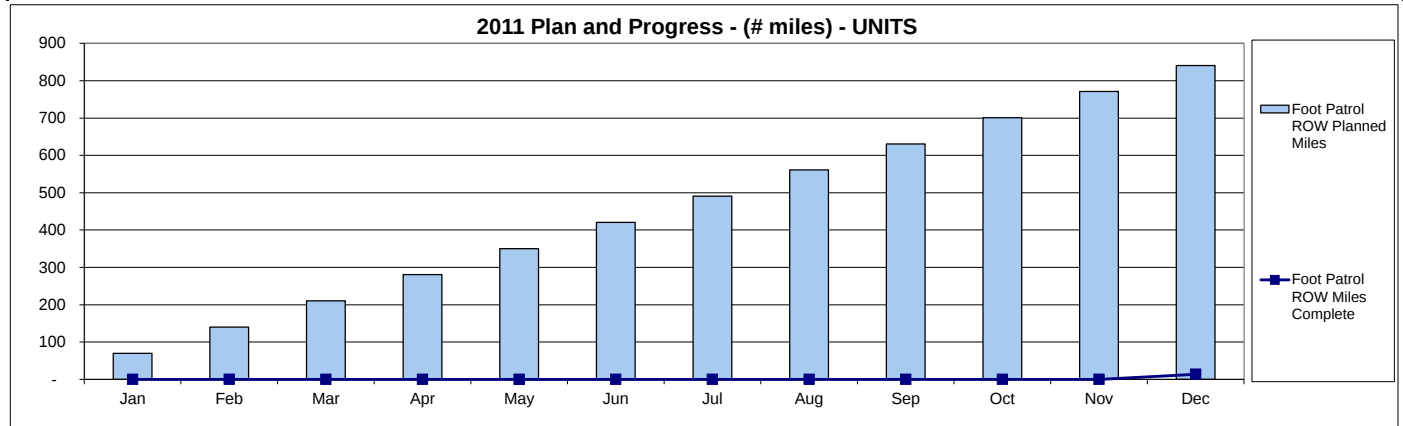
NESCRC - RELIABILITY ENHANCEMENT PROGRAM - FOOT PATROL RIGHTS-OF-WAY



	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CCC 78U												
REP-Foot Patrol ROW Plan \$000 Monthly	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8
REP-Foot Patrol ROW Plan \$000 YTD	\$ 8	\$ 17	\$ 25	\$ 33	\$ 42	\$ 50	\$ 58	\$ 67	\$ 75	\$ 83	\$ 92	\$ 100
REP-Foot Patrol ROW Actual \$000 Monthly	\$ -	\$ -	\$ 7	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2	\$ (0)	\$ 1	\$ 0
REP-Foot Patrol ROW Actual \$000 YTD	\$ -	\$ -	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 9	\$ 9	\$ 9	\$ 9
REP-Foot Patrol ROW Patrol Variance \$000 YTD	\$ (8)	\$ (17)	\$ (18)	\$ (27)	\$ (35)	\$ (43)	\$ (52)	\$ (60)	\$ (66)	\$ (75)	\$ (82)	\$ (91)

See Section 1 for Description and Comments

NESCRC - RELIABILITY ENHANCEMENT PROGRAM - FOOT PATROL RIGHTS-OF-WAY



	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CCC 78U												
REP-Foot Patrol ROW Planned Miles Monthly	70	70	70	70	70	70	70	70	70	70	70	70
REP-Foot Patrol ROW Planned Miles YTD	70	140	210	280	350	421	491	561	631	701	771	841
REP-Foot Patrol ROW Actual Miles Monthly	-	-	-	-	-	-	-	-	-	-	-	14
REP-Foot Patrol ROW Actual Miles YTD	-	-	-	-	-	-	-	-	-	-	-	14
REP-Foot Patrol ROW Variance Miles YTD	(70)	(140)	(210)	(280)	(350)	(421)	(491)	(561)	(631)	(701)	(771)	(827)

Section 4

2011 Other Reliability Programs



RELIABILITY ENHANCEMENT PROGRAM - OTHER RELIABILITY O&M



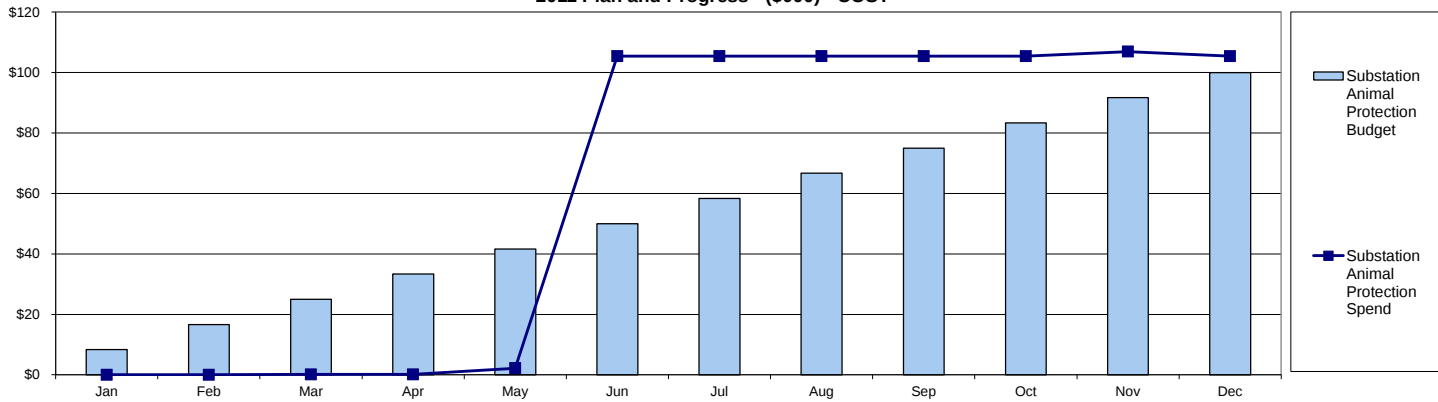
2011 PLAN AND PROGRESS

<u>PROGRAMS:</u>	<u>PAGE</u>
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RECLOSER MAINTENANCE	3
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DIRECT BURIED CONCENTRIC NEUTRALS	5
CASCADE DATABASE FIELD SURVEY AND ENTRY	6
RTE ELBOW REPLACEMENT	7
GIS O&M PORTION OF CAPITAL	8
O&M PORTION OF CAPITAL PROJECTS	9

RELIOM-RELIABILITY ENHANCEMENT PROGRAM - SUBSTATION ANIMAL PROTECTION



2011 Plan and Progress - (\$000) - COST



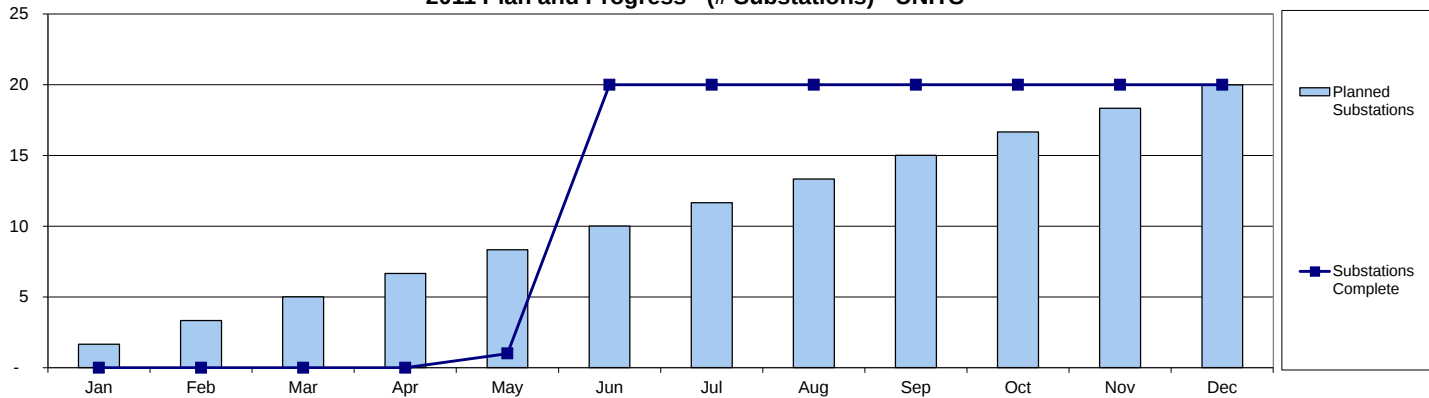
	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
REP												
REP-S/S Animal Protection Plan \$000 Monthly	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8
REP-S/S Animal Protection Plan \$000 YTD	\$ 8	\$ 17	\$ 25	\$ 33	\$ 42	\$ 50	\$ 58	\$ 67	\$ 75	\$ 83	\$ 92	\$ 100
REP-S/S Animal Protection Actual \$000 Monthly	\$ -	\$ -	\$ 0	\$ (0)	\$ 2	\$ 103	\$ -	\$ 0	\$ (0)	\$ 0	\$ 1	\$ (2)
REP-S/S Animal Protection Actual \$000 YTD	\$ -	\$ -	\$ 0	\$ 0	\$ 2	\$ 105	\$ 105	\$ 105	\$ 105	\$ 105	\$ 107	\$ 105
REP-S/S Animal Protection Variance \$000 YTD	\$ (8)	\$ (17)	\$ (25)	\$ (33)	\$ (39)	\$ 55	\$ 47	\$ 39	\$ 30	\$ 22	\$ 15	\$ 5

See Section 1 for Description and Comments

RELIOM-RELIABILITY ENHANCEMENT PROGRAM - SUBSTATION ANIMAL PROTECTION



2011 Plan and Progress - (# Substations) - UNITS

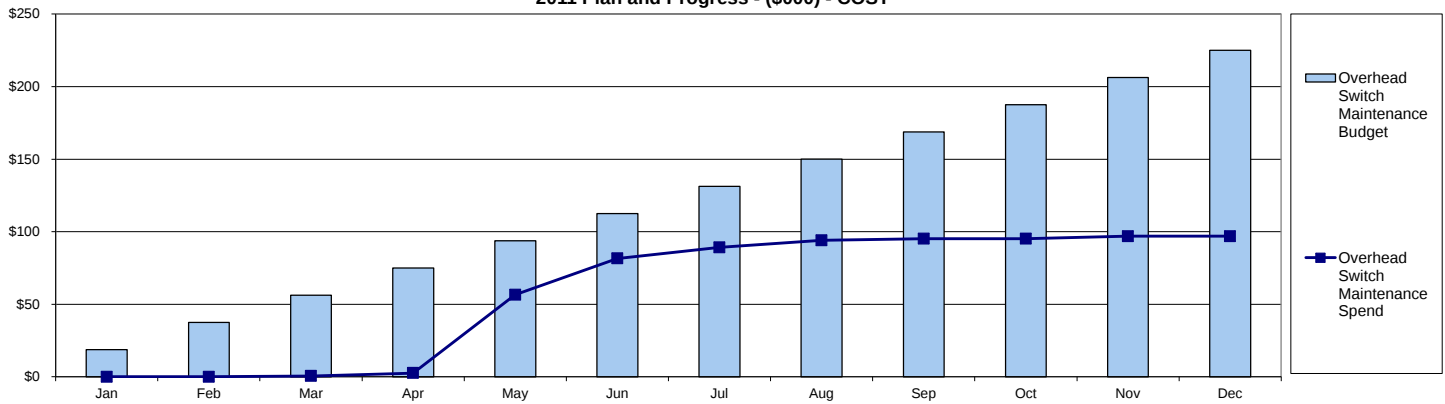


	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
REP												
REP-Substations Planned Monthly	2	2	2	2	2	2	2	2	2	2	2	2
REP-Substations Planned YTD	2	3	5	7	8	10	12	13	15	17	18	20
REP-Substations Actual Monthly	-	-	-	-	1	19	-	-	-	-	-	-
REP-Substations Actual YTD	-	-	-	-	1	20	20	20	20	20	20	20
REP-# Substations Variance YTD	(2)	(3)	(5)	(7)	(7)	10	8	7	5	3	2	-

RELIOM-RELIABILITY ENHANCEMENT PROGRAM - OVERHEAD SWITCH MAINTENANCE



2011 Plan and Progress - (\$000) - COST



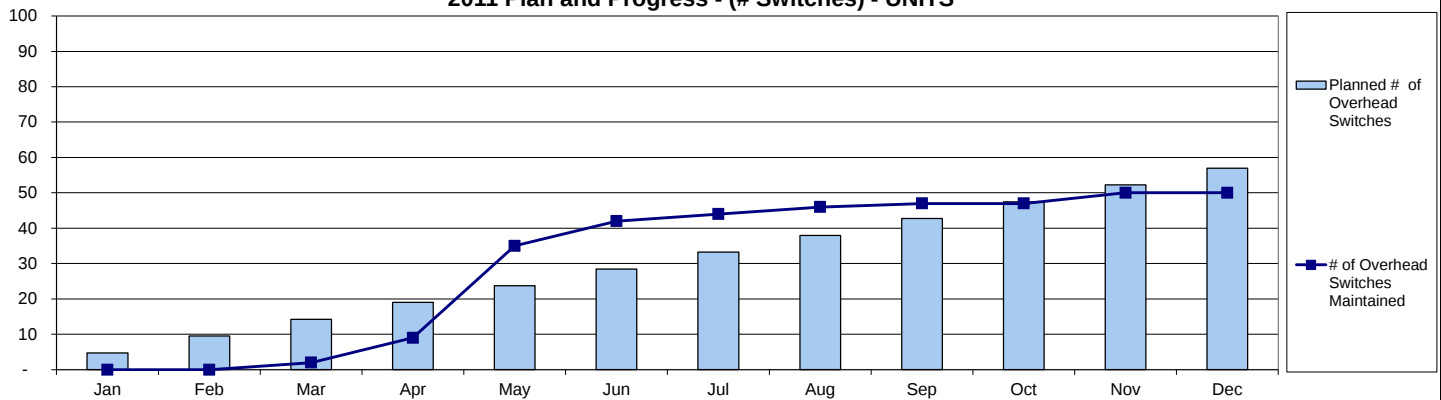
	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
REP												
REP-Overhead Switch Maintenance Plan \$000 Monthly	\$ 19	\$ 19	\$ 19	\$ 19	\$ 19	\$ 19	\$ 19	\$ 19	\$ 19	\$ 19	\$ 19	\$ 19
REP-Overhead Switch Maintenance Plan Plan \$000 YTD	\$ 19	\$ 38	\$ 56	\$ 75	\$ 94	\$ 113	\$ 131	\$ 150	\$ 169	\$ 188	\$ 206	\$ 225
REP-Overhead Switch Maintenance Plan Actual \$000 Monthly	\$ -	\$ -	\$ 1	\$ 2	\$ 54	\$ 25	\$ 8	\$ 5	\$ 1	\$ 0	\$ 2	\$ 0
REP-Overhead Switch Maintenance Plan Actual \$000 YTD	\$ -	\$ -	\$ 1	\$ 3	\$ 57	\$ 82	\$ 89	\$ 94	\$ 95	\$ 95	\$ 97	\$ 97
REP-Overhead Switch Maintenance Plan Variance \$000 YTD	\$ (19)	\$ (38)	\$ (56)	\$ (72)	\$ (37)	\$ (31)	\$ (42)	\$ (56)	\$ (74)	\$ (92)	\$ (109)	\$ (128)

See Section 1 for Description and Comments

RELIOM-RELIABILITY ENHANCEMENT PROGRAM - OVERHEAD SWITCH MAINTENANCE



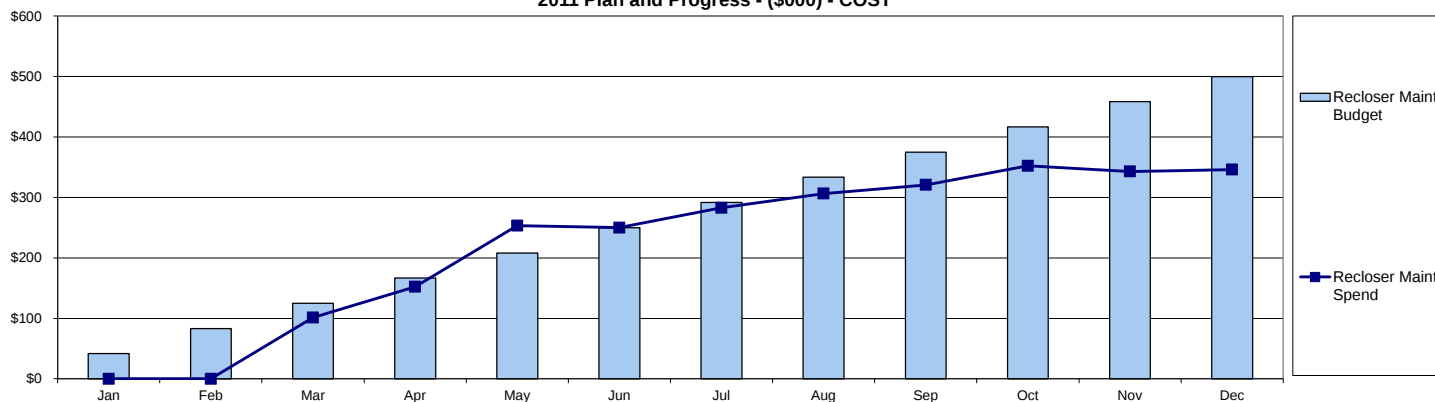
2011 Plan and Progress - (# Switches) - UNITS



	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
REP												
REP-Overhead Switch Maintenance Planned Units Monthly	5	5	5	5	5	5	5	5	5	5	5	5
REP-Overhead Switch Maintenance Planned Units YTD	5	10	14	19	24	29	33	38	43	48	52	57
REP-Overhead Switch Maintenance Actual Units Monthly	-	-	2	7	26	7	2	2	1	-	3	-
REP-Overhead Switch Maintenance Actual Units YTD	-	-	2	9	35	42	44	46	47	47	50	50
REP-Overhead Switch Maintenance Variance Units YTD	(5)	(10)	(12)	(10)	11	14	11	8	4	(1)	(2)	(7)

RELIOM-RELIABILITY ENHANCEMENT PROGRAM - RECLOSER MAINTENANCE

2011 Plan and Progress - (\$000) - COST

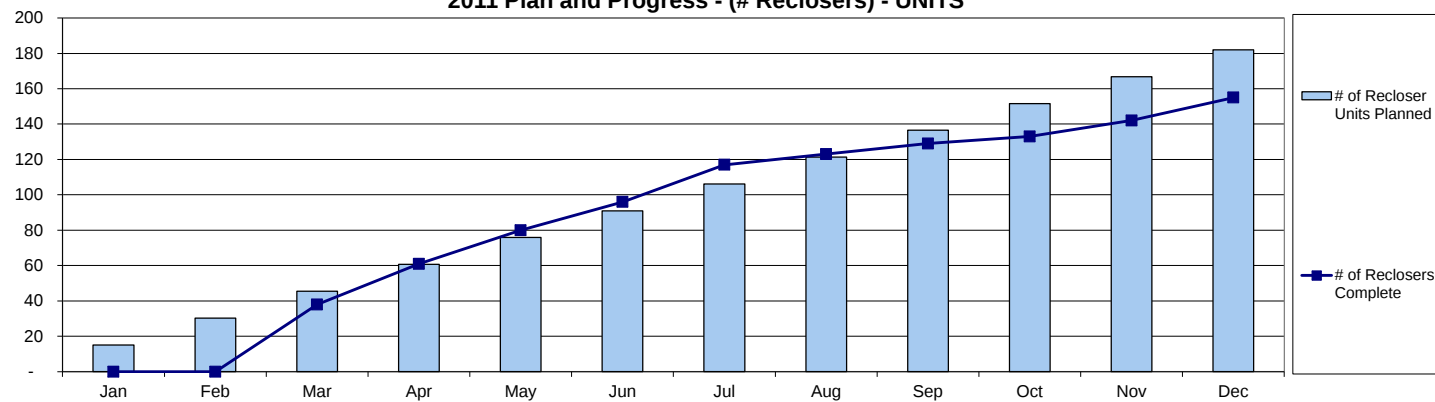


	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
REP												
REP-Recloser Backlog Plan \$000 Monthly	\$ 42	\$ 42	\$ 42	\$ 42	\$ 42	\$ 42	\$ 42	\$ 42	\$ 42	\$ 42	\$ 42	\$ 42
REP-Recloser Backlog Plan \$000 YTD	\$ 42	\$ 83	\$ 125	\$ 167	\$ 208	\$ 250	\$ 292	\$ 333	\$ 375	\$ 417	\$ 458	\$ 500
REP-Recloser Backlog Plan Actual \$000 Monthly	\$ -	\$ -	\$ 101	\$ 51	\$ 101	\$ (3)	\$ 33	\$ 24	\$ 14	\$ 31	\$ (9)	\$ 3
REP-Recloser Backlog Plan Actual \$000 YTD	\$ -	\$ -	\$ 101	\$ 152	\$ 253	\$ 250	\$ 283	\$ 306	\$ 321	\$ 352	\$ 343	\$ 346
REP-Recloser Backlog Plan Variance \$000 YTD	\$ (42)	\$ (83)	\$ (24)	\$ (14)	\$ 45	\$ (0)	\$ (9)	\$ (27)	\$ (54)	\$ (64)	\$ (115)	\$ (154)

See Section 1 for Description and Comments

RELIOM-RELIABILITY ENHANCEMENT PROGRAM - RECLOSER MAINTENANCE

2011 Plan and Progress - (# Reclosers) - UNITS

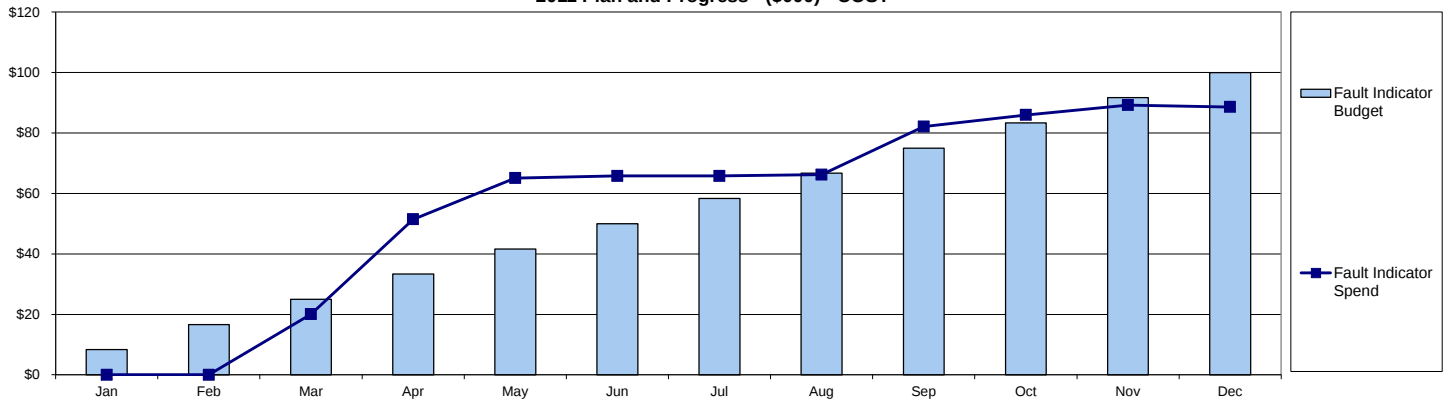


	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
REP												
REP-Recloser Planned Units Monthly	15	15	15	15	15	15	15	15	15	15	15	15
REP-Recloser Planned Units YTD	15	30	46	61	76	91	106	121	137	152	167	182
REP-Recloser Actual Units Monthly	-	-	38	23	19	16	21	6	6	4	9	13
REP-Recloser Actual Units YTD	-	-	38	61	80	96	117	123	129	133	142	155
REP-Recloser Variance Units YTD	(15)	(30)	(8)	0	4	5	11	2	(8)	(19)	(25)	(27)

RELIOM-RELIABILITY ENHANCEMENT PROGRAM - INSTALL FAULT INDICATORS



2011 Plan and Progress - (\$000) - COST



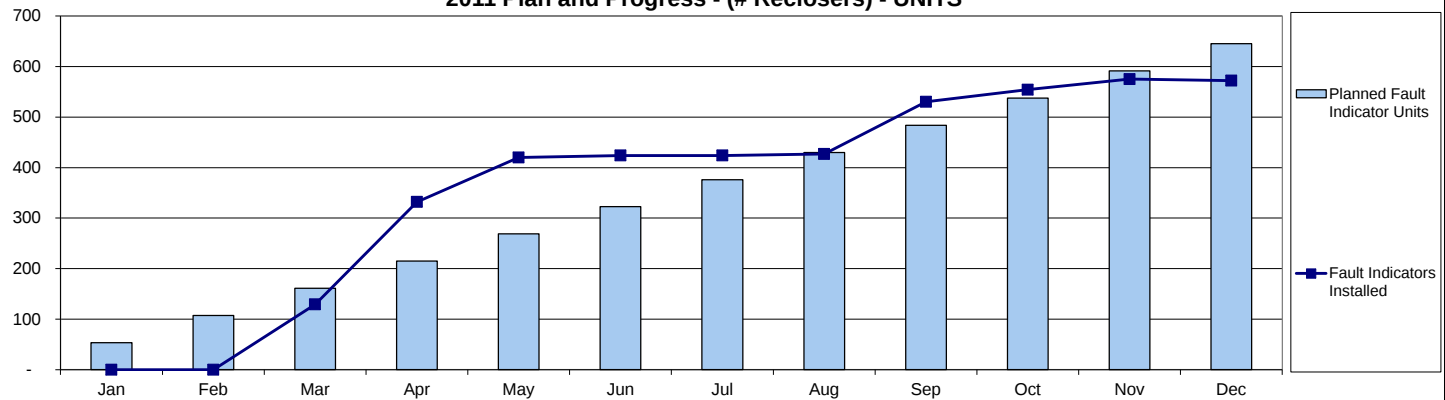
	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
REP												
REP-Fault Indicators Plan \$000 Monthly	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8
REP-Fault Indicators Plan \$000 YTD	\$ 8	\$ 17	\$ 25	\$ 33	\$ 42	\$ 50	\$ 58	\$ 67	\$ 75	\$ 83	\$ 92	\$ 100
REP-Fault Indicators Plan Actual \$000 Monthly	\$ -	\$ -	\$ 20	\$ 31	\$ 14	\$ 1	\$ -	\$ 0	\$ 16	\$ 4	\$ 3	\$ (1)
REP-Fault Indicators Plan Actual \$000 YTD	\$ -	\$ -	\$ 20	\$ 51	\$ 65	\$ 66	\$ 66	\$ 66	\$ 82	\$ 86	\$ 89	\$ 89
REP-Fault Indicators Plan Variance \$000 YTD	\$ (8)	\$ (17)	\$ (5)	\$ 18	\$ 23	\$ 16	\$ 7	\$ (0)	\$ 7	\$ 3	\$ (2)	\$ (11)

See Section 1 for Description and Comments

RELIOM-RELIABILITY ENHANCEMENT PROGRAM - INSTALL FAULT INDICATORS



2011 Plan and Progress - (# Reclosers) - UNITS

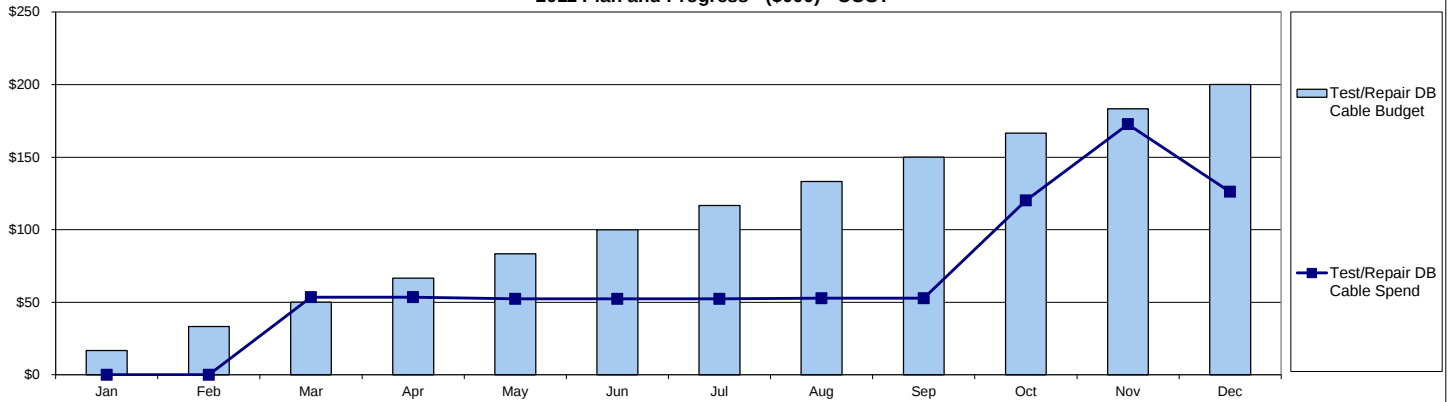


	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
REP												
REP-Fault Indicators Planned Units Monthly	54	54	54	54	54	54	54	54	54	54	54	54
REP-Fault Indicators Planned Units YTD	54	108	161	215	269	323	376	430	484	538	591	645
REP-Fault Indicators Actual Units Monthly	-	-	129	203	88	4	-	3	103	24	21	(3)
REP-Fault Indicators Actual Units YTD	-	-	129	332	420	424	424	427	530	554	575	572
REP-Fault Indicators Variance Units YTD	(54)	(108)	(32)	117	151	102	48	(3)	46	17	(16)	(73)

RELION-RELIABILITY ENHANCEMENT PROGRAM - TEST & REPAIR DIRECT BURIED UNJACKET CONCENTRIC NEUTRAL CABLE



2011 Plan and Progress - (\$000) - COST



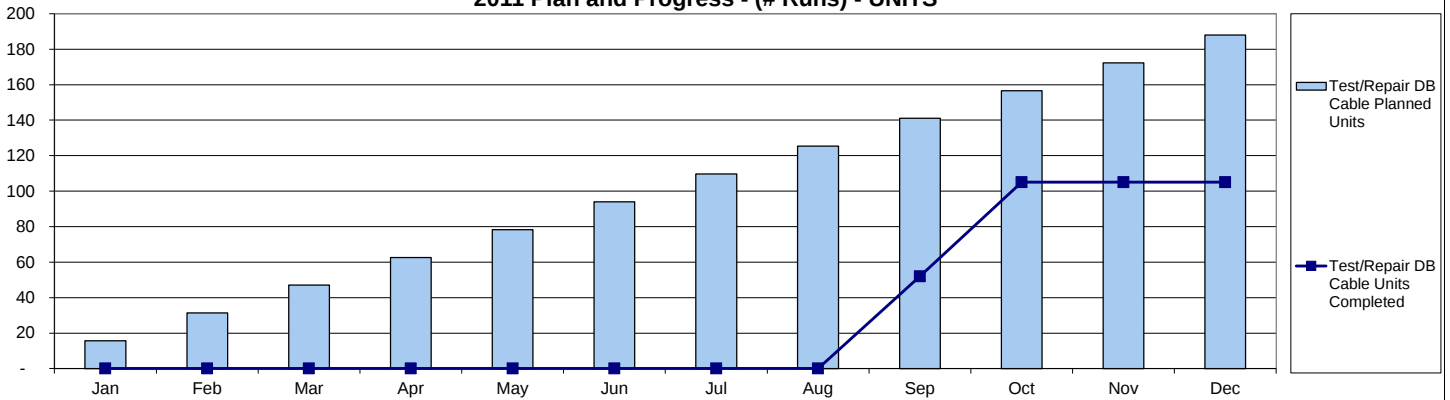
	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
REP												
REP-Test/Repair DB Cable Plan \$000 Monthly	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17
REP-Test/Repair DB Cable Plan \$000 YTD	\$ 17	\$ 33	\$ 50	\$ 67	\$ 83	\$ 100	\$ 117	\$ 133	\$ 150	\$ 167	\$ 183	\$ 200
REP-Test/Repair DB Cable Plan Actual \$000 Monthly	\$ -	\$ -	\$ 53	\$ (0)	\$ (1)	\$ -	\$ -	\$ 0	\$ -	\$ 67	\$ 53	\$ (47)
REP-Test/Repair DB Cable Plan Actual \$000 YTD	\$ -	\$ -	\$ 53	\$ 53	\$ 52	\$ 52	\$ 52	\$ 53	\$ 53	\$ 120	\$ 173	\$ 126
REP-Test/Repair DB Cable Plan Variance \$000 YTD	\$ (17)	\$ (33)	\$ 3	\$ (13)	\$ (31)	\$ (48)	\$ (64)	\$ (81)	\$ (97)	\$ (46)	\$ (11)	\$ (74)

See Section 1 for Description and Comments

RELION-RELIABILITY ENHANCEMENT PROGRAM - TEST & REPAIR DIRECT BURIED UNJACKET CONCENTRIC NEUTRAL CABLE



2011 Plan and Progress - (# Runs) - UNITS

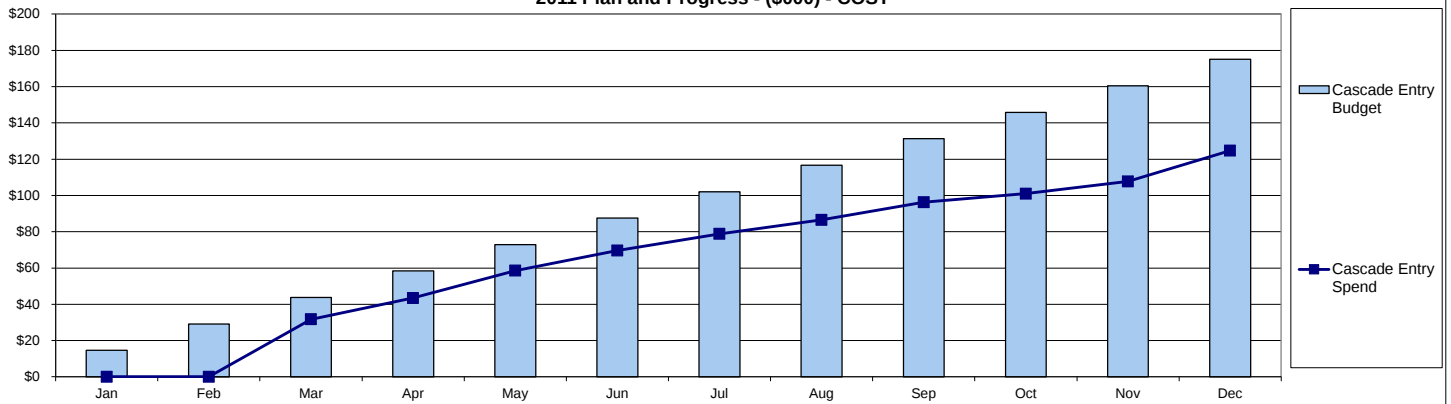


	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
REP												
REP-Test/Repair DB Cable Planned Units Monthly	16	16	16	16	16	16	16	16	16	16	16	16
REP-Test/Repair DB Cable Planned Units YTD	16	31	47	63	78	94	110	125	141	157	172	188
REP-Test/Repair DB Cable Actual Units Monthly	-	-	-	-	-	-	-	-	52	53	-	-
REP-Test/Repair DB Cable Actual Units YTD	-	-	-	-	-	-	-	-	52	105	105	105
REP-Test/Repair DB Cable Variance Units YTD	(16)	(31)	(47)	(63)	(78)	(94)	(110)	(125)	(89)	(52)	(67)	(83)

RELIOM-RELIABILITY ENHANCEMENT PROGRAM - CASCADE DATABASE FIELD SURVEY AND ENTRY



2011 Plan and Progress - (\$000) - COST



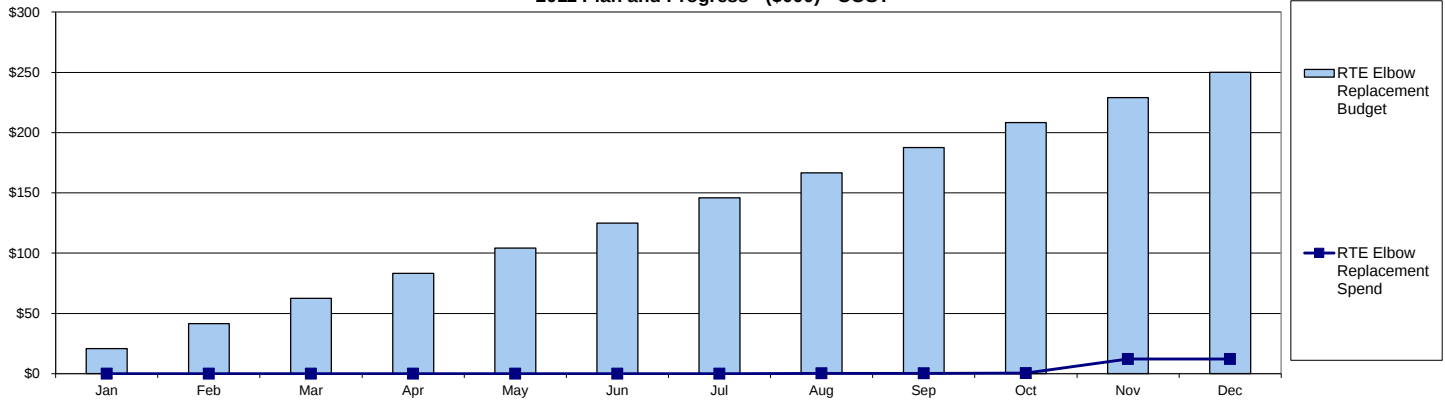
	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
REP												
REP-Cascade Entry Plan \$000 Monthly	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15
REP-Cascade Entry Plan \$000 YTD	\$ 15	\$ 29	\$ 44	\$ 58	\$ 73	\$ 88	\$ 102	\$ 117	\$ 131	\$ 146	\$ 160	\$ 175
REP-Cascade Entry Actual \$000 Monthly	\$ -	\$ -	\$ 32	\$ 12	\$ 15	\$ 11	\$ 9	\$ 8	\$ 10	\$ 5	\$ 7	\$ 17
REP-Cascade Entry Actual \$000 YTD	\$ -	\$ -	\$ 32	\$ 43	\$ 59	\$ 70	\$ 79	\$ 86	\$ 96	\$ 101	\$ 108	\$ 125
REP-Cascade Entry Variance \$000 YTD	\$ (15)	\$ (29)	\$ (12)	\$ (15)	\$ (14)	\$ (18)	\$ (23)	\$ (30)	\$ (35)	\$ (45)	\$ (53)	\$ (50)

See Section 1 for Description and Comments

RELIOM-RELIABILITY ENHANCEMENT PROGRAM - RTE ELBOW REPLACEMENT



2011 Plan and Progress - (\$000) - COST



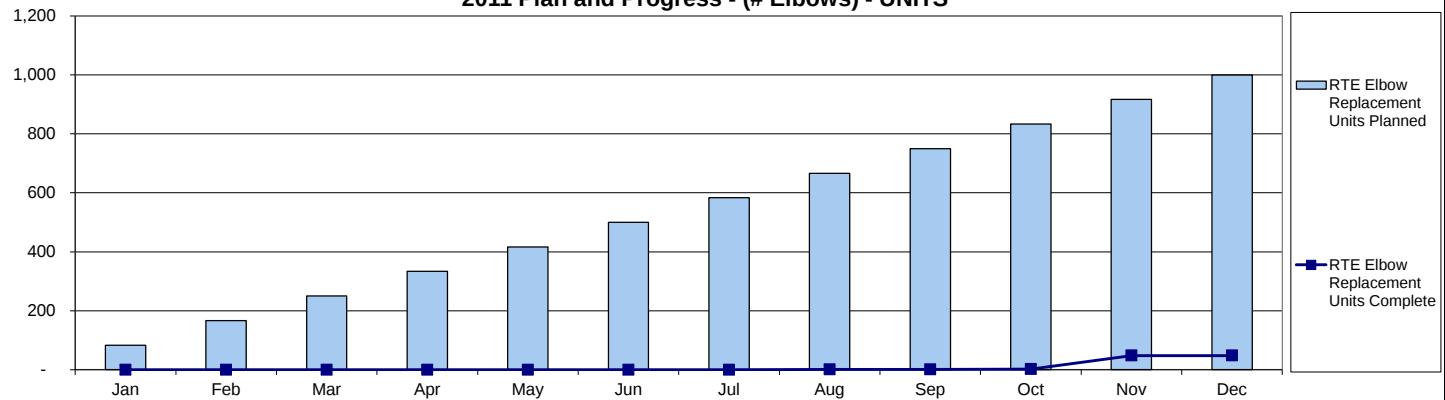
	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
REP												
REP-RTE Elbow Replacement Plan \$000 Monthly	\$ 21	\$ 21	\$ 21	\$ 21	\$ 21	\$ 21	\$ 21	\$ 21	\$ 21	\$ 21	\$ 21	\$ 21
REP-RTE Elbow Replacement Plan \$000 YTD	\$ 21	\$ 42	\$ 63	\$ 83	\$ 104	\$ 125	\$ 146	\$ 167	\$ 188	\$ 208	\$ 229	\$ 250
REP-RTE Elbow Replacement Actual \$000 Monthly	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 0	\$ -	\$ 0	\$ 12	\$ 0
REP-RTE Elbow Replacement Actual \$000 YTD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 0	\$ 0	\$ 0	\$ 12	\$ 12
REP-RTE Elbow Replacement Variance \$000 YTD	\$ (21)	\$ (42)	\$ (63)	\$ (83)	\$ (104)	\$ (125)	\$ (146)	\$ (166)	\$ (187)	\$ (208)	\$ (217)	\$ (238)

See Section 1 for Description and Comments

RELIOM-RELIABILITY ENHANCEMENT PROGRAM - RTE ELBOW REPLACEMENT

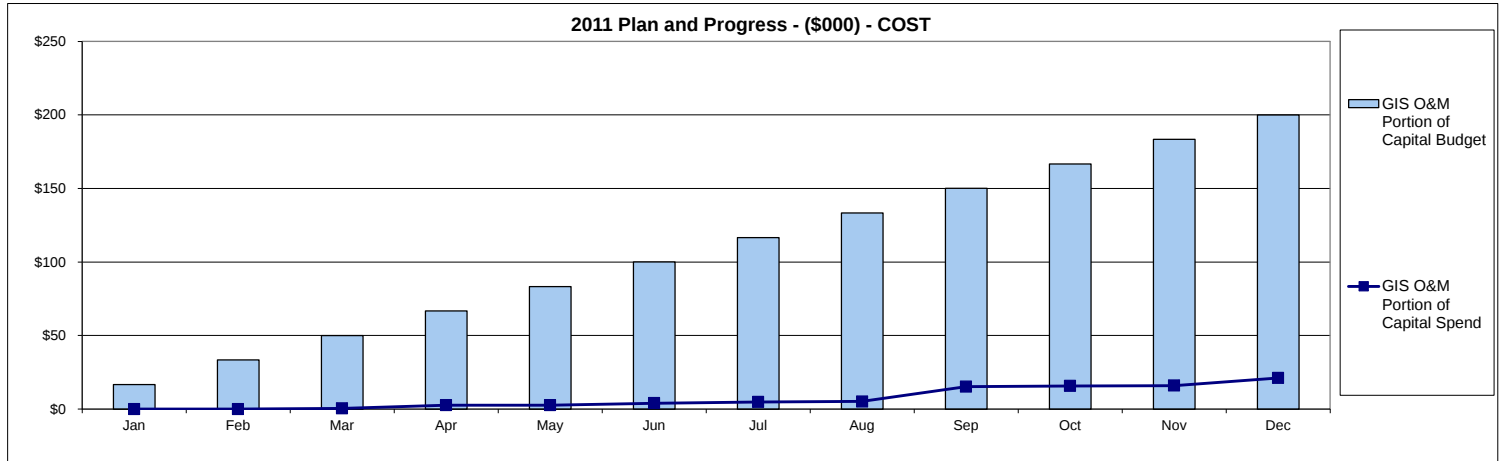


2011 Plan and Progress - (# Elbows) - UNITS



	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
REP												
REP-RTE Elbow Replacement Planned Units Monthly	83	83	83	83	83	83	83	83	83	83	83	83
REP-RTE Elbow Replacement Planned Units YTD	83	167	250	333	417	500	583	667	750	833	917	1,000
REP-RTE Elbow Replacement Actual Units Monthly	-	-	-	-	-	-	-	1	-	1	46	-
REP-RTE Elbow Replacement Actual Units YTD	-	-	-	-	-	-	-	1	1	2	48	48
REP-RTE Elbow Replacement Variance Units YTD	(83)	(167)	(250)	(333)	(417)	(500)	(583)	(666)	(749)	(831)	(869)	(952)

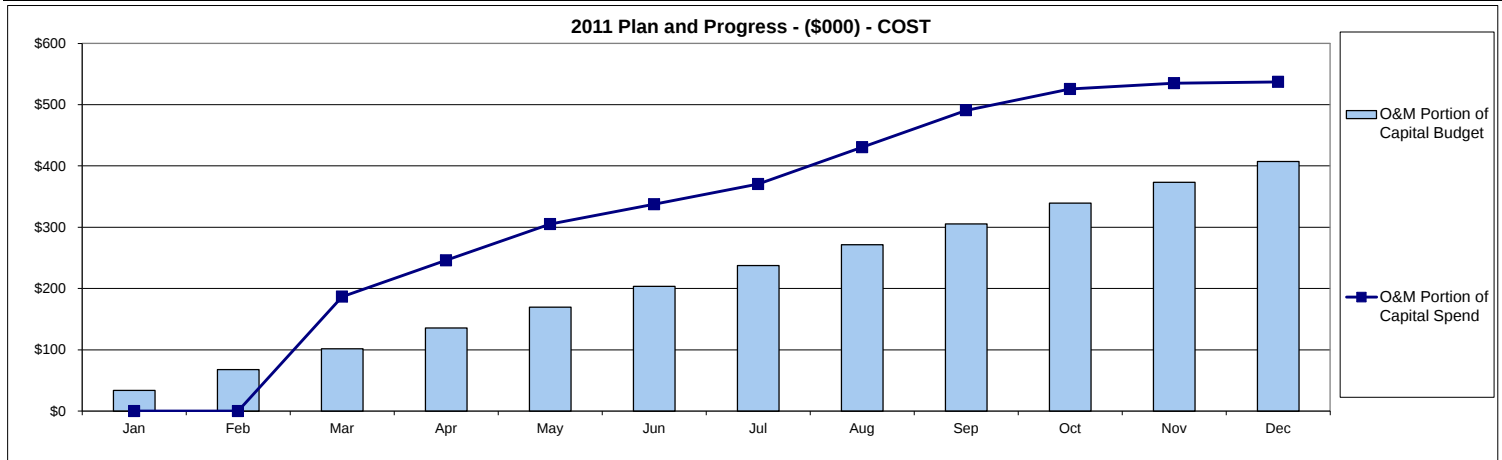
RELION-RELIABILITY ENHANCEMENT PROGRAM - GEOSPACIAL INFORMATION **SYSTEM (GIS) O&M PORTION OF CAPITAL**



	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
REP												
GIS O&M Plan \$000 Monthly	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17
GIS O&M Plan \$000 YTD	\$ 17	\$ 33	\$ 50	\$ 67	\$ 83	\$ 100	\$ 117	\$ 133	\$ 150	\$ 167	\$ 183	\$ 200
GIS O&M Actual \$000 Monthly	\$ -	\$ -	\$ 1	\$ 2	\$ 0	\$ 1	\$ 1	\$ 0	\$ 10	\$ 1	\$ 0	\$ 5
GIS O&M Actual \$000 YTD	\$ -	\$ -	\$ 1	\$ 3	\$ 3	\$ 4	\$ 5	\$ 5	\$ 15	\$ 16	\$ 16	\$ 21
GIS O&M Variance \$000 YTD	\$ (17)	\$ (33)	\$ (49)	\$ (64)	\$ (81)	\$ (96)	\$ (112)	\$ (128)	\$ (135)	\$ (151)	\$ (167)	\$ (179)

See Section 1 for Description and Comments

RELIOM-RELIABILITY ENHANCEMENT PROGRAM - O&M PORTION OF CAPITAL



	2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
REP												
REP-O&M Portion of Capital Plan \$000 Monthly	\$ 34	\$ 34	\$ 34	\$ 34	\$ 34	\$ 34	\$ 34	\$ 34	\$ 34	\$ 34	\$ 34	\$ 34
REP-O&M Portion of Capital Plan \$000 YTD	\$ 34	\$ 68	\$ 102	\$ 136	\$ 170	\$ 204	\$ 238	\$ 272	\$ 305	\$ 339	\$ 373	\$ 407
REP-O&M Portion of Capital Plan Actual \$000 Monthly	\$ -	\$ -	\$ 187	\$ 59	\$ 59	\$ 32	\$ 33	\$ 60	\$ 60	\$ 35	\$ 9	\$ 2
REP-O&M Portion of Capital Plan Actual \$000 YTD	\$ -	\$ -	\$ 187	\$ 246	\$ 305	\$ 338	\$ 370	\$ 431	\$ 491	\$ 525	\$ 535	\$ 537
REP-O&M Portion of Capital Plan Variance \$000 YTD	\$ (34)	\$ (68)	\$ 85	\$ 110	\$ 135	\$ 134	\$ 133	\$ 159	\$ 185	\$ 186	\$ 162	\$ 130

See Section 1 for Description and Comments

Section 5

2011 Capital Summary



**Public Service
of New Hampshire**
The Northeast Utilities System

Year End 2011 Summary of PSNH Reliability Enhancement Program – CAPITAL

Docket No. DE 09-035

Jan 1 2011 - Dec 31 2011



CAPITAL - REP II

	\$ PLAN	\$ ACTUAL	\$ VARIANCE
Distribution Line Porcelain Changeout	\$2,030,000	\$3,164,800	\$1,134,800
34.5kV Substation Breaker Replacement	\$508,000	\$684,400	\$176,400
Enhanced Tree Trimming	\$2,030,000	\$2,057,100	\$27,100
Pole Top DSCADA Replacement	\$507,000	\$499,900	(\$7,100)
Substation RTU Replacement	\$330,000	\$341,500	\$11,500
Enable SCADA to Windsor Backup	\$67,000	\$101,100	\$34,100
Distrib. Line Wire Upgrade/Eliminate Narrow ROW	\$406,000	\$346,500	(\$59,500)
Reliability Improvements Annual (Ongoing)	\$1,015,000	\$1,076,000	\$61,000
GIS Capital Project	\$2,000,000	\$1,266,400	(\$733,600)
	\$8,893,000	\$9,537,700	\$644,700

CAPITAL - DUE TO BASE REP

	\$ PLAN	\$ ACTUAL	\$ VARIANCE
Reject Pole Replacement	\$1,776,000	\$1,275,300	(\$500,700)
Pole Reinforcement	\$152,000	\$10,200	(\$141,800)
NESC Capital Work	\$508,000	\$1,299,200	\$791,200
Airbreak Switch Replacement	\$203,000	\$70,400	(\$132,600)
Direct Buried Cable Replacement	\$1,269,000	\$1,168,300	(\$100,700)
Direct Buried Cable Injection	\$152,000	\$224,700	\$72,700
	\$4,060,000	\$4,048,100	(\$11,900)

TOTAL REP CAPITAL	\$12,953,000	\$13,585,800	\$632,800
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CAPITAL – REP II

DISTRIBUTION LINE PORCELAIN PRODUCT CHANGEOUT (REP II):

Program Description:	This targeted capital project, addressing safety and reliability, is a proactive program aimed at eliminating distribution line porcelain equipment with a known impact on the System Average Interruption Duration Index (SAIDI). The specific goal is to replace all designated porcelain equipment with polymer in ten years. The program will specifically replace porcelain 4 ¼" disc insulators, cutouts, non-transformer lightning arrestors, and solid core in-line disconnect switches with new polymer equipment.
Total Unit Population:	Estimate of 150,000 porcelain units to change out. PSNH has 11,000 miles of line so this equates to 13.6 pieces of porcelain per mile on average.
Maintenance Cycle:	Complete in 10 years. 150,000 pieces of porcelain divided by 10 years equals 15,000 units per year.
Reliability Benefit:	Reduced failure of this product.
Results:	An estimated 23,000 porcelain cutouts, insulators, lightning arresters and in-line disconnect were replaced with polymer units in 2011. Failures of polymer insulators and cutouts have been very low.
Capital Cost:	

\$ PLAN	\$ ACTUAL	\$ VARIANCE
\$2,030,000	\$3,164,800	\$1,134,800

34.5KV SUBSTATION BREAKER REPLACEMENT (REP II):

Program Description:	This program addresses the replacement of existing substation 34.5kV breakers which are old, problematic repair or operation, unique or no longer supported by vendors for parts and repair material. There are 251- 34.5kV breakers on the system of various manufacturers, models, types and vintage.
Total Unit Population:	251- 34.5kV breakers (replace 2 breakers first program year)
Maintenance Cycle:	Breakers are maintained at the time the substation is maintained, on a 10 year cycle.
Reliability Benefit:	Reduce failure to operate of breakers. Reduce maintenance costs.
Results:	Two breakers were replaced in 2011 as part of REP and an additional eight were replaced as part of non REP projects.
Capital Cost:	

\$ PLAN	\$ ACTUAL	\$ VARIANCE
\$508,000	\$684,400	\$176,400

ENHANCED TREE TRIMMING (ETT) (REP II):

Program Description: Trim main lines for reliability using an enhanced tree trimming (ETT) specification to create ground to sky clearance versus the smaller maintenance trim zone.

Expanded clearance is obtained by performing greater off zone takedowns and clearing and higher than normal vertical clearing. Approximately 11,000 miles of overhead line exists with the project targeted up to 50 miles per year on circuits with highest tree related reliability (top 50 list).

Total Unit Population: PSNH is responsible for trimming approximately 11,000 miles of overhead distribution line. A portion of these miles are candidates for ETT to improve reliability on main lines.

Reliability Benefit: Increasing the trim zone at targeted main line locations significantly reduces the risk of tree outages associated with significant SAIDI (customer) impact.

Results: In 2011, 55 miles of ETT was performed.

Capital Cost:

\$ PLAN	\$ ACTUAL	\$ VARIANCE
\$2,030,000	\$2,057,100	\$27,100

POLE TOP DSCADA REPLACEMENT (REP II):

Program Description: Replace obsolete remote terminal units (RTUs) at the same time the radios are upgraded to 220 MHz.

Total Unit Population: 135 total unit population. Replace at approximately 20 per year.

Reliability Benefit: Existing RTUs have reliability issues and parts are no longer available for repair. Additionally, the existing hardware at the Electric System Control Center (ESCC) will not accept the installation any additional units in the field. New RTUs provide advanced technology e.g. time stamped events, line readings, and connection of multiple devices with different communication protocols.

Results: Fourteen sites with obsolete RTU's were upgraded during 2011.

Capital Cost:

\$ PLAN	\$ ACTUAL	\$ VARIANCE
\$507,000	\$499,900	(\$7,100)

SUBSTATION RTU REPLACEMENT (REP II):

Program Description: This project is to replace the remaining estimated 15 of 23 older Remote Terminal Units at various substations. Older units are not supported by vendors for repair and utilize single REDAC 70 communication protocol. New RTUs provide time stamp, line reading data, and connection to devices with different communication protocols.

Total Unit Population: 15 of 23 older Remote Terminal Units (replace 3 first program year)

Maintenance Cycle: Substation RTUs normally are repaired or replaced when they fail to operate.

Reliability Benefit: Fewer failures to communicate with substation SCADA controlled devices.

Results: Three obsolete substation RTU's were upgraded in 2011. Nine remain to be done.

Capital Cost:

\$ PLAN	\$ ACTUAL	\$ VARIANCE
\$330,000	\$341,500	\$11,500

ENABLE SCADA TO WINDSOR BACKUP (REP II):

Program Description: Connect existing remote terminal units (RTUs) to the backup computer server in Windsor, CT. Supervisory Control and Data Acquisition (SCADA) refers to a centralized control system to perform automated activities through RTUs.

Total Unit Population: 33 total unit population.

Reliability Benefit: In the event of failure of the computer server at the Electric System Control Center in Manchester NH, all RTUs will be able to be accessed via the backup server at Windsor CT providing redundant/reliable operations. This also meets NERC and ISO requirements.

Results: Five sites were completed in 2011; two additional sites were upgraded with temporary facilities. Four remaining sites have substantial work completed with final completion expect in 2012.

Capital Cost:

\$ PLAN	\$ ACTUAL	\$ VARIANCE
\$67,000	\$101,100	\$34,100

DISTRIBUTION LINE WIRE UPGRADE/ELIMINATE NARROW RIGHT-OF-WAY (REP II):

Program Description: Replace #6 and #4 copper conductor in locations where it is susceptible to burn down by tree limbs. Primary locations are in rural areas of the western part of the company - Peterborough, New Ipswich, Rindge, Jaffrey, Dublin, but may be in other areas. Bring overhead lines out onto the street. These lines are currently located in narrow rights-of-way which are difficult to patrol and repair and expensive to maintain.

Total Unit Population: Total number to be identified.

Reliability Benefit: Reduce repair time by replacing small copper conductor that burns down and relocating lines out of narrow inaccessible ROWs.

Results: Three projects were identified to be done in 2011. One was completed, one was substantially worked on and the other was designed and materials ordered. An additional 21 non-REP projects to replace #6 and #4 Copper conductors and remove lines from narrow Rights of Way were identified and constructed in 2011.

Capital Cost:

\$ PLAN	\$ ACTUAL	\$ VARIANCE
\$406,000	\$346,500	(\$59,500)

RELIABILITY IMPROVEMENTS ANNUAL (REP II):

Program Description: This project provides funding for a variety of activities, each of which costs less than \$50,000, relating to reliability of service. This includes unfused lateral protection, recloser upgrades and installs, line construction to provide added phases or alternate feeds, switch and manual disconnect installations, and other specific capital work to improve circuit and area reliability. Average cost per typical Engineering Work Request (EWR) is about \$8,900.

Total Unit Population: 112 EWRs in first program year

Maintenance Cycle: None.

Reliability Benefit: Reduce the number of customers affected by outages by fusing laterals and add additional sectionalizing devices. Reduce permanent outages by installing reclosers. Perform other items as identified.

Results: Completed approximately 75 jobs on the system to improve reliability.

Capital Cost:

\$ PLAN	\$ ACTUAL	\$ VARIANCE
\$1,015,000	\$1,076,000	\$61,000

GIS CAPITAL PROJECT (REP II):

Program Description:

Define overall scope and desired end products and determine technology requirements, select vendors and define overall implementation plan to establish a GIS at PSNH. Initial deliverables would include establishing PSNH's overhead maps onto a land base, connecting the new GIS to existing internal databases including Customer Information and Vegetation management with outputs to automate engineering models and analysis tools. Next steps would include capturing underground systems, incorporating switching and distribution operating information (DSCADA), as well as right-of-way lines. Integration with other readily available GIS data from other entities would also be performed such as for wetlands and property ownership information that is available from federal state and municipal agencies. PSNH would also explore ways to share our information with others. Subsequent steps are to move the GIS to desktop/infield design of line extensions and system upgrades. An outage management system and work management opportunities would then become practical expansions of this system.

Reliability Benefit:

Provide a single location for data that can be easily accessed to analyze the distribution system, provide a base for future Outage Management System and provide mapping of the distribution system that is geographically correct.

Results:

The platform and vendor to implement GIS was selected in 2011. A substantial increased amount of spending is anticipated in 2012.

Two reports were provided to the PUC in 2011 regarding progress on this effort:
6/24/2011 – Report to the Public Utilities Commission Detailing PSNH's Distribution Geographic Information System High Level Design and Plan
12/29/2011 – Semi-Annual Report to the Public Utilities Commission Detailing PSNH's Distribution Geographic Information System

Capital Cost:

\$ PLAN	\$ ACTUAL	\$ VARIANCE
\$2,000,000	\$1,266,400	(\$733,600)

CAPITAL DUE TO BASE REP

REJECT POLE REPLACEMENT (BASE REP):

Program Description: The preventive maintenance cycle for distribution poles to inspect, treat, reinforce or replace decayed or damaged poles to ensure reliable and safe use of this asset will generate approximately 2% of the poles inspected for replacement.

PSNH maintains 240,000 poles on its system. These are inspected every 10 years or 24,000 poles per year. Estimated reject rate is 2% requiring 480 poles to be replaced or reinforced. Poles are reviewed in the field for suitability to be reinforced otherwise they are replaced. Estimate >70% replaced.

Total Unit Population: Dependent upon inspection results, estimate 4,800 poles to replace or reinforce.

Reliability Benefit: Reliable performance and safety of poles in high winds, heavy wet snow, pole accidents or other events that cause undo stress in addition to normal service of this asset.

Results: A total of 272 poles were replaced in 2011. The actual pole failure rate is 1.8%. Per company requirements, poles in imminent danger are made safe within five work days and all poles are replaced or reinforced within one year. Pole inspections take place from May through September with many poles being replaced from October through December. Because of the 2011 major storms, the replacements were delayed into 2012.

Capital Cost:

\$ PLAN	\$ ACTUAL	\$ VARIANCE
\$1,776,000	\$1,275,300	(\$500,700)

POLE REINFORCEMENT (BASE REP):

Program Description: Inspection of poles generates approximately 0.6% of poles that require being made safe or replaced within five working days, approximately 0.8% of poles must be replaced within one year and approximately 0.5% are eligible for reinforcement. Each of the poles eligible for reinforcement are reviewed in the field to determine if they will be reinforced.

PSNH maintains 240,000 poles on its system. These are inspected every 10 years or 24,000 poles. Approximately 120 poles are reviewed each year in the field to determine if they will be reinforced.

Total Unit Population: Dependent upon inspection results.

Reliability Benefit: Reliable performance and safety of poles in high winds, heavy wet snow, pole accidents or other events that cause undo stress in addition to normal service of this asset.

Results: In 2011, 25 poles were reinforced.

Capital Cost:

\$ PLAN	\$ ACTUAL	\$ VARIANCE
\$152,000	\$10,200	(\$141,800)

NATIONAL ELECTRICAL SAFETY CODE (NESC) GENERATED CAPITAL WORK (BASE REP):

Program Description: Replace distribution plant units that are required to conform to the National Electrical Safety Code (NESC) and found during NESC inspections.

Correct NESC violations by installing plant units. Most often is the installation of poles and conductors to meet clearance problems to buildings, communications conductors, or over streets and roadways.

Total Unit Population: Approximately 6,200 plant units.

Reliability Benefit: This work is required to conform to NESC requirements.

Results: The most common requirement is to replace poles to gain additional height to meet clearance to communications conductors or clearance to buildings or structures.

Capital Cost:

\$ PLAN	\$ ACTUAL	\$ VARIANCE
\$508,000	\$1,299,200	\$791,200

AIRBREAK SWITCH REPLACEMENT (BASE REP):

Program Description: Of the 725 airbreak switches on the system, 535 are on distribution lines. They are of various manufacturers, models, type, and vintage. This project accounts for the replacement of distribution line switches that are not suitable to be maintained, but remain in service. Replace with a new switch or recloser.

Total Unit Population: 535

Maintenance Cycle: Airbreak Switches are maintained on a six year cycle with inspection every year.

Reliability Benefit: Parts cannot be obtained for obsolete switches. Obsolete switches may not have sufficient capacity to break the load current of the circuit. Replacement with a recloser reduces the maintenance required and reduces the number of permanent outages.

Results: Only one obsolete airbreak switch required replacement. Additional airbreak switches were replaced in conjunction with replacement of obsolete pole top SCADA equipment.

Capital Cost:

\$ PLAN	\$ ACTUAL	\$ VARIANCE
\$203,000	\$70,400	(\$132,600)

DIRECT BURIED CABLE REPLACEMENT (BASE REP):

Program Description: Replace direct buried cable with cable in conduit.

2,000,000 feet of direct buried cable was installed at PSNH until 1985 with earliest vintages from 1970. Cable insulation is subject to age failure and bare concentric neutral conductors are subject to corrosion. Testing has indicated that in many locations the concentric neutral is no longer sufficient to provide a path to ground for the electric system. This project is to replace unjacketed direct buried cable in specific developments which have experienced a high failure rate or where cable has been rejected as a candidate for cable injection. Live front transformers and/or pre-1987 elbows are replaced along with the cable.

Total Unit Population: 2,000,000 feet

Reliability Benefit: Direct buried cable was installed at PSNH until approximately 1985 with a significant amount installed in the 1970's. New cable and new construction standards will provide enhanced reliability for the long-term.

Results: An estimated 60,000 feet of direct buried cable has been replaced with new cable in conduit as part of REP. An additional 40,000 feet is estimated to have been replaced as part of a non-REP project resulting from failed concentric neutrals.

Capital Cost:

\$ PLAN	\$ ACTUAL	\$ VARIANCE
\$1,269,000	\$1,168,300	(\$100,700)

DIRECT BURIED CABLE INJECTION (BASE REP):

Program Description: 2,000,000 feet of direct buried cable was installed at PSNH until 1985 with earliest vintages from 1970. The cable insulation is subject to age failure and the bare concentric neutral is subject to corrosion. This project is to inject unjacketed direct buried cable if it has shown by test that the concentric neutral has the majority of its integrity remaining.

Total Unit Population: 2,000,000 feet of direct buried cable. The actual amount eligible for injection is determined after concentric neutral testing.

Maintenance Cycle: None.

Reliability Benefit: The insulating capability of the cable is restored reducing the probability of a cable failure.

Results: Approximately 18,000 feet of cable was injected in 2011. The cost of injection is significantly lower than replacement. Plans for 2012 are to inject approximately 28,000 feet.

Capital Cost:

\$ PLAN	\$ ACTUAL	\$ VARIANCE
\$152,000	\$224,700	\$72,700

Section 6

2011 Other Activities

2011 ACTIVITIES ON TOP 50 RANKED BY COSAIDI (2009)

2009 Rank	2010 Co SAIDI Rank	Change in Rank Gain (Worse) from 2008	Circuit	AWC	SMT	Hazard Tree Removal	Mid Cycle	ETT	NESC Full Circuit Patrol	NESC Repair Activity	Inspect URD Systems and Replace Fault Indicators	Pole Inspect & Test	Pole Replace or Reinforce	ROW Patrol	Switch Maint	Recloser Maint	Recloser Additions	Test & Repair DB Cable	DB Replace	Porcelain Change Out	Other Corrective Actions	Corrective Actions Comments
1	255	254	3157X1	ROCHESTER	✓						✓			✓								Patrolled as part of DIR policy
2	63	61	348X3	LANCASTER	✓												✓			✓		Added recloser
3	36	33	3115X	EPPING	✓					✓											✓	Unfused laterals
4	8	4	3141X	DERRY							✓										✓	Relocated line out of ROW, correct recloser problem.
5	46	41	W13	KEENE							✓	✓								✓	✓	Unfused laterals.
6	29	23	3128X	DERRY							✓	✓										
7	104	97	W15	KEENE	✓				✓												✓	Relocated line out of ROW.
8	1	(7)	78X1	KEENE				✓					✓								✓	Performed mainline rehabilitation.
9	10	1	319X1	PITTSFIELD				✓														
10	304	294	3191	EPPING																		
11	553	542	312X	MANCHESTER WEST																		
12	14	2	3133X	DERRY			✓	✓			✓										✓	Unfused laterals, P&C improvements
13	17	4	333XS	CHOCORUA					✓	✓			✓		✓	✓	✓	✓	✓	✓	✓	Added multiple reclosers, DB replacement and fault indicators, Smart Grid - DMS added
14	18	4	348X1	LANCASTER					✓	✓							✓				✓	Added recloser, offroad to road line relocations
15	91	76	11W1	LACONIA	✓																✓	Relocated line out of ROW.
16	8	(8)	316	NEWPORT				✓				✓							✓		✓	Added fusing. Rebuilt some old heatherlight constr.
17	NR	(0)	386	ROCHESTER											✓						✓	Removed line regulators
18	NR	(0)	355X	LANCASTER											✓							
19	66	47	27X1	LACONIA								✓	✓							✓	✓	P&C improvements.
20	55	35	32W1	DERRY								✓	✓								✓	Unfused laterals.
21	143	122	60W1	NEWPORT	✓																✓	Added fusing.
22	12	(10)	323X5	MANCHESTER WEST						✓		✓									✓	P&C improvements
23	168	145	3891	NASHUA																		
24	30	6	3137X	EPPING				✓													✓	Add additional fusing
25	146	121	73W1	NEWPORT																✓	✓	Added fusing.
26	203	177	3155X4	MONADNOCK	✓																	
27	218	191	351X16	LANCASTER	✓																	
28	271	243	393X20	MANCHESTER EAST						✓								✓			✓	Unfused Laterals
29	421	392	W1	KEENE					✓													
30	14	(16)	3410	NEWPORT																	✓	Added fusing.
31	2	(29)	39X1	KEENE				✓	✓												✓	Unfused laterals.
32	84	52	73W2	ROCHESTER							✓										✓	Relocated line from offroad to road
33	50	17	3116X1	CHOCORUA																		
34	147	113	382X3	MONADNOCK				✓										✓				Added viper.
35	49	14	3615X1	MANCHESTER EAST	✓	✓	✓		✓									✓			✓	Unfused Laterals
36	4	(32)	23X5	MILFORD	✓		✓				✓		✓			✓	✓				✓	Unfused laterals, P&C improvements
37	544	507	314	MILFORD																	✓	Added additional overhead fault indicators
38	67	29	3114X	FRANKLIN				✓													✓	Converted line from 12.47 kV to 34.5 kV.
39	35	(4)	336X	CHOCORUA																		
40	174	134	19W1	NASHUA																	✓	Unfused Laterals, and added current limiting fuses to transformers
41	99	58	4W1	KEENE				✓	✓	✓	✓											
42	3	(39)	355X10	LANCASTER						✓	✓		✓									
43	149	106	3148X	ROCHESTER						✓	✓							✓				Added reclosers with Voltage/Current Sensing scheme
44	115	71	322X12	MANCHESTER WEST			✓					✓									✓	Unfused laterals, and P&C improvements
45	NR	(0)	342B	LACONIA																	✓	Install Fault Indicators
46	44	(2)	19W2	CHOCORUA									✓								✓	Added fusing
47	145	98	3154X1	NASHUA	✓												✓				✓	Unfused Laterals
48	99	51	3191X3	PORTSMOUTH				✓														
49	19	(30)	333XW	CHOCORUA									✓			✓	✓			✓	✓	Added multiple reclosers, Completed Porc. Replacement, Added DMS.
50	111	61	42X3	NEWPORT																	✓	Added fusing.

37 # of Circuits Improving in Rank
13 # of Circuits Worsening in Rank
86 Avg. Improvement (change in position) in Rank for all 50 Circuits
NR indicates this circuit had no outages so it is Not Ranked

Section 7

2012 O&M and Capital

Summary Plan



**Public Service
of New Hampshire**
The Northeast Utilities System

2012 SUMMARY PLAN OF PSNH RELIABILITY PROGRAM

O&M

Docket No. DE 09-035



TRIMRC - VEGETATION MANAGEMENT (O&M)				
	Unit of Measure	\$ Budget	Unit Budget	Cost Per Unit
Reduce Scheduled Maintenance Trim Cycle	# Miles	\$1,393,052	371	\$3,755
Hazard Tree Removal	# Trees	\$1,147,414	3,520	\$326
Mid Cycle Trimming	# Miles	\$573,707	104	\$5,516
Inspect Contractor	# Miles	N/A ⁽¹⁾	2,520	N/A
Reduce Distribution Rights-of-Way Cycle	# Acres	\$225,189	345	\$653
Storm Damage Premium	# Miles	N/A ⁽¹⁾	N/A ⁽¹⁾	N/A
Subtotal - Base REP		\$3,339,362		
Takedowns	# Trees	N/A ⁽¹⁾	N/A ⁽¹⁾	N/A
Cycle Impact	# Miles	N/A ⁽¹⁾	N/A ⁽¹⁾	N/A
Inspect/Reclaim ROW	# Miles	\$1,556,211	50	\$31,124
ETT Maintenance Trimming	# Miles	\$722,428	130	\$5,557
S/S Perimeter Trimming	# Substations	\$0	0	N/A
Subtotal - REP II		\$2,278,639		
Total TRIMRC		\$5,618,001		

NESCRC - National Electrical Safety Code (O&M)				
	Unit of Measure	\$ Budget	Unit Budget	Cost Per Unit
Full Circuit Patrol	# Miles	\$100,000	1,085	\$92
Inspect and Repair Underground Systems	# UG Maps	\$620,000	540	\$1,148
Inspect Manholes	# Manholes	N/A ⁽¹⁾	222	N/A
Pole Inspection and Treatment	# Poles	\$600,000	24,000	\$25
Overhead Repair Activity	# Miles	\$2,981,132	2,873	N/A
Foot Patrol ROW	# Miles	\$150,000	841	\$178
Subtotal - Base REP		\$4,451,132		
Subtotal - REP II		\$0		
TOTAL NESCRC		\$4,451,132		

RELIOM - RELIABILITY (O&M)				
	Unit of Measure	\$ Budget	Unit Budget	Cost Per Unit
Overhead Switch Maintenance	# Switches	\$309,000	75	\$4,120
Recloser Maintenance Backlog	# Recloser Orders	\$350,000	182	N/A
Fault Indicators	# Fault Indicators	\$100,000	645	\$155
Test & Repair Direct Buried Unjacketed Cable	# Runs	\$200,000	188	\$1,064
Subtotal - Base REP		\$959,000		
Cascade Entry	Entry	\$75,000	N/A	N/A
GIS O&M	\$ Expended	\$100,000	1	\$100,000
O&M Portion of Capital	\$ Expended	\$560,000	N/A	N/A
Subtotal - REP II		\$735,000		
TOTAL RELIOM		\$1,694,000		

Actual Booked Reserve (Carried Over from 2011)	(\$1,917,633)
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TOTAL O&M ONGOING FROM BASE REP	\$8,749,494
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NEW O&M FOR REP II	\$3,013,639
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TOTAL O&M	\$9,845,500
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(1) Data is imbedded in another category as specified in O&M Briefing Sections.



**Public Service
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The Northeast Utilities System

2012 SUMMARY PLAN OF PSNH RELIABILITY PROGRAM

CAPITAL
Docket No. DE 09-035



CAPITAL - REP II

	Project #	\$ Budget
Distribution Line Porcelain Changeout	UBCAD	\$1,194,000
34.5kV Substation Breaker Replacement	A07X44	\$0
Enhanced Tree Trimming	C12ETT	\$2,090,000
Pole Top DSCADA Replacement	A07DL41	\$523,000
Substation RTU Replacement	A07SS41	\$340,000
Enable SCADA to Windsor Backup	A07WI47	\$0
Distrib. Line Wire Upgrade/Eliminate Narrow ROW	A10X06	\$300,000
Reliability Improvements Annual	DR9R	\$500,000
GIS Capital Project	A10X05	\$5,000,000
		\$9,947,000

CAPITAL - DUE TO BASE REP

	Project #	\$ Budget
Reject Pole Replacement	A07X45	\$1,330,000
Pole Reinforcement	A07X99	\$50,000
NESC Capital Work	A07X98	\$530,000
Airbreak Switch Replacement	A08X44	\$100,000
Direct Buried Cable Replacement	A04S34	\$900,000
Direct Buried Cable Injection	A10X04	\$355,000
		\$3,265,000

TOTAL REP CAPITAL

\$13,212,000