PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A EVERSOURCE ENERGY

GEOGRAPHIC INFORMATION SYSTEM & FIELD CONNECTIVITY SURVEY PROJECT OCTOBER 2016 – DECEMBER 2016 PROGRESS REPORT

January 31, 2017

For Submission to the New Hampshire Public Utilities Commission.

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1. Summary

In compliance with Order No. 25,913 issued by the New Hampshire Public Utilities Commission on June 28, 2016, beginning on August 1, 2016, and every three months thereafter, Public Service Company of New Hampshire d/b/a Eversource Energy ("Eversource") will "resume regular reporting on the status of its Geographic Information System (GIS) Project – the last report on which was submitted on December 17, 2013." See Order No. 25,913 at 4, and Exhibit 41 in Docket No. DE 09-035. The reports are to include descriptions of any additional work and charges to the original GIS Project, and incorporate the Company's GIS Connectivity Project.

Eversource completed installation of a GIS in December 2013. In the December 17, 2013 final report to the Commission, Eversource stated, page 2, "It is however important to note that despite a high degree of correlation between the converted data and the original paper maps, supporting an OMS may require further data cleanup to ensure accuracy to the true field conditions." This paper-to-digital conversion included placement of 525,000 customers on over 13,000 miles of line. The primary data sources for this conversion were 5,000 manual maps of Eversource's distribution system along the road, and 1,000 profile mile sheets for distribution facilities in rights of way.

During the initial conversion, determining which customer was connected to which transformer data sources required the use of generic formulas, through which customers fed from an overhead unit were deemed connected in the GIS to the nearest transformer. In most instances such designations corresponded to the actual characteristics in the field. However, for some customers it is incorrect. Recognizing that correct customer connectivity is vital for optimal power restoration performance, Eversource began its Field Connectivity Survey as an extension of the GIS, and as contemplated in its December 2013 report. The increased accuracy following the Field Connectivity Survey significantly improves communication with customers, community leaders, media, and regulators during storms. Moreover, it will improve identification of fault locations and priorities for outage response, resulting in shorter outage durations and will provide better data to support post storm analysis and reporting. The Field Connectivity Survey includes: establishing GPS locations for all overhead transformers; phase validation for customer and transformer; validation of customer to overhead transformer connectivity; and correct association within GIS.

CAPITAL BUDGET REVISION

The previous NHPUC quarterly report dated September 30, 2016 reported a project budget of \$3.9 million. Due to oversight, the report did not reflect adjustments to scope of work and reconciliation of cost assumptions in the original \$3.9 million project cost. Reconciliation of the Project Budget from \$3.9 million to \$5.1 million is as follows:

\$3,900,000	Capital Project budget reported in previous NHPUC report (September 30, 2016)
900,000	Secondary pole path (see #1)
89,000	Enhance GIS model primary changes (see #2)
65,000	Field equipment estimates understated (see #3)
76,000	Additional Quality control on line phasing (see #4)
70,000	for white space management understated (see #5)
Φ = 400 000	

- \$5,100,000 Adjusted Capital project budget
 - (1) \$900,000 Eversource exercised a Secondary Path option in the vendor contract. Over-71,000 secondary poles were never recorded in Eversources field documents (such as one line diagram maps) or automated systems. This option records all secondary poles and includes: A) Field surveying and GPS physical locations for all 71,000+ secondary poles, verification of route and pole number, full geometry path and attachment points of all secondary and service conductors. B) Importing all pole, secondary, and service information data into the Eversource GIS as a connected model. The cost is \$12.68 per secondary pole. Going forward this information will automatically be fed to the Outage Management System to improve outage reporting for all customers receiving power via secondary poles.
 - (2) \$89,000 for a change in scope incorporating primary changes to produce a fully connected model. For example, when a five pole tap with one transformer and a customer on the last pole, goes to the left in GIS, but in the field goes to the right, the original scope of work required UDC to move the transformer pole and customer, not the other four poles. This would be unreadable on GIS maps in the field. The cost efficient time to correct this change is during the project.
 - (3) \$65,000 Eversource's initial project estimate of 126,000 overhead transformer locations and 425,000 customers served from an overhead transformer were understated. The contract calls for vendor compensation if we go more than 5% over. The original estimated total was 126,000 + 425,000 = 551,000. Plus 5% = 578,550. The latest project estimate is 596,806 which is 8.3% over the original estimate.
 - (4) \$76,000 Correct phasing is critical to proper Outage Management System customer counts during power outages. The original project estimate assumed that a random sample 25% Quality assurance / Quality Control (QA/QC) on line phasing data would be sufficient to maintain a high level of accuracy in acquiring field data. Initial line phasing discrepancies warranted 100% QA/QC of the field phasing data to ensure GIS accuracy to the field.
 - (5) \$70,000 White Space Management, which is manual work to ensure readability and usability of the field data in the GIS, was expected to cost \$40,000 per field data delivery. It has cost \$45,000 per delivery to ensure readability on GIS maps.

The April 29, 2016 REP filing with the NHPUC reported projected Connectivity project investment of \$4,263,000 July 1, 2016 through June 30, 2017. This amount excluded \$683,448 of Connectivity project investment that was inadvertently placed into service in March instead of July. This \$683,448 should have been added to the \$4,263,000 estimated in service amount for the 12 months ended June 30, 2017 for a total estimated project cost of approximately \$4,950,000.

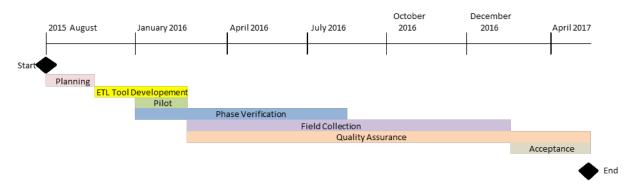


Figure 1 provides the overall project schedule.

Figure 1 – Eversource Connectivity Project Schedule and Milestones

2. Progress

After issuance of a Request for Proposal (RFP) seeking a highly-qualified vendor to conduct a customer to transformer field connectivity survey, Eversource selected Utility Data Contractors ("UDC") as the project vendor for connectivity and data extract, transfer, and load ("ETL") development services. As part of the ETL process, UDC extracts Eversource GIS data and transfers it to their field devices, survey customer to transformer connectivity, and load corrected data back into Eversource's GIS platform to meet the requirements of the August 7, 2015 Scope of Work (SOW). Eversource continues to anticipate on schedule completion by May 1, 2017.

The following key milestones were achieved from October 2016 through the end of December 2016:

 <u>Data Acceptance</u> – Eversource accepted surveyed data for eight deliveries: Bedford AWC, Derry AWC, Berlin AWC, Nashua AWC, Milford AWC, Chocorua, AWC, Keene AWC, and Newport AWC.

Two deliveries, Hooksett AWC and Lancaster AWC, were accepted during the last reporting period. This brings the total deliveries accepted in 2016 to ten.

A "Delivery" is a group of data sent for review and payment. It is typically an AWC, However during the course of the project AWC's have been eliminated and others have changed. A delivery may no longer be a present date AWC. Milford is a delivery.

"Accepted" is a delivery that has been QA / QC'ed by Eversource with import and export quantities matching, circuit validation and integrity checks passing, and achieving at least a 98% accuracy score. We then allow invoicing.

 Field Survey Completion – Survey of last six Area Work Centers: Keene, Newport, and Rochester, Portsmouth, Tilton, and Epping have been completed. Keene AWC and Newport AWC have been accepted by Eversource.

During the previous two reporting periods, a total of eight Area Work Centers were completed. Presently all fourteen Area work Centers areas have been field surveyed.

3. Quality Asssurance / Quality Control - The last four deliveries: Rochester AWC, Portsmouth AWC, Tilton AWC, and Epping AWC, are undergoing QA /QC by both UDC and Eversource.

3. Performance to Budget

Table 1, below, provides the budget to actuals of the project as of December 31, 2016

Project to Date

Table 1: Budget to Actuals

(In Millions)	Adjusted Budget	<u>Actuals</u>
Capital	• \$5.10	• \$3.93
■ 0&M	• \$0.00	• \$0.00
Total	• \$5.10	• \$3.93

The Project cost is expected to come within the Adjusted Budget of \$5.1 million.

4. Upcoming Activities

Over the course of the next three months, Eversource will undertake the following activities:

- Delivery Acceptance Eversource will perform QA / QC on, and accept or reject each of the last four deliveries (Rochester AWC, and Portsmouth AWC, Tilton AWC, and Epping AWC).
- 2. <u>Begin Project Closeout</u> Eversource will ensure stability of the surveyed data and perform circuit validation and continuity checks on the entirety of all the delivered data sets.

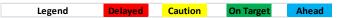
During the first half of 2017, Eversource will undertake the following major activities:

- 1. <u>Project Closeout</u> Eversource, in conjunction with UDC, will initiate and complete project data acceptance by May 1, 2017.
- 2. <u>Data Stability</u> Eversource will verify and correct non project data issues discovered during the field connectivity survey. Example: verifying and GIS connecting, customers sourced in the field from pad mounted transformers that were connected to an overhead transformer in the GIS.

5. Conclusion

During this reporting period Eversource, accepted eight data deliveries; bringing the 2016 accepted total to ten, which exceeds the plan by one. Eversource also completed surveying of the last six AWCs. The project tracks to the schedule with an anticipated project completion date prior to June 1, 2017.

	Phase Verification			
AWC	Scheduled Completion date	Actual Delivery Date	% Complete	
Hooksett	03/03/2016	02/19/2016	100	
Derry	04/01/2016	03/16/2016	100	
Bedford	04/01/2016	03/07/2016	100	
Lancaster	04/22/2016	04/05/2016	100	
Berlin	05/13/2016	04/29/2016	100	
Nashua	04/22/2016	03/30/2016	100	
Milford	04/29/2016	04/13/2016	100	
Chocorua	05/27/2016	05/13/2016	100	
Keene	05/13/2016	05/02/2016	100	
Newport	05/20/2016	05/05/2016	100	
Rochester	06/20/2016	06/05/2016	100	
Tilton	08/09/2016	07/25/2016	100	
Portsmouth	08/19/2016	08/05/2016	100	
Epping	09/02/2016	08/15/2016	100	





Production Milestone Report Customer Connections as of 12/31/16

	Customer Connectivity Field Survey			
AWC	Start date	Completion date	% Complete	
Hooksett	03/04/2016	08/22/2016	100	
Derry	04/27/2016	10/12/2016	100	
Bedford	04/01/2016	09/19/2016	100	
Lancaster	05/04/2016	09/30/2016	100	
Berlin	06/07/2016	10/19/2016	100	
Nashua	05/12/2016	11/04/2016	100	
Milford	06/23/2016	11/16/2016	100	
Chocorua	06/30/2016	12/01/2016	100	
Keene	07/15/2016	12/21/2016	100	
Newport	08/11/2016	12/23/2016	100	
Rochester	08/25/2016	01/25/2017	46	
Tilton	09/16/2016	02/24/2017	41	
Portsmouth	10/14/2016	03/06/2017	29	
Epping	10/25/2016	03/16/2017	24	

Legend Delayed	Caution	On Target	Ahead
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6. Survey Results.

Exhibit 1 is a summary of total and AWC field corrections entered into the GIS system by December 31, 2016.

Legend: ESP Electric Service Point, Tx Transformer, Service Individual Customer

Exhibit 1.

Total Summary

		•		
Feature	Feature Quantity All	Attribute	Attribute Quantity	% incorrect
Total number of OH Transformer Banks	94373	Transformer Bank on Wrong circuit	N/A	N/A
		Transformer Bank on Wrong Phase	3132	3%
(Single phase transformers locations		Transformer Bank on Wrong Pole	23763	25%
as well as multiphase locations		Transformer Bank KVA Incorrect	5378	6%
are counted as a transformer bank)		Transformer Bank not found	2120	2%
		New Transformer bank found	3272	3%
		Transformer Bank with no services	1217	1%
		No Load Transformers	692	1%
Total number of ESP's	240659	ESP in Wrong Location (needed to be moved)	117327	49%
		New ESP found (added to GIS)	15048	6%
Total number of Services	322938	Service on Wrong Circuit	N/A	N/A
(Service corresponds to an individual customer)		Service on Wrong Phase	30152	9%
		Service on Wrong Transformer	118933	37%
		Service not in C2 (not found in C2 database)	1522	0%
		Service at Wrong Address	41911	13%
		New Service found (added to GIS)	1522	0%
Total number of ESP's	240659	ESP Visits Required	9562	4%
Total number of meters	322938	Meter Visits Required	15145	5%
Total number of Poles with Tx or Secondary	185683	Pole Ownership Incorrect	5828	3%
Total number of secondary poles	46682	Secondary Poles Added	5951	13%
		Secondary Poles Removed	385	1%
		Number of Secondary Runs Added	129073	N/A

Hooksett AWC

Feature	Feature Quantity All	Attribute	Attribute Quantity	% incorrect
Total number of OH Transformer Banks	8822	Transformer Bank on Wrong circuit	N/A	N/A
		Transformer Bank on Wrong Phase	336	4%
(Single phase transformers locations		Transformer Bank on Wrong Pole	1779	20%
as well as multiphase locations		Transformer Bank KVA Incorrect	315	4%
are counted as a transformer bank)		Transformer Bank not found	193	2%
		New Transformer bank found	209	2%
		Transformer Bank with no services	146	2%
		No Load Transformers	36	0%
Total number of ESP's	34830	SP in Wrong Location (needed to be moved	13834	40%
		New ESP found (added to GIS)	1343	4%
Total number of Services	53322	Service on Wrong Circuit	N/A	N/A
(Service corresponds to an individual customer)		Service on Wrong Phase	8097	15%
		Service on Wrong Transformer	19752	37%
		Service not in C2 (not found in C2 database)	110	0%
		Service at Wrong Address	7505	14%
		New Service found (added to GIS)	110	0%
Total number of ESP's	34830	ESP Visits Required	527	2%
Total number of meters	53322	Meter Visits Required	661	1%
Total number of Poles with Tx or Secondary	19918	Pole Ownership Incorrect	272	1%
Total number of secondary poles	4631	Secondary Poles Added	649	14%
		Secondary Poles Removed	167	4%
		Number of Secondary Runs Added	15003	N/A

Bedford AWC

Feature	Feature Quantity	Attribute	Attribute Quantity	% incorrect
Total number of OH Transformer Banks	14932	Transformer Bank on Wrong circuit	N/A	N/A
		Transformer Bank on Wrong Phase	350	2%
(Single phase transformers locations		Transformer Bank on Wrong Pole	2274	15%
as well as multiphase locations		Transformer Bank KVA Incorrect	1173	8%
are counted as a transformer bank)		Transformer Bank not found	343	2%
		New Transformer bank found	414	3%
		Transformer Bank with no services	163	1%
		No Load Transformers	52	0%
Total number of ESP's	33561	SP in Wrong Location (needed to be moved	15009	45%
		New ESP found (added to GIS)	1892	6%
Total number of Services	46402	Service on Wrong Circuit	N/A	N/A
(Service corresponds to an individual customer)		Service on Wrong Phase	4068	9%
		Service on Wrong Transformer	16595	36%
		Service not in C2 (not found in C2 database)	110	0%
		Service at Wrong Address	5227	11%
		New Service found (added to GIS)	110	0%
Total number of ESP's	33561	ESP Visits Required	960	3%
Total number of meters	46402	Meter Visits Required	1740	4%
Total number of Poles with Tx or Secondary	26640	Pole Ownership Incorrect	524	2%
Total number of secondary poles	6503	Secondary Poles Added	907	14%
		Secondary Poles Removed	43	1%
		Number of Secondary Runs Added	17481	N/A

Derry AWC

Feature	Feature Quantity	Attribute	Attribute Quantity	% incorrect
Total number of OH Transformer Banks	6556	Transformer Bank on Wrong circuit	N/A	N/A
		Transformer Bank on Wrong Phase	336	5%
(Single phase transformers locations		Transformer Bank on Wrong Pole	758	12%
as well as multiphase locations		Transformer Bank KVA Incorrect	501	8%
are counted as a transformer bank)		Transformer Bank not found	143	2%
		New Transformer bank found	177	3%
		Transformer Bank with no services	89	1%
		No Load Transformers	33	1%
Total number of ESP's	19915	SP in Wrong Location (needed to be moved	9907	50%
Total number of LSF 3	13913	New ESP found (added to GIS)	1134	6%
Total number of Services	26157	Service on Wrong Circuit	N/A	N/A
(Service corresponds to an individual customer)		Service on Wrong Phase	1935	7%
		Service on Wrong Transformer	8917	34%
		Service not in C2 (not found in C2 database)	99	0%
		Service at Wrong Address	3413	13%
		New Service found (added to GIS)	99	0%
Total number of ESP's	19915	ESP Visits Required	522	3%
Total number of meters	26157	Meter Visits Required	821	3%
Total number of meters	20157	Weter visits Required	621	3%
Total number of Poles with Tx or Secondary	13897	Pole Ownership Incorrect	289	2%
Total number of secondary poles	3350	Secondary Poles Added	278	8%
		Secondary Poles Removed	24	1%
		Number of Secondary Runs Added	10607	N/A

Lancaster AWC

Feature	Feature Quantity	Attribute	Attribute Quantity	% incorrect
Total number of OH Transformer Banks	6621	Transformer Bank on Wrong circuit	N/A	N/A
		Transformer Bank on Wrong Phase	173	3%
(Single phase transformers locations		Transformer Bank on Wrong Pole	2323	35%
as well as multiphase locations		Transformer Bank KVA Incorrect	280	4%
are counted as a transformer bank)		Transformer Bank not found	120	2%
		New Transformer bank found	170	3%
		Transformer Bank with no services	88	1%
		No Load Transformers	95	1%
Total number of ESP's	13209	SP in Wrong Location (needed to be moved	8895	67%
		New ESP found (added to GIS)	1324	10%
Total number of Services	16161	Service on Wrong Circuit	N/A	N/A
(Service corresponds to an individual customer)		Service on Wrong Phase	1314	8%
		Service on Wrong Transformer	6012	37%
		Service not in C2 (not found in C2 database)	155	1%
		Service at Wrong Address	2092	13%
		New Service found (added to GIS)	155	1%
Total number of ESP's	13209	ESP Visits Required	1093	8%
Total number of meters	16161	Meter Visits Required	1590	10%
Total number of Poles with Tx or Secondary	13682	Pole Ownership Incorrect	485	4%
Total number of secondary poles	4113	Secondary Poles Added	413	10%
		Secondary Poles Removed	6	0%
		Number of Secondary Runs Added	9289	N/A

Nashua AWC

Feature	Feature Quantity	Attribute	Attribute Quantity	% incorrect
Total number of OH Transformer Banks	9089	Transformer Bank on Wrong circuit	N/A	N/A
		Transformer Bank on Wrong Phase	473	5%
(Single phase transformers locations		Transformer Bank on Wrong Pole	2327	26%
as well as multiphase locations		Transformer Bank KVA Incorrect	930	10%
are counted as a transformer bank)		Transformer Bank not found	219	2%
		New Transformer bank found	266	3%
		Transformer Bank with no services	198	2%
		No Load Transformers	41	0%
Total number of ESP's	20547	CD in Manage Location / acaded to be accord	14028	200/
Total number of ESP's	38517	SP in Wrong Location (needed to be moved		36%
		New ESP found (added to GIS)	1451	4%
T. I. I. CO. :	50704	6 1 111 61 11	21/2	21/2
Total number of Services	50721	Service on Wrong Circuit	N/A	N/A
(Service corresponds to an individual customer)		Service on Wrong Phase	5380	11%
		Service on Wrong Transformer	19766	39%
		Service not in C2 (not found in C2 database)	110	0%
		Service at Wrong Address	8663	17%
		New Service found (added to GIS)	110	0%
Total number of ESP's	38517	ESP Visits Required	823	2%
Total number of meters	50721	Meter Visits Required	1411	3%
Total number of Poles with Tx or Secondary	21545	Pole Ownership Incorrect	419	2%
Total number of secondary poles	4813	Secondary Poles Added	900	19%
		Secondary Poles Removed	54	1%
		Number of Secondary Runs Added	18283	N/A

Berlin AWC

Feature	Feature Quantity	Attribute	Attribute Quantity	% incorrect
Total number of OH Transformer Banks	2654	Transformer Bank on Wrong circuit	N/A	N/A
		Transformer Bank on Wrong Phase	122	5%
(Single phase transformers locations		Transformer Bank on Wrong Pole	922	35%
as well as multiphase locations		Transformer Bank KVA Incorrect	9	0%
are counted as a transformer bank)		Transformer Bank not found	70	3%
		New Transformer bank found	58	2%
		Transformer Bank with no services	49	2%
		No Load Transformers	32	1%
Total number of ESP's	8113	SP in Wrong Location (needed to be moved	4705	58%
		New ESP found (added to GIS)	548	7%
Total number of Services	10615	Service on Wrong Circuit	N/A	N/A
(Service corresponds to an individual customer)		Service on Wrong Phase	1330	13%
		Service on Wrong Transformer	3980	37%
		Service not in C2 (not found in C2 database)	136	1%
		Service at Wrong Address	983	9%
		New Service found (added to GIS)	136	1%
Total number of ESP's	8113	ESP Visits Required	723	9%
Total number of meters	10615	Meter Visits Required	1043	10%
Total number of Poles with Tx or Secondary	6773	Pole Ownership Incorrect	230	3%
Total number of secondary poles	2075	Secondary Poles Added	201	10%
		Secondary Poles Removed	4	0%
		Number of Secondary Runs Added	6005	N/A

Milford AWC

Feature	Feature Quantity	Attribute	Attribute Quantity	% incorrect
Total number of OH Transformer Banks	6983	Transformer Bank on Wrong circuit	N/A	N/A
		Transformer Bank on Wrong Phase	194	3%
(Single phase transformers locations		Transformer Bank on Wrong Pole	1569	22%
as well as multiphase locations		Transformer Bank KVA Incorrect	442	6%
are counted as a transformer bank)		Transformer Bank not found	107	2%
		New Transformer bank found	148	2%
		Transformer Bank with no services	79	1%
		No Load Transformers	54	1%
Total number of ESP's	14982	SP in Wrong Location (needed to be moved	7213	48%
		New ESP found (added to GIS)	963	6%
Total number of Services	19397	Service on Wrong Circuit	N/A	N/A
(Service corresponds to an individual customer)		Service on Wrong Phase	1459	8%
		Service on Wrong Transformer	7235	37%
		Service not in C2 (not found in C2 database)	61	0%
		Service at Wrong Address	2112	11%
		New Service found (added to GIS)	61	0%
Total number of ESP's	14982	ESP Visits Required	704	5%
Total number of meters	19397	Meter Visits Required	1285	7%
Total number of Poles with Tx or Secondary	13222	Pole Ownership Incorrect	219	2%
Total number of secondary poles	3268	Secondary Poles Added	403	12%
		Secondary Poles Removed	26	1%
		Number of Secondary Runs Added	9189	N/A

Chocorua

Feature	Feature Quantity	Attribute	Attribute Quantity	% incorrect
Total number of OH Transformer Banks	7366	Transformer Bank on Wrong circuit	N/A	N/A
		Transformer Bank on Wrong Phase	180	2%
(Single phase transformers locations		Transformer Bank on Wrong Pole	3551	48%
as well as multiphase locations		Transformer Bank KVA Incorrect	698	9%
are counted as a transformer bank)		Transformer Bank not found	230	3%
		New Transformer bank found	320	4%
		Transformer Bank with no services	81	1%
		No Load Transformers	123	2%
Total number of ESP's	14793	SP in Wrong Location (needed to be moved	9694	66%
Total number of ESP'S	14/95	New ESP found (added to GIS)	2145	15%
		New ESP Tourid (added to dis)	2143	13/0
Total number of Services	17799	Service on Wrong Circuit	N/A	N/A
(Service corresponds to an individual customer)		Service on Wrong Phase	729	4%
		Service on Wrong Transformer	7787	44%
		Service not in C2 (not found in C2 database)	379	2%
		Service at Wrong Address	3418	19%
		New Service found (added to GIS)	379	2%
Total number of ESP's	14793	ESP Visits Required	1548	10%
Total number of meters	17799	Meter Visits Required	2414	14%
Total number of meters	17799	weter visits required	2414	1470
Total number of Poles with Tx or Secondary	15112	Pole Ownership Incorrect	616	4%
Total number of secondary poles	4706	Secondary Poles Added	445	9%
		Secondary Poles Removed	13	0%
		Number of Secondary Runs Added	8819	N/A

Newport AWC

Feature	Feature Quantity	Attribute	Attribute Quantity	% incorrect
Total number of OH Transformer Banks	9785	Transformer Bank on Wrong circuit	N/A	N/A
		Transformer Bank on Wrong Phase	346	4%
(Single phase transformers locations		Transformer Bank on Wrong Pole	2290	23%
as well as multiphase locations		Transformer Bank KVA Incorrect	508	5%
are counted as a transformer bank)		Transformer Bank not found	144	1%
		New Transformer bank found	151	2%
		Transformer Bank with no services	92	1%
		No Load Transformers	44	0%
7.1.1.1.1.6501	10000	ton: w	10051	5.40/
Total number of ESP's	19998	SP in Wrong Location (needed to be moved	10854	54%
		New ESP found (added to GIS)	1279	6%
Total number of Services	25902	Service on Wrong Circuit	N/A	N/A
(Service corresponds to an individual customer)	23302	Service on Wrong Phase	2110	8%
(Service corresponds to air marviadar customer)		Service on Wrong Transformer	8753	34%
		Service not in C2 (not found in C2 database)	116	0%
		Service at Wrong Address	2465	10%
		New Service found (added to GIS)	116	0%
Total number of ESP's	19998	ESP Visits Required	705	4%
Total number of meters	25902	Meter Visits Required	978	4%
Total number of Poles with Tx or Secondary	17419	Pole Ownership Incorrect	1670	10%
Total number of secondary poles	4421	Secondary Poles Added	519	12%
Total fluitiber of secondary poles	4421	,	9	
		Secondary Poles Removed		0%
		Number of Secondary Runs Added	12269	N/A

Keene AWC

Feature	Feature Quantity	Attribute	Attribute Quantity	% incorrect
Total number of OH Transformer Banks	21565	Transformer Bank on Wrong circuit	N/A	N/A
		Transformer Bank on Wrong Phase	622	3%
(Single phase transformers locations		Transformer Bank on Wrong Pole	5970	28%
as well as multiphase locations		Transformer Bank KVA Incorrect	522	2%
are counted as a transformer bank)		Transformer Bank not found	551	3%
		New Transformer bank found	1359	6%
		Transformer Bank with no services	232	1%
		No Load Transformers	182	1%
Total number of ESP's	42741	ESP in Wrong Location (needed to be moved)	23188	54%
		New ESP found (added to GIS)	2969	7%
Total number of Services	56462	Service on Wrong Circuit	N/A	N/A
(Service corresponds to an individual customer)		Service on Wrong Phase	3730	7%
		Service on Wrong Transformer	20136	36%
		Service not in C2 (not found in C2 database)	246	0%
		Service at Wrong Address	6033	11%
		New Service found (added to GIS)	246	0%
Total number of ESP's	42741	ESP Visits Required	1957	5%
Total number of meters	56462	Meter Visits Required	3202	6%
Total number of Poles with Tx or Secondary	37475	Pole Ownership Incorrect	1104	3%
Total number of secondary poles	8802	Secondary Poles Added	1236	14%
		Secondary Poles Removed	39	0%
		Number of Secondary Runs Added	22128	N/A