

The Narragansett Electric Company
d/b/a National Grid

Electric Infrastructure, Safety, and Reliability Plan FY 2023 Proposal

Responses to Division's Data Requests

Book 2 of 2

December 20, 2041

Docket No. 5209

Submitted to:
Rhode Island Public Utilities Commission

Submitted by:

nationalgrid

November 16, 2021

VIA HAND DELIVERY & ELECTRONIC MAIL

Luly E. Massaro, Clerk
Rhode Island Division of Public Utilities and Carriers
89 Jefferson Boulevard
Warwick, RI 02888

**RE: National Grid's Proposed FY 2023 Electric Infrastructure, Safety, and Reliability Plan
Responses to Division Set 1**

Dear Ms. Massaro:

On behalf of The Narragansett Electric Company d/b/a National Grid ("National Grid" or the "Company"), enclosed please find the electronic version of the Company's responses to the Division's First Set of Data Requests in the above-reference matter.¹

Thank you for your attention to this transmittal. If you have any questions, please contact me at 401-784-7263.

Sincerely,



Andrew S. Marcaccio

Enclosure

cc: Leo Wold, Esq.
Christy Hetherington, Esq.
John Bell, Division
Greg Booth, Division
Al Contente, Division

¹ The Company is providing the Division with four (4) copies of this transmittal.

Division 1-1

Request:

Regarding Chart 1, RI Reliability Performance:

- a. Generally, the Company's SAIDI and SAIFI results have trended similarly but CY 20 indicates a decreasing SAIFI and increasing SAIDI when compared to CY 19. Has the Company identified unusual circumstances contributing to these results? What are the primary causes of outages that have increasing duration and lower frequency in CY 20?
- b. Provide Chart 1 underlying data in executable format.

Response:

- a. In CY2020, SAIFI caused by Human Element/Other, Intentional, Deteriorated Equipment, Transmission and Unknown all decreased compared to CY2019. In CY2020, SAIDI caused by Adverse Environment, Animal, Deteriorated Equipment, Human Element /Company, Sub-Transmission and Substation all increased compared to CY2019.

There is no single cause group that has driven the decreasing SAIFI and increasing SAIDI. The driver with the largest SAIFI decrease is Transmission, which decreased from 0.082 to 0.018, however, this also had a decrease in SAIDI from 2.66 to 0.60 minutes. The driver with the largest SAIDI increase is Sub-Transmission, which increased from 1.52 to 5.16 minutes, however, SAIFI also increased from 0.072 to 0.077. The combination of Transmission and Sub-Transmission drivers results in a decrease in SAIFI from 0.154 to 0.095, and an increase in SAIDI from 4.18 to 5.76 minutes.

- b. Please see Attachment DIV 1-1 for Chart 1 in executable form.

The Narragansett Electric Company
d/b/a National Grid
In Re: Division's Review of FY 2023 Proposed Electric ISR Plan
Responses to Division's First Set of Data Requests
Issued October 26, 2021

Attachment DIV 1-1

Please see the Excel version of Attachment DIV 1-1.

Year	SAIFI	SAIDI	CAIDI	SAIFI Target	SAIDI Target
2001	1.19	79.78	67.15	1.05	71.9
2002	1.00	73.26	73.05	1.05	71.9
2003	1.24	92.04	74.24	1.05	71.9
2004	0.91	66.17	73.03	1.05	71.9
2005	1.13	80.56	71.06	1.05	71.9
2006	0.98	74.05	75.50	1.05	71.9
2007	0.92	59.02	64.34	1.05	71.9
2008	1.01	64.44	64.07	1.05	71.9
2009	0.85	51.08	60.06	1.05	71.9
2010	1.07	76.30	71.26	1.05	71.9
2011	0.86	60.70	70.90	1.05	71.9
2012	0.90	65.99	73.00	1.05	71.9
2013	0.72	57.28	79.66	1.05	71.9
2014	0.78	54.06	70	1.05	71.9
2015	0.94	64.63	68.77	1.05	71.9
2016	0.97	69.13	71.27	1.05	71.9
2017	0.78	59.10	76.24	1.05	71.9
2018	1.00	65.11	65.04	1.05	71.9
2019	1.02	68.20	66.60	1.05	71.9
2020	0.95	69.10	73.12	1.05	71.9

Division 1-2

Request:

Regarding Attachment 4, Chart 5 and Chart 7; please provide the data in executable format.

Response:

See Attachment DIV 1-2-1 for the data for Chart 5 for Rhode Island Customers Interrupted by Cause by Calendar Year (2008 – 2020) (Major Event Days Excluded) in executable format.

See Attachment DIV 1-2-2 for the data for Chart 7 for Rhode Island Customers Interrupted by Cause by Fiscal Year (2008 – 2020) (Major Event Days Excluded) in executable format.

The Narragansett Electric Company
d/b/a National Grid
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Attachments DIV 1-2-1 and DIV 1-2-2

Please see the Excel versions of Attachments DIV 1-2-1 and DIV 1-2-2

**Customer Interrupted by Cause - CY
Major Event Days Excluded**

Cause	CY08	CY09	CY10	CY11	CY12	CY13	CY14	CY15	CY16	CY17	CY18	CY19	CY20
Adverse Environment	5,910	3,926	3,800	4,444	4,778	4,318	3,220	8,677	10,928	8,115	11,964	8,507	17,973
Animal	16,977	11,769	18,021	15,547	9,912	10,324	21,247	29,831	33,541	18,340	21,664	14,277	25,405
Deteriorated Equipment	67,114	85,047	87,768	89,743	47,301	39,131	79,260	77,575	47,966	55,316	65,386	72,114	55,603
Human Element/ Co.	28,298	8,450	26,047	18,455	7,043	13,481	13,259	16,619	5,489	12,995	11,462	11,392	15,066
Human Element/Other	27,607	54,275	36,999	48,650	47,404	54,719	29,908	33,049	43,514	42,510	48,520	52,266	29,164
Intentional	44,887	58,356	37,743	44,526	40,927	55,927	43,132	62,373	68,273	58,544	90,092	80,218	66,301
Lightning	25,987	27,874	36,859	11,044	9,362	23,310	5,745	14,374	10,832	14,505	5,766	12,648	20,127
Substation	65,704	10,713	77,189	37,086	63,397	18,882	30,888	65,932	28,525	6,616	19,802	7,830	32,413
Sub-Transmission	40,845	28,046	40,034	22,524	51,972	48,902	33,556	29,211	33,994	23,710	39,235	35,645	38,474
Transmission	8,721	25	18,438	2,973	19,099	5,958	18,284	11,594	72,808	13,786	17,106	40,969	8,856
Tree	109,214	74,116	97,807	97,485	100,459	55,056	70,277	73,248	87,036	95,025	120,812	137,437	140,002
Unknown	37,501	13,545	23,962	36,065	32,176	19,008	19,657	31,703	32,088	30,918	41,014	35,586	21,341
Grand Total	478,765	376,142	504,667	428,542	433,830	349,016	368,433	454,186	474,994	380,380	492,823	508,889	470,725

**Customer Interrupted by Cause - FY
Major Event Days Excluded**

Cause	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21
Adverse Environment	1,673	5,651	4,018	5,992	3,674	6,584	811	6,786	5,922	10,108	8,576	15,164	9,390	14,819
Animal	15,103	16,303	14,751	15,335	15,008	9,864	10,098	21,232	32,266	31,931	17,356	22,034	14,539	30,211
Deteriorated Equipment	71,336	69,296	88,655	78,009	84,052	43,196	59,239	68,992	69,921	50,930	60,685	63,578	68,506	78,553
Human Element / Co.	20,633	24,393	8,846	27,305	17,722	8,500	9,304	11,507	17,943	8,266	9,641	14,443	15,851	8,049
Human Element / Other	28,547	35,531	44,248	51,837	46,171	45,152	48,008	25,659	45,280	36,344	42,597	51,756	50,234	37,609
Intentional	50,735	36,569	59,581	33,987	41,879	42,989	44,451	55,268	54,661	67,444	62,978	89,138	73,589	74,705
Lightning	44,176	19,577	27,874	36,883	11,098	9,362	23,882	5,234	17,639	11,044	14,313	5,736	12,922	19,831
Substation	55,282	53,391	12,120	82,926	51,866	38,492	23,243	26,527	71,115	26,558	13,015	16,685	11,580	25,394
Sub-Transmission	24,298	31,628	22,243	39,770	29,805	44,084	53,550	26,191	33,727	33,741	28,224	37,180	32,350	39,983
Transmission	20,176	6,000	7,093	11,370	2,973	19,099	4,568	18,284	11,594	72,808	14,777	16,115	40,969	8,856
Tree	104,023	79,977	83,311	88,714	88,474	90,726	56,964	63,009	109,023	85,147	83,471	139,454	117,480	153,372
Unknown	29,583	26,146	15,807	29,629	29,163	34,143	18,501	23,529	35,829	34,689	23,395	47,391	25,088	30,623
Grand Total	465,565	404,462	388,547	501,757	421,885	392,191	352,619	352,218	504,920	469,010	379,028	518,674	472,498	522,005

Division 1-3

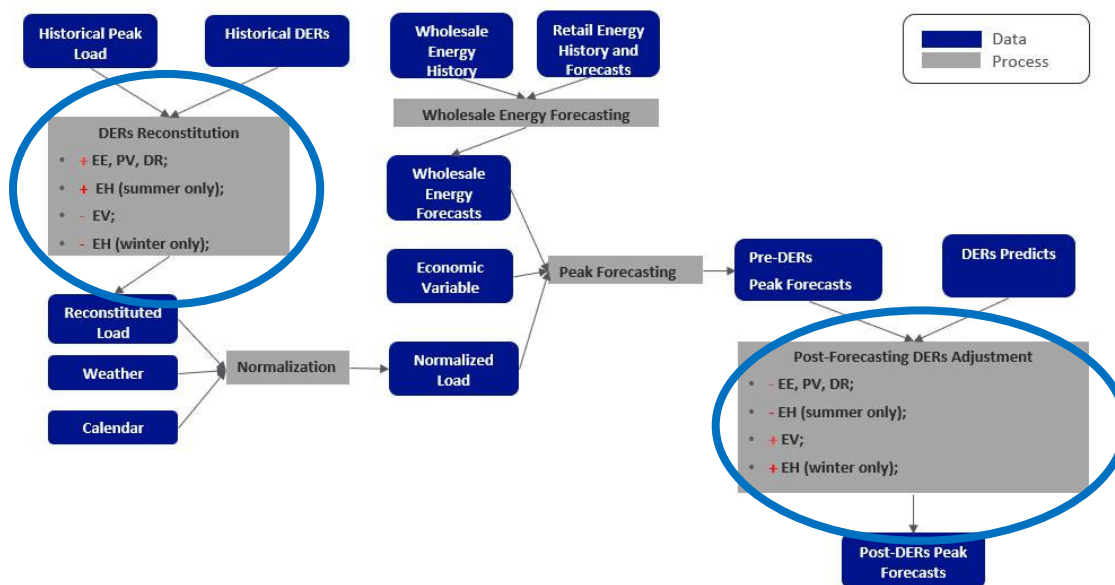
Request:

Regarding Chart 3, Load Forecasting Process:

- a. Discuss how the Company treats EV load and specifically why EV load is excluded from summer adjustments. Provide all assumptions and support.
- b. Discuss how the Company treats heat pump load in both summer and winter. Explain whether heat pump load is considered additive or a displacement for existing load. Provide all assumptions and support.

Response:

- a. EV load is considered beneficial electrification and adding load through the year. It is **included** in the adjustment process for both summer and winter seasons, and it is considered adding load in both seasons. See Proposed FY 2023 Electric Infrastructure, Safety, and Reliability Plan Annual Filing, Section 2 page 11 of 92 submitted to the Division on October 1, 2021. The kw impacts were estimated based on ISO-NE EV charging study¹. Chart 3 is updated below to better show the adjustment process for EV and EH. The summer and winter notes in the parenthesis are meant for electric heat pump (i.e. EH) only but not for EV.



¹ Transportation Electrocutation Forecasts, ISO-NE Load Forecast Committee, November 2019

Division 1-3, page 2

- b. As also discussed on page 11 of 92 of Section 2 of the Proposed FY 2023 Plan, heat pumps are treated as additive to loads during the winter peak and a reduction to loads during the summer peak. For the winter peak, heat pumps are to add 2.0 kw per heat pump. This value is based on information from ISO-NE which assumes a similar estimate in its Final 2021 Heating Electrification Forecast.² During the summer peak, heat pumps are assumed to reduce loads by 0.5 kw per heat pump. This is based on similar values for the heat pump program of the Company's affiliate in Massachusetts.

² Slide 31, Final 2021 Heating Electrification Forecast, ISO-NE Load Forecast Committee, February 2021

Division 1-4

Request:

Does the Company expect that increased EV charging infrastructure, particularly DCFC chargers, will increase infrastructure costs in the ISR Plan? Please explain.

How does the Company assign costs to interconnect EV chargers, including potential system upgrades due to high demands in low capacity areas?

Describe potential system impacts expected with increased EV charging and the steps the Company is taking to monitor and manage those impacts.

Response:

The Company's long-term forecast includes increases for impacts due to EV charging. That forecast is the basis for the Company's annual capacity reviews and area studies.

Forecasts including EV charging loads can impact infrastructure costs in the ISR plan. Applications for individual EV chargers follow the same interconnection process as load customer requests and follows RIPUC No. 2217 Terms and Conditions for Distribution Service, Appendix A, Policy 3 for Line Extensions and Construction Advances (Policy 3). In most cases, the application of Policy 3 results in little to no customer contribution for EV charging stations similar to any small load request.

The potential system impacts with increased EV charging are similar to any increasing load impacts. These impacts are largely related to capacity and voltage constraints. However, certain EV charging segments are conducive to intelligent management to reduce these system impacts. The Company has demonstrated how this feature of EV charging load can be leveraged in its SmartCharge Rhode Island program. In that program Customers are financially incentivized to charge their EVs during off-peak periods, thereby increasing utilization of existing assets and minimizing system impacts.

Division 1-5

Request:

Provide results of the Company's most recent annual capacity review indicating any feeder with imminent thermal capacity constraints. Indicate the substation, feeder, voltage, load forecast and spot load assumptions, and resulting constraint. Identify the alternatives considered to resolve the constraint, the selected alternative, estimated cost, and construction timeline.

Response:

The 2022 annual capacity review (FY23) is in progress and the 2022 forecast report is currently under development. The Company had anticipated completion of the FY2023 annual capacity review by February 2022 (See Proposed FY 2023 Electric Infrastructure, Safety, and Reliability Plan Annual Filing Section 2 page 7 of 92 submitted to the Division on October 1, 2021). However, the Company is targeting early completion of the feeder annual capacity reviews, working towards completion by early December 2021.

As agreed upon in the conference call between the Company and the Division on 11/9/21, the Company will provide the results of the 2022 feeder annual capacity reviews upon completion in early December 2021.

The Narragansett Electric Company
d/b/a National Grid
In Re: Division's Review of FY 2023 Proposed Electric ISR Plan
Responses to Division's First Set of Data Requests
Issued October 26, 2021

Division 1-6

Request:

For each completed Area Study, indicate each project that is or could be considered for an NWA. Provide a brief project description identifying the system condition to be resolved, timing of need, the scope and current cost estimate for the traditional wires solution, and status of the NWA analysis and/or selection process.

Response:

There are two active projects from recently completed area studies being considered for an NWA. The table below includes additional information about these opportunities.

Area study	Wires solution project name	Description of need	Timing of need	Scope of wires solution	Current cost estimate of wires solution	NWA process status
South County West	Kenyon 68F2	The 68F2 feeder out of Kenyon Substation violates the feeder contingency loading criteria, due to the lack of ties (23MWhr by 2025). Additionally, the circuit is overloaded to 110% by 2025. The load must either be reduced or additional ties must be added.	2025	-Extend the existing 68F5 circuit, from Biscuit City Road 6,500', using a mixture or existing 1 phase wire (adding new additional phases) and new 3 phase wire, to create a N/O loadbreak tie with the 68F2 at Shannock Rd. -Transfer ~180 Amps of single phase load from the 68F2 to the 68F5 at Wardens Pond Road. -Feeder balancing will be required on the 68F5 and 68F2.	\$ 1,541,000.00	Not started - RFP release anticipated early 2023
Blackstone Valley South	Valley 102W54 MWhr violation	The 102W54 feeder out of the Valley Substation violates the feeder contingency loading criteria, due to the lack of ties (16.9MWhr by 2025). The 102W54 only ties with the Valley 102W44 feeder and the Washington 126W41 feeder. The load must either be reduced or additional ties must be added.	2025	Re-route the 102W50 feeder to transfer load from the 102W54 and add an additional tie to the 102W54. This work includes: -Transfer the load on 102W50 to 102W52 -Remove the OH Conductor on 102W50 south of the Valley Substation from P3-50 in the R/W to P90 High St -Re-route the 102W50 feeder north of Valley Substation in the same path as the existing 102K22 by installing ~1,710 circuit feet of 477 OH Conductor -Reconductor ~7,980 circuit feet of existing single phase 1/0 OH conductor to three phase 477 OH to tie 102W50 to 102W54. This section is currently a single phase branch of 102W54 with a load of 765kVA. The load will be transferred to 102W50 and balanced across the three phases	\$ 2,382,000.00	Not started - RFP release anticipated early 2023

Division 1-7

Request:

At what point does the Company finalize the cost estimate for a wires solution when evaluating an NWA option? Identify any cost contingencies and accuracy of the estimate.

Response:

A few years prior to the wires solution need date, the Company confirms the need is still valid. If the need is still valid, scope and cost estimates are refreshed and are at the +50%/-25% tolerance range. The NWA RFP process is kicked off at that time to avoid work plan delays and incurring significant costs for fully developing two alternatives

Division 1-8

Request:

The Company's FY 2022 ISR Plan Q1 Report, Attachment G, indicates that Admiral St. Phase 1B project cost estimate increased to \$46.5 million compared to the initial budget of \$24.4 million presented in the FY 2022 ISR Plan. The FY 2023 ISR Plan indicates a current estimate of \$51.4 million with a 10% tolerance.

- a. Summarize the drivers for the successive increases.
- b. Provide any actions or steps the Company is taking to improve its early project estimates to mitigate significant increases as scope is refined.

Response:

- a. The current estimate for Admiral St. Phase 1B shown on Attachment 3 – Five Year Budget with Details of the FY 2023 ISR Plan represents the sanctioned capital, cost of removal and O&M costs approved. The drivers associated with the increases in the capital cost of the project are presented in the FY 2022 ISR Plan Q1 and Q2 Reports and are shown below:
 - Duct bank costs due to increased costs in recent projects – \$4.2m
 - Police detail, soil disposal - \$2.2m
 - Paving restoration due to curb to curb paving requirements - \$2.1m
 - Craft labor and team costs - \$0.7m
 - Transportation costs - \$0.6m
 - Upgrade of the existing small main line conductor to standard mainline conductor on the Olneyville distribution line - \$0.5m
 - Contingency, Risk, AFUDC, and associated A&G costs - \$8.3m
- b. The Company has made a change in estimating practices for Complex projects. Currently projects in Step 4.2 are estimated with a “cost book” template by disciplines outside of our Estimating Department. The new process incorporated for Area Studies will utilize the Sage Estimate program and be completed by our Estimating Department for projects in Step 4.2. This will align estimating tools from Step 4.2 to Step 4.3 as a project progresses as well as utilize the subject matter expertise of the department specifically aligned to the task.

Division 1-8, page 2

This is a preliminary improvement while the Vice President of the Estimating Department has sponsored and initiated an improvement project for early stage estimation processes. The goal of this project is to improve the project level early-stage estimation process (4.1 thru 4.2 including scope, schedule and cost) resulting in a reduction of bias by 15% in the portfolio spend forecast across Complex projects without slowing down the process.

Division 1-9

Request:

The Company states that early project estimates are typically created by Engineering using a Cost Book tool developed by the Estimating Department (FY 2022 ISR Plan, response to R-I-21). Is the Company's Estimating Department part of corporate services? Explain if the Cost Book is specific to Rhode Island or a broader area. How is the Cost Book updated and at what frequency?

Response:

The Project Estimating department is part of corporate services.

The Cost Book is utilized for projects in MA, NY, and RI.

Since April 2021, we no longer utilize the Cost Book for most complex projects in the 4.2 project stage (Option Selection/Gate B) estimates. These estimates are completed using our Sage estimating solution by the Project Estimating department. The Cost Book is still utilized in stage 4.1 (Needs Case) to establish a budget/placeholder type estimate. Since its inception, the Cost Book has been updated with new functionality and new units have been added on an ad-hoc/as-needed basis.

Division 1-10

Request:

Regarding the Underground Cable Replacement Strategy; the Company references a risk matrix focused on cable characteristics used to prioritize cable replacements. Provide a copy of the risk matrix and accompanying guidelines used to develop the matrix. Explain how actual cable operating history is considered in the risk matrix or decisions for replacement.

Response:

The risk matrix is shown in Figure 2 on page 9 of the attached Underground Cable Replacement Program document, Attachment DIV 1-10.

The Risk Matrix is developed by combining the Criticality Scoring Model (CSM) (shown in Table 1 on page 17 of the program document), score with the probability of failure. The main drivers for the CSM are listed in Section 2.2 on page 6 of the report and details are provided on page 7. Operating history is captured in the CMS categories Safety as Previous Manhole Events and Reliability as Feeder CKAIID and Splice Log, which is for failure-related splices.





Underground Cable Replacement Program – Study Report Rhode Island

Jeffrey H. Smith

December 14, 2017

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Reviewed by:  Date: 04/17/18
Elton Prifti, Manager
Distribution Planning & Asset Management, NE
Electric Process and Engineering

Approved by:  Date: 4/17/18
Ryan Constable, Director
Distribution Planning & Asset Management, NE Electric
Process and Engineering

Underground Cable Replacement Program Rhode Island

Jeffrey H. Smith

December 14, 2017

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Amendments Record

Issue	Date	Summary of Changes	Author(s)	Approved By (Inc. Job Title)
2	12/14/2017	Updated data, documented data sources, changed scope to main line only cable replacement and updated miles/year figures	Jeffrey H. Smith Distribution Planning & Asset Management	
1	09/29/2014	Initial Issue	Sahir Shakir Distribution Planning & Asset Management	

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Executive Summary

National Grid's underground electric infrastructure (principally electric cables and manhole and duct systems) is extensive. Such infrastructure is most common in the urban centers within the Company's service territory. Asset age and condition varies and certain vintages of cable insulation have demonstrated less reliable performance than others. When they occur, underground asset failures can (and have) resulted in manhole cover dislodgements. Such events are often visible to the public and raise understandable concern with regulators, the community, and public safety officials. Although such contingency events and possible outcomes cannot be completely eliminated, it is the Company's opinion that the frequency with which such events occur can be reduced with programmatic cable replacements.

The program documented with this study report will proactively replace underground cable on sub-transmission, distribution primary, and distribution secondary cable systems in the Rhode Island service territory. These replacements will result from the execution of both specific and programmatic projects.

A list of candidate sub-transmission and distribution primary cable replacement projects was developed and prioritized using a Criticality Scoring Model (CSM) that weighed factors such as asset age, past performance, customers served, proximity to assets experiencing prior failures and cable insulation type, among others. This CMS score was combined with a probability of failure, based on exposure, to create a ranked list of candidate projects. This candidate project list allows for long range program budgeting and resource planning and provides a starting point for further engineering review and the development of specific project proposals. The operating characteristics and availability of data on secondary cable systems does not currently allow for the application of a CSM for candidate project selection. As such, the program will identify and prioritize specific geographic areas within which secondary cable assets would first undergo inspection followed by targeted asset replacement and/or consolidation.

The sub-transmission and distribution primary cable replacement candidate project list was reviewed in detail by a cross functional team of Company representatives having local knowledge and experience with the Rhode Island underground system infrastructure. Functions represented included:

- Distribution Planning & Asset Management engineers
- Operations
- Community and Customer Management
- Resource Planning

It is presently expected that under this program the following costs will be incurred throughout FY19-21:

- Sub-Transmission cable replacements (approximately 10.0 miles) - \$7.1M
- Distribution Primary cable replacements (approximately 4.9 miles) - \$3.3M
- Distribution Secondary cable replacements (approximately 4.2 miles) - \$5.1M

Over a ten year horizon, it is expected that a total of approximately 64 miles of underground cable replacements will be directed by this program at a total estimated cost of \$52M.

Additionally, the current splice log application should be updated to improve its usability. Information from this application is a fundamental part of the CSM. Upgrading the program will better support the data collection and extraction process and allow users to more easily enter the data needed to support the continuing improvement of the UG cable replacement program.

Program Justification

1.0 Purpose and Scope

National Grid distribution engineers monitor the electrical distribution system's performance and when necessary develop projects to address concerns (reliability, thermal, voltage, etc.) either existing or anticipated. Underground cable replacement projects have been executed in response to acute or chronic service reliability concerns or have been undertaken based on asset physical condition, deterioration, or age. The Company is now putting forth this program to proactively replace underground cable. The program evaluates the underground cable assets using a Criticality Scoring Model (CSM) which considers multiple factors contributing to asset deterioration and "end of life" and a probability of failure based on the length of the feeder. These two factors are combined to create an overall risk score used to select feeders for cable replacement.

All main line underground cable is included in the analysis; however the program focuses on the conventional underground systems generally found in more urban areas of the service territory. These cables are predominantly installed in manhole and duct systems, yet some may be direct-buried. Underground cables in Underground Residential Developments (URD) and Underground Commercial Developments (UCD) are not a subject of this program. Aerial cable is also outside the scope of this program.

2.0 Program Description

2.1 Background

2.1.1 System Description

National Grid's underground electric infrastructure, principally electric cables and manhole and duct systems, is extensive (approximately 320 circuit miles of main line primary on 420 feeders). Cable operating voltages and functionalities vary. Operating voltages and usages include:

- Sub-transmission from 11 – 34.5 kilovolts (kV)
- Distribution Primary from 4 – 34.5 kV
- Secondary from 0 – 600 volts (V)

At all operating voltages listed above, portions of the distribution system are either operated in a radial or networked fashion.

The age of the underground system varies considerably. As such, underground cables with various vintages of insulation exist. Predominant insulation types include:

- Cross Linked Polyethylene (XLPE)
- Ethylene Propylene Rubber (EPR)
- Paper Insulated Lead Covered (PILC)

Generally, National Grid's underground systems perform very reliably and typically have more redundancy (operational flexibility to respond to system contingencies) than overhead systems. As such, the standard and complete response to contingency events has mostly been reactive repair or replacement of failed equipment. When elements of the system have experienced chronic performance concerns (ex. multiple cable failures), targeted projects have been executed to resolve the situation. National Grid has observed variability in the performance of the various types of cable insulation with certain vintages of XLPE being less reliable than others. In addition, given the fact that significant amounts of PILC cable have been in service for more than 60 years, concerns about the need for replacement due to normal deterioration have begun to surface both at National Grid and in the industry as a whole.

Over the last five years there have been several failures in urban areas of the system that have resulted in manhole cover dislodgements and/or smoking manholes. This has caused concern among public safety officials, regulators and the community regarding the performance of the Company's underground systems.

2.1.2 Industry Benchmarking

In 2014 the Company reviewed the cable replacement plans of several utilities including Commonwealth Edison (ComEd) in Chicago, Potomac Electric Power Company (Pepco) in Washington DC, Consolidated Edison (ConEd) in New York City and Indianapolis Power & Light (IPL) in Indianapolis.

Significant findings:

- The volume of planned replacements varied significantly between companies, and any planned replacements were limited to medium voltage class cable.
- No utilities indicated that they have a proactive secondary cable replacement program.
- Primary cable replacement programs varied from none, to limited opportunistic programs (in which projects based on other drivers were marginally expanded to accommodate localized asset replacement), to significant cable replacement programs.
- A significant program at ComEd is targeting the replacement of 526 miles of cable, primarily PILC cable in urban areas. This volume represents approximately 15% of the PILC cable ComEd indicated they have in service in Chicago. ConEd has an ongoing significant effort to replace PILC cable on their system. Both these PILC cable replacement programs appear to have resulted from concerns about future system performance due to normal deterioration that comes with extensive years in service.

2.2 Program

In response to manhole events and in consideration of the Company's industry benchmarking, National Grid has chosen to develop an underground cable replacement program. The Company has moved to an approach where it evaluates its asset replacement programs utilizing a Criticality Scoring Model (CSM) with standardized weighting factors for:

- Safety (20%)
- Customer Impact (20%)
- Asset Condition (40%)
- Reliability (20%)

Criteria used to populate the CSM have been standardized across both distribution and sub-transmission assets. The key criteria, and their relative impact in the CSM for each sub-group of primary cable used in this program's development, are shown in Appendix 1. The main drivers considered in the evaluation are:

- Safety - Recorded manhole events and public accessibility
- Customer Impact - Number of customer served, System Control Center Priority Code and percent feeder loading
- Asset Condition - Cable age and cable insulation type
- Reliability - Number of cable failures and feeder CKAIDI (Circuit Average Interruption Duration Index)
- Five years (2012 – 2016) of historic data was used across all data sources to feed the CSM.

Data is weighted exponentially by level as shown at the top of the table found in Appendix 1, with the most risk assigned to the highest level and score. Each data set within each category receives a weight based on Subject Matter Expert (SME) opinion. In the Excel based scoring tool used for this program, the weighting of

each data set and the criteria for each level within the data set can be altered, and are shown in red in the scoring matrix. This allows scoring to be varied depending on the availability of data and the requirements of each jurisdiction.

The Safety component of the criticality score is primarily based on the potential of a manhole event and the public exposure should an event occur. A manhole event can range from smoke emitting from a manhole to an explosion that causes manhole cover dislodgement. An extensive study performed for ConEd found that previous manhole events are an indicator of future manhole events. The data in this study indicated that 20% of the serious manhole events occurred in the 10% of the manholes that were involved in previous manhole events.

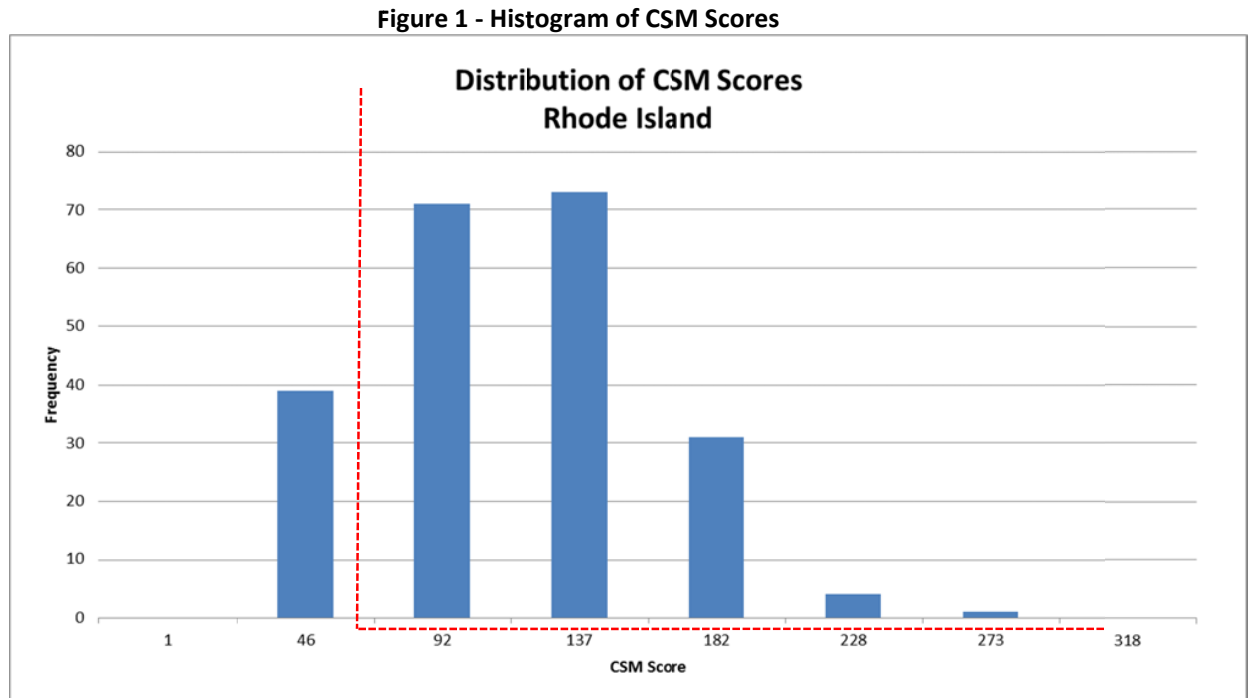
At National Grid, manhole events are recorded in the Outage Reporting Protocol (ORP) database. To analyze this CSM category, manhole events were downloaded from ORP and the locations were matched to the GIS ID of the manhole. ESRI ArcGIS was used to score each feeder by counting the number of "event manholes" each feeder passes through. To measure public exposure to a potential manhole event, a third party data source ([Walk Score®](#)) was used to provide a consistent measure of pedestrian access in areas served by manhole and duct systems. ESRI ArcGIS was used to determine the percentage of the feeder passing through areas with a Walk Score ≥ 90 (Walk Scores range from 0 to 100). In the CSM, safety related risks were the only categories that can achieve Level 5 scoring.

The Customer Impact component of the criticality score is based on the number of customers served by the feeder, the feeder System Control Center (SCC) Priority Code and the percent feeder loading. The number of customers served and the SCC Priority Codes are only available for feeders serving customers directly. Due to this, some of the sub-transmission circuits do not have values for these categories. All feeders have a percent loading value so this category is given more weight in the Customer Impact criticality score.

The Asset Condition component of the criticality score is primarily based on cable age and insulation type. While age alone is not indicative of cable performance, the longer cable is in service the greater normal deterioration it has potentially experienced. In older urban areas, a significant proportion of cables have been in service for well over 50 years, some for over 80 years. Age varies from cable segment to cable segment due to upgrades/repairs over time. The age and insulation type (see Appendix 2 for insulation type weights) data used for scoring was extracted from GIS and split into ranges. This data was reviewed with SME's to provide a high level check of the GIS information. The GIS data quality for both the cable age and insulation type is inconsistent. As the GIS data matures, the expectation is that the data will become more reliable as new assets are added to the system.

The Reliability component of the criticality score is based on the number of previous failure-related splices (stored in the splice log) and Interruption and Disturbance System (IDS) data. The splice log data captures outages to feeders that don't necessarily supply customers directly. These outage types do not have IDS data because no customers were interrupted. The splice log is critical for tracking failures on feeders that supply customers indirectly, such as sub-transmission and distribution cables supplying secondary network systems. IDS data was used for the distribution primary cables. More consistent usage of National Grid's online splice log will enhance future evaluations. A recent review of UG Electric Operating Procedure (EOP) 009 identified a need to improve splice log use and to enhance the splice log application.

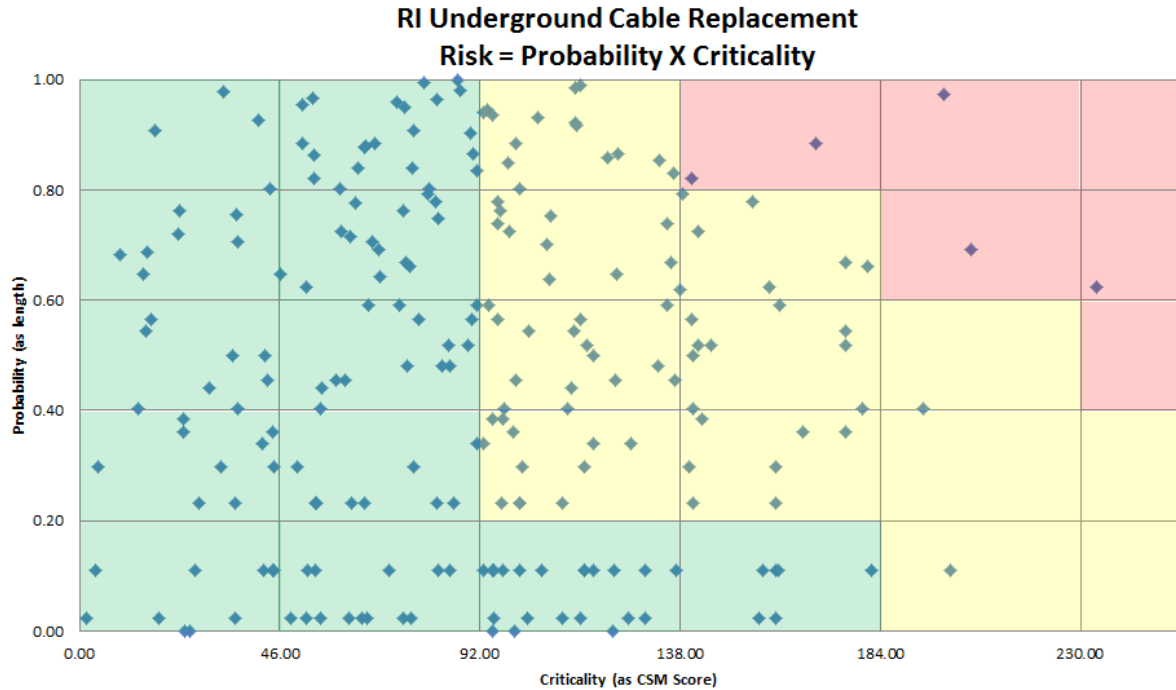
The following histogram shows the grouping of the CSM scores:



CSM scores \geq the average CSM score, 92, have been targeted for potential replacement in the strategy. This represents approximately 50% of the population or 109 of 219 feeders.

The last component of the CSM scoring is the addition of a probability of failure to the analysis. This was accomplished by adding in an exposure component (feeder length) to the analysis. Assuming the failure rate (failures/mile) is consistent, the longer the feeder the more likely it is to experience a failure. A consistent failure rate was used due to a lack of any data to support different failure rates for different cable types. The feeder circuit miles were given a percentile rank to provide consistent scale. The results of combining the CSM score (criticality) with the probability of failure results in the matrix below:

Figure 2 - Risk Matrix for RI Underground Primary Cables



Each blue dot represents a cable, the cables in the green areas represent cables with a risk score that will be tolerated, and cables in the yellow and red areas are addressed in the strategy in order of risk score followed by CSM score. The green area was selected based on CSM scores below the average CSM score (refer to Figure 1) and cables with little exposure and a low to moderate CSM score.

The CSM uses information from available data sources to identify candidate cables for planned replacement by feeder. This candidate list will be provided to local area SME's for cross functional review. Following this review, specific cable replacement projects will be selected. These feeders will be forwarded to local engineering departments for detailed scope and project grade estimate development. In developing the specific scope of planned cable replacement projects, all underground segments of targeted circuits will be evaluated, including laterals and cable to/from sectionalizing riser poles serving backyard distribution.

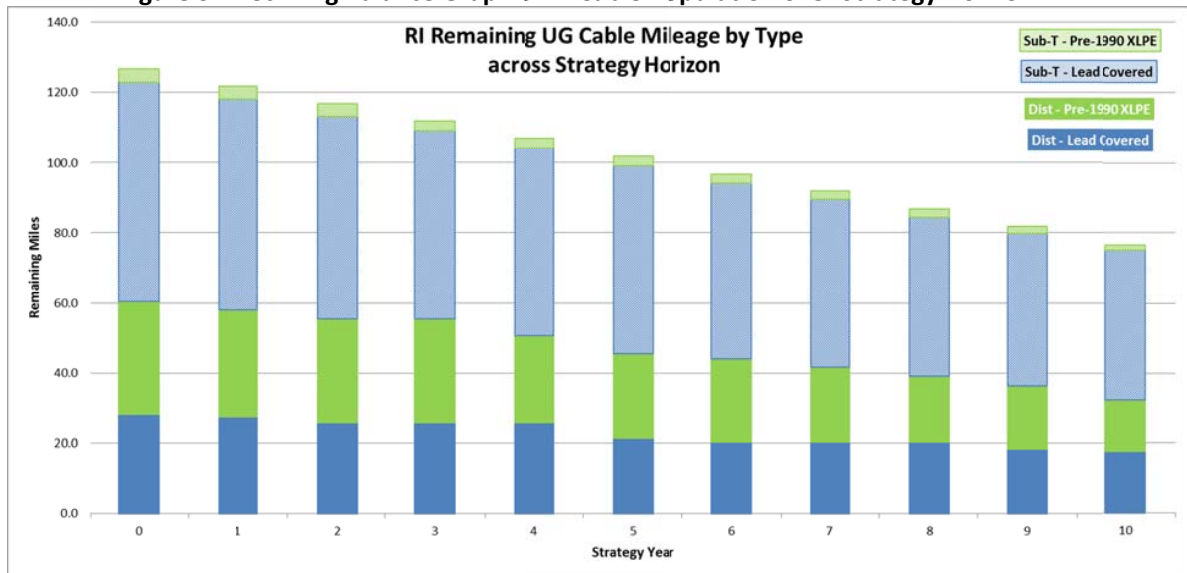
The availability of secondary system data does not presently allow for population and application of a similar CSM for secondary cable. As such, secondary cable replacement scoping and prioritization will focus on geographic areas and will be developed by employee experts with considering of underground system density, past performance, pedestrian activities, etc.

Using the CSM Risk model, this program results in an average annual replacement rate of 8 percent of the total targeted mainline primary cable located within the Rhode Island service territory. The projects already budgeted and the planned annual replacement rate is shown in Table 1 and a graph displaying the declining population of targeted cable is shown in Figure 3. This program is intended to be continuous, with a ten year horizon, to address the continued deterioration of these assets over time. It is expected that the planned mileage in need of replacement will become smaller as the backlog of high risk cable is addressed.

Table 1 - Program Based Cable Replacement Levels

System Wide Goals – Miles Replaced by Fiscal Year						
Asset Group	FY16-FY18*	FY19	FY20	FY21	FY22-28	Total
Sub-Transmission	4.0	2.6	2.4	5.0	11.9	21.9
Distribution	8.4	2.4	2.5	0.0	23.2	28.1
Secondary	3.9	1.4	1.4	1.4	9.8	14.0
Total	16.3	6.4	6.3	6.4	44.9	64.0
*Previous years projects already budgeted, not included in Totals						

Figure 3 - Declining Balance Graph of RI Cable Population over Strategy Horizon



Separate program funding streams are established for distribution/ sub-transmission and secondary replacement. The output of the CSM risk tool will be used for budgeting, resource planning and to identify candidate cable replacement projects. Distribution and sub-transmission cable replacement projects will be on a feeder basis, with each project justified, engineered, scoped and approved individually. To reserve funding for future year spending on distribution and sub-transmission cable replacement, specific project placeholders are being used. Secondary cable replacement funding will be accounted for on a program basis, with work performed against a jurisdiction funding project with annually approved funding levels.

Secondary network supply cable replacements will be managed using specific projects resulting from a network study/review. Many of the existing secondary network systems across the New England service territory are being reviewed. Any cable replacements should be coordinated through an overall review of the system.

The intent of the scoring methodology is to take advantage of existing information to identify cable replacement opportunities and to leverage new information as it becomes available. When that information becomes available, the scoring matrix will be reevaluated. In addition to annually reviewing funding levels, program weighting will be evaluated on an as needed basis to leverage lessons learned and as data quality improves. The quality of the data evaluated in the model varied across the system and is expected to improve over time. As such, this program's CSM will be refreshed biannually to properly reflect recent system performance and improved data availability.

Over a ten year horizon, it is expected that approximately 64 circuit miles of underground cable will be replaced as part of this program at a total estimated cost of \$52M (CAPEX).

3.0 Benefits

3.1 Safety and Environmental

Much of the cable to be replaced through this program will be PILC cable. There is an environmental benefit to removing PILC cable because this will reduce the amount of lead on the system.

Underground asset failures can (and have) resulted in manhole cover dislodgements. Such events are often visible to the public and raise understandable concern with regulators, the community and public safety officials. Although the consequence of a manhole event can be severe, the likelihood of a manhole event remains low. This program is expected to further reduce the likelihood of manhole events by proactively replacing cable based on its condition and past performance.

The impact of a cable failure on manhole dislodgement may be affected by the type of manhole cover installed. In addition to proactive cable replacement, National Grid is piloting the installation of vented manhole covers.

3.2 Customer/Regulatory

Underground cable systems typically supply urban areas, including critical loads such as police, fire and hospitals. Outages on the underground system typically take longer to isolate and repair. This program intends to mitigate the length of long-term sustained customer interruptions occurring in these urban areas by updating the design to current standards. Inclusion of the SCC Priority Code in the CSM will improve the ability of the model to prioritize critical feeders.

3.3 Reliability

The time to locate and respond to cable failures is typically longer than on the overhead system. Therefore, many cable systems are often designed with an emergency plan and greater redundancy to limit the impact on customer reliability. However, if cable performance deteriorates significantly, the likelihood of concurrent failures increases. The consequences of multiple secondary network failures or multiple sub-transmission failures would be significant. Cable failures can result in increased operations and loading on parallel equipment, further increasing the risk of failure on the rest of the system. Proactive replacement of targeted cable and improved design criteria in these systems is expected to reduce the risk of concurrent failures and the potential for large scale customer interruptions.

3.4 Efficiency

Addressing the cable in a prioritized fashion and re-evaluating the CSM on a regular basis will support the creation of the most cost efficient plan and permit lessons learned from recently completed projects to be applied to subsequent projects. A proactive approach should mitigate premiums paid for emergency replacements and allow for efficient material procurement. Coordinating planned work with the list of replacement feeders and circuits should foster project development and delivery efficiencies in investigation (engineering and manhole survey), mobilization and civil construction costs.

4.0 Estimated Costs

The selection of candidate projects to pursue should consider the cost/benefit of each project. The cable targeted for replacement includes all varnished cambric (VC), PILC cable and some of XLPE cables installed prior to 1990. The selection of the XLPE cable to be replaced will be determined as part of the detailed engineering/design.

1970's vintage XLPE cable has known defects that support replacement as well as other pre-1990's XLPE cables with possible strand shield damage due to repeated faults. For the purposes of this strategy all pre-1990 XLPE cable has been included in the replacement mileage and estimated cost.

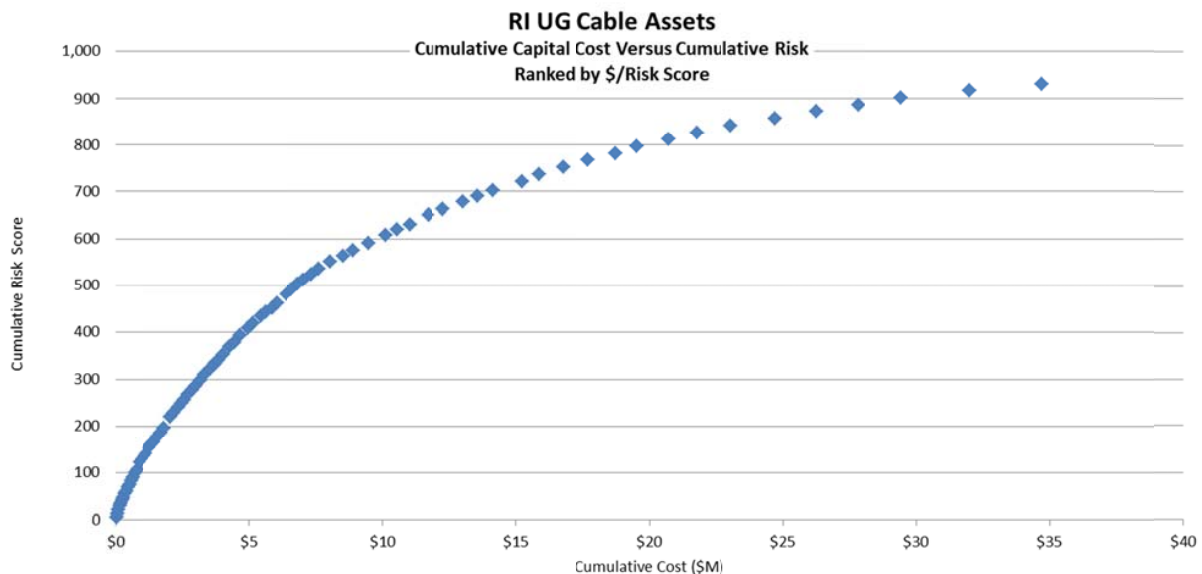
The budgetary cost estimates are based on the installation of 3-1/C 500 Cu EPR cable in conduit with 15% conduit system replacement. The conduit system replacement was added to account for locations with direct buried cable and where existing duct banks no longer have capacity. 15 kV class cable will be installed for all cable replacement at 15 kV and below. This will support any future conversions of 4kV feeders to higher voltages.

Table 2 - Estimated Costs used in the Program

Budgetary Estimates For 1000 circuit feet of construction				
Cable Voltage	CAPEX (K\$)	OPEX (K\$)	Cost of Removal (K\$)	Total (K\$)
≤ 15 kV	\$ 130	\$ 2.5	\$ 5	\$ 137.5
> 15 kV	\$ 150	\$ 2.5	\$ 5	\$ 157.5
600 V	\$ 240	\$ 2.5	\$ 5	\$ 247.5

Figure 4 shows the cumulative risk, as determined by the scoring methodology, mitigated by a cumulative program cost for replacing each primary feeder cables. Candidate feeders were ranked by efficiency (risk score mitigated per feeder project cost). Only feeders with in the yellow and red areas of the CSM risk matrix, see Figure 2, are included in the analysis.

Figure 4 - Cumulative Risk Mitigation for Replacement of Distribution and Sub-Transmission Primary Cable



Secondary (radial and network) cable replacement projects will be geographically based. Work will be performed against a program project until preset funding levels are approached. After ramp up, a cash flow of \$1.5M per year is expected with an annual goal of 1.2 miles per year.

Table 3 represents an investment grade cash flow for capital program costs over a ten year horizon. This cost includes duct bank upgrade or replacement that may be necessary to facilitate cable replacement, which will vary project to project. Estimated program spending has been developed considering both resource requirements and the need to address cable assets of highest risk at a reasonable pace. The costs do not include cable replacement performed due to other drivers (ex. Capacity).

Table 3 - Investment Grade Cash Flow

Budgeted CAPEX Spend Per Fiscal Year (\$M)						
Asset Group	FY16-FY18*	FY19	FY20	FY21	FY22-28	Total
Sub-Transmission	\$ 1.7	\$ 1.8	\$ 1.7	\$ 3.6	\$ 8.3	\$ 15.4
Distribution	\$ 2.8	\$ 1.6	\$ 1.7	\$ 0.0	\$ 16.0	\$ 19.3
Secondary	\$ 2.8	\$ 1.7	\$ 1.7	\$ 1.7	\$ 11.9	\$ 17.0
Total	\$ 7.3	\$ 5.1	\$ 5.1	\$ 5.3	\$ 36.2	\$ 51.7
*Previous years projects already budgeted, not included in Totals						

Over a ten year horizon, it is expected that approximately 64 circuit miles of underground cable will be replaced as part of this program at a total estimated cost of \$52M (CAPEX).

5.0 Implementation

Pursuing projects simply by their cost/benefit rank, as illustrated in Figure 4, would tend to focus activities on the shortest and therefore least costly circuits to replace, leaving some of the poorest performing but most costly projects in service for longer periods of time. That is why the CSM risk matrix was developed to address the cables with the highest estimated risk first. Additionally, the primary cable replacement candidate project list will be reviewed in detail by a cross functional team of Company SME's having local knowledge and experience with the Rhode Island distribution system infrastructure. This review will include data used in the CSM risk tool, consideration of active and currently budgeted projects, upgrades resulting from ongoing planning studies, etc.

The specific list of future projects will be selected based on the budgets established within this underground cable strategy document. The current project list is attached as Appendix 5. A ranked list of the candidate projects, identified by the CSM, is included in Appendix 4. The top ten distribution and sub-transmission feeders are listed for each district.

Each project will be approved individually with a scope, schedule, and cash flow. Distribution Planning & Asset Management (DPAM) Regional Engineering will perform an engineering review and initiate the individual projects. Individual projects will be managed by Program Management or Project Management depending on project complexity. Program Management will track replacement mileage. The overall program will be evaluated annually by DPAM.

DPAM Engineers will work with Operations, Customer Community Management, and Resource Planning to develop geographical areas and projects for secondary cable replacement in the City of Providence. Some of these areas are:

- Jewelry District
- College Hill
- Wayland
- Olneyville

The Company has also made a decision to pilot the application of vented manhole covers and will implement this pilot in conjunction with the secondary replacement program.

The secondary cable replacement program will define the circuit miles to be replaced in jurisdictions each fiscal year. The estimated state-wide replacement goal will be 1.2 miles per year. DPAM Regional Engineering will define projects or geographic areas for secondary cable replacement. Operations will perform the necessary field inspections, replace the cable and document replacements through designed work against program funding projects approved annually by DPAM. Program Management will track the program and limit the scope to keep within approved spending levels and goals.

6.0 Project Execution Considerations

In general, risks to cable removal efforts will be mitigated by applying lessons learned from earlier projects to subsequent projects.

6.1 Safety & Environmental

Individual project costs can be impacted by local environmental issues affecting any needed civil construction. Program costs do not assume significant environmental mitigation.

6.2 Customer/Regulatory

Some projects will require additional manhole and duct bank construction. There is a risk that local jurisdictions will refuse to issue licensing and permitting for the proposed work, or that process delays will impact project schedule. Community outreach in major urban areas should be performed prior to secondary cable replacement program kickoff, and for each individually scoped and approved distribution and sub-transmission cable replacement projects.

There is a risk that licensing will be delayed where roads have recently been repaved which will increase cost. This risk can be partially mitigated with a community outreach to obtain proposed paving schedules for urban communities. The information should be geographically mapped against identified feeder and circuit replacement projects so that the information is available during engineering review.

Some projects may require customer easements to locate equipment above ground as required by current standards. For example, sectionalizing riser poles currently used for backyard construction may require an easement to locate a padmounted switch on private property.

6.3 Reliability

Construction related outages, especially on sub-transmission cable projects, will increase load and customer reliability risks on parallel circuits. Construction related outage risks can be partially mitigated by having all materials on hand prior to starting replacement construction and analyzing outage requirements as part of preliminary engineering.

6.4 Resources

The volume of cable replacement proposed in this program represents an increase in underground work. Additional resources (either internal or contractor) for engineering, program management and data management as well as civil and cable craft workers are expected to be necessary.

7.0 Data Requirements

The Access-based database and Excel-based tool used for this program will be stored on a shared drive. This report identifies how scoring was applied to available information, and makes recommendations for improvements (See Appendix 1).

8.0 Factors Influencing Future Study

Long range studies presently underway may affect the timing of replacing some of the cables this program may identify. Future year candidates will be evaluated after creation of implementation plans associated with individual distribution studies.

The intent of the scoring methodology is to take advantage of existing information to identify cable replacement opportunities and to leverage new information as it becomes available. When that information becomes available, the scoring matrix will be reevaluated. Subsequent engineering review may result in deferral or elimination of candidate projects. In addition to annually reviewing funding levels, program weighting will be evaluated every two years based on lessons learned and as data quality improves.

9.0 Conclusion

The proactive replacement of underground cables on the sub-transmission, distribution primary and distribution secondary systems in the Rhode Island service territory is recommended to minimize faults and the occurrence of manhole events. It is recommended that over the next ten years National Grid spend:

- Sub-Transmission cable replacements (approximately 21.9 miles) - \$15.4M CAPEX
- Distribution primary cable replacements (approximately 28.1 miles) - \$19.3M CAPEX
- Distribution secondary cable replacements (approximately 14.0 miles) - \$17.0M CAPEX

The total capital spend over the ten year horizon is \$52M replacing approximately 64 miles of underground cable.

Appendix 1 – Criticality Scoring Model for Identifying UG Cable Replacement

The drivers used in the analysis are each described below. The same scoring categories are used for both distribution and sub-transmission cable assets. This was done to create a common basis for the analysis. As the data quality improves, the small bias created by this common approach should be minimized. All data is taken from the five most recent complete calendar years, 2012 through 2016. The data is converted into either a percentage or per mile form to improve scoring consistency within cable sub-groups. The data is stored and combined within an Access DB to compile the data for each scoring area then exported to Excel for final scoring and to make the results more user-friendly.

List of Data Sources:

GIS – GIS data is extracted from the Business Objects Asset Data Warehouse via the Feeder Reference Model (FRM) and direct underground cable and OFC related queries. The queries focus on the extraction of information related to only main line underground cable as defined in the Smallworld GIS.

FeedPro and Annual Plan Spreadsheets – Feeder loading and rating information

IDS, Interruption and Disturbance System – Five year average (2012 – 2016) feeder level main line reliability data for faults related to underground assets and most recent (2016) customer served counts.

ORP, Outage Reporting Protocol – Manhole event data

UG Splice Log – Cable splice failure data

List of Network Cables – Dan Mungovan, Table updated 2/4/2016

[Walk Score®](#) – Third party data source used to provide a consistent measure of pedestrian access in areas served by manhole and duct systems.

Local SME's by district – Meetings were held with each district to get feedback on the accuracy of the GIS cable data to verify/correct approximate age and insulation type of cable. Significant differences between GIS and the assets in the field were identified in most districts, specifically around direct buried versus in conduit construction and the age of XLPE cable in the system.

Safety	
Previous Manhole Events	Manhole event data collected in the ORP DB, manhole event tagged with GIS ID and spatial query is run in ArcGIS to generate a list of cables potentially impacted by the manhole event (cables running through the same manhole). Data is converted into a percentile rank for scoring on an event/mile basis.
OFC Counts	Count of OFC's per feeder extracted from GIS via the FRM. Data is converted into a percentile rank for scoring.
Public Accessibility	The service territory was broken down by census tract and each tract was given a Walk Score based on the geometric center of the underground assets in the tract. Census Tracts with walk scores \geq 90 were considered potentially high pedestrian traffic areas. Feeders are scored based on the percentage of feeder in these areas.
Customer	
Number of Customers Served	Extracted from IDS via the FRM. Most recent calendar year data used (2016). Data is converted into a percentile rank for scoring.
SCC Priority Score	Feeder priority score from 2017 System Control Center Load Shed Plan
% Feeder Loading	FeedPro via FRM and Annual Planning Spreadsheets used to collect most recent summer peak (2016) load and rating data to calculate % SN rating. Data is converted into a percentile rank for scoring.
Asset Condition	
Age	GIS and Local SME's feedback used to score each feeder by cable insulation/construction type for approximate age. Entire feeder is scored based on the age group of the insulation type with the largest %.

Weighted Average Insulation Type	GIS and Local SME's feedback used to determine the cable insulation type for each feeder. Scoring based on the weighted average on the cable insulation scores.
Manhole Crowding	GIS data is used within ArcGIS to create a spatial query counting the number of primary cables running through each manhole. Each feeder is then scored on the average number of cables/manhole on a percentile rank basis.
Direct Buried Percentage	GIS and Local SME's feedback used to score each feeder by cable construction type. This data is used to calculate a direct buried % used to score the feeder.
Reliability	
Splice Log	Data extracted from UG Splice Log to calculate splice failure rates for feeders on an event/mile basis.
Feeder CKAIDI	IDS Data is extracted via FRM to calculate the CKAIDI for main line underground cable interruptions. Data is converted into a percentile rank for scoring.

The categories used in the analysis are shown in green shading. Red lettering indicates weighting that can be changed within the scoring tool to evaluate the effect of different weighting factors. Minimum weighting factors set at 5% per category.

Table 1 – Distribution/Sub-Transmission Feeder Criticality Scoring Model

Rhode Island Feeder/Circuit Scoring Matrix							
Category	Data Source	Weight	Level 1 1	Level 2 20	Level 3 100	Level 4 400	Level 5 1000
Safety		20%					
Previous Manhole Events	2012-2016 from I&M Group (ORP DB) - All cables in MH scored Events/Mile	12%	10%	25%	50%	75%	90%
OFC Count	FRM - % Rank Basis	0%	N/A	N/A	N/A	N/A	N/A
Public Accessibility: Percent of Feeder Passing Through High Pedestrian Traffic Area	Walk Score % of feeder in area with Walk Score >=90	8%	10%	25%	50%	75%	90%
Customer		20%					
Number of Customers Served	FRM - % Rank Basis	5%	10%	25%	50%	75%	N/A
SCC Priority Code	SCC Load Shed Plan - 2017	5%	10%	25%	50%	75%	N/A
% Feeder Loading	FRM/Annual Planning Spreadsheets % Rank Basis	10%	10%	25%	50%	75%	N/A
Asset Condition		40%					
Age	Local Engineering to designate by feeder Entire feeder scored based on largest %	15%	N/A	N/A	26 to 49 Years	50+ Years	N/A
Weighted Average Insulation Type	GIS	15%	Use the weighted average scored for insulation type				
Crowding in Manholes Feeder Passes Through	Custom ESRI GIS Query Count cables passing through each manhole and score on average for feeder % Rank Basis	5%	N/A	25%	50%	75%	N/A
Direct Buried Percentage	GIS DB UG/Total UG	5%	N/A	25%	50%	75%	N/A
Reliability		20%					
Splice Log	2012 - 2016 from UG Ops Splice Log Events/Mile % Rank Basis	10%	N/A	25%	50%	75%	N/A
Feeder CKAIDI	ML UG IDS 2012-2016 - % Rank Basis	10%	N/A	25%	50%	75%	N/A

Notes:

- Revised strategy uses the same CSM for all assets, the distribution and sub-transmission cables are no longer analyzed separately.
- Number of Customers Served and SCC Priority Code categories would potentially favor distribution feeders. This is because many Sub-T circuits do not directly serve customers and the IT systems do not currently link substation customer counts to the Sub-T lines supplying them.
- The Splice Log is not used consistently across New England so this will favor areas that use the application.
- Many Sub-T cable outages don't result in permanent customer interruptions so the Feeder CKAIDI category will favor distribution feeders because the Sub-T outages do not get recorded in IDS.

Areas in need of improvement for future strategy updates:

GIS – no reliable age data before 2000, incorrect cable sizes, insulation types and construction types, main line tag not always correct

Feeder Rating and Loading – Inconsistent information in FeedPro and Annual Planning Spreadsheets

IDS – currently being reviewed for update

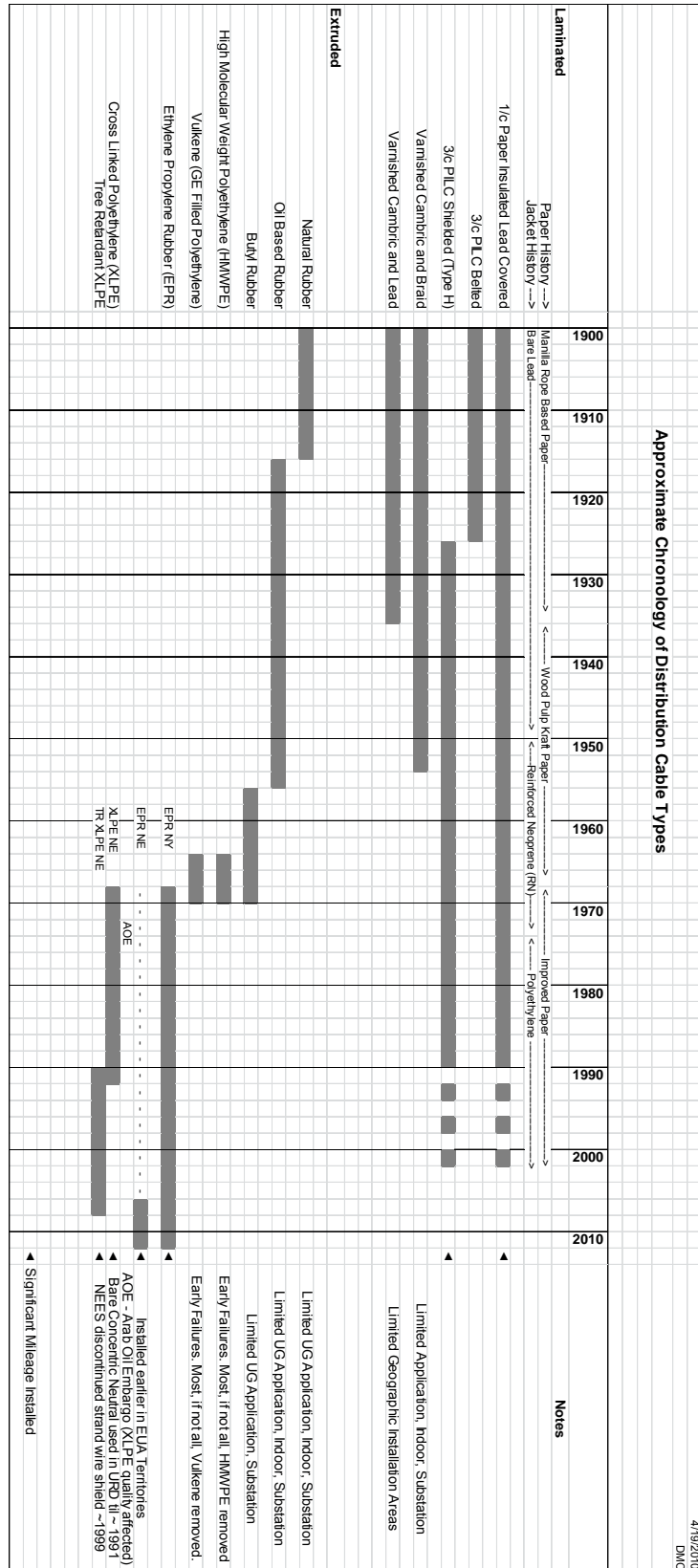
Splice Log – Not being used consistently, difficult to enter data and extract data. Recommend program update.

The Excel spreadsheet attached contains the data used in the CSM scoring matrix as well as the ranked list of all candidate projects.

Appendix 2 – Cable Insulation Type Weighting

INSULATION CODES IN GIS	Assumed Code Definition	Awarded Points
EPR	EPR	0
KDPS Lead	Kerite Double Permashield Lead Covered	100
KER	Kerite	0
LC	Lead Covered	100
P & L	Paper and Lead	100
PE combined with Age over 26 years	Polyethelene	400
PE combined with Age under 25 years	Tree Retardant Cross Linked Polyethylene	0
R	Rubber	20
R & L	Rubber Covered Lead	100
SUBL	Submarine Cable Lead	100
SUBR	Submarine Cable Rubber	20
VC	Varnished Cambric	1000
VC & L	Varnished Cambric and Lead	1000
XLPE combined with Age over 26 years	Cross Linked Polyethylene	400
XLPE combined with Age under 25 years	Tree Retardant Cross Linked Polyethylene	0

Appendix 3 – Approximate Chronology of Distribution Cable Types



Appendix 4 – Top 10 Distribution and Sub-Transmission Primary Feeder Cable Replacement Candidate Projects/District

District/Feeder	Risk Score	CSM Score	Circuit Kft to be Replaced	Budgetary CAPEX (K\$)
Capital	276	3192.9	77.4	10085.0
Distribution	128	1850.9	11.5	1486.0
49_53_6J6	24	233.8	1.8	237.0
49_53_13F3	20	205.0	2.8	363.0
49_53_6J7	16	181.2	2.2	290.0
49_53_37J5	15	194.0	0.8	109.0
49_53_107W84	12	180.0	0.8	98.0
49_53_48F6	12	161.0	1.6	202.0
49_53_13F4	8	176.0	0.6	79.0
49_53_21F1	8	160.0	0.4	51.0
49_53_69F3	8	160.0	0.3	34.0
49_53_5F4	5	200.0	0.2	23.0
Sub Transmission	148	1342.0	65.9	8599.0
49_53_1171	20	169.1	8.1	1057.0
49_53_1144	20	140.6	5.4	699.0
49_53_1142	15	136.6	5.7	741.0
49_53_1151	15	133.2	7.0	916.0
49_53_1137	15	123.8	7.7	1001.0
49_53_1114	15	121.4	7.5	970.0
49_53_1132	15	113.8	19.5	2540.0
49_53_1160	12	145.0	1.3	171.0
49_53_1166	12	123.4	2.1	268.0
49_53_2235	9	135.0	1.6	236.0
Coastal	124	1604.6	18.9	2460.0
Distribution	118	1509.6	18.2	2359.0
49_56_33F3	16	176.0	2.3	297.0
49_56_154J14	16	142.1	3.4	439.0
49_56_33F2	12	176.0	1.4	181.0
49_56_33F4	12	176.0	1.3	167.0
49_56_51J12	12	142.1	1.3	173.0
49_56_57J1	12	136.1	2.3	301.0
49_56_45J3	12	135.2	3.6	464.0
49_56_14F3	9	136.9	1.0	133.0
49_56_33F1	9	123.0	1.0	124.0
49_56_64F2	8	166.3	0.6	80.0
Sub Transmission	6	95.0	0.7	101.0
49_56_2233	6	95.0	0.7	101.0
Grand Total	400	4797.5	96.3	12545.0

Appendix 5 – List of Currently Active and Budgeted Cable Replacement Projects

Primary or Sub-T	Project #	Project Description	Budget Year	Ckt Miles
Primary	C055357	RI UG CABLE REPL PROGRAM - FDR 1111	FY16	1.8
Primary	C055359	RI UG CABLE REPL PROGRAM - FDR 79F1	FY16	0.4
Primary	C071307	RI UG CABLE REPL PROG- FDRS 79F1&F2	FY17	1.7
Primary	C074307	RI UG 79F1 DUCT CHARLES & ORMS STS	FY17	-
Primary	C055364	RI UG CABLE REPL PROGRAM - FDR 13F6	FY17	0.5
Primary	C055360	RI UG CABLE REPL PROGRAM - FDR 2J8	FY17	1.9
Primary	C055362	RI UG CABLE REPL PROGRAM - FDR 1105	FY18	1.0
Primary	C055361	RI UG CABLE REPL PROGRAM - FDR 1107	FY18	0.7
Primary	C055363	RI UG CABLE REPL PROGRAM - FDR 1127	FY18	-
SubT	C055367	RI UG CABLE REPL PROGRAM FDR 54K21	FY16	1.4
SubT	C055369	RI UG CABLE REPL PROGRAM FDR 54K23	FY16	1.5
SubT	C072807	RI UG CABLE REPL PROGRAM - FDR 1102	FY17	0.4
SubT	C072826	RI UG CABLE REPL PROGRAM - FDR 1104	FY17	0.4
SubT	C072847	RI UG CABLE REPL PROGRAM - FDR 1106	FY17	0.4

Division 1-11

Request:

Regarding the URD Cable Program; the IRURD FY2022 forecasted spend is \$5 million and the proposed budget for FY 2023 is \$7 million. Explain the rationale for the increase. Provide the planned replacements and/or injections, the associated condition or failure rates, and the thresholds or criteria used to prioritize the replacements/injections. Additionally, provide a breakdown of cost between URD replacement versus injection projects.

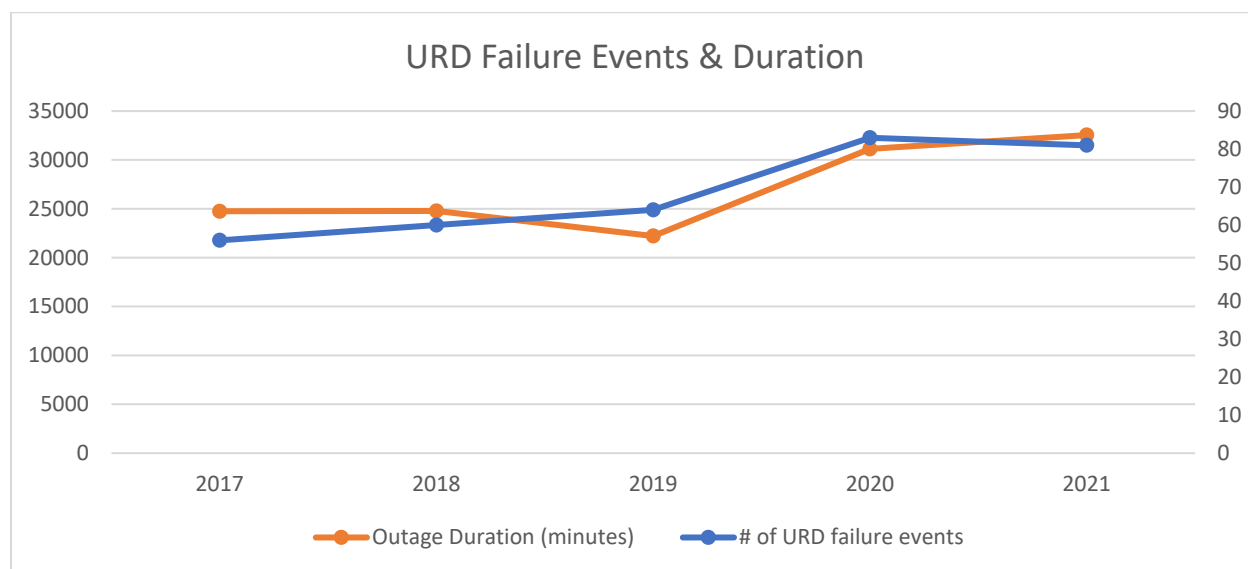
Response:

While the Company does not have a formal process to track customer complaints with regards to URD failure, in response to this request, the Company undertook a manual effort to attempt to find all URD related outages from 2017-November 11, 2021. The data compiled is shown in the chart and graph below.

As shown in the information provided below, there has been a steady increase in URD related failures since 2017. Operations has also expressed that they have responded to more URD related outages over the past few years which aligns with the outage data below. The 2021 data was extrapolated to the end of the year for comparison purposes. The proposal to increase the budget for IRURD's is to respond to this increasing trend and customer concerns about URD performance.

Row Labels	# of URD failure events	Outage Duration (minutes)
2017	56	24744
2018	60	24778
2019	64	22213
2020	83	31131
2021	81	32555
Grand Total	344	135422

Division 1-11, page 2



The Company plans to replace the direct buried primary voltage cable within the following developments in FY23:

- Juniper Hills West Warwick – injection attempted
- Chateau Apartments Providence
- Willowbrook URD Cranston
- High Hawk URD East Greenwich - injection attempted
- Village at Point Judith Narragansett
- Sandy Point Farms Portsmouth
- East Greenwich Heights E.G.
- Paddock Estates Warwick
- High Point Dr North Smithfield
- Eastward Look Narragansett - injection attempted

The URD program is based on the type of cable, the cable fault history and the condition of the concentric neutral. The criteria for replacement is three cable faults within three years in the same half loop section, or the injection process has identified neutral corrosion of greater than 50% of the cable or multiple splices present in the single section. These criteria define how the Company decides which cables are replaced as opposed to injected. All of the URDs planned for replacement in FY23 (listed above) fit this criteria and have been prioritized based on recent cable failures and condition based on information after injections.

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The Company plans to expand upon the URDs that were injected in FY22 with a larger list of URDs to improve upon our injection success rate of 58% this past year. The injection work will be done in a proactive manner where there have been cable faults in the URD over the past 3 years and where the sections are the same type of vintage cable that is targeted within the URD program.

The plan to expand on the injection program will extend the life span of the cable and is more cost effective than replacement. A list of URDs planned for injection has not been fully developed as they have a much shorter design time period than the replacement projects. This list will be based on URDs that are the XLPE vintage cable and have experience cable faults over the past 3 years.

Of the \$7 million planned for the URD program in FY 2023, approximately \$1 million is allocated for injections and \$6 million is for replacements.

Division 1-12

Request:

Regarding Substation EMS/RTU (SCADA) projects:

- a. Provide the comprehensive Substation EMS/RTU (SCADA) strategy and implementation plan, indicating completed and proposed work.
- b. Provide a list of all feeders indicating those with electronic relays or other smart relays and feeders which still have electromechanical relays.
- c. How are SCADA projects aligned with major project work?

Response:

- a. The program was originally called the substation RTU Installation Strategy and that strategy document is attached to this response as Attachment DIV 1-12-1. The Company changed the name of the strategy to the Substation EMS/RTU (SCADA) program to better represent the scope of work included in the program which includes more than one for one RTU replacements. A table with completed and proposed work under this program is also included below. The 2nd column indicates if the project is being done under the EMS program or if it has been combined with a larger project to maximize efficiencies. The 3rd column indicates projected in service date. Projects already completed are noted as Complete. If a project is in early stages of engineering and the in service date has yet to be determined, it is listed as TBD.

The Narragansett Electric Company
d/b/a National Grid
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Station	EMS program or other project?	Projected in Service Date
Davisville 84	EMS program	Complete
Drumrock 14	EMS program	Complete
Hopkins Hill 63	EMS program	Complete
Natick 29	EMS program	Complete
Phillipsdale 20	part of area study project	TBD
Wampanoag 48	EMS program	TBD
Warwick 52	EMS program	Complete
Wood River 85	part of area study project	TBD
Anthony 64	part of area study project	TBD
Bonnet 42	EMS program	Projected 10/14/22
Bristol 51	EMS program	Projected 6/3/22
Centredale 50	part of area study project	TBD
Coventry 54	EMS program	Complete
Hope 15	part of area study project	TBD
Merton 51	part of area study project	TBD
Tiverton 2 33	part of area study project	TBD
Apponaug 3	part of area study project	TBD
East George St 77	EMS Program	TBD
Harrison 32	EMS Program	Complete
Nasonville 127	part of area study project	TBD
Clarkson Street 13	EMS program	Complete
Division Street 61	EMS program	Complete
Elmwood 7 - Outdoor	EMS program	Complete
Hospital Sub 146	EMS program	Complete
Old Baptist Road 46	EMS program	Complete
Peacedale 59	EMS program	Complete

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- b. All distribution substation relays are included in Attachment DIV 1-12-2. Feeder ID is included in column F "Equip_description".
- c. SCADA projects are bundled with other major project work whenever reasonable in order to maximize efficiencies. If there are other larger projects planned at a substation, EMS work is included in the larger project instead of a separate EMS Program project. For example, the Tiverton substation was identified as a candidate for the EMS program, but the work is now being done as part of the larger area study project. Substations where the company is bundling EMS work with larger projects instead of having a standalone EMS program project are listed as such in the table included in response to part a of this data request.

The Narragansett Electric Company
d/b/a National Grid
In Re: Division's Review of FY 2023 Proposed Electric ISR Plan
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Attachment DIV 1-12-2

The Company is also providing the Excel version of this attachment.

Substation RTU Installation Strategy

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Strategy Statement

The purpose of this strategy is to install RTU's (Remote Terminal Units) and expand existing RTU's in National Grid Substations which presently do not have an RTU installed or lack sufficient monitoring and control points. This strategy supports both reliability and a sustainable network through the installation of equipment that will improve reliability performance, increase operational effectiveness, and provide data for asset expansion or operational studies. This program will also enable distribution automation and smart grid strategies.

Although this paper also identifies substations that are categorized as Managed by Transmission (TXT and DXT), this paper identifies estimated costs and implementation of those substations Managed by Distribution (DXD).

A strategy paper for those stations managed by Transmission will be presented at a future AMIC.

This program will be delivered over a five-year period with each year of the strategy to be sanctioned with each year of the program to be sanctioned.

Amendments Record

Issue	Date	Summary of Changes / Reasons	Author(s)	Approved By (Inc. Job Title)
	01/13/2010	Revision	John Gavin Distribution Asset Strategy	Ellen Smith Executive Vice President, US Electricity Operations
1	01/03/2008	Initial Issue	Anthony McGrail Substation Engineering Services	John Pettigrew Executive Vice President, Electric Distribution Operations

Strategy Justification

1.0 Purpose and Scope

This strategy sets forth a Transmission and Distribution Substation RTU installation and expansion program for those substations where an RTU is not presently installed or an RTU is installed and expansion is required to maintain a reliable and sustainable network. For the purposes of this strategy, RTU installation includes the RTU, associated wiring, device control requirements, data acquisition capability, and EMS configuration.

At a minimum RTU control points shall include status and control of all automatic protective devices such as circuit breakers and circuit switchers. Additional points for monitoring the condition of equipment such as transformers, circuit breakers, circuit switchers, batteries, voltage regulators, etc may be added to an RTU as needed provided the existing equipment has the necessary features allowing an addition of a monitoring point.

This strategy supports National Grid's objective to improve reliability and meet service quality standards in all states in which National Grid operates. This strategy pertains to substations identified as DXD and DXT in accordance with TGP-12 – Division of Responsibilities for Asset Management.

This strategy offers a phased approach utilizing a priority list developed with System Operations and Distribution Planning to address key substations that require an RTU installed or needs the existing RTU expanded. The priority was based on substation loading, importance of the station related to customers served as well as impact the loss of this station has on the system, frequency of times that we do switching at the stations, stations that support the sub-transmission 23 kV network (NE), substation status, metering and control would be most advantageous to regional control operators based on historical experience, mitigating customer outages or improving system integrity, the number of customers affected by outages/interruptions, the past fault/outage frequency and severity for a given area, as well as the customer sensitivity to outages in a given area.

The additional RTU's being added or expanded to the substations will not be deemed obsolete with the implementation of the Distribution Automation Program or the Smart Grid Program. New RTU's with the latest protocols and architecture will be compatible to the new EMS system. The substation supervisory and control information (SCADA) for the equipment inside the substation fence currently connects to the Energy Management System (EMS) at National Grid's Control Center facilities. Going forward, as we create new opportunities to combine Substation and Distribution SCADA information, it is expected to be accomplished through EMS and a new Distribution Management System (DMS) integration, or by landing Distribution SCADA information on the Substation RTU.

2.0 Background

A Remote Terminal Unit ("RTU") is a device used to transfer operational information from a substation to an Energy Management System ("EMS") in a control center. An RTU allows for remote operation and management of the system providing benefits in incident response and recovery improving performance and reliability.

Currently approximately 64% of the locations in New England and 42% of the New York locations have RTU installations in comparison to 100% in Long Island and 98% in ComEd (Chicago). The total number of locations that may require an RTU is 610 in NE and Upstate NY. NE has approximately 162 locations that may require an RTU while NY has approximately 448 locations that may require an RTU.

The findings of KEMA Consulting's recent studies for National Grid, indicate that RTU's, when used to monitor and control the distribution feeder breakers, can provide a 15 percent to 20 percent reduction in average customer outage duration (CAIDI) when compared with a similar feeder that is not equipped with control and monitoring facilities. This reduction in outage time results primarily from the dispatcher being informed immediately of a switch operation and being able to take action. RTU's and EMS can also provide the dispatcher with fault location information that can help reduce feeder patrol time. Substation RTU installations additionally provide system operators with immediate notification when an interruption occurs within a substation, so that service restoration activities can start immediately. Substation intelligent electronic devices (IEDs) can also provide an estimated fault location, which can cut feeder patrol time in half."

Outage notification is currently estimated to take on average 8-9 minutes without EMS technology. With EMS technology outage notification is less than 1 minute of a breaker or PTR operation. The actual total cumulative performance of the proposed 21 substations for the last two years is shown below in figure 1. The proposed installation of RTU's for the 21 substations in this project is estimated to reduce CAIDI by 10% or 23 to 27 minute reduction in CAIDI.

	EVENTS	CI	CMI	CS	SAIFI	SAIDI	CAIDI
2006	802	157,408	20,649,186	66,566	55	7,138	2,744
2007	750	80,725	8,942,829	62,732	25	3,039	2,345

Figure 1

This program is designed to provide for a sustainable distribution system by enabling the following advantages:

- a) Enable National Grid personnel to operate a substation without having to travel to the substation
- b) Enable National Grid to fully exploit the wealth of information contained in existing substations.
- c) Enable National Grid personnel to access operational and non-operational data from substation without having to travel to the substation
- d) Provide abilities to more quickly and more accurately diagnose faults for protection engineers and operations engineers, as well as providing data for smarter analysis tools for asset managers.
- e) Improved asset management decisions based on hard statistical data and demand management profiles.
- f) Improved asset life cycle management and life extension
- g) Actual field measurements obtained from substation data benefit the design and engineering functions related to: system protection, power factor monitoring and control, phase balancing, circuit reconfiguration and load balancing, load forecasting, and outage trending.

- h) Knowledge of the equipment condition, past performance, and historical loading and operations could be used to determine the remaining life of the equipment, future maintenance requirements, and ultimately the economic decision making criteria for retirement and life extension alternatives. The ability to perform these decisions more accurately is becoming increasingly important as the equipment population increases in age.
- i) Reduce the CAIDI contribution from non-SCADA stations by 10%.

This program aligns with National Grid Internal Strategy Document – Distribution Automation Strategy, future smart grid applications and customer satisfaction improvement. This program supports stated reliability improvement objectives of the Company.

3.0 Benefits

3.1 Safety and Environmental

Substation RTU installation will enable additional information to be brought back to System Operations providing further intelligence on substation and equipment status that will improve decision making and response to environmental issues.

3.2 Reliability

RTU's, when used to monitor and control the distribution feeder breakers, can provide a 15 percent to 20 percent reduction in average customer outage duration (CAIDI) when compared with a similar feeder that is not equipped with control and monitoring facilities.

3.3 Customer/Regulatory/Reputation

Installation of RTU's will improve the Company's reliability performance to avoid service quality penalties with our regulators. In addition, the installation of RTU's at these substations will help the Company achieve its goal of meeting state reliability targets.

3.4 Efficiency

The benefits of implementing this program will enable the realization of benefits derived by utilizing and integrating operational and engineering information to achieve savings in maintenance, operations, and investment planning.

4.0 Estimated Costs

Installations of RTU's are estimated to average \$330K per installation. This installation includes the RTU, associated wiring, device control requirements, data acquisition capability, and EMS configuration.

	FY2012	FY2013	FY2014	FY2015	FY2016	TOTAL
MA Substations	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	17,500,000
RI Substations	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	7,500,000
NH Substations	250,000	250,000	250,000	250,000	250,000	1,250,000
NY Substations	3,300,000	3,300,000	4,300,000	4,300,000	3,300,000	18,500,000
Total	\$8,550,000	\$8,550,000	\$9,550,000	\$9,550,000	\$8,550,000	\$44,750,000

5.0 Implementation

This program addresses the installation of RTU's and expansion of RTU's (remote terminal units) associated wiring, device control requirements, and data acquisition capability at the Distribution and Transmission Substations in New York and New England that currently do not have RTU's.

In Phase One of this strategy, priority lists have been developed with input from System Operations and Distribution Planning to address approximately 86 substations without RTU's in NY (56 – DXD and 27 DXT) and approximately 100 (70 Distribution and 31 DXT or TXT) substations in NE that require an RTU or are candidates for expansion. Substations in NY and NE identified for Phase One are shown in Appendix 1 attached. Substations identified in Appendix 1 will be reviewed by Distribution Planning for the purposes of synchronizing with future system plans.

Additional Stations which require RTU's will be addressed with Phase Two of the Strategy.

This strategy does not address new stations that are being constructed, or new substation additions. Installation and upgrade of RTU's are included in the scope of work for new substations and major rebuilds. For those substation construction projects of smaller scopes such as additional bay construction where an RTU is not installed, or RTU upgrades and/or additions are required, estimates for RTU's installations and upgrades are included in Substation Engineering Conceptual estimates as an optional scope item if not identified in the original project scope.

A separate strategy is currently being implemented to address existing RTU equipment in New York and New England that are obsolete and in most cases unsupported by the manufacturer and cannot be modified to provide the capabilities required for modern supervisory control and data acquisition. These strategies (**Replacement of Remote Terminal Units (RTU's) in New York, Replacement of Remote Terminal Units (RTU's) in New England**) address both Distribution and Transmission Substations. These strategies are currently being managed by Transmission Asset Strategy.

6.0 Risk Assessment

6.1 Safety & Environmental

Improvements to response times for environmental issues that may arise in a substation will not be realized.

6.2 Reliability

Improvements to CAIDI (Customer Outage Duration) will not be realized which may impact reliability

6.3 Customer/Regulatory/Reputation

Improvement to CAIDI (Customer Outage Duration) will not be realized which may result in customer complaints or impact reputation.

6.4 Efficiency

Substation schematics may not be accurate or exist. Substation's schematics will be reviewed in the scope develop to determine adequacy. If new schematics are needed to be developed then this will be factored into the project cost and schedule.

Substations listed in NE will need to be scoped. RTU's may be existing at some of these locations but have not been expanded to include necessary status and points.

7.0 Data Requirements

7.1 Existing/Interim:

None

7.2 Proposed:

N/A

7.3 Comments:

N/A

8.0 References

1. TGP-12 – Division of Responsibilities for Asset Management

Appendix 1 – Massachusetts Transmission Stations

Priority	Sub Name	State	Region	Division	Voltage	Comments
HIGH	Mink St	MA	NE	South	115-13.2kV	
HIGH	Webster St	MA	NE	North	115-13.8-4.16kV	In Conceptual Engineering
HIGH	Vernon Hill, Worcester	MA	NE	North	115-13.8-4.16kV	In construction with Vernon Hill Rebuild
MEDIUM	Shearers Corner 514	MA	NE	North	115-13.8kV	
HIGH	Depot St - Automate 11 breakers	MA	NE	South	115-13.8kV	
HIGH	Beaver Pd	MA	NE	South	115-13.8kV	
HIGH	Ayer Sub	MA	NE	North	115-13.8kV	
HIGH	Drumrock	MA	NE	South	115-23-12.47kV	In Preliminary Engineering
HIGH	E. Holbrook	MA	NE	South	115-23-13.2kV	
HIGH	E. Weymouth	MA	NE	South	115-23-13.2kV	
HIGH	N. Chelmsford	MA	NE	North	115-23-13.2kV	
HIGH	Everett #37	MA	NE	North	115-23-13.8-4.16kV	
HIGH	Revere #7	MA	NE	South	115-23-13.8-4.16kV	
HIGH	Maplewood #16-23kv	MA	NE	North	115-23-13.8-4.16kV	
HIGH	S. Broadway	MA	NE	North	115-23kV	
HIGH	W. Andover	MA	NE	North	115-34.5-13.2kV	
HIGH	Canal Street 16	MA	NE	North	115kV	
MEDIUM	North River 30	MA	NE	North	115kV	Switching Station
HIGH	Sandy Pond Reclosing	MA	NE	North	345-115-23kV	
HIGH	Westminster 602	MA	NE	North	69-13.8kV	
HIGH	Prospect St Sub	MA	NE	North	69-13.8kV	
HIGH	Cooks Pond, Worcester	MA	NE	North	69-13.8kV	In construction with replacement of two 69-13.8 transformers
LOW	North Grafton 328	MA	NE	North	69-4.16kV	To be retired

Appendix 1 - Massachusetts Distribution Stations

Priority	Sub Name	State	Region	Division	Voltage	Comments
HIGH	Field Street 1	MA	NE	South	13.8-4.16kV	Indoor Sub
HIGH	Salisbury St 16	MA	NE	North	13.8-4.16kV	
HIGH	Tatnuck 1	MA	NE	North	13.8-4.16kV	
HIGH	Mendon 332	MA	NE	South	13.8kV	
HIGH	Uxbridge Sub - Automate 8 break	MA	NE	South	13.8kV	
HIGH	Mendon Sub Supply Automation	MA	NE	South	13.8kV	
HIGH	Norton 4	MA	NE	South	23-13.2-4kV	Union Loop
HIGH	West Quincy 3	MA	NE	South	23-13.2-4kV	
HIGH	Boulevard 77	MA	NE	North	23-13.2kV	
HIGH	Hillside 66	MA	NE	North	23-13.2kV	
HIGH	North Weymouth 6	MA	NE	South	23-13.2kV	
HIGH	Plainville 3451	MA	NE	South	23-13.2kV	Union Loop
HIGH	Pleasant Street 8	MA	NE	North	23-13.2kV	
HIGH	Randolph 5	MA	NE	South	23-13.2kV	
HIGH	Salem 2 Valley St	MA	NE	North	23-13.2kV	
HIGH	Tyngsboro 211	MA	NE	North	23-13.2kV	
HIGH	Hillside Sub	MA	NE	North	23-13.2kV	
HIGH	W. Newbury	MA	NE	North	23-13.2kV	
HIGH	Foxboro 1 3431	MA	NE	South	23-13.8kV	Union Loop
HIGH	Foxboro 2 3432	MA	NE	South	23-13.8kV	Union Loop
HIGH	Holbrook 10	MA	NE	South	23-13.8kV	
HIGH	Hoover Street 21	MA	NE	North	23-13.8kV	May have EMS
HIGH	Metcalf Square 96	MA	NE	North	23-13.8kV	
HIGH	Rockland Street 39	MA	NE	South	23-13.8kV	
HIGH	Saugus 23	MA	NE	North	23-13.8kV	
HIGH	Stockbridge 2	MA	NE	North	23-13.8kV	
HIGH	Risingdale Sub	MA	NE	North	23-13.8kV	
HIGH	Clara Street 6	MA	NE	South	23-4.16kV	Union Loop
HIGH	Codding Ave 64	MA	NE	North	23-4.16kV	
HIGH	Forest Street 2	MA	NE	South	23-4.16kV	Union Loop
HIGH	Glendale 6	MA	NE	North	23-4.16kV	Indoor Sub
HIGH	Salem #1	MA	NE	North	23-4.16kV	Indoor Sub
HIGH	Salem 3 Boston St	MA	NE	North	23-4.16kV	
HIGH	South Attleboro 5	MA	NE	South	23-4.16kV	Union Loop
HIGH	West Medford 17	MA	NE	North	23-4.16kV	
HIGH	Thorndike #10	MA	NE	South	23-4.16kV	
HIGH	Malden #5	MA	NE	North	23-4.16kV	
HIGH	Water St	MA	NE	North	23-4.16kV	Indoor Sub
HIGH	Walnut St	MA	NE	North	23-4.16kV	Indoor Sub
HIGH	Wellington #11	MA	NE	North	23-4.16kV	
HIGH	Mansfield 16	MA	NE	South	23kV	Union Loop
HIGH	Lawrence #1	MA	NE	North	23kV-13.8-4.16kV	
HIGH	Gloucester #24	MA	NE	North	34-23-4.16kV	

Appendix 1 - NY Transmission Substations

Priority	Substation	Division	State	Region	Voltages (kV)	FERC	Comments	
HIGH	Station 054	West	NY	Frontier	115, 4.2	D		
HIGH	Station 055	West	NY	Frontier	115, 4.2	D		
HIGH	Station 061	West	NY	Frontier	115, 4.2	D		
HIGH	Station 139 - Martin Rd	West	NY	Frontier	115, 4.2	D		
HIGH	Station 129 - Brompton Rd	West	NY	Frontier	115, 4.3	D		
HIGH	Bremen Station 815	Central	NY	Northern	115, 13.2	D		
HIGH	Bridgeport Station 168	Central	NY	Central	115, 13.2	D		
HIGH	Chadwicks Station 668	Central	NY	Mohawk Valley	115, 13.2	D		
HIGH	Dekalb Station 984	Central	NY	Northern	115, 13.2	D		
HIGH	Delphi Station 262	Central	NY	Central	115, 13.2	D		
HIGH	Gilbert Mills Station 247	Central	NY	Central	115, 13.2	D		
HIGH	Lake Road No. 2 Station 299	Central	NY	Central	115, 13.2	D		
HIGH	Lehigh Station 669	Central	NY	Mohawk Valley	115, 13.2	D	Final Engineering Complete	
HIGH	New Haven Station 256	Central	NY	Central	115, 13.2	D		
HIGH	Raybrook Station 839	Central	NY	Northern	115, 13.2	D		
HIGH	Southwood Station 244	Central	NY	Central	115, 13.2	D	Final Engineering Complete	
HIGH	Stittville Station 670	Central	NY	Mohawk Valley	115, 13.2	D		
HIGH	Tully Center Station 278	Central	NY	Central	115, 13.2	D	Final Engineering Complete	
HIGH	Wine Creek Station 283	Central	NY	Central	115, 13.2	D		
HIGH	Levitt Station 665	Central	NY	Mohawk Valley	115, 4.8	D		
HIGH	Madison Station 654	Central	NY	Mohawk Valley	115, 4.8	D		
HIGH	Clinton Road Station 366	East	NY	Northeastern	115, 13.2	D		
HIGH	Crown Point Station 249	East	NY	Northeastern	115, 13.2	D		
HIGH	Port Henry Station 385	East	NY	Northeastern	115, 13.2	D		
HIGH	Prospect Hill Station 413	East	NY	Capital	115, 13.2	D	Final Engineering Complete	
HIGH	Saint Johnsville Station 335	East	NY	Northeastern	115, 13.2	D		
HIGH	Butternut	East	NY	Central	115, 13.2	D	Final Engineering Complete	

Appendix 1 - NY Distribution Stations

Priority	Substation	Division	State	Region	Voltages (kV)	Comments
HIGH	Station 025	West	NY	Frontier	23, 4.2	
HIGH	Station 027	West	NY	Frontier	23, 4.2	
HIGH	Station 030	West	NY	Frontier	23, 4.2	
HIGH	Station 031	West	NY	Frontier	23, 4.2	
HIGH	Station 032	West	NY	Frontier	23, 4.2	
HIGH	Station 035	West	NY	Frontier	23, 4.2	
HIGH	Station 038	West	NY	Frontier	23, 4.2	
HIGH	Station 040	West	NY	Frontier	23, 4.2	
HIGH	Station 042	West	NY	Frontier	23, 4.2	
HIGH	Station 043	West	NY	Frontier	23, 4.2	
HIGH	Station 045	West	NY	Frontier	23, 4.2	
HIGH	Station 050	West	NY	Frontier	23, 4.2	
HIGH	Station 051	West	NY	Frontier	23, 4.2	
HIGH	Station 052	West	NY	Frontier	23, 4.2	
HIGH	Station 053	West	NY	Frontier	23, 4.2	
HIGH	Station 056	West	NY	Frontier	23, 4.2	
HIGH	Station 057	West	NY	Frontier	23, 4.2	
HIGH	Station 059	West	NY	Frontier	23, 4.2	
HIGH	Station 063	West	NY	Frontier	23, 4.2	
HIGH	Station 068	West	NY	Frontier	23, 4.2	
HIGH	Station 074	West	NY	Frontier	23, 4.2	
HIGH	Station 079	West	NY	Frontier	23, 4.2	
HIGH	Station 122 - Tonawanda News	West	NY	Frontier	23, 4.2	
HIGH	Station 126 - Gibson St	West	NY	Frontier	23, 4.2	
HIGH	Station 127 - Delaware Rd	West	NY	Frontier	23, 4.2	
HIGH	Station 157	West	NY	Frontier	23, 4.2	
HIGH	Station 161 - Short St	West	NY	Frontier	23, 4.2	
HIGH	Station 162	West	NY	Frontier	23, 4.2	
HIGH	Station 058	West	NY	Frontier	34.5, 4.2	
HIGH	Station 067	West	NY	Frontier	34.5, 4.2	
HIGH	Station 080 - Eighth Street	West	NY	Frontier	34.5, 4.2	
HIGH	Station 081 - Beech Avenue	West	NY	Frontier	34.5, 4.2	
HIGH	Station 082 - Eleventh Street	West	NY	Frontier	34.5, 4.2	
HIGH	Station 083 - Welch Avenue	West	NY	Frontier	34.5, 4.2	
HIGH	Station 124 - Alameda Ave	West	NY	Frontier	34.5, 4.2	
HIGH	Station 066	West	NY	Frontier	34.5, 4.8	
HIGH	Station 085 - Stephenson Avenue	West	NY	Frontier	34.5, 4.8	
HIGH	Station 086 - Lewiston Heights	West	NY	Frontier	34.5, 4.8	
HIGH	Station 093 - Wilson	West	NY	Frontier	34.5, 4.8	
HIGH	Station 121 - Clinton	West	NY	Frontier	34.5, 4.8	
HIGH	Chatauqua	West	NY		34.5, 4.8	Final Engineering
HIGH	Middleburgh	West	NY	East	69, 13.2	Final Engineering
HIGH	Cattaraugus Station 15	West	NY	Genesee	34.5, 4.8	
HIGH	Clymer Station 55	West	NY	Southwest	34.5, 4.8	
HIGH	French Creek	West	NY		34.5, 13.8	Final Engineering
HIGH	Station 087 - Lewiston	West	NY	Frontier	34.5, 5.04	
HIGH	Barker	West	NY			Final Engineering
HIGH	West Valley Station 25	West	NY	Southwest	34.5, 5.04	
HIGH	Richmond	West	NY	West	34.5, 13.2	Final Engineering
HIGH	Wethersfield Station 23	West	NY	Southwest	34.5, 5.04	
HIGH	Avenue A Station 291	East	NY	Capital	34.5, 4.2	
HIGH	Avenue A Station 291	East	NY	Capital	34.5, 4.2	
HIGH	Indian Lake Station 310	East	NY	Northeastern	34.5, 4.8	Final Engineering
HIGH	Schuylerville Station 39	East	NY	Northeastern	34.5, 4.8	Final Engineering
HIGH	Scotia Station 255	East	NY	Capital	34.5, 4.2	
HIGH	Ephratah Station 18	East	NY	Northeastern	69, 23	
HIGH	Ballina Station 221	Central	NY	Central	34.5, 13.2	Final Engineering
HIGH	Niles Station 294	Central	NY	Central	34.5, 13.2	Final Engineering

RI Transmission Substations - DXT

Priority	Sub Name	State	Region	Division	Voltage	Comments
HIGH	Franklin Sq	RI	NE	South	115-11kV	
HIGH	South St	RI	NE	South	115-11kV	
HIGH	Clarkson	RI	NE	South	115-12.47kV	
HIGH	Admiral St	RI	NE	South	115-23-11kV	
HIGH	Sockonosset TNEC	RI	NE	South	115-23kV	
HIGH	Davisville TNEC	RI	NE	South	115-34.5kV	

RI Distribution Substations - DXD

Priority	Sub Name	State	Region	Division	Voltage	Comments
LOW	Daggett Ave 113	RI	NE	South	13.8 -4kV	
LOW	Central Falls 104	RI	NE	South	13.8-4.16kV	
LOW	Centre St Unit 106	RI	NE	South	13.8-4.16kV	
LOW	Cottage Street 109	RI	NE	South	13.8-4.16kV	
LOW	Crossman Street 111	RI	NE	South	13.8-4.16kV	
LOW	Front St 24	RI	NE	South	13.8-4.16kV	
LOW	Hyde Ave 28	RI	NE	South	13.8-4.16kV	
LOW	Lee Street 30	RI	NE	South	13.8-4.16kV	
LOW	Southeast Sub 60	RI	NE	South	13.8-4.16kv	
HIGH	Natick 29	RI	NE	South	23-12.47kV	
MEDIUM	Warwick Mall 28	RI	NE	South	23-12.47kV	
LOW	Auburn 73	RI	NE	South	23-4.16kV	
MEDIUM	Harrison 32	RI	NE	South	23-4.16kV	
HIGH	Hospital Sub 146	RI	NE	South	23-4.16kV	
LOW	Huntington Park 67	RI	NE	South	23-4.16kV	
LOW	Knightsville 66	RI	NE	South	23-4.16kV	
LOW	Lakewood 57	RI	NE	South	23-4.16kV	
MEDIUM	Merton 51	RI	NE	South	23-4.16kV	
MEDIUM	North Aquidneck 21	RI	NE	South	23-4.16kV	
HIGH	Olneyville 6	RI	NE	South	23-4.16kV	Indoor Sub
LOW	Pawtuxet 31	RI	NE	South	23-4.16kV	
MEDIUM	Rochambeau Avenue 37	RI	NE	South	23-4.16kV	
MEDIUM	South Aquidneck 122	RI	NE	South	23-4.16kV	
MEDIUM	Sprague Street 36	RI	NE	South	23-4.16kV	
HIGH	Elmwood outdoor	RI	NE	South	23kV	
HIGH	Hope Valley 41	RI	NE	South	34-12.47kV	
HIGH	Langworthy Corner 86	RI	NE	South	34-12.47kV	
HIGH	Peacedale	RI	NE	South	34-12.47kV	
HIGH	Division Street	RI	NE	South	34-12.47kV	

NH Transmission Substations

Priority	Sub Name	State	Region	Division	Voltage	Comments
HIGH	Comerford 18 Switchyard	NH	NE	North	230-34kV	In Preliminary Engineering
HIGH	Charlestown 32	NH	NE	North	46-13.2kV	
HIGH	Vilas Bridge 34	NH	NE	North	46-13.2kV	Final Engineering
HIGH	Pelham	NH	NE	North	115-13.2kV	Final Engineering

NH Distribution Substations

Priority	Sub Name	State	Region	Division	Voltage	Comments
MEDIUM	Enfield 7	NH	NE	North	13.8kV	
LOW	Monroe 15	NH	NE	North	34.5-2.4kV	
LOW	McIndoes 17 Switchyard	NH	NE	North	34.5kV	
HIGH	Barron Ave	NH	NE	North	23-13.2kV	
HIGH	Lebanon	NH	NE	North		
HIGH	Hanover 6	NH	NE	North		
HIGH	Craft Hill	NH	NE	North		
HIGH	Salem Depot	NH	NE	North		
HIGH	Spicket River	NH	NE	North		
High	Wilder	NH	NE	North		

location	equip_category	equip_type	equip_class	status	equip_description
Admiral Street 9	RELAY	ElectroMechSS	0kV	OPERATING	UNDERFREQUENCY
Admiral Street 9	RELAY	ElectroMechSS	11kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Admiral Street 9	RELAY	ElectroMechSS	11kV	OPERATING	1115 GROUND
Admiral Street 9	RELAY	ElectroMechSS	11kV	OPERATING	1117 B PH OC
Admiral Street 9	RELAY	ElectroMechSS	11kV	OPERATING	1115 C PH OC
Admiral Street 9	RELAY	ElectroMechSS	11kV	OPERATING	BUS-1 TR B PH OC
Admiral Street 9	RELAY	ElectroMechSS	11kV	OPERATING	BUS TIE GROUND
Admiral Street 9	RELAY	ElectroMechSS	11kV	OPERATING	1117 A PH OC
Admiral Street 9	RELAY	ElectroMechSS	11kV	OPERATING	1-2 TR GROUND
Admiral Street 9	RELAY	ElectroMechSS	11kV	OPERATING	1117 C PH OC
Admiral Street 9	RELAY	ElectroMechSS	11kV	OPERATING	1110A/B GROUND
Admiral Street 9	RELAY	ElectroMechSS	11kV	OPERATING	1117 GROUND
Admiral Street 9	RELAY	ElectroMechSS	11kV	OPERATING	BUS-2 TR B PH OC
Admiral Street 9	RELAY	ElectroMechSS	11kV	OPERATING	BUS-1 TR C PH OC
Admiral Street 9	RELAY	ElectroMechSS	11kV	OPERATING	BUS-2 TR C PH OC
Admiral Street 9	RELAY	ElectroMechSS	11kV	OPERATING	BUS-1 TR UV T
Admiral Street 9	RELAY	ElectroMechSS	11kV	OPERATING	1115 A PH OC
Admiral Street 9	RELAY	ElectroMechSS	11kV	OPERATING	BUS-2 TR A PH OC
Admiral Street 9	RELAY	ElectroMechSS	11kV	OPERATING	1110A/B C PH OC
Admiral Street 9	RELAY	ElectroMechSS	11kV	OPERATING	1115 B PH OC
Admiral Street 9	RELAY	ElectroMechSS	11kV	OPERATING	1119 C PH OC
Admiral Street 9	RELAY	ElectroMechSS	11kV	OPERATING	1110A/B B PH OC
Admiral Street 9	RELAY	ElectroMechSS	11kV	OPERATING	1119 A PH OC
Admiral Street 9	RELAY	ElectroMechSS	11kV	OPERATING	1119 GROUND
Admiral Street 9	RELAY	ElectroMechSS	11kV	OPERATING	BUS TIE A PH OC
Admiral Street 9	RELAY	ElectroMechSS	11kV	OPERATING	1119 B PH OC
Admiral Street 9	RELAY	ElectroMechSS	11kV	OPERATING	BUS TIE B PH OC
Admiral Street 9	RELAY	ElectroMechSS	11kV	OPERATING	1117 R
Admiral Street 9	RELAY	ElectroMechSS	11kV	OPERATING	BUS-1 TR A PH OC
Admiral Street 9	RELAY	ElectroMechSS	11kV	OPERATING	BUS-2 TR UV T
Admiral Street 9	RELAY	ElectroMechSS	11kV	OPERATING	BUS TIE C PH OC
Admiral Street 9	RELAY	ElectroMechSS	11kV	OPERATING	1110A/B A PH OC
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	1 BUS B PH BOC
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	1 BUS BG
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	5 TR R
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	3 TR DDOC
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	4 TR B PH DDOC
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	5 TR TFP
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	39-22 BKR BFI
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	39-22 R
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	3952 BKR BFI
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	4 TR TLOL
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	2 BUS C PH BOC
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	3 TR B PH DDOC
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	4 TR DDOC
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	2254/2256 C PH DOC
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	3 TR C PH DDOC
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	3952 R
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	1 TR B PH TD
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	2239/52 GROUND
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	2 BUS BG
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	3 TR B PH TD
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	4 TR DDFD
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	1 BUS C PH BOC
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	2237 GROUND
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	4 TR TNG
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	22 C PH OC
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	5 TR C PH OC
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	2239 FD
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	5 TR A PH OC
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	2239/52 C PH OC
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	5TR BKR BFI

location	equip_category	equip_type	equip_class	status	equip_description
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	5 TR GROUND
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	2 BUS A PH BOC
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	1 TR C PH TD
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	2254 GCB BFI
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	2 TR A PH TD
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	22 B PH OC
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	2256 GCB BFI
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	22 BKR BFI
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	2254/2256 A PH DOC
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	2 TR C PH TD
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	4 TR C PH TD
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	2237 R
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	22 A PH OC
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	2 TR B PH TD
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	1 TR A PH TD
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	5 TR TLOL
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	3 TR C PH TD
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	2 BUS B PH BOC
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	3 TR A PH DDOC
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	3 TR TNG
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	3 TR DD
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	22 GROUND
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	2237 C PH OC
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	3 TR T
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	2239/52 B PH OC
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	4 TR TIMER
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	2254/2256 B PH DOC
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	2237 B PH OC
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	4 TR C PH DDOC
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	5 TR B PH OC
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	22 R
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	2254/2256 DG
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	4 TR DD
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	2237 BKR BFI
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	3 TR TLOL
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	1 BUS A PH BOC
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	2239/52 A PH OC
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	4 TR A PH DDOC
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	4 TR A PH TD
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	2237 A PH OC
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	4 TR B PH TD
Admiral Street 9	RELAY	ElectroMechSS	23kV	OPERATING	3 TR DDFD
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	5 TR-4KV B PH BOC
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	2 TR R
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	9J5 R
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	9J2 R
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	9J3 GROUND
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	9J3 B PH OC
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	9J5 C PH OC
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	5 TR-4KV C PH BOC
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	2 TR B PH OC
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	1 TR A PH OC
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	9J5 A PH OC
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	1 TR C PH OC
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	1 TR TNG
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	BUS TIE B PH OC
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	9J2 GROUND
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	9J1 GROUND
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	1 TR R
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	9J2 C PH OC
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	BUS TIE C PH OC
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	2 TR C PH OC
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	9J3 A PH OC

location	equip_category	equip_type	equip_class	status	equip_description
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	9J1 C PH OC
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	9J2 B PH OC
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	2 TR TNG
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	9J1 R
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	9J3 C PH OC
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	1 TR B PH OC
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	9J2 A PH OC
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	9J5 GROUND
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	5 TR-4KV A PH BOC
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	9J1 B PH OC
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	9J1 A PH OC
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	BUS TIE GROUND
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	2 TR A PH OC
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	5 TR-4KV BG
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	BUS TIE A PH OC
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	9J5 B PH OC
Admiral Street 9	RELAY	ElectroMechSS	4kV	OPERATING	9J3 R
Anthony 64	RELAY	ElectroMechSS	13kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Anthony 64	RELAY	Microprocessor	13kV	OPERATING	64F2 OC/G/R NSOV
Anthony 64	RELAY	Microprocessor	13kV	OPERATING	64F1 OC/G/R NSOV
Anthony 64	RELAY	ElectroMechSS	23kV	OPERATING	BUS OC/G
Anthony 64	RELAY	ElectroMechSS	23kV	OPERATING	2232 UV T
Anthony 64	RELAY	ElectroMechSS	23kV	OPERATING	BUS T (27B)
Anthony 64	RELAY	ElectroMechSS	23kV	OPERATING	2230 UV T
Anthony 64	RELAY	ElectroMechSS	23kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Anthony 64	RELAY	ElectroMechSS	23kV	OPERATING	BUS T (27C)
Apponaug 3	RELAY	ElectroMechSS	0kV	OPERATING	UNDERFREQUENCY
Apponaug 3	RELAY	ElectroMechSS	12kV	OPERATING	4 TR TNG
Apponaug 3	RELAY	ElectroMechSS	12kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Apponaug 3	RELAY	ElectroMechSS	12kV	OPERATING	3 TR TNG
Apponaug 3	RELAY	ElectroMechSS	12kV	OPERATING	3F1 OC/G/R
Apponaug 3	RELAY	Microprocessor	12kV	OPERATING	3F2 OC/G/R
Apponaug 3	RELAY	ElectroMechSS	23kV	OPERATING	4T23 T
Apponaug 3	RELAY	ElectroMechSS	23kV	OPERATING	4 TR TFP
Apponaug 3	RELAY	ElectroMechSS	23kV	OPERATING	3 TR TFP
Apponaug 3	RELAY	ElectroMechSS	23kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Apponaug 3	RELAY	ElectroMechSS	23kV	OPERATING	3-4 TR T
Auburn 73	RELAY	ElectroMechSS	23kV	OPERATING	2 TR B PH TD
Auburn 73	RELAY	ElectroMechSS	23kV	OPERATING	2 TR A PH TD
Auburn 73	RELAY	ElectroMechSS	23kV	OPERATING	2 TR TCG
Auburn 73	RELAY	ElectroMechSS	23kV	OPERATING	1 TR B PH TD
Auburn 73	RELAY	ElectroMechSS	23kV	OPERATING	2 TR C PH TD
Auburn 73	RELAY	ElectroMechSS	23kV	OPERATING	1 TR TCG
Auburn 73	RELAY	ElectroMechSS	23kV	OPERATING	1 TR C PH TD
Auburn 73	RELAY	ElectroMechSS	23kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Auburn 73	RELAY	ElectroMechSS	23kV	OPERATING	1 TR A PH TD
Auburn 73	RELAY	ElectroMechSS	4kV	OPERATING	73J3 B PH OC
Auburn 73	RELAY	ElectroMechSS	4kV	OPERATING	73J1 R
Auburn 73	RELAY	ElectroMechSS	4kV	OPERATING	73J2 C PH OC
Auburn 73	RELAY	ElectroMechSS	4kV	OPERATING	73J1 GROUND
Auburn 73	RELAY	ElectroMechSS	4kV	OPERATING	73J2 GROUND
Auburn 73	RELAY	ElectroMechSS	4kV	OPERATING	73J4 GROUND
Auburn 73	RELAY	ElectroMechSS	4kV	OPERATING	73J2 R
Auburn 73	RELAY	ElectroMechSS	4kV	OPERATING	73J4 C PH OC
Auburn 73	RELAY	ElectroMechSS	4kV	OPERATING	73J1 C PH OC
Auburn 73	RELAY	ElectroMechSS	4kV	OPERATING	73J6 GROUND
Auburn 73	RELAY	ElectroMechSS	4kV	OPERATING	73J1 A PH OC
Auburn 73	RELAY	ElectroMechSS	4kV	OPERATING	73J3 C PH OC
Auburn 73	RELAY	ElectroMechSS	4kV	OPERATING	4-3 R
Auburn 73	RELAY	ElectroMechSS	4kV	OPERATING	73J1 GROUND
Auburn 73	RELAY	ElectroMechSS	4kV	OPERATING	73J6 C PH OC
Auburn 73	RELAY	ElectroMechSS	4kV	OPERATING	73J6 B PH OC

location	equip_category	equip_type	equip_class	status	equip_description
Auburn 73	RELAY	ElectroMechSS	4kV	OPERATING	6-5 R
Auburn 73	RELAY	ElectroMechSS	4kV	OPERATING	73J5 C PH OC
Auburn 73	RELAY	ElectroMechSS	4kV	OPERATING	73J2 B PH OC
Auburn 73	RELAY	ElectroMechSS	4kV	OPERATING	73J5 GROUND
Auburn 73	RELAY	ElectroMechSS	4kV	OPERATING	73J1 B PH OC
Auburn 73	RELAY	ElectroMechSS	4kV	OPERATING	73J2 A PH OC
Auburn 73	RELAY	ElectroMechSS	4kV	OPERATING	73J3 GROUND
Auburn 73	RELAY	ElectroMechSS	4kV	OPERATING	73J5 B PH OC
Auburn 73	RELAY	ElectroMechSS	4kV	OPERATING	73J4 A PH OC
Auburn 73	RELAY	ElectroMechSS	4kV	OPERATING	73J5 R
Auburn 73	RELAY	ElectroMechSS	4kV	OPERATING	73J6 R
Auburn 73	RELAY	ElectroMechSS	4kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Auburn 73	RELAY	ElectroMechSS	4kV	OPERATING	73J4 B PH OC
Auburn 73	RELAY	ElectroMechSS	4kV	OPERATING	73J3 R
Auburn 73	RELAY	ElectroMechSS	4kV	OPERATING	73J4 R
Auburn 73	RELAY	ElectroMechSS	4kV	OPERATING	73J6 A PH OC
Auburn 73	RELAY	ElectroMechSS	4kV	OPERATING	73J5 A PH OC
Auburn 73	RELAY	ElectroMechSS	4kV	OPERATING	2-1 R
Auburn 73	RELAY	Microprocessor	4kV	OPERATING	UNDERFREQUENCY
Auburn 73	RELAY	Microprocessor	4kV	OPERATING	UNDERFREQUENCY
Barrington 4	RELAY	ElectroMechSS	0kV	OPERATING	UNDERFREQUENCY
Barrington 4	RELAY	Microprocessor	12kV	OPERATING	4F2 OC/G/R
Barrington 4	RELAY	ElectroMechSS	13kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Barrington 4	RELAY	ElectroMechSS	13kV	OPERATING	1 TR VB
Barrington 4	RELAY	ElectroMechSS	13kV	OPERATING	1 TR TNG
Barrington 4	RELAY	ElectroMechSS	13kV	OPERATING	4F1 OC/G/R
Barrington 4	RELAY	ElectroMechSS	23kV	OPERATING	1 TR DDOC
Barrington 4	RELAY	ElectroMechSS	23kV	OPERATING	1 TR GROUND
Barrington 4	RELAY	ElectroMechSS	23kV	OPERATING	1 TR DDOC
Barrington 4	RELAY	ElectroMechSS	23kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Barrington 4	RELAY	ElectroMechSS	23kV	OPERATING	1 TR TD
Barrington 4	RELAY	ElectroMechSS	23kV	OPERATING	1 TR TFP
Block Island Sub 160	RELAY	ElectroMechSS	2kV	OPERATING	2.4kV Bus UV Pnl 8
Block Island Sub 160	RELAY	ElectroMechSS	2kV	OPERATING	160H1 UV Pnl 7
Block Island Sub 160	RELAY	Microprocessor	2kV	OPERATING	160H1 primary DOC/UV Pnl 8
Block Island Sub 160	RELAY	Microprocessor	2kV	OPERATING	160H1 backup DOC//UV Pnl 8
Block Island Sub 160	RELAY	Microprocessor	2kV	OPERATING	1 Tr Low OC/DIOC/BF/OV/UF/OF Pnl 7
Block Island Sub 160	RELAY	Microprocessor	2kV	OPERATING	160H1 Breaker (1A1) R/SC Pnl 8
Block Island Sub 160	RELAY	ElectroMechSS	34kV	OPERATING	Mobile UV Pnl 1
Block Island Sub 160	RELAY	ElectroMechSS	34kV	OPERATING	160T1 UV Pnl 3
Block Island Sub 160	RELAY	ElectroMechSS	34kV	OPERATING	165T1 UV Pnl 2
Block Island Sub 160	RELAY	ElectroMechSS	34kV	OPERATING	34kV Bus UV Pnl 5
Block Island Sub 160	RELAY	Microprocessor	34kV	OPERATING	Mobile Tap primary OC/G/BF/OV Pnl 1
Block Island Sub 160	RELAY	Microprocessor	34kV	OPERATING	Mobile Tap backup OC/G/BF/OV Pnl 1
Block Island Sub 160	RELAY	Microprocessor	34kV	OPERATING	160T1 REV DOC/DG/BF Pnl 3
Block Island Sub 160	RELAY	Microprocessor	34kV	OPERATING	160T1 backup DOC/DG/BF Pnl 3
Block Island Sub 160	RELAY	Microprocessor	34kV	OPERATING	Reactor 3 Sys B OC/G/BF Pnl 6
Block Island Sub 160	RELAY	Microprocessor	34kV	OPERATING	Bus Diff primary BD Pnl 9
Block Island Sub 160	RELAY	Microprocessor	34kV	OPERATING	165T1 DOC/DG/BF/OV Pnl 2
Block Island Sub 160	RELAY	Microprocessor	34kV	OPERATING	Bus Arc Fault Detection
Block Island Sub 160	RELAY	Microprocessor	34kV	OPERATING	Mobile Sub Breaker (25-6A1)SC/UV/OV Pnl 1
Block Island Sub 160	RELAY	Microprocessor	34kV	OPERATING	Reactor 3 primary OC/G/REFP Pnl 6
Block Island Sub 160	RELAY	Microprocessor	34kV	OPERATING	3GTR Primary DOC/DG/TNG Pnl 4
Block Island Sub 160	RELAY	Microprocessor	34kV	OPERATING	165T1 primary LD/DDOC/DG/OV Pnl 2
Block Island Sub 160	RELAY	Microprocessor	34kV	OPERATING	T1 High backup OC/G/BF/OV Pnl 7
Block Island Sub 160	RELAY	Microprocessor	34kV	OPERATING	Bus Diff backup BD Pnl 9
Block Island Sub 160	RELAY	Microprocessor	34kV	OPERATING	Reactor 1 Sys B OC/G/BF Pnl 5
Block Island Sub 160	RELAY	Microprocessor	34kV	OPERATING	Reactor 1 primary OC/G/REFP Pnl 5
Block Island Sub 160	RELAY	Microprocessor	34kV	OPERATING	3GTR backup DOC/DG/TNG Pnl 4
Block Island Sub 160	RELAY	Microprocessor	34kV	OPERATING	1T34 Breaker (6F1) SC/UV/OV Pnl 7
Block Island Sub 160	RELAY	Microprocessor	34kV	OPERATING	165T1 Breaker (6B1) SC/UV/OV Pnl 2
Block Island Sub 160	RELAY	Microprocessor	34kV	OPERATING	160T1 Breaker (6C1) SC/UV/OV Pnl 4
Block Island Sub 160	RELAY	Microprocessor	34kV	OPERATING	Tr 1 Primary TD Pnl 7

location	equip_category	equip_type	equip_class	status	equip_description
Block Island Sub 160	RELAY	Microprocessor	34kV	OPERATING	160T1 primary DOC/DG/BF Pnl 3
Bonnet 42	RELAY	ElectroMechSS	12kV	OPERATING	42F1 OC/G/R
Bonnet 42	RELAY	ElectroMechSS	12kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Bristol 51	RELAY	ElectroMechSS	0kV	OPERATING	UNDERFREQUENCY
Bristol 51	RELAY	ElectroMechSS	12kV	OPERATING	51F3 B PH OC
Bristol 51	RELAY	ElectroMechSS	12kV	OPERATING	1 TR DDOC
Bristol 51	RELAY	ElectroMechSS	12kV	OPERATING	51F1 B PH OC
Bristol 51	RELAY	ElectroMechSS	12kV	OPERATING	1 TR TFP
Bristol 51	RELAY	ElectroMechSS	12kV	OPERATING	3-4 R
Bristol 51	RELAY	ElectroMechSS	12kV	OPERATING	1 TR T
Bristol 51	RELAY	ElectroMechSS	12kV	OPERATING	1-2 R
Bristol 51	RELAY	ElectroMechSS	12kV	OPERATING	1 TR GROUND
Bristol 51	RELAY	ElectroMechSS	12kV	OPERATING	1 BUS VB
Bristol 51	RELAY	ElectroMechSS	12kV	OPERATING	2 CAP C PH OC
Bristol 51	RELAY	ElectroMechSS	12kV	OPERATING	1 TR TNG
Bristol 51	RELAY	ElectroMechSS	12kV	OPERATING	51F1 A PH OC
Bristol 51	RELAY	ElectroMechSS	12kV	OPERATING	51F1 C PH OC
Bristol 51	RELAY	ElectroMechSS	12kV	OPERATING	51F2 A PH OC
Bristol 51	RELAY	ElectroMechSS	12kV	OPERATING	1 TR IOC
Bristol 51	RELAY	ElectroMechSS	12kV	OPERATING	2 TR TNG
Bristol 51	RELAY	ElectroMechSS	12kV	OPERATING	51F2 GROUND
Bristol 51	RELAY	ElectroMechSS	12kV	OPERATING	51F1 GROUND
Bristol 51	RELAY	ElectroMechSS	12kV	OPERATING	1 TR DDOC
Bristol 51	RELAY	ElectroMechSS	12kV	OPERATING	51F3 C PH OC
Bristol 51	RELAY	ElectroMechSS	12kV	OPERATING	51F1 R
Bristol 51	RELAY	ElectroMechSS	12kV	OPERATING	51F3 A PH OC
Bristol 51	RELAY	ElectroMechSS	12kV	OPERATING	51F2 B PH OC
Bristol 51	RELAY	ElectroMechSS	12kV	OPERATING	51F3 GROUND
Bristol 51	RELAY	ElectroMechSS	12kV	OPERATING	51F2 R
Bristol 51	RELAY	ElectroMechSS	12kV	OPERATING	51F3 R
Bristol 51	RELAY	ElectroMechSS	12kV	OPERATING	2 CAP A PH OC
Bristol 51	RELAY	ElectroMechSS	12kV	OPERATING	1 TR TD
Bristol 51	RELAY	ElectroMechSS	12kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Bristol 51	RELAY	ElectroMechSS	12kV	OPERATING	2 BUS VB
Bristol 51	RELAY	ElectroMechSS	12kV	OPERATING	51F2 C PH OC
Bristol 51	RELAY	ElectroMechSS	12kV	OPERATING	2 CAP B PH OC
Bristol 51	RELAY	ElectroMechSS	12kV	OPERATING	2 CAP OV
Bristol 51	RELAY	ElectroMechSS	12kV	OPERATING	2 CAP GROUND
Bristol 51	RELAY	ElectroMechSS	23kV	OPERATING	2 TR DDOC
Bristol 51	RELAY	ElectroMechSS	23kV	OPERATING	2 TR GROUND
Bristol 51	RELAY	ElectroMechSS	23kV	OPERATING	2 TR TFP
Bristol 51	RELAY	ElectroMechSS	23kV	OPERATING	2 TR TD
Bristol 51	RELAY	ElectroMechSS	23kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Bristol 51	RELAY	ElectroMechSS	23kV	OPERATING	2 TR T
Bristol 51	RELAY	ElectroMechSS	23kV	OPERATING	2 TR DDOC
Central Falls 104	RELAY	ElectroMechSS	4kV	OPERATING	41 TR A PH OC
Central Falls 104	RELAY	ElectroMechSS	4kV	OPERATING	41 TR UV
Central Falls 104	RELAY	ElectroMechSS	4kV	OPERATING	42 TR B PH OC
Central Falls 104	RELAY	ElectroMechSS	4kV	OPERATING	104J5 A PH OC
Central Falls 104	RELAY	ElectroMechSS	4kV	OPERATING	104J3 R
Central Falls 104	RELAY	ElectroMechSS	4kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Central Falls 104	RELAY	ElectroMechSS	4kV	OPERATING	42 TR A PH OC
Central Falls 104	RELAY	ElectroMechSS	4kV	OPERATING	41 TR B PH OC
Central Falls 104	RELAY	ElectroMechSS	4kV	OPERATING	104J5 R
Central Falls 104	RELAY	ElectroMechSS	4kV	OPERATING	104J3 B PH OC
Central Falls 104	RELAY	ElectroMechSS	4kV	OPERATING	104J3 A PH OC
Central Falls 104	RELAY	ElectroMechSS	4kV	OPERATING	104J3 C PH OC
Central Falls 104	RELAY	ElectroMechSS	4kV	OPERATING	104J7 R
Central Falls 104	RELAY	ElectroMechSS	4kV	OPERATING	104J1 A PH OC
Central Falls 104	RELAY	ElectroMechSS	4kV	OPERATING	104J1 C PH OC
Central Falls 104	RELAY	ElectroMechSS	4kV	OPERATING	104J1 B PH OC
Central Falls 104	RELAY	ElectroMechSS	4kV	OPERATING	41 TR C PH OC
Central Falls 104	RELAY	ElectroMechSS	4kV	OPERATING	104J5 B PH OC

location	equip_category	equip_type	equip_class	status	equip_description
Central Falls 104	RELAY	ElectroMechSS	4kV	OPERATING	104J5 C PH OC
Central Falls 104	RELAY	ElectroMechSS	4kV	OPERATING	104J7 C PH OC
Central Falls 104	RELAY	ElectroMechSS	4kV	OPERATING	42 TR C PH OC
Central Falls 104	RELAY	ElectroMechSS	4kV	OPERATING	104J7 B PH OC
Central Falls 104	RELAY	ElectroMechSS	4kV	OPERATING	104J1 R
Central Falls 104	RELAY	ElectroMechSS	4kV	OPERATING	42 TR UV
Central Falls 104	RELAY	ElectroMechSS	4kV	OPERATING	104J7 A PH OC
Centre St Unit 106	RELAY	ElectroMechSS	4kV	OPERATING	106J3 C PH OC
Centre St Unit 106	RELAY	ElectroMechSS	4kV	OPERATING	106J7 B PH OC
Centre St Unit 106	RELAY	ElectroMechSS	4kV	OPERATING	106J1 B PH OC
Centre St Unit 106	RELAY	ElectroMechSS	4kV	OPERATING	106J3 A PH OC
Centre St Unit 106	RELAY	ElectroMechSS	4kV	OPERATING	62 TR B PH OC
Centre St Unit 106	RELAY	ElectroMechSS	4kV	OPERATING	106J7 C PH OC
Centre St Unit 106	RELAY	ElectroMechSS	4kV	OPERATING	106J3 B PH OC
Centre St Unit 106	RELAY	ElectroMechSS	4kV	OPERATING	106J1 A PH OC
Centre St Unit 106	RELAY	ElectroMechSS	4kV	OPERATING	106J3 R
Centre St Unit 106	RELAY	ElectroMechSS	4kV	OPERATING	106J1 R
Centre St Unit 106	RELAY	ElectroMechSS	4kV	OPERATING	106J1 C PH OC
Centre St Unit 106	RELAY	ElectroMechSS	4kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Centre St Unit 106	RELAY	ElectroMechSS	4kV	OPERATING	62 TR A PH OC
Centre St Unit 106	RELAY	ElectroMechSS	4kV	OPERATING	62 TR C PH OC
Centre St Unit 106	RELAY	ElectroMechSS	4kV	OPERATING	106J7 R
Centre St Unit 106	RELAY	ElectroMechSS	4kV	OPERATING	106J7 A PH OC
Centredale 50	RELAY	Microprocessor	0kV	OPERATING	UNDERFREQUENCY
Centredale 50	RELAY	ElectroMechSS	13kV	OPERATING	50F2 NSOV T
Centredale 50	RELAY	ElectroMechSS	13kV	OPERATING	50F2 NSOV
Centredale 50	RELAY	ElectroMechSS	13kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Centredale 50	RELAY	ElectroMechSS	13kV	OPERATING	50F2 OC/G/R
Centredale 50	RELAY	ElectroMechSS	23kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Centredale 50	RELAY	ElectroMechSS	23kV	OPERATING	2219 UV
Centredale 50	RELAY	ElectroMechSS	23kV	OPERATING	1 TR TCG
Centredale 50	RELAY	ElectroMechSS	23kV	OPERATING	2219 UV
Centredale 50	RELAY	ElectroMechSS	23kV	OPERATING	2211 UV
Centredale 50	RELAY	ElectroMechSS	23kV	OPERATING	2211 UV
Centredale 50	RELAY	ElectroMechSS	23kV	OPERATING	3 TR TCG
Centredale 50	RELAY	ElectroMechSS	4kV	OPERATING	50J2 R
Centredale 50	RELAY	ElectroMechSS	4kV	OPERATING	50J2 GROUND
Centredale 50	RELAY	ElectroMechSS	4kV	OPERATING	50J1 R
Centredale 50	RELAY	ElectroMechSS	4kV	OPERATING	50J3 A PH OC
Centredale 50	RELAY	ElectroMechSS	4kV	OPERATING	50J1 B PH OC
Centredale 50	RELAY	ElectroMechSS	4kV	OPERATING	50J1 C PH OC
Centredale 50	RELAY	ElectroMechSS	4kV	OPERATING	50J3 R
Centredale 50	RELAY	ElectroMechSS	4kV	OPERATING	50J2 A PH OC
Centredale 50	RELAY	ElectroMechSS	4kV	OPERATING	50J3 GROUND
Centredale 50	RELAY	ElectroMechSS	4kV	OPERATING	50J1 GROUND
Centredale 50	RELAY	ElectroMechSS	4kV	OPERATING	50J1 A PH OC
Centredale 50	RELAY	ElectroMechSS	4kV	OPERATING	50J2 B PH OC
Centredale 50	RELAY	ElectroMechSS	4kV	OPERATING	50J3 B PH OC
Centredale 50	RELAY	ElectroMechSS	4kV	OPERATING	50J3 C PH OC
Centredale 50	RELAY	ElectroMechSS	4kV	OPERATING	50J2 C PH OC
Chase Hill 155	RELAY	ElectroMechSS	12kV	OPERATING	#1 BUS UV
Chase Hill 155	RELAY	ElectroMechSS	12kV	DECOMMISSIONED	C2 OV
Chase Hill 155	RELAY	ElectroMechSS	12kV	OPERATING	#2 STATION SERV UV
Chase Hill 155	RELAY	ElectroMechSS	12kV	OPERATING	#2 BUS UV
Chase Hill 155	RELAY	ElectroMechSS	12kV	OPERATING	#1 STATION SERV UV
Chase Hill 155	RELAY	ElectroMechSS	12kV	OPERATING	C2 OV
Chase Hill 155	RELAY	ElectroMechSS	12kV	OPERATING	C4 N OV
Chase Hill 155	RELAY	ElectroMechSS	12kV	OPERATING	C2 N OV
Chase Hill 155	RELAY	Microprocessor	12kV	OPERATING	155F8 BACKUP OC/G
Chase Hill 155	RELAY	Microprocessor	12kV	OPERATING	155F2 PRIMARY OC/G/R
Chase Hill 155	RELAY	Microprocessor	12kV	OPERATING	C2/C4 CAP CONTROLLER
Chase Hill 155	RELAY	Microprocessor	12kV	OPERATING	155F6 BACKUP OC/G
Chase Hill 155	RELAY	Microprocessor	12kV	OPERATING	C2/C4 PRIMARY OC/G

location	equip_category	equip_type	equip_class	status	equip_description
Chase Hill 155	RELAY	Microprocessor	12kV	OPERATING	155F8 PRIMARY OC/G/R
Chase Hill 155	RELAY	Microprocessor	12kV	OPERATING	155F6 PRIMARY OC/G/R
Chase Hill 155	RELAY	Microprocessor	12kV	OPERATING	155F4 PRIMARY OC/G/R
Chase Hill 155	RELAY	Microprocessor	12kV	OPERATING	C2/C4 BACKUP OC/G
Chase Hill 155	RELAY	Microprocessor	12kV	OPERATING	155F2 BACKUP OC/G
Chase Hill 155	RELAY	Microprocessor	12kV	OPERATING	155F4 BACKUP OC/G
Chopmist 34	RELAY	ElectroMechSS	13kV	OPERATING	1 TR TNG
Chopmist 34	RELAY	ElectroMechSS	13kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Chopmist 34	RELAY	ElectroMechSS	13kV	OPERATING	2 TR TNG
Chopmist 34	RELAY	ElectroMechSS	13kV	OPERATING	34F2 OC/G/R
Chopmist 34	RELAY	ElectroMechSS	13kV	OPERATING	34F3 OC/G/R
Chopmist 34	RELAY	Microprocessor	13kV	OPERATING	34F3 (BU) OC/G
Chopmist 34	RELAY	Microprocessor	13kV	OPERATING	34F1 OC/G/R
Chopmist 34	RELAY	ElectroMechSS	23kV	OPERATING	C1 OV
Chopmist 34	RELAY	ElectroMechSS	23kV	OPERATING	2 TR GROUND
Chopmist 34	RELAY	ElectroMechSS	23kV	OPERATING	C4 OV
Chopmist 34	RELAY	ElectroMechSS	23kV	OPERATING	1 TR A PH OC
Chopmist 34	RELAY	ElectroMechSS	23kV	OPERATING	C2 OV
Chopmist 34	RELAY	ElectroMechSS	23kV	OPERATING	2 TR B PH OC
Chopmist 34	RELAY	ElectroMechSS	23kV	OPERATING	3 TR TFP
Chopmist 34	RELAY	ElectroMechSS	23kV	OPERATING	2 TR A PH OC
Chopmist 34	RELAY	ElectroMechSS	23kV	OPERATING	3 TR TLOL
Chopmist 34	RELAY	ElectroMechSS	23kV	OPERATING	2 TR TFP
Chopmist 34	RELAY	ElectroMechSS	23kV	OPERATING	C3 OV
Chopmist 34	RELAY	ElectroMechSS	23kV	OPERATING	2 TR C PH OC
Chopmist 34	RELAY	ElectroMechSS	23kV	OPERATING	1 TR B PH OC
Chopmist 34	RELAY	ElectroMechSS	23kV	OPERATING	1 TR C PH OC
Chopmist 34	RELAY	ElectroMechSS	23kV	OPERATING	1 TR GROUND
Chopmist 34	RELAY	ElectroMechSS	23kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Chopmist 34	RELAY	ElectroMechSS	23kV	OPERATING	1 TR TFP
Chopmist 34	RELAY	ElectroMechSS	23kV	OPERATING	1 BUS OV
Chopmist 34	RELAY	ElectroMechSS	23kV	OPERATING	2 BUS OV
Chopmist 34	RELAY	Microprocessor	23kV	OPERATING	3 TR (BU) OC/G/TNG
Chopmist 34	RELAY	Microprocessor	23kV	OPERATING	3 TR OC/G/TNG
Chopmist 34	RELAY	Microprocessor	23kV	OPERATING	2 TR GV3
Chopmist 34	RELAY	Microprocessor	23kV	OPERATING	1 TR GV3
Clarke Street 65	RELAY	ElectroMechSS	4kV	OPERATING	65J2 GROUND
Clarke Street 65	RELAY	ElectroMechSS	4kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Clarke Street 65	RELAY	ElectroMechSS	4kV	OPERATING	65J2 C PH OC
Clarke Street 65	RELAY	ElectroMechSS	4kV	OPERATING	65J2 R
Clarke Street 65	RELAY	ElectroMechSS	4kV	OPERATING	65J2 B PH OC
Clarke Street 65	RELAY	ElectroMechSS	4kV	OPERATING	65J2 A PH OC
Clarke Street 65	RELAY	Microprocessor	4kV	OPERATING	65J12 OC/G/R/NSOV
Clarkson Street 13	RELAY	ElectroMechSS	0kV	OPERATING	UNDERFREQUENCY
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	1 TR GROUND
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F2 GROUND
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F8 B PH OC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	2 TR TNG
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	C2 C PH OC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F3 A PH OC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F10 GROUND
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	C 4 OV
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F1 GROUND
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	C2 A PH OC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	C2 B PH OC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F7 R
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F1 C PH OC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F5 C PH OC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	7-8 R
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	2 TR DDOC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F9 B PH OC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	C1 B PH OC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	1 TR DDOC

location	equip_category	equip_type	equip_class	status	equip_description
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	2 TR VB
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F3 C PH OC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	2 TR DDOC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F9 GROUND
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F9 R
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F8 A PH OC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	2 TR IOC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F6 B PH OC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	9-10 R
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	1 TR TLOL T
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F6 GROUND
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F6 A PH OC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F6 C PH OC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	3-4 R
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	1 TR TNG
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	5-6 R
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F8 R
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F4 C PH OC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	C1 GROUND
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F1 A PH OC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F2 A PH OC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	2 TR TLOL T
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F10 A PH OC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	C2 GROUND
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F3 R
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F10 B PH OC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F5 B PH OC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F4 R
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F8 GROUND
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F5 GROUND
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	2 TR GROUND
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	1 TR TFP
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F5 R
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F4 A PH OC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F3 B PH OC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	1 TR TD
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	2 TR TFP
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	1 TR IOC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F5 A PH OC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F9 C PH OC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F6 R
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F1 R
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F3 GROUND
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F8 C PH OC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	C1 C PH OC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	2 TR TD
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F2 B PH OC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F7 GROUND
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F4 B PH OC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F7 A PH OC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F7 B PH OC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F1 B PH OC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F2 C PH OC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F7 C PH OC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F10 R
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F10 C PH OC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F9 A PH OC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F4 GROUND
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	C 2 OV
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	C 1 OV
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	13F2 R
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	C1 A PH OC

location	equip_category	equip_type	equip_class	status	equip_description
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	1-2 R
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	C 3 OV
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	1 TR DDOC
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	1 TR VB
Clarkson Street 13	RELAY	ElectroMechSS	12kV	OPERATING	
Coventry 54	RELAY	Microprocessor	12kV	OPERATING	UNDERFREQUENCY
Coventry 54	RELAY	ElectroMechSS	13kV	OPERATING	54F1 OC/G/R
Coventry 54	RELAY	ElectroMechSS	13kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Coventry 54	RELAY	ElectroMechSS	13kV	OPERATING	1 TR TNG
Coventry 54	RELAY	ElectroMechSS	23kV	OPERATING	1 TR TL0L T
Coventry 54	RELAY	ElectroMechSS	23kV	OPERATING	1 TR C PH OC
Coventry 54	RELAY	ElectroMechSS	23kV	OPERATING	1 TR A PH OC
Coventry 54	RELAY	ElectroMechSS	23kV	OPERATING	1 TR B PH OC
Coventry 54	RELAY	ElectroMechSS	23kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Coventry 54	RELAY	ElectroMechSS	23kV	OPERATING	1 TR TFP
Coventry 54	RELAY	ElectroMechSS	23kV	OPERATING	1 TR GROUND
Coventry 54	RELAY	Microprocessor	23kV	OPERATING	2232N DOC/DG/R
Coventry 54	RELAY	Microprocessor	23kV	OPERATING	GV3
Coventry 54	RELAY	Microprocessor	23kV	OPERATING	2232S DOC/DG/R
Crossman Street 111	RELAY	ElectroMechSS	4kV	OPERATING	111T MAIN B PH OC
Crossman Street 111	RELAY	ElectroMechSS	4kV	OPERATING	111J3 R
Crossman Street 111	RELAY	ElectroMechSS	4kV	OPERATING	111J3 B PH OC
Crossman Street 111	RELAY	ElectroMechSS	4kV	OPERATING	111J1 R
Crossman Street 111	RELAY	ElectroMechSS	4kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Crossman Street 111	RELAY	ElectroMechSS	4kV	OPERATING	111J3 C PH OC
Crossman Street 111	RELAY	ElectroMechSS	4kV	OPERATING	111J1 C PH OC
Crossman Street 111	RELAY	ElectroMechSS	4kV	OPERATING	111J1 B PH OC
Crossman Street 111	RELAY	ElectroMechSS	4kV	OPERATING	111T MAIN C PH OC
Crossman Street 111	RELAY	ElectroMechSS	4kV	OPERATING	111J1 A PH OC
Crossman Street 111	RELAY	ElectroMechSS	4kV	OPERATING	111T MAIN A PH OC
Crossman Street 111	RELAY	ElectroMechSS	4kV	OPERATING	111J3 A PH OC
Davisville 84	RELAY	ElectroMechSS	0kV	OPERATING	UNDERFREQUENCY
Davisville 84	RELAY	Microprocessor	33kV	OPERATING	84T2 PRIMARY
Davisville 84	RELAY	Microprocessor	33kV	OPERATING	84T1 BU
Davisville 84	RELAY	Microprocessor	33kV	OPERATING	84T2 BU
Davisville 84	RELAY	Microprocessor	33kV	OPERATING	84T1 PRIMARY
Davisville 84	RELAY	ElectroMechSS	34kV	OPERATING	84T4 C PH OC
Davisville 84	RELAY	ElectroMechSS	34kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Davisville 84	RELAY	ElectroMechSS	34kV	OPERATING	2A TR B PH TD
Davisville 84	RELAY	ElectroMechSS	34kV	OPERATING	1 TR A PH TD
Davisville 84	RELAY	ElectroMechSS	34kV	OPERATING	1T115 CS T
Davisville 84	RELAY	ElectroMechSS	34kV	OPERATING	1 TR TFP
Davisville 84	RELAY	ElectroMechSS	34kV	OPERATING	2A TR TNG
Davisville 84	RELAY	ElectroMechSS	34kV	OPERATING	2A TR C PH TD
Davisville 84	RELAY	ElectroMechSS	34kV	OPERATING	2 BUS UV T
Davisville 84	RELAY	ElectroMechSS	34kV	OPERATING	1 TR TNG
Davisville 84	RELAY	ElectroMechSS	34kV	OPERATING	84T3 A PH OC
Davisville 84	RELAY	ElectroMechSS	34kV	OPERATING	84T3 GROUND
Davisville 84	RELAY	ElectroMechSS	34kV	OPERATING	2A TR B PH OC
Davisville 84	RELAY	ElectroMechSS	34kV	OPERATING	1 TR C PH OC
Davisville 84	RELAY	ElectroMechSS	34kV	OPERATING	2T115 CS T
Davisville 84	RELAY	ElectroMechSS	34kV	OPERATING	84T3 B PH OC
Davisville 84	RELAY	ElectroMechSS	34kV	OPERATING	84T3 R
Davisville 84	RELAY	ElectroMechSS	34kV	OPERATING	LOAD SHED DST
Davisville 84	RELAY	ElectroMechSS	34kV	OPERATING	1-2 R
Davisville 84	RELAY	ElectroMechSS	34kV	OPERATING	2A TR A PH TD
Davisville 84	RELAY	ElectroMechSS	34kV	OPERATING	1 TR C PH TD
Davisville 84	RELAY	ElectroMechSS	34kV	OPERATING	1 TR B PH TD
Davisville 84	RELAY	ElectroMechSS	34kV	OPERATING	1 BUS UV T
Davisville 84	RELAY	ElectroMechSS	34kV	OPERATING	2A TR C PH OC
Davisville 84	RELAY	ElectroMechSS	34kV	OPERATING	2A TR TL0L
Davisville 84	RELAY	ElectroMechSS	34kV	OPERATING	1 TR A PH OC

location	equip_category	equip_type	equip_class	status	equip_description
Davisville 84	RELAY	ElectroMechSS	34kV	OPERATING	1 TR TLOL
Davisville 84	RELAY	ElectroMechSS	34kV	OPERATING	2A TR A PH OC
Davisville 84	RELAY	ElectroMechSS	34kV	OPERATING	84T4 A PH OC
Davisville 84	RELAY	ElectroMechSS	34kV	OPERATING	2A TR GROUND
Davisville 84	RELAY	ElectroMechSS	34kV	OPERATING	84T3 C PH OC
Davisville 84	RELAY	ElectroMechSS	34kV	OPERATING	1 TR GROUND
Davisville 84	RELAY	ElectroMechSS	34kV	OPERATING	84T4 GROUND
Davisville 84	RELAY	ElectroMechSS	34kV	OPERATING	84T4 B PH OC
Davisville 84	RELAY	ElectroMechSS	34kV	OPERATING	3-4 R
Davisville 84	RELAY	ElectroMechSS	34kV	OPERATING	1 TR B PH OC
Davisville 84	RELAY	ElectroMechSS	34kV	OPERATING	84T4 R
Dexter 36	RELAY	ElectroMechSS	0kV	OPERATING	UNDERFREQUENCY
Dexter 36	RELAY	ElectroMechSS	0kV	OPERATING	UNDERFREQUENCY
Dexter 36	RELAY	ElectroMechSS	13kV	OPERATING	36W44 C PH OC
Dexter 36	RELAY	ElectroMechSS	13kV	OPERATING	364T B PH OC
Dexter 36	RELAY	ElectroMechSS	13kV	OPERATING	36W44 A PH OC
Dexter 36	RELAY	ElectroMechSS	13kV	OPERATING	36W43 C PH OC
Dexter 36	RELAY	ElectroMechSS	13kV	OPERATING	13.8kV BUS CPH UV
Dexter 36	RELAY	ElectroMechSS	13kV	OPERATING	364 TR GROUND
Dexter 36	RELAY	ElectroMechSS	13kV	OPERATING	36W42 C PH OC
Dexter 36	RELAY	ElectroMechSS	13kV	OPERATING	36W42 B PH OC
Dexter 36	RELAY	ElectroMechSS	13kV	OPERATING	36W44 B PH OC
Dexter 36	RELAY	ElectroMechSS	13kV	OPERATING	36W41 GROUND
Dexter 36	RELAY	ElectroMechSS	13kV	OPERATING	13.8kVSS UV
Dexter 36	RELAY	ElectroMechSS	13kV	OPERATING	36W42 R
Dexter 36	RELAY	ElectroMechSS	13kV	OPERATING	364T GROUND
Dexter 36	RELAY	ElectroMechSS	13kV	OPERATING	364T A PH OC
Dexter 36	RELAY	ElectroMechSS	13kV	OPERATING	13.8kV BUS BPH UV
Dexter 36	RELAY	ElectroMechSS	13kV	OPERATING	13.8kV BUS APH UV
Dexter 36	RELAY	ElectroMechSS	13kV	OPERATING	36W44 GROUND
Dexter 36	RELAY	ElectroMechSS	13kV	OPERATING	36W41 R
Dexter 36	RELAY	ElectroMechSS	13kV	OPERATING	36W43 B PH OC
Dexter 36	RELAY	ElectroMechSS	13kV	OPERATING	36W42 A PH OC
Dexter 36	RELAY	ElectroMechSS	13kV	OPERATING	36W43 GROUND
Dexter 36	RELAY	ElectroMechSS	13kV	OPERATING	36W42 GROUND
Dexter 36	RELAY	ElectroMechSS	13kV	OPERATING	36W41 B PH OC
Dexter 36	RELAY	ElectroMechSS	13kV	OPERATING	364T C PH OC
Dexter 36	RELAY	ElectroMechSS	13kV	OPERATING	36W41 C PH OC
Dexter 36	RELAY	ElectroMechSS	13kV	OPERATING	364 TR TNG
Dexter 36	RELAY	ElectroMechSS	13kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Dexter 36	RELAY	ElectroMechSS	13kV	OPERATING	364 TR A PH OC
Dexter 36	RELAY	ElectroMechSS	13kV	OPERATING	36W43 R
Dexter 36	RELAY	ElectroMechSS	13kV	OPERATING	364 TR B PH OC
Dexter 36	RELAY	ElectroMechSS	13kV	OPERATING	36W44 R
Dexter 36	RELAY	ElectroMechSS	13kV	OPERATING	36W41 A PH OC
Dexter 36	RELAY	ElectroMechSS	13kV	OPERATING	364 TR C PH OC
Dexter 36	RELAY	ElectroMechSS	13kV	OPERATING	36W43 A PH OC
Dexter 36	RELAY	Microprocessor	13kV	OPERATING	13.8kV BUS DIFF
Dillon's Corner 165	RELAY	ElectroMechSS	34kV	OPERATING	165T1 UV
Dillon's Corner 165	RELAY	ElectroMechSS	34kV	OPERATING	SPARE UV
Dillon's Corner 165	RELAY	ElectroMechSS	34kV	OPERATING	BUS UV
Dillon's Corner 165	RELAY	ElectroMechSS	34kV	OPERATING	3301 UV
Dillon's Corner 165	RELAY	ElectroMechSS	34kV	OPERATING	C1 UV
Dillon's Corner 165	RELAY	Microprocessor	34kV	OPERATING	BUS DIFF PRI
Dillon's Corner 165	RELAY	Microprocessor	34kV	OPERATING	165T1 SC
Dillon's Corner 165	RELAY	Microprocessor	34kV	OPERATING	C1 OC/BFI
Dillon's Corner 165	RELAY	Microprocessor	34kV	OPERATING	SPARE OC/G
Dillon's Corner 165	RELAY	Microprocessor	34kV	OPERATING	3301 DOC/BFI
Dillon's Corner 165	RELAY	Microprocessor	34kV	OPERATING	R3 OC/BFI
Dillon's Corner 165	RELAY	Microprocessor	34kV	OPERATING	3301 LD
Dillon's Corner 165	RELAY	Microprocessor	34kV	OPERATING	R1 DIFF
Dillon's Corner 165	RELAY	Microprocessor	34kV	OPERATING	SPARE OC/BFI
Dillon's Corner 165	RELAY	Microprocessor	34kV	OPERATING	BUS DIFF SEC

location	equip_category	equip_type	equip_class	status	equip_description
Dillon's Corner 165	RELAY	Microprocessor	34kV	OPERATING	165T1 DOC/BFI
Dillon's Corner 165	RELAY	Microprocessor	34kV	OPERATING	3301 SC
Dillon's Corner 165	RELAY	Microprocessor	34kV	OPERATING	SPARE SC
Dillon's Corner 165	RELAY	Microprocessor	34kV	OPERATING	165T1 LD
Dillon's Corner 165	RELAY	Microprocessor	34kV	OPERATING	C1 OC/G
Dillon's Corner 165	RELAY	Microprocessor	34kV	OPERATING	C1 CONTROLLER
Dillon's Corner 165	RELAY	Microprocessor	34kV	OPERATING	C1 N
Dillon's Corner 165	RELAY	Microprocessor	34kV	OPERATING	BUS AFD
Dillon's Corner 165	RELAY	Microprocessor	34kV	OPERATING	R3 DIFF
Dillon's Corner 165	RELAY	Microprocessor	34kV	OPERATING	R1 OC/BFI
Division Street 61	RELAY	ElectroMechSS	12kV	OPERATING	2 TR TNG
Division Street 61	RELAY	ElectroMechSS	12kV	OPERATING	1 TR TNG
Division Street 61	RELAY	ElectroMechSS	12kV	OPERATING	1 BUS-3312 UV T
Division Street 61	RELAY	ElectroMechSS	12kV	OPERATING	2 BUS-3311 UV T
Division Street 61	RELAY	ElectroMechSS	12kV	OPERATING	ALARM
Division Street 61	RELAY	ElectroMechSS	12kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Division Street 61	RELAY	Microprocessor	12kV	OPERATING	61F3 OC/G/R
Division Street 61	RELAY	Microprocessor	12kV	OPERATING	1-2 OC/G/R
Division Street 61	RELAY	Microprocessor	12kV	OPERATING	UNDERFREQUENCY
Division Street 61	RELAY	Microprocessor	12kV	OPERATING	61F2 OC/G/R
Division Street 61	RELAY	Microprocessor	12kV	OPERATING	61F4 OC/G/R
Division Street 61	RELAY	Microprocessor	12kV	OPERATING	34 OC/G/R
Division Street 61	RELAY	Microprocessor	12kV	OPERATING	61F1 OC/G/R
Division Street 61	RELAY	ElectroMechSS	34kV	OPERATING	2 TR A PH OC
Division Street 61	RELAY	ElectroMechSS	34kV	OPERATING	1 TR C PH OC
Division Street 61	RELAY	ElectroMechSS	34kV	OPERATING	1 TR A PH OC
Division Street 61	RELAY	ElectroMechSS	34kV	OPERATING	LOAD SHED DST
Division Street 61	RELAY	ElectroMechSS	34kV	OPERATING	1 TR TFP
Division Street 61	RELAY	ElectroMechSS	34kV	OPERATING	2 TR TFP
Division Street 61	RELAY	ElectroMechSS	34kV	OPERATING	1 TR B PH OC
Division Street 61	RELAY	ElectroMechSS	34kV	OPERATING	2 TR GROUND
Division Street 61	RELAY	ElectroMechSS	34kV	OPERATING	2 TR C PH OC
Division Street 61	RELAY	ElectroMechSS	34kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Division Street 61	RELAY	ElectroMechSS	34kV	OPERATING	1 TR GROUND
Division Street 61	RELAY	ElectroMechSS	34kV	OPERATING	2 TR B PH OC
Drumrock 14	RELAY	ElectroMechSS	0kV	OPERATING	UNDERFREQUENCY
Drumrock 14	RELAY	ElectroMechSS	12kV	OPERATING	14F4 B PH OC
Drumrock 14	RELAY	ElectroMechSS	12kV	OPERATING	14F3 A PH OC
Drumrock 14	RELAY	ElectroMechSS	12kV	OPERATING	14F1 C PH OC
Drumrock 14	RELAY	ElectroMechSS	12kV	OPERATING	14F4 R
Drumrock 14	RELAY	ElectroMechSS	12kV	OPERATING	5 TR-12KV T
Drumrock 14	RELAY	ElectroMechSS	12kV	OPERATING	14F3 R
Drumrock 14	RELAY	ElectroMechSS	12kV	OPERATING	1 GRD TR TFP
Drumrock 14	RELAY	ElectroMechSS	12kV	OPERATING	2 GRD TR TFP
Drumrock 14	RELAY	ElectroMechSS	12kV	OPERATING	1-4 R
Drumrock 14	RELAY	ElectroMechSS	12kV	OPERATING	3 TR-12KV T
Drumrock 14	RELAY	ElectroMechSS	12kV	OPERATING	14F3 C PH OC
Drumrock 14	RELAY	ElectroMechSS	12kV	OPERATING	3 TR-12KV A PH OC
Drumrock 14	RELAY	ElectroMechSS	12kV	OPERATING	14F3 GROUND
Drumrock 14	RELAY	ElectroMechSS	12kV	OPERATING	5 TR-12KV C PH OC
Drumrock 14	RELAY	ElectroMechSS	12kV	OPERATING	14F1 B PH OC
Drumrock 14	RELAY	ElectroMechSS	12kV	OPERATING	14F1 GROUND
Drumrock 14	RELAY	ElectroMechSS	12kV	OPERATING	5 TR GROUND
Drumrock 14	RELAY	ElectroMechSS	12kV	OPERATING	5 TR-12KV A PH OC
Drumrock 14	RELAY	ElectroMechSS	12kV	OPERATING	14F4 C PH OC
Drumrock 14	RELAY	ElectroMechSS	12kV	OPERATING	5 TR-12KV B PH OC
Drumrock 14	RELAY	ElectroMechSS	12kV	OPERATING	3 TR-12KV C PH OC
Drumrock 14	RELAY	ElectroMechSS	12kV	OPERATING	14F4 GROUND
Drumrock 14	RELAY	ElectroMechSS	12kV	OPERATING	14F4 A PH OC
Drumrock 14	RELAY	ElectroMechSS	12kV	OPERATING	2-3 R
Drumrock 14	RELAY	ElectroMechSS	12kV	OPERATING	14F1 R
Drumrock 14	RELAY	ElectroMechSS	12kV	OPERATING	3 TR-12KV B PH OC
Drumrock 14	RELAY	ElectroMechSS	12kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT

location	equip_category	equip_type	equip_class	status	equip_description
Drumrock 14	RELAY	ElectroMechSS	12kV	OPERATING	14F1 A PH OC
Drumrock 14	RELAY	ElectroMechSS	12kV	OPERATING	14F3 B PH OC
Drumrock 14	RELAY	ElectroMechSS	12kV	OPERATING	3 TR GROUND
Drumrock 14	RELAY	Microprocessor	12kV	OPERATING	1 BUS G OC Back up
Drumrock 14	RELAY	Microprocessor	12kV	OPERATING	2 BUS DOC
Drumrock 14	RELAY	Microprocessor	12kV	OPERATING	1 BUS G OC Primary
Drumrock 14	RELAY	Microprocessor	12kV	OPERATING	1 BUS DOC
Drumrock 14	RELAY	Microprocessor	12kV	OPERATING	14F2 (BU) OC/G
Drumrock 14	RELAY	Microprocessor	12kV	OPERATING	14F2 (Pri) OG/G
Drumrock 14	RELAY	Microprocessor	12kV	OPERATING	2 BUS G OC Back up
Drumrock 14	RELAY	Microprocessor	12kV	OPERATING	2 BUS G OC Primary
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	5 TR B PH TD
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	3 TR TLOL
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	C3 OV
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	2264 R
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	5 TR A PH BFIOC
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	5 TR B PH BFIOC
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	4T185 T
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	2262 A PH OC
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	2262 C PH OC
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	2232 C PH DDOC
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	2264 A PH OC
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	2262 T
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	C6 OV
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	C5-C6 C PH OC
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	2230 DDOC
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	2231 GROUND
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	2224 T
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	C3-C4 B PH OC
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	2222 T
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	2264 C PH OC
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	31-64 A PH OC
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	2230 R
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	C5-C6 A PH OC
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	C4 OV
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	2264 GROUND
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	62-66 A PH BFIOC
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	2262 B PH OC
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	2231 B PH OC
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	32-22 A PH BFIOC
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	2230 A PH DDOC
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	30-24 A PH BFIOC
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	62-66 C PH BFIOC
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	2232 GROUND
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	2266 C PH OC
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	2266 B PH OC
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	2222 B PH OC
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	2230 B PH DDOC
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	2222 A PH OC
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	2266 GROUND
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	2231 C PH OC
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	2224 A PH OC
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	2232 B PH DDOC
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	2232 DDOC
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	30-24 C PH BFIOC
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	C3-C4 C PH OC
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	2222 R
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	32-22 B PH BFIOC
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	2224 R
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	2224 C PH OC
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	2264 T
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	2266 R
Drumrock 14	RELAY	ElectroMechSS	23kV	OPERATING	31-64 B PH OC

location	equip_category	equip_type	equip_class	status	equip_description
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	5 TR TLOL
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	3-4 TR C PH BFI OC
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	5 TR T
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	2232 A PH DDOC
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	3-4 TR A PH BFI OC
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	2224 B PH OC
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	4 TR TFP
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	3-4 TR B PH BFI OC
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	2232 T
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	2231 A PH OC
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	C3-C4 A PH OC
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	2230 T
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	2230 C PH DDOC
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	30-24 B PH BFI OC
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	C5-C6 GROUND
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	2262 GROUND
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	32-22 C PH BFI OC
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	2266 A PH OC
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	C5-C6 B PH OC
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	2262 R
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	3 TR TFP
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	5 TR C PH TD
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	2222 GROUND
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	5T185 T
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	5 TR A PH TD
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	5 TR C PH BFI OC
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	3-4 TR A PH TD
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	3T185 T
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	4 TR TLOL
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	3-4 TR C PH TD
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	2231 R
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	C5 OV
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	3-4 TR B PH TD
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	2224 GROUND
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	2222 C PH OC
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	2264 B PH OC
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	2230 GROUND
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	62-66 B PH BFI OC
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	31-64 C PH OC
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	5 TR TFP
Drumrock 14	RELAY	ElectroMechSS	23kv	OPERATING	C3-C4 GROUND
Drumrock 14	RELAY	Microprocessor	23kv	OPERATING	2 BUS BD
Drumrock 14	RELAY	Microprocessor	23kv	OPERATING	1 BUS BD
Drumrock 14	RELAY	Microprocessor	23kv	OPERATING	2262 LD
Drumrock 14	RELAY	Microprocessor	23kv	OPERATING	2264 LD
Drumrock 14	RELAY	Microprocessor	23kv	OPERATING	Station Cleavage
Dunnell Park 1201	RELAY	Microprocessor	13kv	OPERATING	1201W5 BU
Dunnell Park 1201	RELAY	Microprocessor	13kv	OPERATING	1201W3 PRIMARY
Dunnell Park 1201	RELAY	Microprocessor	13kv	OPERATING	1201W1 PRIMARY
Dunnell Park 1201	RELAY	Microprocessor	13kv	OPERATING	1201W2 BU
Dunnell Park 1201	RELAY	Microprocessor	13kv	OPERATING	C1 CAP PRIMARY
Dunnell Park 1201	RELAY	Microprocessor	13kv	OPERATING	C1 CAP OV
Dunnell Park 1201	RELAY	Microprocessor	13kv	OPERATING	1201W8 BU
Dunnell Park 1201	RELAY	Microprocessor	13kv	OPERATING	1201W5 PRIMARY
Dunnell Park 1201	RELAY	Microprocessor	13kv	OPERATING	1201W4 PRIMARY
Dunnell Park 1201	RELAY	Microprocessor	13kv	OPERATING	C2 CAP PRIMARY
Dunnell Park 1201	RELAY	Microprocessor	13kv	OPERATING	1201W8 PRIMARY
Dunnell Park 1201	RELAY	Microprocessor	13kv	OPERATING	1201W7 BU
Dunnell Park 1201	RELAY	Microprocessor	13kv	OPERATING	1201W7 PRIMARY
Dunnell Park 1201	RELAY	Microprocessor	13kv	OPERATING	C2 CAP OV
Dunnell Park 1201	RELAY	Microprocessor	13kv	OPERATING	C1/C3 CAP CONTROLLER
Dunnell Park 1201	RELAY	Microprocessor	13kv	OPERATING	1201W4 BU

location	equip_category	equip_type	equip_class	status	equip_description
Dunnell Park 1201	RELAY	Microprocessor	13kV	OPERATING	C2/C4 CAP CONTROLLER
Dunnell Park 1201	RELAY	Microprocessor	13kV	OPERATING	C1 CAP BU
Dunnell Park 1201	RELAY	Microprocessor	13kV	OPERATING	1201W1 BU
Dunnell Park 1201	RELAY	Microprocessor	13kV	OPERATING	1201W3 BU
Dunnell Park 1201	RELAY	Microprocessor	13kV	OPERATING	1201W6 PRIMARY
Dunnell Park 1201	RELAY	Microprocessor	13kV	OPERATING	1201W2 PRIMARY
Dunnell Park 1201	RELAY	Microprocessor	13kV	OPERATING	1201W6 BU
Dunnell Park 1201	RELAY	Microprocessor	13kV	OPERATING	C2 CAP BU
Dyer Street 2	RELAY	ElectroMechSS	0kV	OPERATING	UNDERFREQUENCY
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	2 BUS A PH BD
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1106 B PH OC
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1142 B PH BP
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1142 C PH OC
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1106 C PH DOC
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1142 C PH BP
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	2 TR B PH OC
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	2 BUS BDG
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	2 TR A PH OC
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	3 TR TD
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	2 TR TFP
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1109 GROUND
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1102 A PH BP
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	2 BUS B PH BD
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1104 B PH BP
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1103 C PH OC
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1105 GROUND
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1 TR B PH OC
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1104 A PH OC
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1106 BP
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1106 A PH OC
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1144 BP
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1 TR TD
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1103 GROUND
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1144 GROUND
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	3 TR B PH OC
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1102 BPG
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1102 C PH BP
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1144 A PH OC
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1102 B PH BP
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1101 BP
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1109 A PH OC
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1 TR TFP
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1106 A PH DOC
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1104 C PH BP
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1106 GROUND
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	2 TR GROUND
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1144 C PH OC
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1142 GROUND
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1104 B PH OC
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1 BUS C PH BD
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1 TR A PH OC
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1109 C PH OC
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1106 B PH DOC
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1103 A PH OC
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1144 C PH BP
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1103 B PH OC
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1144 B PH OC
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1105 A PH OC
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1 TR C PH OC
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1104 C PH OC
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1102 B PH OC
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1142 B PH OC

location	equip_category	equip_type	equip_class	status	equip_description
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1144 B PH BP
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1142 A PH OC
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1104 BPG
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	3 TR GROUND
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1104 BP
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1106 C PH OC
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1 TR GROUND
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1103-B FD
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1142 BPG
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1144 BPG
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1142 BP
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1144 A PH BP
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1142 A PH BP
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	2 TR TD
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1 BUS B PH BD
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	3 TR A PH OC
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1105 B PH OC
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1105 C PH OC
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1 BUS A PH BD
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1102 GROUND
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	2 BUS C PH BD
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	3 TR C PH OC
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1102 A PH OC
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1104 GROUND
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	2 TR C PH OC
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1104 A PH BP
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1109 B PH OC
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1102 C PH OC
Dyer Street 2	RELAY	ElectroMechSS	11kV	OPERATING	1 BUS BDG
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	2J10 C PH OC
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	BT-LOW C PH OC
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	2J8 A PH OC
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	2J3 C PH OC
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	2 TR TNG
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	2J8 C PH OC
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	BT-HI A PH OC
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	2J4 GROUND
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	2J3 A PH OC
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	2J4 B PH OC
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	2J9 GROUND
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	2J8 GROUND
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	2J5 GROUND
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	2J3 B PH OC
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	2J5 A PH OC
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	2J3 GROUND
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	2J10 A PH OC
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	2J7 C PH OC
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	2J1 C PH OC
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	2J7 GROUND
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	2J5 C PH OC
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	2J9 C PH OC
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	UNDERFREQUENCY
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	1 TR TNG
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	2J4 C PH OC
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	2J10 B PH OC
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	2J2 A PH OC
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	2J2 C PH OC
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	2J1 GROUND
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	2J2 B PH OC
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	2J5 B PH OC
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	2J2 GROUND
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	2J1 B PH OC

location	equip_category	equip_type	equip_class	status	equip_description
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	2J7 A PH OC
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	2J10 GROUND
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	2J7 B PH OC
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	2J9 B PH OC
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	BT-HI B PH OC
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	BUS TIE GROUND
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	2J9 A PH OC
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	BT-HI C PH OC
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	2J4 A PH OC
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	3 TR TNG
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	BT-LOW B PH OC
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	2J1 A PH OC
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	2J8 B PH OC
Dyer Street 2	RELAY	ElectroMechSS	4kV	OPERATING	BT-LOW A PH OC
East George St 77	RELAY	Microprocessor	0kV	OPERATING	UNDERFREQUENCY
East George St 77	RELAY	ElectroMechSS	23kV	OPERATING	2 BUS UV
East George St 77	RELAY	ElectroMechSS	23kV	OPERATING	2 TR TFP
East George St 77	RELAY	ElectroMechSS	23kV	OPERATING	1 TR TFP
East George St 77	RELAY	ElectroMechSS	23kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
East George St 77	RELAY	ElectroMechSS	23kV	OPERATING	1 BUS UV
East George St 77	RELAY	ElectroMechSS	4kV	OPERATING	77J1 C PH OC
East George St 77	RELAY	ElectroMechSS	4kV	OPERATING	77J4 GROUND
East George St 77	RELAY	ElectroMechSS	4kV	OPERATING	77J3 A PH OC
East George St 77	RELAY	ElectroMechSS	4kV	OPERATING	77J3 B PH OC
East George St 77	RELAY	ElectroMechSS	4kV	OPERATING	77J4 C PH OC
East George St 77	RELAY	ElectroMechSS	4kV	OPERATING	77J2 C PH OC
East George St 77	RELAY	ElectroMechSS	4kV	OPERATING	77J2 R
East George St 77	RELAY	ElectroMechSS	4kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
East George St 77	RELAY	ElectroMechSS	4kV	OPERATING	77J4 R
East George St 77	RELAY	ElectroMechSS	4kV	OPERATING	77J1 A PH OC
East George St 77	RELAY	ElectroMechSS	4kV	OPERATING	77J3 R
East George St 77	RELAY	ElectroMechSS	4kV	OPERATING	77J2 A PH OC
East George St 77	RELAY	ElectroMechSS	4kV	OPERATING	77J4 B PH OC
East George St 77	RELAY	ElectroMechSS	4kV	OPERATING	77J3 GROUND
East George St 77	RELAY	ElectroMechSS	4kV	OPERATING	77J4 A PH OC
East George St 77	RELAY	ElectroMechSS	4kV	OPERATING	77J2 B PH OC
East George St 77	RELAY	ElectroMechSS	4kV	OPERATING	77J1 R
East George St 77	RELAY	ElectroMechSS	4kV	OPERATING	77J1 B PH OC
East George St 77	RELAY	ElectroMechSS	4kV	OPERATING	77J1 GROUND
East George St 77	RELAY	ElectroMechSS	4kV	OPERATING	77J2 GROUND
East George St 77	RELAY	ElectroMechSS	4kV	OPERATING	77J3 C PH OC
Eldred 45	RELAY	ElectroMechSS	23kV	OPERATING	2 TR UV
Eldred 45	RELAY	ElectroMechSS	23kV	OPERATING	1 TR UV
Eldred 45	RELAY	ElectroMechSS	23kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Eldred 45	RELAY	Microprocessor	23kV	OPERATING	1 TR OC/G PRIMARY
Eldred 45	RELAY	Microprocessor	23kV	OPERATING	1 TR OC/G BU
Eldred 45	RELAY	Microprocessor	23kV	OPERATING	2 TR OC/G PRIMARY
Eldred 45	RELAY	Microprocessor	23kV	OPERATING	2 TR OC/G BU
Eldred 45	RELAY	ElectroMechSS	4kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Eldred 45	RELAY	Microprocessor	4kV	OPERATING	45J3 OC/G/R
Eldred 45	RELAY	Microprocessor	4kV	OPERATING	45J4 OC/G/R
Elmwood 7 - Outdoor	RELAY	ElectroMechSS	0kV	OPERATING	UNDERFREQUENCY
Elmwood 7 - Outdoor	RELAY	ElectroMechSS	12kV	OPERATING	7F4 GROUND
Elmwood 7 - Outdoor	RELAY	ElectroMechSS	12kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Elmwood 7 - Outdoor	RELAY	ElectroMechSS	12kV	OPERATING	7F2 C PH OC
Elmwood 7 - Outdoor	RELAY	ElectroMechSS	12kV	OPERATING	7F1 R
Elmwood 7 - Outdoor	RELAY	ElectroMechSS	12kV	OPERATING	7F4 A PH OC
Elmwood 7 - Outdoor	RELAY	ElectroMechSS	12kV	OPERATING	7F4 C PH OC
Elmwood 7 - Outdoor	RELAY	ElectroMechSS	12kV	OPERATING	7F1 C PH OC
Elmwood 7 - Outdoor	RELAY	ElectroMechSS	12kV	OPERATING	7F1 GROUND
Elmwood 7 - Outdoor	RELAY	ElectroMechSS	12kV	OPERATING	2 BUS VB
Elmwood 7 - Outdoor	RELAY	ElectroMechSS	12kV	OPERATING	2 TR TNG
Elmwood 7 - Outdoor	RELAY	ElectroMechSS	12kV	OPERATING	7F1 B PH OC

location	equip_category	equip_type	equip_class	status	equip_description
Elmwood 7 - Outdoor	RELAY	ElectroMechSS	12kV	OPERATING	1 BUS VB
Elmwood 7 - Outdoor	RELAY	ElectroMechSS	12kV	OPERATING	7F4 R
Elmwood 7 - Outdoor	RELAY	ElectroMechSS	12kV	OPERATING	7F2 B PH OC
Elmwood 7 - Outdoor	RELAY	ElectroMechSS	12kV	OPERATING	7F2 R
Elmwood 7 - Outdoor	RELAY	ElectroMechSS	12kV	OPERATING	7F4 B PH OC
Elmwood 7 - Outdoor	RELAY	ElectroMechSS	12kV	OPERATING	7F2 GROUND
Elmwood 7 - Outdoor	RELAY	ElectroMechSS	12kV	OPERATING	7F1 A PH OC
Elmwood 7 - Outdoor	RELAY	ElectroMechSS	12kV	OPERATING	7F2 A PH OC
Elmwood 7 - Outdoor	RELAY	Microprocessor	12kV	OPERATING	UNDERFREQUENCY
Elmwood 7 - Outdoor	RELAY	ElectroMechSS	23kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Elmwood 7 - Outdoor	RELAY	ElectroMechSS	23kV	OPERATING	2 TR TFP
Elmwood 7 - Outdoor	RELAY	Microprocessor	23kV	OPERATING	2210 OC/G
Elmwood 7 - Outdoor	RELAY	Microprocessor	23kV	OPERATING	BUS TIE OC/G
Elmwood 7 - Outdoor	RELAY	Microprocessor	23kV	OPERATING	2216 OC/G
Elmwood 7 - Outdoor	RELAY	Microprocessor	23kV	OPERATING	2226 OC/G
Elmwood 7 - Outdoor	RELAY	Microprocessor	23kV	OPERATING	2215 OC/G
Elmwood 7 - Outdoor	RELAY	Microprocessor	23kV	OPERATING	2203 OC/G
Elmwood 7 - Outdoor	RELAY	Microprocessor	23kV	OPERATING	2213 OC/G
Elmwood 7 - Outdoor	RELAY	Microprocessor	23kV	OPERATING	BUS TIE OC/G
Elmwood 7 - Outdoor	RELAY	Microprocessor	23kV	OPERATING	2228 OC/G
Elmwood 7 - Outdoor	RELAY	Microprocessor	23kV	OPERATING	2213 OC/G
Elmwood 7 - Outdoor	RELAY	Microprocessor	23kV	OPERATING	2220 OC/G
Elmwood 7 - Outdoor	RELAY	Microprocessor	23kV	OPERATING	2216 OC/G
Elmwood 7 - Outdoor	RELAY	Microprocessor	23kV	OPERATING	2226 OC/G
Elmwood 7 - Outdoor	RELAY	Microprocessor	23kV	OPERATING	2215 OC/G
Elmwood 7 - Outdoor	RELAY	Microprocessor	23kV	OPERATING	2210 OC/G
Elmwood 7 - Outdoor	RELAY	Microprocessor	23kV	OPERATING	2220 OC/G
Elmwood 7 - Outdoor	RELAY	Microprocessor	23kV	OPERATING	2203 OC/G
Elmwood 7 - Outdoor	RELAY	Microprocessor	23kV	OPERATING	2228 OC/G
Farnum Pike 23	RELAY	ElectroMechSS	12kV	OPERATING	2 TR B PH OC
Farnum Pike 23	RELAY	ElectroMechSS	12kV	OPERATING	C2 OV
Farnum Pike 23	RELAY	ElectroMechSS	12kV	OPERATING	23F2 OC/G/R
Farnum Pike 23	RELAY	ElectroMechSS	12kV	OPERATING	1 TR C PH OC
Farnum Pike 23	RELAY	ElectroMechSS	12kV	OPERATING	23F3 R
Farnum Pike 23	RELAY	ElectroMechSS	12kV	OPERATING	C1 OV
Farnum Pike 23	RELAY	ElectroMechSS	12kV	OPERATING	1-2 TIE OC/G/R
Farnum Pike 23	RELAY	ElectroMechSS	12kV	OPERATING	2 TR TLOL
Farnum Pike 23	RELAY	ElectroMechSS	12kV	OPERATING	1 TR A PH OC
Farnum Pike 23	RELAY	ElectroMechSS	12kV	OPERATING	23F4 B PH OC
Farnum Pike 23	RELAY	ElectroMechSS	12kV	OPERATING	23F3 C PH OC
Farnum Pike 23	RELAY	ElectroMechSS	12kV	OPERATING	23F3 A PH OC
Farnum Pike 23	RELAY	ElectroMechSS	12kV	OPERATING	1 BUS UV
Farnum Pike 23	RELAY	ElectroMechSS	12kV	OPERATING	1 TR B PH OC
Farnum Pike 23	RELAY	ElectroMechSS	12kV	OPERATING	1 BUS GROUND
Farnum Pike 23	RELAY	ElectroMechSS	12kV	OPERATING	2 BUS GROUND
Farnum Pike 23	RELAY	ElectroMechSS	12kV	OPERATING	23F3 B PH OC
Farnum Pike 23	RELAY	ElectroMechSS	12kV	OPERATING	2 BUS UV
Farnum Pike 23	RELAY	ElectroMechSS	12kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Farnum Pike 23	RELAY	ElectroMechSS	12kV	OPERATING	23F4 GROUND
Farnum Pike 23	RELAY	ElectroMechSS	12kV	OPERATING	23F4 C PH OC
Farnum Pike 23	RELAY	ElectroMechSS	12kV	OPERATING	2 TR TFP
Farnum Pike 23	RELAY	ElectroMechSS	12kV	OPERATING	1 TR GROUND
Farnum Pike 23	RELAY	ElectroMechSS	12kV	OPERATING	C3 OV
Farnum Pike 23	RELAY	ElectroMechSS	12kV	OPERATING	2 TR C PH OC
Farnum Pike 23	RELAY	ElectroMechSS	12kV	OPERATING	23F1 OC/G/R
Farnum Pike 23	RELAY	ElectroMechSS	12kV	OPERATING	3-4 R
Farnum Pike 23	RELAY	ElectroMechSS	12kV	OPERATING	C4 OV
Farnum Pike 23	RELAY	ElectroMechSS	12kV	OPERATING	23F4 R
Farnum Pike 23	RELAY	ElectroMechSS	12kV	OPERATING	23F4 A PH OC
Farnum Pike 23	RELAY	ElectroMechSS	12kV	OPERATING	LOAD SHED DST
Farnum Pike 23	RELAY	ElectroMechSS	12kV	OPERATING	2 TR A PH OC
Farnum Pike 23	RELAY	ElectroMechSS	12kV	OPERATING	23F3 GROUND
Farnum Pike 23	RELAY	ElectroMechSS	12kV	OPERATING	1 TR TLOL

location	equip_category	equip_type	equip_class	status	equip_description
Farnum Pike 23	RELAY	ElectroMechSS	12kV	OPERATING	1 TR TFP
Farnum Pike 23	RELAY	ElectroMechSS	12kV	OPERATING	2 TR GROUND
Farnum Pike 23	RELAY	Microprocessor	12kV	OPERATING	23F2 OC/G/R
Farnum Pike 23	RELAY	Microprocessor	12kV	OPERATING	23F8 OC/G/R
Farnum Pike 23	RELAY	Microprocessor	12kV	OPERATING	23F5 OC/G/R
Farnum Pike 23	RELAY	Microprocessor	12kV	OPERATING	2TR DOC/TNG
Farnum Pike 23	RELAY	Microprocessor	12kV	OPERATING	2TR DIFF
Farnum Pike 23	RELAY	Microprocessor	12kV	OPERATING	23F3 OC/G/R
Farnum Pike 23	RELAY	Microprocessor	12kV	OPERATING	C1-C2 OC/G/NSOC
Farnum Pike 23	RELAY	Microprocessor	12kV	OPERATING	1TR DOC/TNG
Farnum Pike 23	RELAY	Microprocessor	12kV	OPERATING	23F1 & 23F2 OC/G
Farnum Pike 23	RELAY	Microprocessor	12kV	OPERATING	23F7 OC/G/R
Farnum Pike 23	RELAY	Microprocessor	12kV	OPERATING	23F3 & 23F4 OC/G
Farnum Pike 23	RELAY	Microprocessor	12kV	OPERATING	23F1 OC/G/R
Farnum Pike 23	RELAY	Microprocessor	12kV	OPERATING	23F7 & 23F8 OC/G
Farnum Pike 23	RELAY	Microprocessor	12kV	OPERATING	32F5 & 23F6 OC/G
Farnum Pike 23	RELAY	Microprocessor	12kV	OPERATING	23F4 OC/G/R
Farnum Pike 23	RELAY	Microprocessor	12kV	OPERATING	26F6 OC/G/R
Farnum Pike 23	RELAY	Microprocessor	12kV	OPERATING	1TR DIFF
Farnum Sub 105	RELAY	ElectroMechSS	23kV	OPERATING	105K1 DG
Farnum Sub 105	RELAY	ElectroMechSS	23kV	OPERATING	105K1 B PH DOC
Farnum Sub 105	RELAY	ElectroMechSS	23kV	OPERATING	51 TR C PH OC
Farnum Sub 105	RELAY	ElectroMechSS	23kV	OPERATING	51 TR A PH OC
Farnum Sub 105	RELAY	ElectroMechSS	23kV	OPERATING	51 TR TNG
Farnum Sub 105	RELAY	ElectroMechSS	23kV	OPERATING	51 TR TFP
Farnum Sub 105	RELAY	ElectroMechSS	23kV	OPERATING	51 TR B PH OC
Farnum Sub 105	RELAY	ElectroMechSS	23kV	OPERATING	51 TR A PH TD
Farnum Sub 105	RELAY	ElectroMechSS	23kV	OPERATING	105K1 A PH DOC
Farnum Sub 105	RELAY	ElectroMechSS	23kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Farnum Sub 105	RELAY	ElectroMechSS	23kV	OPERATING	51 TR C PH TD
Farnum Sub 105	RELAY	ElectroMechSS	23kV	OPERATING	51 TR B PH TD
Farnum Sub 105	RELAY	ElectroMechSS	23kV	OPERATING	105K1 C PH DOC
Franklin Square	RELAY	ElectroMechSS	0kV	OPERATING	UNDERFREQUENCY
Franklin Square	RELAY	ElectroMechSS	0kV	OPERATING	UNDERFREQUENCY
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	2207 GROUND
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1121 C PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	2207 C PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1168 & 31 TR C PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1153 C PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1164 & 30 TR B PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	2 BUS SEC 2 B PH BD
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	3320 TFP
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	2 BUS SEC 3 A PH BD
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1 BUS SEC 3 B PH BD
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	2260 TNG
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1 BUS SEC 2 C PH BD
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1153 GROUND
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	9G-1T ACB BFI
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	3 TR A PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1162 A PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	2 BUS SEC 2 A PH BD
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	3324 TLOL
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	2210 GROUND
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	10G-2B ACB BFI
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	11G-3T ACB BFI
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	2 BUS SEC 3 BDG
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1 BUS SEC 1 B PH BD
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	2 BUS SEC 1 BDG
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	2 BUS SEC 1 B PH BD
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1125 B PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1144 A PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1121 B PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT

location	equip_category	equip_type	equip_class	status	equip_description
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	2220 GVI
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1120 C PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1158 C PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1112 GROUND
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1 TR B PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1143 B PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1141 GROUND
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1107 C PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1153 B PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	2207 B PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1123 C PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1123 GROUND
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1142 GROUND
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1121 A PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1120 A PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1142 B PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1130 B PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1120 GROUND
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1123 A PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1160 GROUND
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1125 A PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1112 C PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1132 C PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1166 C PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1126 C PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1120 B PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	2210 B PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1 BUS SEC 1 C PH BD
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	3324 TFP
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	3320 T
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1149 GROUND
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1143 C PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1132 A PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1158 B PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1166 B PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1 TR C PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1130 GROUND
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1143 GROUND
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1149 B PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	2260 B PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1141 B PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1144 C PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1153 A PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1164 & 30 TR A PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1 BUS SEC 3 BDG
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	3 TR C PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1112 B PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1 BUS SEC 2 BDG
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	2220 B PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	2207 A PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	2210 C PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1144 B PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1126 A PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1107 A PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1139 B PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1123 B PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1162 GROUND
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1142 A PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1158 GROUND
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1143 A PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1132 B PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1107 B PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1160 A PH OC

location	equip_category	equip_type	equip_class	status	equip_description
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1160 B PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	2220 C PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	10G-1B ACB BFI
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	2 BUS SEC 1 C PH BD
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1 BUS SEC 1 BDG
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	2260 GROUND
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	2220 A PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	2 BUS SEC 2 BDG
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1162 C PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	2220 TFP
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1112 A PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1168 & 31 TR B PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1168 & 31 TR A PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	2 BUS SEC 3 B PH BD
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1166 A PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	2220 UVLS
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1 BUS SEC 3 C PH BD
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	2220 GROUND
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	3 TR B PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1 BUS SEC 2 A PH BD
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1 BUS SEC 2 B PH BD
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	2 BUS SEC 3 C PH BD
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1164 & 30 TR C PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	11G ACB BFI
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1149 A PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	2210 TNG
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	2 BUS SEC 1 A PH BD
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1 BUS SEC 3 A PH BD
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1 BUS SEC 1 A PH BD
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1125 C PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1132 GROUND
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1162 B PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	9G ACB BFI
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	2260 A PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	2207 TNG
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	2 BUS SEC 2 C PH BD
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1 TR A PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1141 A PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1130 C PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1112 A PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1141 C PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1166 GROUND
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	2260 C PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1125 GROUND
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1139 GROUND
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	2 TR A PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1139 C PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1121 GROUND
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1107 GROUND
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1144 GROUND
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1139 A PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	2 TR C PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1126 GROUND
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1126 B PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1142 C PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1168 & 31 TR GROUND
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1164 & 30 TR GROUND
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	2 TR B PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1130 A PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1149 C PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1160 C PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	1158 A PH OC
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	2210 A PH OC

location	equip_category	equip_type	equip_class	status	equip_description
Franklin Square	RELAY	ElectroMechSS	11kV	OPERATING	3320 TLOL
Franklin Square	RELAY	Microprocessor	11kV	OPERATING	1162 LDR
Franklin Square	RELAY	Microprocessor	11kV	OPERATING	1164 LDR
Franklin Square	RELAY	Microprocessor	11kV	OPERATING	3320 TR DIFF
Franklin Square	RELAY	Microprocessor	11kV	OPERATING	1158 LDR
Franklin Square	RELAY	Microprocessor	11kV	OPERATING	3324 TR DIFF
Franklin Square	RELAY	Microprocessor	11kV	OPERATING	3320 TR OC
Franklin Square	RELAY	Microprocessor	11kV	OPERATING	1160 LDR
Franklin Square	RELAY	Microprocessor	11kV	OPERATING	1168 LDR
Franklin Square	RELAY	Microprocessor	11kV	OPERATING	1166 LDR
Franklin Square	RELAY	Microprocessor	11kV	OPERATING	3324 TR OC
Gate II 38	RELAY	ElectroMechSS	23kV	OPERATING	3826 C1 TIMER
Gate II 38	RELAY	ElectroMechSS	23kV	OPERATING	3827 C2 TIMER
Gate II 38	RELAY	ElectroMechSS	23kV	OPERATING	381 GRD TR GROUND
Gate II 38	RELAY	ElectroMechSS	23kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Gate II 38	RELAY	ElectroMechSS	23kV	OPERATING	3826 C1 OV
Gate II 38	RELAY	ElectroMechSS	23kV	OPERATING	3827 C2 OV
Gate II 38	RELAY	ElectroMechSS	23kV	OPERATING	381 GRD TR B PH OC
Gate II 38	RELAY	ElectroMechSS	23kV	OPERATING	381 TR GROUND
Gate II 38	RELAY	ElectroMechSS	23kV	OPERATING	381 GRD TR C PH OC
Gate II 38	RELAY	ElectroMechSS	23kV	OPERATING	3827 C2 BR
Gate II 38	RELAY	ElectroMechSS	23kV	OPERATING	3826 C1 BR
Gate II 38	RELAY	ElectroMechSS	23kV	OPERATING	381 GRD TR A PH OC
Gate II 38	RELAY	Microprocessor	23kV	OPERATING	37K33 PRIMARY OC/G/R
Gate II 38	RELAY	Microprocessor	23kV	OPERATING	38K22 OC/G
Gate II 38	RELAY	Microprocessor	23kV	OPERATING	38K23 OC/G
Gate II 38	RELAY	Microprocessor	23kV	OPERATING	38K21 OC/G/R
Gate II 38	RELAY	Microprocessor	23kV	OPERATING	38K21 OC/G
Gate II 38	RELAY	Microprocessor	23kV	OPERATING	38K23 OC/G/R
Gate II 38	RELAY	Microprocessor	23kV	OPERATING	37K33 BACKUP OC/G
Gate II 38	RELAY	Microprocessor	23kV	OPERATING	38K22 OC/G
Gate II 38	RELAY	Microprocessor	23kV	OPERATING	381TR 23KV DD
Geneva 71	RELAY	ElectroMechSS	23kV	OPERATING	2211 UV T
Geneva 71	RELAY	ElectroMechSS	23kV	OPERATING	1 TR C PH TD
Geneva 71	RELAY	ElectroMechSS	23kV	OPERATING	2 TR TFP
Geneva 71	RELAY	ElectroMechSS	23kV	OPERATING	2 TR B PH TD
Geneva 71	RELAY	ElectroMechSS	23kV	OPERATING	1 TR B PH TD
Geneva 71	RELAY	ElectroMechSS	23kV	OPERATING	2 TR C PH TD
Geneva 71	RELAY	ElectroMechSS	23kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Geneva 71	RELAY	ElectroMechSS	23kV	OPERATING	22 UV T
Geneva 71	RELAY	ElectroMechSS	23kV	OPERATING	2 TR A PH TD
Geneva 71	RELAY	ElectroMechSS	23kV	OPERATING	1 TR A PH TD
Geneva 71	RELAY	ElectroMechSS	4kV	OPERATING	71J4 R
Geneva 71	RELAY	ElectroMechSS	4kV	OPERATING	71J6 C PH OC
Geneva 71	RELAY	ElectroMechSS	4kV	OPERATING	71J5 GROUND
Geneva 71	RELAY	ElectroMechSS	4kV	OPERATING	71J4 C PH OC
Geneva 71	RELAY	ElectroMechSS	4kV	OPERATING	71J4 B PH OC
Geneva 71	RELAY	ElectroMechSS	4kV	OPERATING	71J2 GROUND
Geneva 71	RELAY	ElectroMechSS	4kV	OPERATING	71J5 A PH OC
Geneva 71	RELAY	ElectroMechSS	4kV	OPERATING	71J1 A PH OC
Geneva 71	RELAY	ElectroMechSS	4kV	OPERATING	71J3 A PH OC
Geneva 71	RELAY	ElectroMechSS	4kV	OPERATING	71J2 R
Geneva 71	RELAY	ElectroMechSS	4kV	OPERATING	71J1 B PH OC
Geneva 71	RELAY	ElectroMechSS	4kV	OPERATING	2-4 R
Geneva 71	RELAY	ElectroMechSS	4kV	OPERATING	71J4 GROUND
Geneva 71	RELAY	ElectroMechSS	4kV	OPERATING	71J6 A PH OC
Geneva 71	RELAY	ElectroMechSS	4kV	OPERATING	71J4 A PH OC
Geneva 71	RELAY	ElectroMechSS	4kV	OPERATING	71J3 B PH OC
Geneva 71	RELAY	ElectroMechSS	4kV	OPERATING	71J2 A PH OC
Geneva 71	RELAY	ElectroMechSS	4kV	OPERATING	1-3 R
Geneva 71	RELAY	ElectroMechSS	4kV	OPERATING	71J2 B PH OC
Geneva 71	RELAY	ElectroMechSS	4kV	OPERATING	71J1 R
Geneva 71	RELAY	ElectroMechSS	4kV	OPERATING	71J1 C PH OC

location	equip_category	equip_type	equip_class	status	equip_description
Geneva 71	RELAY	ElectroMechSS	4kV	OPERATING	6-5 R
Geneva 71	RELAY	ElectroMechSS	4kV	OPERATING	71J3 R
Geneva 71	RELAY	ElectroMechSS	4kV	OPERATING	71J1 GROUND
Geneva 71	RELAY	ElectroMechSS	4kV	OPERATING	71J5 B PH OC
Geneva 71	RELAY	ElectroMechSS	4kV	OPERATING	71J6 B PH OC
Geneva 71	RELAY	ElectroMechSS	4kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Geneva 71	RELAY	ElectroMechSS	4kV	OPERATING	71J6 R
Geneva 71	RELAY	ElectroMechSS	4kV	OPERATING	71J5 C PH OC
Geneva 71	RELAY	ElectroMechSS	4kV	OPERATING	71J6 GROUND
Geneva 71	RELAY	ElectroMechSS	4kV	OPERATING	71J3 GROUND
Geneva 71	RELAY	ElectroMechSS	4kV	OPERATING	71J3 C PH OC
Geneva 71	RELAY	ElectroMechSS	4kV	OPERATING	71J2 C PH OC
Geneva 71	RELAY	ElectroMechSS	4kV	OPERATING	71J5 R
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1120 BP
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1137A GROUND
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1131 GROUND
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1120 BPG
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1114 BPG
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1145 A PH OC
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	CAP BU B PH OC
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1130 B PH OC
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1120 A PH BP
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	2W BUS BDG
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1129 B PH OC
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1114 C PH BP
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1129 C PH OC
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1120 B PH BP
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1118 B PH OC
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1130 GROUND
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1147 GROUND
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1133A A PH OC
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1147 A PH OC
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1133A GROUND
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	2W BUS A PH BD
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1147 B PH OC
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	CAP BU A PH OC
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1145 C PH OC
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	CAP C PH OC
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	CAP B PH OC
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1131 B PH OC
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	CAP BU C PH OC
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	CAP A PH OC
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1130 A PH OC
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1133A B PH OC
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1130 C PH OC
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	2W BUS C PH BD
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1118 GROUND
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1120 C PH OC
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1114 B PH BP
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1E BUS C PH BD
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1114 A PH BP
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1114 C PH OC
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1E BUS B PH BD
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1118 C PH OC
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	2 TR B PH OC
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	2 TR A PH OC
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1114 A PH OC
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1E BUS A PH BD
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	2 TR C PH OC
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1E BUS BDG
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1137A B PH OC
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1145 GROUND
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1114 B PH OC

location	equip_category	equip_type	equip_class	status	equip_description
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1118 A PH OC
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1129 A PH OC
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1147 C PH OC
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	2W BUS B PH BD
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1145 B PH OC
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	2 TR GROUND
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1137A C PH OC
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1120 B PH OC
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1129 GROUND
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1120 A PH OC
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1131 A PH OC
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1137A A PH OC
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1120 C PH BP
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1133A C PH OC
Harris Avenue 12	RELAY	ElectroMechSS	11kV	OPERATING	1131 C PH OC
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	STA SER C PH OC
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	2 BUS T
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	1TR TNG
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	12J1 C PH OC
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	12J4 A PH OC
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	1 BUS T
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	2 TR TNG
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	12J5 B PH OC
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	STA SER B PH OC
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	BUS TIE C PH OC
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	BUS TIE A PH OC
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	12J2 C PH OC
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	12J2 A PH OC
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	1 TR B PH OC
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	12J3 A PH OC
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	2 TR B PH OC
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	12J4 GROUND
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	12J7 R
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	2 TR TFP
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	12J5 R
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	BUS TIE B PH OC
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	12J7 GROUND
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	FDR-BT A PH OC
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	2 TR C PH OC
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	12J5 A PH OC
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	1 TR A PH OC
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	12J6 R
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	1 TR C PH OC
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	12J5 GROUND
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	12J6 B PH OC
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	12J7 B PH OC
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	12J3 R
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	12J4 C PH OC
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	12J4 R
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	12J6 C PH OC
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	2 TR A PH OC
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	FDR-BT B PH OC
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	12J3 C PH OC
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	12J2 B PH OC
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	FDR-BT C PH OC
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	12J6 GROUND
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	12J1 R
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	BUS TIE GROUND
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	12J6 A PH OC
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	12J1 GROUND
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	12J2 GROUND
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	12J5 C PH OC

location	equip_category	equip_type	equip_class	status	equip_description
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	12J3 GROUND
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	12J7 C PH OC
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	12J3 B PH OC
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	12J1 B PH OC
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	12J1 A PH OC
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	STA SER A PH OC
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	12J2 R
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	12J7 A PH OC
Harris Avenue 12	RELAY	ElectroMechSS	4kV	OPERATING	12J4 B PH OC
Harris Avenue 12	RELAY	Microprocessor	4kV	OPERATING	UNDERFREQUENCY
Harrison 32	RELAY	ElectroMechSS	4kV	OPERATING	32J12 C PH OC
Harrison 32	RELAY	ElectroMechSS	4kV	OPERATING	32J12 R
Harrison 32	RELAY	ElectroMechSS	4kV	OPERATING	32J4 C PH OC
Harrison 32	RELAY	ElectroMechSS	4kV	OPERATING	32J4 B PH OC
Harrison 32	RELAY	ElectroMechSS	4kV	OPERATING	32J12 A PH OC
Harrison 32	RELAY	ElectroMechSS	4kV	OPERATING	32J2 C PH OC
Harrison 32	RELAY	ElectroMechSS	4kV	OPERATING	32J2 A PH OC
Harrison 32	RELAY	ElectroMechSS	4kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Harrison 32	RELAY	ElectroMechSS	4kV	OPERATING	32J4 R
Harrison 32	RELAY	ElectroMechSS	4kV	OPERATING	32J2 R
Harrison 32	RELAY	ElectroMechSS	4kV	OPERATING	32J4 GROUND
Harrison 32	RELAY	ElectroMechSS	4kV	OPERATING	32J2 GROUND
Harrison 32	RELAY	ElectroMechSS	4kV	OPERATING	32J2 B PH OC
Harrison 32	RELAY	ElectroMechSS	4kV	OPERATING	32J12 GROUND
Harrison 32	RELAY	ElectroMechSS	4kV	OPERATING	32J12 B PH OC
Harrison 32	RELAY	ElectroMechSS	4kV	OPERATING	32J4 A PH OC
Hope 15	RELAY	Microprocessor	0kV	OPERATING	UNDERFREQUENCY
Hope 15	RELAY	ElectroMechSS	13kV	OPERATING	2 TR TNG
Hope 15	RELAY	ElectroMechSS	13kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Hope 15	RELAY	Microprocessor	13kV	OPERATING	15F1 OC/G/R
Hope 15	RELAY	Microprocessor	13kV	OPERATING	15F2 OC/G/R
Hope 15	RELAY	ElectroMechSS	23kV	OPERATING	2232 A PH DOC
Hope 15	RELAY	ElectroMechSS	23kV	OPERATING	2228 C PH DOC
Hope 15	RELAY	ElectroMechSS	23kV	OPERATING	BUS GROUND
Hope 15	RELAY	ElectroMechSS	23kV	OPERATING	2228 A PH DOC
Hope 15	RELAY	ElectroMechSS	23kV	OPERATING	2229 GROUND
Hope 15	RELAY	ElectroMechSS	23kV	OPERATING	BUS C PH OC
Hope 15	RELAY	ElectroMechSS	23kV	OPERATING	2232 DG
Hope 15	RELAY	ElectroMechSS	23kV	OPERATING	2230 B PH DOC
Hope 15	RELAY	ElectroMechSS	23kV	OPERATING	BUS TIE R
Hope 15	RELAY	ElectroMechSS	23kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Hope 15	RELAY	ElectroMechSS	23kV	OPERATING	2229 C PH OC
Hope 15	RELAY	ElectroMechSS	23kV	OPERATING	2232 B PH DOC
Hope 15	RELAY	ElectroMechSS	23kV	OPERATING	BUS TIE C PH DOC
Hope 15	RELAY	ElectroMechSS	23kV	OPERATING	2232 C PH DOC
Hope 15	RELAY	ElectroMechSS	23kV	OPERATING	BUS A PH OC
Hope 15	RELAY	ElectroMechSS	23kV	OPERATING	2228 B PH DOC
Hope 15	RELAY	ElectroMechSS	23kV	OPERATING	2230 A PH DOC
Hope 15	RELAY	ElectroMechSS	23kV	OPERATING	2 TR A PH OC
Hope 15	RELAY	ElectroMechSS	23kV	OPERATING	2 TR TFP
Hope 15	RELAY	ElectroMechSS	23kV	OPERATING	BUS B PH OC
Hope 15	RELAY	ElectroMechSS	23kV	OPERATING	2229 B PH OC
Hope 15	RELAY	ElectroMechSS	23kV	OPERATING	2228 DG
Hope 15	RELAY	ElectroMechSS	23kV	OPERATING	2 TR B PH OC
Hope 15	RELAY	ElectroMechSS	23kV	OPERATING	2 TR GROUND
Hope 15	RELAY	ElectroMechSS	23kV	OPERATING	2229 A PH OC
Hope 15	RELAY	ElectroMechSS	23kV	OPERATING	BUS TIE A PH DOC
Hope 15	RELAY	ElectroMechSS	23kV	OPERATING	BUS TIE B PH DOC
Hope 15	RELAY	ElectroMechSS	23kV	OPERATING	BUS TIE DG
Hope 15	RELAY	ElectroMechSS	23kV	OPERATING	2230 DG
Hope 15	RELAY	ElectroMechSS	23kV	OPERATING	2232 R
Hope 15	RELAY	ElectroMechSS	23kV	OPERATING	2230 R

location	equip_category	equip_type	equip_class	status	equip_description
Hope 15	RELAY	ElectroMechSS	23kV	OPERATING	2229 R
Hope 15	RELAY	ElectroMechSS	23kV	OPERATING	2228 R
Hope 15	RELAY	ElectroMechSS	23kV	OPERATING	2 TR C PH OC
Hope 15	RELAY	ElectroMechSS	23kV	OPERATING	2230 C PH DOC
Hope 15	RELAY	ElectroMechSS	23kV	OPERATING	BUS TIE DOC
Hope 15	RELAY	Microprocessor	23kV	OPERATING	2232 Backup
Hope 15	RELAY	Microprocessor	23kV	OPERATING	2228 Backup
Hope 15	RELAY	Microprocessor	23kV	OPERATING	2230 Backup
Hope 15	RELAY	Microprocessor	23kV	OPERATING	Bus Tie Backup
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	C6 OV
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	63F5 R
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	C5 OV
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	1 TR VB
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	63F3 GROUND
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	63F1 A PH OC
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	5-6 R
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	2 TR TNG
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	63F3 R
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	63F5 GROUND
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	C3 OV
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	63F2 R
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	63F1 R
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	C1 OV
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	C4 OV
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	63F5 B PH OC
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	63F4 GROUND
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	63F4 C PH OC
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	63F3 B PH OC
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	63F2 GROUND
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	63F2 C PH OC
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	63F2 B PH OC
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	63F1 GROUND
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	63F1 B PH OC
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	2 TR VB
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	2 BUS UV
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	C8 OV
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	63F4 A PH OC
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	63F5 A PH OC
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	C2 OV
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	63F6 OC/G/R
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	3-4 R
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	63F4 R
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	1-2 R
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	UNDERFREQUENCY
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	1 TR TNG
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	63F1 C PH OC
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	1 BUS UV
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	C7 OV
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	63F2 A PH OC
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	63F3 A PH OC
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	63F4 B PH OC
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	63F3 C PH OC
Hopkins Hill 63	RELAY	ElectroMechSS	12kV	OPERATING	63F5 C PH OC
Hopkins Hill 63	RELAY	Microprocessor	12kV	OPERATING	63F6 OC/G
Hopkins Hill 63	RELAY	Microprocessor	12kV	OPERATING	C1/C2 OC/G
Hopkins Hill 63	RELAY	ElectroMechSS	34kV	OPERATING	2 TR DDOC
Hopkins Hill 63	RELAY	ElectroMechSS	34kV	OPERATING	1 TR DDOC
Hopkins Hill 63	RELAY	ElectroMechSS	34kV	OPERATING	1 TR TFP
Hopkins Hill 63	RELAY	ElectroMechSS	34kV	OPERATING	2 TR TFP
Hopkins Hill 63	RELAY	ElectroMechSS	34kV	OPERATING	2 TR B PH DDOC
Hopkins Hill 63	RELAY	ElectroMechSS	34kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Hopkins Hill 63	RELAY	ElectroMechSS	34kV	OPERATING	2 TR A PH DDOC

location	equip_category	equip_type	equip_class	status	equip_description
Hopkins Hill 63	RELAY	ElectroMechSS	34kV	OPERATING	2 TR GROUND
Hopkins Hill 63	RELAY	ElectroMechSS	34kV	OPERATING	2 TR T
Hopkins Hill 63	RELAY	ElectroMechSS	34kV	OPERATING	2 TR TD
Hopkins Hill 63	RELAY	ElectroMechSS	34kV	OPERATING	1 TR B PH DDOC
Hopkins Hill 63	RELAY	ElectroMechSS	34kV	OPERATING	1 TR T
Hopkins Hill 63	RELAY	ElectroMechSS	34kV	OPERATING	1 TR GROUND
Hopkins Hill 63	RELAY	ElectroMechSS	34kV	OPERATING	1 TR TD
Hopkins Hill 63	RELAY	ElectroMechSS	34kV	OPERATING	1 TR A PH DDOC
Hopkins Hill 63	RELAY	ElectroMechSS	34kV	OPERATING	1 TR C PH DDOC
Hopkins Hill 63	RELAY	ElectroMechSS	34kV	OPERATING	2 TR C PH DDOC
Hopkins Hill 63	RELAY	Microprocessor	34kV	OPERATING	#2 Transformer 3V0/UV
Hopkins Hill 63	RELAY	Microprocessor	34kV	OPERATING	#1 Transformer 3V0/UV
Hopkins Hill 63	RELAY	Microprocessor	34kV	OPERATING	3309 OC/G
Hospital Sub 146	RELAY	ElectroMechSS	4kV	OPERATING	146J14 GROUND
Hospital Sub 146	RELAY	ElectroMechSS	4kV	OPERATING	146J4 GROUND
Hospital Sub 146	RELAY	ElectroMechSS	4kV	OPERATING	146J14 C PH OC
Hospital Sub 146	RELAY	ElectroMechSS	4kV	OPERATING	146J4 A PH OC
Hospital Sub 146	RELAY	ElectroMechSS	4kV	OPERATING	146J12 R
Hospital Sub 146	RELAY	ElectroMechSS	4kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Hospital Sub 146	RELAY	ElectroMechSS	4kV	OPERATING	146J2 C PH OC
Hospital Sub 146	RELAY	ElectroMechSS	4kV	OPERATING	146J2 B PH OC
Hospital Sub 146	RELAY	ElectroMechSS	4kV	OPERATING	146J12 GROUND
Hospital Sub 146	RELAY	ElectroMechSS	4kV	OPERATING	146J12 A PH OC
Hospital Sub 146	RELAY	ElectroMechSS	4kV	OPERATING	146J4 C PH OC
Hospital Sub 146	RELAY	ElectroMechSS	4kV	OPERATING	146J4 B PH OC
Hospital Sub 146	RELAY	ElectroMechSS	4kV	OPERATING	146J12 B PH OC
Hospital Sub 146	RELAY	ElectroMechSS	4kV	OPERATING	146J14 A PH OC
Hospital Sub 146	RELAY	ElectroMechSS	4kV	OPERATING	146J12 C PH OC
Hospital Sub 146	RELAY	ElectroMechSS	4kV	OPERATING	461 TR T
Hospital Sub 146	RELAY	ElectroMechSS	4kV	OPERATING	461 TR UV
Hospital Sub 146	RELAY	ElectroMechSS	4kV	OPERATING	146J2 R
Hospital Sub 146	RELAY	ElectroMechSS	4kV	OPERATING	146J4 R
Hospital Sub 146	RELAY	ElectroMechSS	4kV	OPERATING	462 TR T
Hospital Sub 146	RELAY	ElectroMechSS	4kV	OPERATING	146J14 R
Hospital Sub 146	RELAY	ElectroMechSS	4kV	OPERATING	462 TR UV
Hospital Sub 146	RELAY	ElectroMechSS	4kV	OPERATING	146J2 GROUND
Hospital Sub 146	RELAY	ElectroMechSS	4kV	OPERATING	146J14 B PH OC
Hospital Sub 146	RELAY	ElectroMechSS	4kV	OPERATING	146J2 A PH OC
Huntington Park 67	RELAY	ElectroMechSS	4kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Huntington Park 67	RELAY	Microprocessor	4kV	OPERATING	67J1 OC/G
Jepson 37	RELAY	ElectroMechSS	13kV	OPERATING	C5 OV
Jepson 37	RELAY	ElectroMechSS	13kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Jepson 37	RELAY	ElectroMechSS	13kV	OPERATING	C6 OV
Jepson 37	RELAY	Microprocessor	13kV	OPERATING	37W5 (4C1) PRI
Jepson 37	RELAY	Microprocessor	13kV	OPERATING	37W7 (4D1) PRI
Jepson 37	RELAY	Microprocessor	13kV	OPERATING	13.8kV BUS 5 ARC FLASH DETECTOR
Jepson 37	RELAY	Microprocessor	13kV	OPERATING	37W7 (4D1) BU
Jepson 37	RELAY	Microprocessor	13kV	OPERATING	C6 (4E3) CAP CONTROLLER
Jepson 37	RELAY	Microprocessor	13kV	OPERATING	37W6 (4C3) BU
Jepson 37	RELAY	Microprocessor	13kV	OPERATING	37W1 (4A1) BU
Jepson 37	RELAY	Microprocessor	13kV	OPERATING	37W3 (4B1) BU
Jepson 37	RELAY	Microprocessor	13kV	OPERATING	C6 (4E3) PRI
Jepson 37	RELAY	Microprocessor	13kV	OPERATING	13.8kV BUS 6 ARC FLASH DETECTOR
Jepson 37	RELAY	Microprocessor	13kV	OPERATING	37W4 (4B3) PRI
Jepson 37	RELAY	Microprocessor	13kV	OPERATING	37W3 (4B1) PRI
Jepson 37	RELAY	Microprocessor	13kV	OPERATING	37W2 (4A3) PRI
Jepson 37	RELAY	Microprocessor	13kV	OPERATING	37W1 (4A1) PRI
Jepson 37	RELAY	Microprocessor	13kV	OPERATING	C6 (4E3) BU
Jepson 37	RELAY	Microprocessor	13kV	OPERATING	C5 (4E1) BU
Jepson 37	RELAY	Microprocessor	13kV	OPERATING	37W8 (4D3) BU
Jepson 37	RELAY	Microprocessor	13kV	OPERATING	37W4 (4B3) BU
Jepson 37	RELAY	Microprocessor	13kV	OPERATING	37W2 (4A3) BU
Jepson 37	RELAY	Microprocessor	13kV	OPERATING	37W8 (4D3) PRI

location	equip_category	equip_type	equip_class	status	equip_description
Jepson 37	RELAY	Microprocessor	13kV	OPERATING	37W6 (4C3) PRI
Jepson 37	RELAY	Microprocessor	13kV	OPERATING	13.8Kv 1 TRAN SYS 2
Jepson 37	RELAY	Microprocessor	13kV	OPERATING	13.8Kv 1 TRAN SYS 1
Jepson 37	RELAY	Microprocessor	13kV	OPERATING	37W5 (4C1) BU
Jepson 37	RELAY	Microprocessor	13kV	OPERATING	C5 (4E1) PRI
Jepson 37	RELAY	Microprocessor	13kV	OPERATING	C5 (4E1) CAP CONTROLLER
Jepson 37	RELAY	ElectroMechSS	23kV	OPERATING	C3 OV
Jepson 37	RELAY	ElectroMechSS	23kV	OPERATING	SS4 UV
Jepson 37	RELAY	ElectroMechSS	23kV	OPERATING	SS3 UV
Jepson 37	RELAY	ElectroMechSS	23kV	OPERATING	3 BUS UV
Jepson 37	RELAY	ElectroMechSS	23kV	OPERATING	C4 OV
Jepson 37	RELAY	ElectroMechSS	23kV	OPERATING	4 BUS UV
Jepson 37	RELAY	ElectroMechSS	23kV	OPERATING	3 GROUNDING TRAN FAULT PRESSURE
Jepson 37	RELAY	ElectroMechSS	23kV	OPERATING	4 GROUNDING TRAN FAULT PRESSURE
Jepson 37	RELAY	Microprocessor	23kV	OPERATING	37K21 (5A1) BU
Jepson 37	RELAY	Microprocessor	23kV	OPERATING	37K24 (5B3) BU
Jepson 37	RELAY	Microprocessor	23kV	OPERATING	C3 (5C1) BU
Jepson 37	RELAY	Microprocessor	23kV	OPERATING	23Kv BUS 3 ARC FLASH DETECTOR
Jepson 37	RELAY	Microprocessor	23kV	OPERATING	4 GROUNDING TRAN PRI
Jepson 37	RELAY	Microprocessor	23kV	OPERATING	37K22 (5A3) BU
Jepson 37	RELAY	Microprocessor	23kV	OPERATING	37K23 (5B1) PRI
Jepson 37	RELAY	Microprocessor	23kV	OPERATING	C4 (5C3) PRI
Jepson 37	RELAY	Microprocessor	23kV	OPERATING	23Kv BUS 4 ARC FLASH DETECTOR
Jepson 37	RELAY	Microprocessor	23kV	OPERATING	C4 (5C3) BU
Jepson 37	RELAY	Microprocessor	23kV	OPERATING	C3 (5C1) PRI
Jepson 37	RELAY	Microprocessor	23kV	OPERATING	4 GROUNDING TRAN BU
Jepson 37	RELAY	Microprocessor	23kV	OPERATING	3 GROUNDING TRAN BU
Jepson 37	RELAY	Microprocessor	23kV	OPERATING	37K23 (5B1) BU
Jepson 37	RELAY	Microprocessor	23kV	OPERATING	37K24 (5B3) PRI
Jepson 37	RELAY	Microprocessor	23kV	OPERATING	37K22 (5A3) PRI
Jepson 37	RELAY	Microprocessor	23kV	OPERATING	37K21 (5A1) PRI
Jepson 37	RELAY	Microprocessor	23kV	OPERATING	3 GROUNDING TRAN PRI
Johnston 18	RELAY	ElectroMechSS	12kV	OPERATING	4 TR TNG
Johnston 18	RELAY	ElectroMechSS	12kV	OPERATING	3 TR TNG
Johnston 18	RELAY	ElectroMechSS	12kV	OPERATING	3 TR TFP
Johnston 18	RELAY	ElectroMechSS	12kV	OPERATING	4 TR TFP
Johnston 18	RELAY	ElectroMechSS	12kV	OPERATING	4 BUS UV
Johnston 18	RELAY	ElectroMechSS	12kV	OPERATING	C3 CAP OV
Johnston 18	RELAY	ElectroMechSS	12kV	OPERATING	3 CAP OV
Johnston 18	RELAY	ElectroMechSS	12kV	OPERATING	4 CAP OV
Johnston 18	RELAY	ElectroMechSS	12kV	OPERATING	C6 CAP OV
Johnston 18	RELAY	ElectroMechSS	12kV	OPERATING	4 TR TLOL
Johnston 18	RELAY	ElectroMechSS	12kV	OPERATING	C4 CAP OV
Johnston 18	RELAY	ElectroMechSS	12kV	OPERATING	C5 CAP OV
Johnston 18	RELAY	ElectroMechSS	12kV	OPERATING	3 TR TLOL
Johnston 18	RELAY	ElectroMechSS	12kV	OPERATING	3 BUS UV
Johnston 18	RELAY	ElectroMechSS	12kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Johnston 18	RELAY	Microprocessor	12kV	OPERATING	18F11 PRI OC/G/R
Johnston 18	RELAY	Microprocessor	12kV	OPERATING	18F7 S1 OC/G/R
Johnston 18	RELAY	Microprocessor	12kV	OPERATING	18F5/F6 BU OC/G
Johnston 18	RELAY	Microprocessor	12kV	OPERATING	3 TR IOC/DOC/G
Johnston 18	RELAY	Microprocessor	12kV	OPERATING	18F13/F14 BU OC/G
Johnston 18	RELAY	Microprocessor	12kV	OPERATING	C3/C4 OC
Johnston 18	RELAY	Microprocessor	12kV	OPERATING	18F13 PRI OC/G/R
Johnston 18	RELAY	Microprocessor	12kV	OPERATING	18F8 S1 OC/G/R
Johnston 18	RELAY	Microprocessor	12kV	OPERATING	4 TR IOC/DOC/G
Johnston 18	RELAY	Microprocessor	12kV	OPERATING	18F10 PRI OC/G/R
Johnston 18	RELAY	Microprocessor	12kV	OPERATING	18F11/F12 BU OC/G
Johnston 18	RELAY	Microprocessor	12kV	OPERATING	18F7/F8 BU OC
Johnston 18	RELAY	Microprocessor	12kV	OPERATING	18F5 S1 OC/G/R
Johnston 18	RELAY	Microprocessor	12kV	OPERATING	18F12 PRI OC/G/R
Johnston 18	RELAY	Microprocessor	12kV	OPERATING	18F6 S1 OC/G/R
Johnston 18	RELAY	Microprocessor	12kV	OPERATING	18F9 S1 OC/G/R

location	equip_category	equip_type	equip_class	status	equip_description
Johnston 18	RELAY	Microprocessor	12kV	OPERATING	18F9/F10 BU OC/G
Johnston 18	RELAY	Microprocessor	12kV	OPERATING	18F14 PRI OC/G/R
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	1 TR B PH TD
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2227 C PH OC
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	1 TR A PH TD
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	1 TR A PH DDOC
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2226 R
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2202 R
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	1 TR TFP
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2211 R
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	STA CLEAV B PH OC
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	11-27 R
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2 TR B PH TD
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	02-26 R
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2225 R
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	STA CLEAV GROUND
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2227 R
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	1 TR C PH DDOC
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2 TR TNG
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2 TR TFP
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2 TR C PH DDOC
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2202 B PH OC
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2 TR TLOL
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2 TR B PH DDOC
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	C 3 RB
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	C 3 B PH OC
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	C 3 A PH OC
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	1 TR IOC
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	1 TR C PH TD
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2228 DDOC
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2202 C PH OC
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2202 A PH OC
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2227 B PH OC
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2227 A PH OC
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	C 3 C PH OC
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2226 B PH OC
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2226 C PH OC
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2211 C PH OC
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2 TR T
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2226 A PH OC
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	1 TR TNG
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2 TR DDOC
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2211 B PH OC
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2211 A PH OC
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2 TR A PH DDOC
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2202 GROUND
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2228 A PH DDOC
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2 TR IOC
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2228 C PH DDOC
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2211 GROUND
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	1 TR TLOL
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	1 TR DDOC
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	1 TR T
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2227 GROUND
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	STA CLEAV C PH OC
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2226 GROUND
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2228 GROUND
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2 TR A PH TD
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	1 TR B PH DDOC
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2228 R
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	STA CLEAV A PH OC
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2 TR C PH TD

location	equip_category	equip_type	equip_class	status	equip_description
Johnston 18	RELAY	ElectroMechSS	23kV	OPERATING	2228 B PH DDOC
Johnston 18	RELAY	Microprocessor	23kV	OPERATING	UNDERFREQUENCY
Kent County 22	RELAY	ElectroMechSS	12kV	OPERATING	6 TR TFP
Kent County 22	RELAY	ElectroMechSS	12kV	OPERATING	CAP 3 OV
Kent County 22	RELAY	ElectroMechSS	12kV	OPERATING	5 TR TFP
Kent County 22	RELAY	ElectroMechSS	12kV	OPERATING	6 TR TFP
Kent County 22	RELAY	ElectroMechSS	12kV	OPERATING	5 TR TLOL
Kent County 22	RELAY	ElectroMechSS	12kV	OPERATING	6 TR TLOL
Kent County 22	RELAY	ElectroMechSS	12kV	OPERATING	4 STA. SER. UV
Kent County 22	RELAY	ElectroMechSS	12kV	OPERATING	CAP 4 OV
Kent County 22	RELAY	ElectroMechSS	12kV	OPERATING	6 TR TNG
Kent County 22	RELAY	ElectroMechSS	12kV	OPERATING	5 TR TFP
Kent County 22	RELAY	ElectroMechSS	12kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Kent County 22	RELAY	Microprocessor	12kV	OPERATING	22F5/F6 OC/G
Kent County 22	RELAY	Microprocessor	12kV	OPERATING	22F1/F2 OC/G
Kent County 22	RELAY	Microprocessor	12kV	OPERATING	22F3 OC/G/R
Kent County 22	RELAY	Microprocessor	12kV	OPERATING	22F2 OC/G/R
Kent County 22	RELAY	Microprocessor	12kV	OPERATING	22F3/F4 OC/G
Kent County 22	RELAY	Microprocessor	12kV	OPERATING	22F4 OC/G/R
Kent County 22	RELAY	Microprocessor	12kV	OPERATING	22F6 OC/G/R
Kent County 22	RELAY	Microprocessor	12kV	OPERATING	22F1 OC/G/R
Kent County 22	RELAY	Microprocessor	12kV	OPERATING	C3/C4 OC/G
Kent County 22	RELAY	ElectroMechSS	34kV	OPERATING	3312 C PH DDOC
Kent County 22	RELAY	ElectroMechSS	34kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Kent County 22	RELAY	ElectroMechSS	34kV	OPERATING	STA CLVG A PH OC
Kent County 22	RELAY	ElectroMechSS	34kV	OPERATING	3310 B PH OC
Kent County 22	RELAY	ElectroMechSS	34kV	OPERATING	3 STA. SER. UV
Kent County 22	RELAY	ElectroMechSS	34kV	OPERATING	STA CLVG GROUND
Kent County 22	RELAY	ElectroMechSS	34kV	OPERATING	7 TR TLOL
Kent County 22	RELAY	ElectroMechSS	34kV	OPERATING	1 TR TFP
Kent County 22	RELAY	ElectroMechSS	34kV	OPERATING	10-12 R
Kent County 22	RELAY	ElectroMechSS	34kV	OPERATING	3310 R
Kent County 22	RELAY	ElectroMechSS	34kV	OPERATING	7 TR TFP
Kent County 22	RELAY	ElectroMechSS	34kV	OPERATING	2 TR TFP
Kent County 22	RELAY	ElectroMechSS	34kV	OPERATING	2 TR TLOL
Kent County 22	RELAY	ElectroMechSS	34kV	OPERATING	1 TR TLOL
Kent County 22	RELAY	ElectroMechSS	34kV	OPERATING	1 CAP B PH OC
Kent County 22	RELAY	ElectroMechSS	34kV	OPERATING	1 CAP A PH OC
Kent County 22	RELAY	ElectroMechSS	34kV	OPERATING	STA CLVG C PH OC
Kent County 22	RELAY	ElectroMechSS	34kV	OPERATING	STA CLVG B PH OC
Kent County 22	RELAY	ElectroMechSS	34kV	OPERATING	3310 GROUND
Kent County 22	RELAY	ElectroMechSS	34kV	OPERATING	3310 C PH OC
Kent County 22	RELAY	ElectroMechSS	34kV	OPERATING	3310 A PH OC
Kent County 22	RELAY	ElectroMechSS	34kV	OPERATING	3312 B PH DDOC
Kent County 22	RELAY	ElectroMechSS	34kV	OPERATING	3312 DDOC
Kent County 22	RELAY	ElectroMechSS	34kV	OPERATING	3311 OCB BF
Kent County 22	RELAY	ElectroMechSS	34kV	OPERATING	11-09 VCB BF
Kent County 22	RELAY	ElectroMechSS	34kV	OPERATING	1 CAP C PH OC
Kent County 22	RELAY	ElectroMechSS	34kV	OPERATING	3312 R
Kent County 22	RELAY	ElectroMechSS	34kV	OPERATING	3312 A PH DDOC
Kent County 22	RELAY	ElectroMechSS	34kV	OPERATING	3312 GROUND
Kent County 22	RELAY	Microprocessor	34kV	OPERATING	3309 BFI
Kent County 22	RELAY	Microprocessor	34kV	OPERATING	3312 BFI
Kent County 22	RELAY	Microprocessor	34kV	OPERATING	3310 BFI
Kent County 22	RELAY	Microprocessor	34kV	OPERATING	7 TR IOC/DOC/DG/BF
Kent County 22	RELAY	Microprocessor	34kV	OPERATING	3311B DOC/DG
Kent County 22	RELAY	Microprocessor	34kV	OPERATING	3309B DOC/DG
Kent County 22	RELAY	Microprocessor	34kV	OPERATING	3309A DOC/DG/R
Kent County 22	RELAY	Microprocessor	34kV	OPERATING	3311A DOC/DG/R
Kent County 22	RELAY	Microprocessor	34kV	OPERATING	BUS TIE OC/G
Kent County 22	RELAY	Microprocessor	34kV	OPERATING	7T34 BFI
Kents Corner 47	RELAY	ElectroMechSS	0kV	OPERATING	UNDERFREQUENCY
Kents Corner 47	RELAY	ElectroMechSS	23kV	OPERATING	2 TR GROUND

location	equip_category	equip_type	equip_class	status	equip_description
Kents Corner 47	RELAY	ElectroMechSS	23kV	OPERATING	1 TR A PH OC
Kents Corner 47	RELAY	ElectroMechSS	23kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Kents Corner 47	RELAY	ElectroMechSS	23kV	OPERATING	1 TR GROUND
Kents Corner 47	RELAY	ElectroMechSS	23kV	OPERATING	2 TR A PH OC
Kents Corner 47	RELAY	ElectroMechSS	23kV	OPERATING	1 TR C PH OC
Kents Corner 47	RELAY	ElectroMechSS	23kV	OPERATING	2 TR B PH OC
Kents Corner 47	RELAY	ElectroMechSS	23kV	OPERATING	2 TR C PH OC
Kents Corner 47	RELAY	ElectroMechSS	23kV	OPERATING	1 TR B PH OC
Kents Corner 47	RELAY	ElectroMechSS	4kV	OPERATING	47J4 R
Kents Corner 47	RELAY	ElectroMechSS	4kV	OPERATING	47J1 A PH OC
Kents Corner 47	RELAY	ElectroMechSS	4kV	OPERATING	47J3 A PH OC
Kents Corner 47	RELAY	ElectroMechSS	4kV	OPERATING	47J3 C PH OC
Kents Corner 47	RELAY	ElectroMechSS	4kV	OPERATING	47J4 B PH OC
Kents Corner 47	RELAY	ElectroMechSS	4kV	OPERATING	47J4 A PH OC
Kents Corner 47	RELAY	ElectroMechSS	4kV	OPERATING	47J3 R
Kents Corner 47	RELAY	ElectroMechSS	4kV	OPERATING	47J4 C PH OC
Kents Corner 47	RELAY	ElectroMechSS	4kV	OPERATING	47J2 B PH OC
Kents Corner 47	RELAY	ElectroMechSS	4kV	OPERATING	47J1 C PH OC
Kents Corner 47	RELAY	ElectroMechSS	4kV	OPERATING	47J1 B PH OC
Kents Corner 47	RELAY	ElectroMechSS	4kV	OPERATING	47J4 GROUND
Kents Corner 47	RELAY	ElectroMechSS	4kV	OPERATING	47J3 GROUND
Kents Corner 47	RELAY	ElectroMechSS	4kV	OPERATING	47J2 GROUND
Kents Corner 47	RELAY	ElectroMechSS	4kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Kents Corner 47	RELAY	ElectroMechSS	4kV	OPERATING	47J1 GROUND
Kents Corner 47	RELAY	ElectroMechSS	4kV	OPERATING	47J2 C PH OC
Kents Corner 47	RELAY	ElectroMechSS	4kV	OPERATING	47J1 R
Kents Corner 47	RELAY	ElectroMechSS	4kV	OPERATING	47J2 A PH OC
Kents Corner 47	RELAY	ElectroMechSS	4kV	OPERATING	47J2 R
Kents Corner 47	RELAY	ElectroMechSS	4kV	OPERATING	47J3 B PH OC
Kenyon 68	RELAY	ElectroMechSS	12kV	OPERATING	T2 GV3 OV 59N
Kenyon 68	RELAY	ElectroMechSS	12kV	OPERATING	T1 GV3 OV 59N
Kenyon 68	RELAY	ElectroMechSS	12kV	OPERATING	2 TR DDOC
Kenyon 68	RELAY	ElectroMechSS	12kV	OPERATING	1 TR DDOC
Kenyon 68	RELAY	ElectroMechSS	12kV	OPERATING	2 TR TLOL T
Kenyon 68	RELAY	ElectroMechSS	12kV	OPERATING	1 TR GROUND
Kenyon 68	RELAY	ElectroMechSS	12kV	OPERATING	C2 OV
Kenyon 68	RELAY	ElectroMechSS	12kV	OPERATING	2 TR VB
Kenyon 68	RELAY	ElectroMechSS	12kV	OPERATING	2 TR TNG
Kenyon 68	RELAY	ElectroMechSS	12kV	OPERATING	2 TR DDOC
Kenyon 68	RELAY	ElectroMechSS	12kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Kenyon 68	RELAY	ElectroMechSS	12kV	OPERATING	1 TR TFP
Kenyon 68	RELAY	ElectroMechSS	12kV	OPERATING	2 TR TFP
Kenyon 68	RELAY	ElectroMechSS	12kV	OPERATING	2 TR TD
Kenyon 68	RELAY	ElectroMechSS	12kV	OPERATING	C1 OV
Kenyon 68	RELAY	ElectroMechSS	12kV	OPERATING	1 TR TNG
Kenyon 68	RELAY	ElectroMechSS	12kV	OPERATING	1 TR DDOC
Kenyon 68	RELAY	ElectroMechSS	12kV	OPERATING	2 TR GROUND
Kenyon 68	RELAY	ElectroMechSS	12kV	OPERATING	1 TR TLOL T
Kenyon 68	RELAY	ElectroMechSS	12kV	OPERATING	1 TR VB
Kenyon 68	RELAY	ElectroMechSS	12kV	OPERATING	1 TR TD
Kenyon 68	RELAY	Microprocessor	12kV	OPERATING	68F2 OC/G (BU)
Kenyon 68	RELAY	Microprocessor	12kV	OPERATING	5-6 TIE R
Kenyon 68	RELAY	Microprocessor	12kV	OPERATING	3-4 TIE R
Kenyon 68	RELAY	Microprocessor	12kV	OPERATING	68F5 OC/G (BU)
Kenyon 68	RELAY	Microprocessor	12kV	OPERATING	68F3 OC/G/R
Kenyon 68	RELAY	Microprocessor	12kV	OPERATING	68F2 OC/G/R
Kenyon 68	RELAY	Microprocessor	12kV	OPERATING	68F1 OC/G (BU)
Kenyon 68	RELAY	Microprocessor	12kV	OPERATING	68F4 OC/G/R
Kenyon 68	RELAY	Microprocessor	12kV	OPERATING	68F3 OC/G (BU)
Kenyon 68	RELAY	Microprocessor	12kV	OPERATING	1-2 TIE R
Kenyon 68	RELAY	Microprocessor	12kV	OPERATING	68F4 OC/G (BU)
Kenyon 68	RELAY	Microprocessor	12kV	OPERATING	68F1 OC/G/R
Kenyon 68	RELAY	Microprocessor	12kV	OPERATING	68F5 OC/G/R

location	equip_category	equip_type	equip_class	status	equip_description
Kilvert Street 87	RELAY	Microprocessor	12kV	OPERATING	test
Kilvert Street 87	RELAY	Microprocessor	12kV	OPERATING	test
Kilvert Street 87	RELAY	ElectroMechSS	12kV	OPERATING	1 TR TFP
Kilvert Street 87	RELAY	ElectroMechSS	12kV	OPERATING	C2 OV
Kilvert Street 87	RELAY	ElectroMechSS	12kV	OPERATING	C1 OV
Kilvert Street 87	RELAY	ElectroMechSS	12kV	OPERATING	1 TR TLOL T
Kilvert Street 87	RELAY	ElectroMechSS	12kV	OPERATING	C1 OV
Kilvert Street 87	RELAY	ElectroMechSS	12kV	OPERATING	2 BUS UV
Kilvert Street 87	RELAY	ElectroMechSS	12kV	OPERATING	2 TR TLOL T
Kilvert Street 87	RELAY	ElectroMechSS	12kV	OPERATING	C2 OV
Kilvert Street 87	RELAY	ElectroMechSS	12kV	OPERATING	C3 OV
Kilvert Street 87	RELAY	ElectroMechSS	12kV	OPERATING	2 TR TFP
Kilvert Street 87	RELAY	ElectroMechSS	12kV	OPERATING	1 BUS UV
Kilvert Street 87	RELAY	ElectroMechSS	12kV	OPERATING	C4 OV
Kilvert Street 87	RELAY	ElectroMechSS	12kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Kilvert Street 87	RELAY	Microprocessor	12kV	OPERATING	test
Kilvert Street 87	RELAY	Microprocessor	12kV	OPERATING	test
Kilvert Street 87	RELAY	Microprocessor	12kV	OPERATING	test
Kilvert Street 87	RELAY	Microprocessor	12kV	OPERATING	87F1/F2 OC/G (BU)
Kilvert Street 87	RELAY	Microprocessor	12kV	OPERATING	1 TR TD/OC/G/TNG
Kilvert Street 87	RELAY	Microprocessor	12kV	OPERATING	2 TR OC/G/TNG/LE
Kilvert Street 87	RELAY	Microprocessor	12kV	OPERATING	87F3/F4 OC/G (BU)
Kilvert Street 87	RELAY	Microprocessor	12kV	OPERATING	C2 OC/G
Kilvert Street 87	RELAY	Microprocessor	12kV	OPERATING	87F2 OC/G/R
Kilvert Street 87	RELAY	Microprocessor	12kV	OPERATING	87F6 OC/G/R
Kilvert Street 87	RELAY	Microprocessor	12kV	OPERATING	2 TR TD/OC/G/TNG
Kilvert Street 87	RELAY	Microprocessor	12kV	OPERATING	87F5 OC/G/R
Kilvert Street 87	RELAY	Microprocessor	12kV	OPERATING	1 TR OC/G/TNG/LE
Kilvert Street 87	RELAY	Microprocessor	12kV	OPERATING	87F1 OC/G/R
Kilvert Street 87	RELAY	Microprocessor	12kV	OPERATING	87F3 OC/G/R
Kilvert Street 87	RELAY	Microprocessor	12kV	OPERATING	87F4 OC/G/R
Kilvert Street 87	RELAY	Microprocessor	12kV	OPERATING	87F5/F6 OC/G (BU)
Kingston 131	RELAY	ElectroMechSS	23kV	OPERATING	3130 OC/G/R
Kingston 131	RELAY	ElectroMechSS	23kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Kingston 131	RELAY	ElectroMechSS	23kV	OPERATING	3120 CO/G/R
Kingston 131	RELAY	ElectroMechSS	4kV	OPERATING	131J4 A PH OC
Kingston 131	RELAY	ElectroMechSS	4kV	OPERATING	131J6 A PH OC
Kingston 131	RELAY	ElectroMechSS	4kV	OPERATING	131J6 B PH OC
Kingston 131	RELAY	ElectroMechSS	4kV	OPERATING	131J4 B PH OC
Kingston 131	RELAY	ElectroMechSS	4kV	OPERATING	131J2 C PH OC
Kingston 131	RELAY	ElectroMechSS	4kV	OPERATING	131J16 R
Kingston 131	RELAY	ElectroMechSS	4kV	OPERATING	131J2 R
Kingston 131	RELAY	ElectroMechSS	4kV	OPERATING	131J16 GROUND
Kingston 131	RELAY	ElectroMechSS	4kV	OPERATING	131J14 A/B/C OC
Kingston 131	RELAY	ElectroMechSS	4kV	OPERATING	131J12 GROUND
Kingston 131	RELAY	ElectroMechSS	4kV	OPERATING	131J12 A/B/C OC
Kingston 131	RELAY	ElectroMechSS	4kV	OPERATING	131J2 GROUND
Kingston 131	RELAY	ElectroMechSS	4kV	OPERATING	131J6 GROUND
Kingston 131	RELAY	ElectroMechSS	4kV	OPERATING	131J6 C PH OC
Kingston 131	RELAY	ElectroMechSS	4kV	OPERATING	131J4 C PH OC
Kingston 131	RELAY	ElectroMechSS	4kV	OPERATING	131J2 A PH OC
Kingston 131	RELAY	ElectroMechSS	4kV	OPERATING	131J12 R
Kingston 131	RELAY	ElectroMechSS	4kV	OPERATING	131J16 A/B/C OC
Kingston 131	RELAY	ElectroMechSS	4kV	OPERATING	131J6 R
Kingston 131	RELAY	ElectroMechSS	4kV	OPERATING	131J2 B PH OC
Kingston 131	RELAY	ElectroMechSS	4kV	OPERATING	131J14 GROUND
Kingston 131	RELAY	ElectroMechSS	4kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Kingston 131	RELAY	ElectroMechSS	4kV	OPERATING	131J14 R
Kingston 131	RELAY	ElectroMechSS	4kV	OPERATING	131J4 R
Kingston 131	RELAY	ElectroMechSS	4kV	OPERATING	131J4 GROUND
Knightsville 66	RELAY	ElectroMechSS	23kV	OPERATING	1 TR A PH TD
Knightsville 66	RELAY	ElectroMechSS	23kV	OPERATING	2 TR C PH TD
Knightsville 66	RELAY	ElectroMechSS	23kV	OPERATING	2 TR B PH TD

location	equip_category	equip_type	equip_class	status	equip_description
Knightsville 66	RELAY	ElectroMechSS	23kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Knightsville 66	RELAY	ElectroMechSS	23kV	OPERATING	1 TR C PH TD
Knightsville 66	RELAY	ElectroMechSS	23kV	OPERATING	2226 UV T
Knightsville 66	RELAY	ElectroMechSS	23kV	OPERATING	2 TR A PH TD
Knightsville 66	RELAY	ElectroMechSS	23kV	OPERATING	1 TR B PH TD
Knightsville 66	RELAY	ElectroMechSS	23kV	OPERATING	2228 UV T
Knightsville 66	RELAY	ElectroMechSS	4kV	OPERATING	66J3 C PH OC
Knightsville 66	RELAY	ElectroMechSS	4kV	OPERATING	66J5 A PH OC
Knightsville 66	RELAY	ElectroMechSS	4kV	OPERATING	66J1 GROUND
Knightsville 66	RELAY	ElectroMechSS	4kV	OPERATING	66J2 GROUND
Knightsville 66	RELAY	ElectroMechSS	4kV	OPERATING	66J1 R
Knightsville 66	RELAY	ElectroMechSS	4kV	OPERATING	66J5 C PH OC
Knightsville 66	RELAY	ElectroMechSS	4kV	OPERATING	66J5 B PH OC
Knightsville 66	RELAY	ElectroMechSS	4kV	OPERATING	66J4 C PH OC
Knightsville 66	RELAY	ElectroMechSS	4kV	OPERATING	66J4 B PH OC
Knightsville 66	RELAY	ElectroMechSS	4kV	OPERATING	66J4 A PH OC
Knightsville 66	RELAY	ElectroMechSS	4kV	OPERATING	66J1 A PH OC
Knightsville 66	RELAY	ElectroMechSS	4kV	OPERATING	66J2 C PH OC
Knightsville 66	RELAY	ElectroMechSS	4kV	OPERATING	66J2 A PH OC
Knightsville 66	RELAY	ElectroMechSS	4kV	OPERATING	66J1 B PH OC
Knightsville 66	RELAY	ElectroMechSS	4kV	OPERATING	66J2 B PH OC
Knightsville 66	RELAY	ElectroMechSS	4kV	OPERATING	66J5 GROUND
Knightsville 66	RELAY	ElectroMechSS	4kV	OPERATING	66J4 GROUND
Knightsville 66	RELAY	ElectroMechSS	4kV	OPERATING	66J3 GROUND
Knightsville 66	RELAY	ElectroMechSS	4kV	OPERATING	66J3 A PH OC
Knightsville 66	RELAY	ElectroMechSS	4kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Knightsville 66	RELAY	ElectroMechSS	4kV	OPERATING	66J2 R
Knightsville 66	RELAY	ElectroMechSS	4kV	OPERATING	5-6 R
Knightsville 66	RELAY	ElectroMechSS	4kV	OPERATING	66J5 R
Knightsville 66	RELAY	ElectroMechSS	4kV	OPERATING	66J3 R
Knightsville 66	RELAY	ElectroMechSS	4kV	OPERATING	66J3 B PH OC
Knightsville 66	RELAY	ElectroMechSS	4kV	OPERATING	3-4 R
Knightsville 66	RELAY	ElectroMechSS	4kV	OPERATING	1-2 R
Knightsville 66	RELAY	ElectroMechSS	4kV	OPERATING	66J1 C PH OC
Knightsville 66	RELAY	ElectroMechSS	4kV	OPERATING	66J4 R
Lafayette 30	RELAY	ElectroMechSS	13kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Lafayette 30	RELAY	Microprocessor	13kV	OPERATING	30F2 OC/G/R
Lafayette 30	RELAY	Microprocessor	13kV	OPERATING	30F1 OC/G/R/NSOV
Lafayette 30	RELAY	Microprocessor	33kV	OPERATING	1 TR BACKUP
Lafayette 30	RELAY	Microprocessor	33kV	OPERATING	UNDERFREQUENCY
Lafayette 30	RELAY	Microprocessor	33kV	OPERATING	2 TR PRIMARY
Lafayette 30	RELAY	Microprocessor	33kV	OPERATING	1 TR PRIMARY
Lafayette 30	RELAY	Microprocessor	33kV	OPERATING	2 TR BACKUP
Lafayette 30	RELAY	ElectroMechSS	34kV	OPERATING	C2 OV
Lafayette 30	RELAY	ElectroMechSS	34kV	OPERATING	C2 RB
Lafayette 30	RELAY	ElectroMechSS	34kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Lafayette 30	RELAY	ElectroMechSS	34kV	OPERATING	C2 UV T
Lakewood 57	RELAY	Microprocessor	0kV	OPERATING	UNDERFREQUENCY
Lakewood 57	RELAY	ElectroMechSS	23kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Lakewood 57	RELAY	ElectroMechSS	23kV	OPERATING	2233 PREF UV T
Lakewood 57	RELAY	ElectroMechSS	23kV	OPERATING	2260 EMER UV T
Lakewood 57	RELAY	ElectroMechSS	23kV	OPERATING	2 TR TCG
Lakewood 57	RELAY	ElectroMechSS	23kV	OPERATING	1 TR TCG
Lakewood 57	RELAY	ElectroMechSS	4kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Lakewood 57	RELAY	Microprocessor	4kV	OPERATING	57J3 OC/G/R
Lakewood 57	RELAY	Microprocessor	4kV	OPERATING	57J2 OC/G/R
Lakewood 57	RELAY	Microprocessor	4kV	OPERATING	57J1 OC/G/R
Lakewood 57	RELAY	Microprocessor	4kV	OPERATING	57J4 (Tie) OC/G/R
Lakewood 57	RELAY	Microprocessor	4kV	OPERATING	57J5 OC/G/R
Langworthy Corner 86	RELAY	ElectroMechSS	0kV	OPERATING	UNDERFREQUENCY
Langworthy Corner 86	RELAY	Microprocessor	12kV	OPERATING	86F1 OC/G/R
Langworthy Corner 86	RELAY	ElectroMechSS	13kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Lincoln Avenue 72	RELAY	ElectroMechSS	0kV	OPERATING	UNDERFREQUENCY

location	equip_category	equip_type	equip_class	status	equip_description
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	72F6 B PH OC
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	5-6 R
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	72F6 R
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	72F5 GROUND
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	72F5 B PH OC
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	72F4 C PH OC
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	72F3 GROUND
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	72F3 B PH OC
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	72F2 GROUND
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	72F2 B PH OC
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	72F1 B PH OC
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	2T115 CS T
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	1 TR DDOC
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	2 TR GROUND
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	72F3 C PH OC
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	1 TR GROUND
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	72F6 A PH OC
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	2 TR TD
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	1 TR TD
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	2 TR DDOC
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	1 TR DDOC
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	72F5 A PH OC
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	2 TR DDOC
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	1T115 CS T
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	1 TR TFP
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	72F4 A PH OC
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	2 TR IOC
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	2 TR TFP
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	1 TR IOC
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	72F3 A PH OC
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	2 TR TNG
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	1 TR TNG
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	72F1 A PH OC
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	1 BUS VB
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	2 BUS VB
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	72F1 GROUND
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	72F1 C PH OC
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	72F2 C PH OC
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	72F2 A PH OC
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	72F4 B PH OC
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	72F5 R
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	72F5 C PH OC
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	72F4 GROUND
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	72F6 GROUND
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	72F6 C PH OC
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	72F1 R
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	1-2 R
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	72F4 R
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	72F3 R
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	72F2 R
Lincoln Avenue 72	RELAY	ElectroMechSS	13kV	OPERATING	3-4 R
Lippitt Hill 79	RELAY	ElectroMechSS	0kV	OPERATING	UNDERFREQUENCY
Lippitt Hill 79	RELAY	ElectroMechSS	13kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Lippitt Hill 79	RELAY	ElectroMechSS	13kV	OPERATING	79F2 A PH OC
Lippitt Hill 79	RELAY	ElectroMechSS	13kV	OPERATING	79F2 GROUND
Lippitt Hill 79	RELAY	ElectroMechSS	13kV	OPERATING	79F1 GROUND
Lippitt Hill 79	RELAY	ElectroMechSS	13kV	OPERATING	79F2 C PH OC
Lippitt Hill 79	RELAY	ElectroMechSS	13kV	OPERATING	79F2 B PH OC
Lippitt Hill 79	RELAY	ElectroMechSS	13kV	OPERATING	79F1 C PH OC
Lippitt Hill 79	RELAY	ElectroMechSS	13kV	OPERATING	79F1 B PH OC
Lippitt Hill 79	RELAY	ElectroMechSS	13kV	OPERATING	79F1 A PH OC
Lippitt Hill 79	RELAY	ElectroMechSS	23kV	OPERATING	2 TR TFP

location	equip_category	equip_type	equip_class	status	equip_description
Lippitt Hill 79	RELAY	ElectroMechSS	23kV	OPERATING	1 TR TFP
Lippitt Hill 79	RELAY	ElectroMechSS	23kV	OPERATING	LOAD SHED DST
Lippitt Hill 79	RELAY	ElectroMechSS	23kV	OPERATING	2 TR TLOL
Lippitt Hill 79	RELAY	ElectroMechSS	23kV	OPERATING	1 TR TLOL
Lippitt Hill 79	RELAY	ElectroMechSS	23kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Lippitt Hill 79	RELAY	Microprocessor	23kV	OPERATING	1 TR OC/G/LE/TNG
Lippitt Hill 79	RELAY	Microprocessor	23kV	OPERATING	2 TR OC/G/TNG
Lippitt Hill 79	RELAY	Microprocessor	23kV	OPERATING	1 TR OC/G/TNG
Lippitt Hill 79	RELAY	Microprocessor	23kV	OPERATING	2 TR OC/G/LE/TNG
Manton 69	RELAY	Microprocessor	0kV	OPERATING	UNDERFREQUENCY
Manton 69	RELAY	ElectroMechSS	12kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Manton 69	RELAY	ElectroMechSS	12kV	OPERATING	69F1 OC/G/R
Manton 69	RELAY	Microprocessor	12kV	OPERATING	69F3 OC/G/R
Manton 69	RELAY	ElectroMechSS	23kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Manton 69	RELAY	ElectroMechSS	23kV	OPERATING	LOAD SHED DST
Manton 69	RELAY	ElectroMechSS	23kV	OPERATING	2 TR TFP
Manton 69	RELAY	Microprocessor	23kV	OPERATING	1 TR TD/OC/G/TNG
Manton 69	RELAY	Microprocessor	23kV	OPERATING	1 TR OC/G/TNG
Merton 51	RELAY	ElectroMechSS	23kV	OPERATING	5120 OC/G/R
Merton 51	RELAY	ElectroMechSS	23kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Merton 51	RELAY	ElectroMechSS	4kV	OPERATING	5112 GROUND
Merton 51	RELAY	ElectroMechSS	4kV	OPERATING	51J2 A PH OC
Merton 51	RELAY	ElectroMechSS	4kV	OPERATING	51J16 GROUND
Merton 51	RELAY	ElectroMechSS	4kV	OPERATING	5116 A/B/C PH OC
Merton 51	RELAY	ElectroMechSS	4kV	OPERATING	5114 A/B/C PH OC
Merton 51	RELAY	ElectroMechSS	4kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Merton 51	RELAY	ElectroMechSS	4kV	OPERATING	5112 A/B/C PH OC
Merton 51	RELAY	ElectroMechSS	4kV	OPERATING	51J2 GROUND
Merton 51	RELAY	ElectroMechSS	4kV	OPERATING	51J2 C PH OC
Merton 51	RELAY	ElectroMechSS	4kV	OPERATING	51J2 B PH OC
Merton 51	RELAY	ElectroMechSS	4kV	OPERATING	5114 GROUND
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	271 TR TFP
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	127W41 A PH OC
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	127W42 B PH OC
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	127C45 C PH OC
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	127C45 BR
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	127W43 R
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	271 TR TNG
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	271 TR C PH TD
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	127W41 GROUND
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	127W43 GROUND
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	127W43 BR
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	127W42 R
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	127W41 R
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	127W40 R
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	127W42 BR
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	127W41 BR
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	127W40 BR
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	127C45 B PH OC
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	127C45 A PH OC
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	127W43 C PH OC
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	127W43 B PH OC
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	127W43 A PH OC
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	127W42 GROUND
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	127W42 C PH OC
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	127W42 A PH OC
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	127W41 C PH OC
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	127W41 B PH OC
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	127W40 C PH OC
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	127W40 B PH OC
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	127W40 A PH OC
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	271 TR C PH OC
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	271 TR B PH OC

location	equip_category	equip_type	equip_class	status	equip_description
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	271 TR A PH OC
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	271 TR B PH TD
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	271 TR A PH TD
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	127C45 GROUND
Nasonville 127	RELAY	ElectroMechSS	13kV	OPERATING	127W40 GROUND
Nasonville 127	RELAY	Microprocessor	13kV	OPERATING	2 TR GV3
Nasonville 127	RELAY	Microprocessor	14kV	OPERATING	Under Frequency
Natick 29	RELAY	ElectroMechSS	12kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Natick 29	RELAY	Microprocessor	12kV	OPERATING	29F1 OC/G/R
Natick 29	RELAY	Microprocessor	12kV	OPERATING	29F2 OC/G/R
Natick 29	RELAY	ElectroMechSS	23kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Natick 29	RELAY	ElectroMechSS	23kV	OPERATING	1 TR TCG
Natick 29	RELAY	ElectroMechSS	23kV	OPERATING	2 TR TFP
Natick 29	RELAY	ElectroMechSS	23kV	OPERATING	1 TR TFP
Natick 29	RELAY	ElectroMechSS	23kV	OPERATING	2 TR TCG
New London Ave 150	RELAY	ElectroMechSS	12kV	OPERATING	2 BUS UV
New London Ave 150	RELAY	ElectroMechSS	12kV	OPERATING	2 STATION SERV UV
New London Ave 150	RELAY	ElectroMechSS	12kV	OPERATING	C2 OV
New London Ave 150	RELAY	ElectroMechSS	12kV	OPERATING	C4 N OV
New London Ave 150	RELAY	ElectroMechSS	12kV	OPERATING	C2 N OV
New London Ave 150	RELAY	Microprocessor	12kV	OPERATING	150F2 BACKUP
New London Ave 150	RELAY	Microprocessor	12kV	OPERATING	150F6 BACKUP
New London Ave 150	RELAY	Microprocessor	12kV	OPERATING	150F4 BACKUP
New London Ave 150	RELAY	Microprocessor	12kV	OPERATING	2 BUS OC
New London Ave 150	RELAY	Microprocessor	12kV	OPERATING	C2 PRIMARY
New London Ave 150	RELAY	Microprocessor	12kV	OPERATING	150F8 BACKUP
New London Ave 150	RELAY	Microprocessor	12kV	OPERATING	C2 BACKUP
New London Ave 150	RELAY	Microprocessor	12kV	OPERATING	C2/C4 CAP CONTROLLER
New London Ave 150	RELAY	Microprocessor	12kV	OPERATING	2 BUS DIFF
Newport 203	RELAY	ElectroMechSS	14kV	OPERATING	C3 N OV (59N-C3)
Newport 203	RELAY	ElectroMechSS	14kV	OPERATING	BUS #1 UV (27-1)
Newport 203	RELAY	ElectroMechSS	14kV	OPERATING	C1 N OV (59N-C1)
Newport 203	RELAY	ElectroMechSS	14kV	OPERATING	BUS #1 OV (59-C1)
Newport 203	RELAY	ElectroMechSS	14kV	OPERATING	SS #1 UV (27L-1)
Newport 203	RELAY	Microprocessor	14kV	OPERATING	#1 BUS DOC
Newport 203	RELAY	Microprocessor	14kV	OPERATING	C1/C3 CAP CONTROLLER
Newport 203	RELAY	Microprocessor	14kV	OPERATING	203W1 BACKUP OC/G
Newport 203	RELAY	Microprocessor	14kV	OPERATING	C1 PRIMARY OC/G
Newport 203	RELAY	Microprocessor	14kV	OPERATING	203W3 PRIMARY OC/G/R
Newport 203	RELAY	Microprocessor	14kV	OPERATING	#1 BUS DIFF
Newport 203	RELAY	Microprocessor	14kV	OPERATING	203W1 PRIMARY OC/G/R
Newport 203	RELAY	Microprocessor	14kV	OPERATING	203W5 BACKUP OC/G
Newport 203	RELAY	Microprocessor	14kV	OPERATING	203W5 PRIMARY OC/G/R
Newport 203	RELAY	Microprocessor	14kV	OPERATING	203W3 BACKUP OC/G
Newport 203	RELAY	Microprocessor	14kV	OPERATING	203W7 PRIMARY OC/G/R
Newport 203	RELAY	Microprocessor	14kV	OPERATING	C1 BACKUP OC/G
Newport 203	RELAY	Microprocessor	14kV	OPERATING	203W7 BACKUP OC/G
North Aquidneck 21	RELAY	ElectroMechSS	4kV	OPERATING	21J4 R
North Aquidneck 21	RELAY	ElectroMechSS	4kV	OPERATING	21J6 R
North Aquidneck 21	RELAY	ElectroMechSS	4kV	OPERATING	21J2 R
North Aquidneck 21	RELAY	ElectroMechSS	4kV	OPERATING	21J6 GROUND
North Aquidneck 21	RELAY	ElectroMechSS	4kV	OPERATING	21J6 C PH OC
North Aquidneck 21	RELAY	ElectroMechSS	4kV	OPERATING	21J6 B PH OC
North Aquidneck 21	RELAY	ElectroMechSS	4kV	OPERATING	21J6 A PH OC
North Aquidneck 21	RELAY	ElectroMechSS	4kV	OPERATING	21J4 C PH OC
North Aquidneck 21	RELAY	ElectroMechSS	4kV	OPERATING	21J4 B PH OC
North Aquidneck 21	RELAY	ElectroMechSS	4kV	OPERATING	21J4 A PH OC
North Aquidneck 21	RELAY	ElectroMechSS	4kV	OPERATING	21J2 C PH OC
North Aquidneck 21	RELAY	ElectroMechSS	4kV	OPERATING	21J2 B PH OC
North Aquidneck 21	RELAY	ElectroMechSS	4kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
North Aquidneck 21	RELAY	ElectroMechSS	4kV	OPERATING	21J2 GROUND
North Aquidneck 21	RELAY	ElectroMechSS	4kV	OPERATING	21J2 A PH OC

location	equip_category	equip_type	equip_class	status	equip_description
North Aquidneck 21	RELAY	ElectroMechSS	4kV	OPERATING	21J4 GROUND
Old Baptist Road 46	RELAY	ElectroMechSS	0kV	OPERATING	UNDERFREQUENCY
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	2 TR B PH DDOC
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	2 TR DDOC T
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	LOAD SHED - DST
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	2 BUS UV
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	2 TR IOC
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	46F1 C PH OC
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	46F2 B PH OC
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	46F3 R
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	46F3 B PH OC
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	46F4 C PH OC
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	1 TR C PH DDOC
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	1 TR B PH DDOC
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	2 TR TNG
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	46F4 R
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	1 TR TNG
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	1 TR GROUND
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	2 TR TD
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	3-4 R
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	1-2 R
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	46F2 R
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	46F4 GROUND
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	46F4 B PH OC
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	46F3 GROUND
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	46F3 C PH OC
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	46F3 A PH OC
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	46F2 GROUND
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	46F2 C PH OC
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	46F1 GROUND
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	46F1 B PH OC
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	1 BUS UV
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	2 BUS VB
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	1 BUS VB
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	1 TR IOC
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	2 TR TFP
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	1 TR TFP
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	1 TR DDOC T
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	2 TR C PH DDOC
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	46F1 A PH OC
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	2 TR A PH DDOC
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	46F2 A PH OC
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	1 TR A PH DDOC
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	2 TR DDOC
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	1 TR DDOC
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	1 TR TD
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	46F4 A PH OC
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	2 TR GROUND
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Old Baptist Road 46	RELAY	ElectroMechSS	13kV	OPERATING	46F1 R
Old Baptist Road 46	RELAY	Microprocessor	13kV	OPERATING	46F2 MF/R
Old Baptist Road 46	RELAY	Microprocessor	13kV	OPERATING	2 TR GV3
Old Baptist Road 46	RELAY	Microprocessor	13kV	OPERATING	L-190 UV
Old Baptist Road 46	RELAY	Microprocessor	13kV	OPERATING	1-2 MF/R
Old Baptist Road 46	RELAY	Microprocessor	13kV	OPERATING	46F1 MF/R
Olneyville 6	RELAY	Microprocessor	0kV	OPERATING	UNDERFREQUENCY
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	1121 C PH OC
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	3 TR C PH OC
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	BUS TIE B PH OC
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	2 TR A PH OC
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	BUS TIE A PH OC
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	1132-1134 C PH BP
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	1132-1134 BPG

location	equip_category	equip_type	equip_class	status	equip_description
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	1132 B PH OC
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	3 TR B PH OC
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	1 TR C PH OC
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	1132 C PH OC
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	1 TR B PH OC
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	1121 A PH OC
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	1134 B PH OC
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	1132-1134 B PH BP
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	3 TR A PH OC
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	1132 GROUND
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	1132-1134 BP
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	1 TR GROUND
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	1121 GROUND
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	1130 A PH OC
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	1132-1134 A PH BP
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	1 TR A PH OC
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	1130 GROUND
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	1130 B PH OC
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	1134 A PH OC
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	1121 B PH OC
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	3 TR GROUND
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	BUS TIE GROUND
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	1134 C PH OC
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	1132 A PH OC
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	BUS TIE C PH OC
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	2 TR GROUND
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	2 TR C PH OC
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	1130 C PH OC
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	1134 GROUND
Olneyville 6	RELAY	ElectroMechSS	11kV	OPERATING	2 TR B PH OC
Olneyville 6	RELAY	Microprocessor	11kV	OPERATING	3 TR TD/OC/G
Olneyville 6	RELAY	Microprocessor	11kV	OPERATING	1130 DOC/DG
Olneyville 6	RELAY	Microprocessor	11kV	OPERATING	1 TR TD/OC/G
Olneyville 6	RELAY	Microprocessor	11kV	OPERATING	2 TR TD/OC/G
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	BUS TIE GROUND
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J5 R
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J2 R
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	BUS TIE R
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J6 R
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J8 GROUND
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J1 GROUND
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J3 A PH OC
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J1 C PH OC
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J3 R
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J4 R
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J4 GROUND
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J8 R
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J2 GROUND
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J5 B PH OC
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J6 B PH OC
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J3 B PH OC
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J1 A PH OC
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J2 A PH OC
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J5 GROUND
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J7 A PH OC
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J5 C PH OC
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J6 A PH OC
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	BUS TIE C PH OC
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J7 B PH OC
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	BUS TIE B PH OC
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	BUS TIE A PH OC

location	equip_category	equip_type	equip_class	status	equip_description
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J8 B PH OC
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J6 C PH OC
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J4 A PH OC
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J8 C PH OC
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J3 C PH OC
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J7 C PH OC
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J8 A PH OC
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J2 B PH OC
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J4 A PH OC
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J2 C PH OC
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J6 GROUND
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J5 A PH OC
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J7 GROUND
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J1 R
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J4 C PH OC
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J1 B PH OC
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J3 GROUND
Olneyville 6	RELAY	ElectroMechSS	4kV	OPERATING	6J7 R
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	73A TR TFP
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W62 R
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	71 TR A PH TD
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W85 R
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W80 R
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	MID BUS BD
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	BT13 R
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W84 R
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W81 R
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W66 R
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W65 R
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W63 R
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W60 R
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W61 R
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W53 R
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W50 R
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W43 R
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	74 TR TFP
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	71 TR C PH TD
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	71 TR B PH TD
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	73A TR C PH TD
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	73A TR A PH TD
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	74 TR B PH TD
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	74 TR A PH TD
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	71 TR C PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	71 TR B PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	71 TR A PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	C2 GROUND
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	C2 A PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W85 GROUND
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W85 C PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W84 GROUND
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W84 C PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W84 A PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W83 C PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W83 B PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W83 A PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W81 GROUND
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W81 C PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W81 A PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W80 GROUND
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W80 A PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	C3 GROUND
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	C3 C PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W66 GROUND

location	equip_category	equip_type	equip_class	status	equip_description
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W66 C PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W66 B PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W65 GROUND
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W65 C PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W65 A PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W63 GROUND
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W63 C PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W63 A PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W62 GROUND
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W62 B PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W62 A PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W61 GROUND
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W61 B PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W61 A PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W60 GROUND
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W60 A PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W50 C PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W3 GROUND
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W1 GROUND
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W3 C PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W3 B PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W2 C PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W2 A PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W1 C PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W1 B PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	C1 BR
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	C1 C PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	C1 B PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W53 B PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W53 A PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W51 C PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W51 A PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W53 GROUND
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W51 GROUND
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W50 GROUND
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W45 GROUND
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W43 GROUND
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W45 C PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W50 A PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W49 C PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W49 B PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W45 B PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W45 A PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W43 C PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W43 B PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W43 A PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	BT13 C PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W51 B PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	BT13 B PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	BT13 A PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W53 C PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	73 BUS C PH BD
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	73 BUS B PH BD
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	C1 GROUND
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	74 TR TNG
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	74 TR C PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	74 TR B PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	74 TR A PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	71 TR TNG
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W3 A PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W2 GROUND
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W60 B PH OC

location	equip_category	equip_type	equip_class	status	equip_description
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W63 B PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W65 B PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	C3 B PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W80 B PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W81 B PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W84 B PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W85 B PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	C2 B PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	74 TR C PH TD
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	73 BUS A PH BD
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	731BT IOC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	BT13 GROUND
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W51 R
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W49 A PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W50 B PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W60 C PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W49 GROUND
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	C1 A PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W1 A PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W2 B PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W61 C PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W62 C PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W66 A PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W80 C PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	C3 A PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	71 TR TFP
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W83 GROUND
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W85 A PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	C2 C PH OC
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	73A TR B PH TD
Pawtucket 1 107 Sub	RELAY	ElectroMechSS	13kV	OPERATING	107W83 R
Pawtucket 1 107 Sub	RELAY	Microprocessor	13kV	OPERATING	UF (81-73)
Pawtucket 1 107 Sub	RELAY	Microprocessor	13kV	OPERATING	T71 OC 50/51/51N-T71
Pawtucket 1 107 Sub	RELAY	Microprocessor	13kV	OPERATING	T71 DIFF/OC 87/51/51N-T71
Pawtucket 1 107 Sub	RELAY	Microprocessor	13kV	OPERATING	T73 DIFF/OC
Pawtucket 1 107 Sub	RELAY	Microprocessor	13kV	OPERATING	73A TR OC/G/TNG
Pawtucket 1 107 Sub	RELAY	Microprocessor	13kV	OPERATING	UF (81-71)
Pawtucket 2 Station 148	RELAY	ElectroMechSS	4kV	OPERATING	480T BT GROUND
Pawtucket 2 Station 148	RELAY	ElectroMechSS	4kV	OPERATING	1 TR A PH OC
Pawtucket 2 Station 148	RELAY	ElectroMechSS	4kV	OPERATING	148J7 B PH OC
Pawtucket 2 Station 148	RELAY	ElectroMechSS	4kV	OPERATING	1 TR GROUND
Pawtucket 2 Station 148	RELAY	ElectroMechSS	4kV	OPERATING	2 TR GROUND
Pawtucket 2 Station 148	RELAY	ElectroMechSS	4kV	OPERATING	148J5 C PH OC
Pawtucket 2 Station 148	RELAY	ElectroMechSS	4kV	OPERATING	148J3 GROUND
Pawtucket 2 Station 148	RELAY	ElectroMechSS	4kV	OPERATING	148J3 B PH OC
Pawtucket 2 Station 148	RELAY	ElectroMechSS	4kV	OPERATING	148J7 R
Pawtucket 2 Station 148	RELAY	ElectroMechSS	4kV	OPERATING	148J5 R
Pawtucket 2 Station 148	RELAY	ElectroMechSS	4kV	OPERATING	148J1 B PH OC
Pawtucket 2 Station 148	RELAY	ElectroMechSS	4kV	OPERATING	148J7 GROUND
Pawtucket 2 Station 148	RELAY	ElectroMechSS	4kV	OPERATING	148J3 R
Pawtucket 2 Station 148	RELAY	ElectroMechSS	4kV	OPERATING	148J1 R
Pawtucket 2 Station 148	RELAY	ElectroMechSS	4kV	OPERATING	148J3 C PH OC
Pawtucket 2 Station 148	RELAY	ElectroMechSS	4kV	OPERATING	148J3 A PH OC
Pawtucket 2 Station 148	RELAY	ElectroMechSS	4kV	OPERATING	148J1 C PH OC
Pawtucket 2 Station 148	RELAY	ElectroMechSS	4kV	OPERATING	148J7 C PH OC
Pawtucket 2 Station 148	RELAY	ElectroMechSS	4kV	OPERATING	480T BT C PH OC
Pawtucket 2 Station 148	RELAY	ElectroMechSS	4kV	OPERATING	480T BT A PH OC
Pawtucket 2 Station 148	RELAY	ElectroMechSS	4kV	OPERATING	148J5 GROUND
Pawtucket 2 Station 148	RELAY	ElectroMechSS	4kV	OPERATING	148J1 GROUND
Pawtucket 2 Station 148	RELAY	ElectroMechSS	4kV	OPERATING	148J7 A PH OC
Pawtucket 2 Station 148	RELAY	ElectroMechSS	4kV	OPERATING	148J5 B PH OC
Pawtucket 2 Station 148	RELAY	ElectroMechSS	4kV	OPERATING	148J5 A PH OC
Pawtucket 2 Station 148	RELAY	ElectroMechSS	4kV	OPERATING	148J1 A PH OC

location	equip_category	equip_type	equip_class	status	equip_description
Pawtucket 2 Station 148	RELAY	ElectroMechSS	4kV	OPERATING	2 TR C PH OC
Pawtucket 2 Station 148	RELAY	ElectroMechSS	4kV	OPERATING	2 TR B PH OC
Pawtucket 2 Station 148	RELAY	ElectroMechSS	4kV	OPERATING	2 TR A PH OC
Pawtucket 2 Station 148	RELAY	ElectroMechSS	4kV	OPERATING	1 TR C PH OC
Pawtucket 2 Station 148	RELAY	ElectroMechSS	4kV	OPERATING	1 TR B PH OC
Pawtucket 2 Station 148	RELAY	ElectroMechSS	4kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Pawtucket 2 Station 148	RELAY	ElectroMechSS	4kV	OPERATING	480T BT B PH OC
Peacedale 59	RELAY	Microprocessor	0kV	OPERATING	UNDERFREQUENCY
Peacedale 59	RELAY	ElectroMechSS	12kV	OPERATING	STA. ALARM
Peacedale 59	RELAY	ElectroMechSS	12kV	OPERATING	3307-2 BUS T
Peacedale 59	RELAY	ElectroMechSS	12kV	OPERATING	2 TR TNG
Peacedale 59	RELAY	ElectroMechSS	12kV	OPERATING	3308-1 BUS T
Peacedale 59	RELAY	ElectroMechSS	12kV	OPERATING	1 TR ALARM
Peacedale 59	RELAY	ElectroMechSS	12kV	OPERATING	2 TR ALARM
Peacedale 59	RELAY	ElectroMechSS	12kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Peacedale 59	RELAY	ElectroMechSS	12kV	OPERATING	1 TR TNG
Peacedale 59	RELAY	Microprocessor	12kV	OPERATING	59F1 OC/G/R
Peacedale 59	RELAY	Microprocessor	12kV	OPERATING	59F2 OC/G/R
Peacedale 59	RELAY	Microprocessor	12kV	OPERATING	3-4 OC/G/R
Peacedale 59	RELAY	Microprocessor	12kV	OPERATING	1-2 TIE OC/G/R
Peacedale 59	RELAY	Microprocessor	12kV	OPERATING	59F4 OC/G/R
Peacedale 59	RELAY	Microprocessor	12kV	OPERATING	59F3 OC/G/R
Peacedale 59	RELAY	ElectroMechSS	34kV	OPERATING	2 TR TFP
Peacedale 59	RELAY	ElectroMechSS	34kV	OPERATING	1 TR TFP
Peacedale 59	RELAY	ElectroMechSS	34kV	OPERATING	2 TR GROUND
Peacedale 59	RELAY	ElectroMechSS	34kV	OPERATING	2 TR C PH OC
Peacedale 59	RELAY	ElectroMechSS	34kV	OPERATING	2 TR B PH OC
Peacedale 59	RELAY	ElectroMechSS	34kV	OPERATING	2 TR A PH OC
Peacedale 59	RELAY	ElectroMechSS	34kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Peacedale 59	RELAY	ElectroMechSS	34kV	OPERATING	LOAD SHED DST
Peacedale 59	RELAY	ElectroMechSS	34kV	OPERATING	1 TR TLOL
Peacedale 59	RELAY	ElectroMechSS	34kV	OPERATING	1 TR C PH OC
Peacedale 59	RELAY	ElectroMechSS	34kV	OPERATING	1 TR GROUND
Peacedale 59	RELAY	ElectroMechSS	34kV	OPERATING	1 TR A PH OC
Peacedale 59	RELAY	ElectroMechSS	34kV	OPERATING	2 TR TLOL
Peacedale 59	RELAY	ElectroMechSS	34kV	OPERATING	1 TR B PH OC
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	2 TR C PH TD
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	LOAD SHED DST
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	2 TR B PH TD
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	1 TR GROUND
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	4342 BFI T
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	2 TR C PH OC
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	1 TR B PH TD
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	2242 GROUND
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	3 TR TFP
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	3 TR C PH OC
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	3 TR GROUND
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	1 TR C PH OC
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	1 TR B PH OC
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	2242 B PH OC
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	2 TR A PH TD
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	1 TR BFI T
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	1 TR TFP
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	2243 C PH OC
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	1 TR A PH OC
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	2243 GROUND
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	1 TR C PH TD
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	2243 A PH OC
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	1 TR A PH TD
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	4342 BFI T
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	2243 B PH OC
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	2 TR B PH OC

location	equip_category	equip_type	equip_class	status	equip_description
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	2242 A PH OC
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	2 TR A PH OC
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	2 TR GROUND
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	2 TR BFI T
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	3 TR B PH OC
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	1 BUS T
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	3 TR A PH OC
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	2 TR TLOL
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	1 TR TLOL
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	2242 C PH OC
Phillipsdale 20	RELAY	ElectroMechSS	23kV	OPERATING	2 BUS T
Point Street 76	RELAY	ElectroMechSS	12kV	OPERATING	1 TR TLOL
Point Street 76	RELAY	ElectroMechSS	12kV	OPERATING	2 TR TLOL
Point Street 76	RELAY	ElectroMechSS	12kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Point Street 76	RELAY	ElectroMechSS	12kV	OPERATING	2 TR TNG
Point Street 76	RELAY	ElectroMechSS	12kV	OPERATING	2 TR TFP
Point Street 76	RELAY	ElectroMechSS	12kV	OPERATING	1 TR TFP
Point Street 76	RELAY	ElectroMechSS	12kV	OPERATING	1T-115 CS TIMER
Point Street 76	RELAY	ElectroMechSS	12kV	OPERATING	1 TR TNG
Point Street 76	RELAY	ElectroMechSS	12kV	OPERATING	2 BUS UV
Point Street 76	RELAY	ElectroMechSS	12kV	OPERATING	1 BUS UV
Point Street 76	RELAY	Microprocessor	12kV	OPERATING	2 TR DOC/G/IOC
Point Street 76	RELAY	Microprocessor	12kV	OPERATING	76F4 S1 OC/G/R
Point Street 76	RELAY	Microprocessor	12kV	OPERATING	76F5 S1 OC/G/R
Point Street 76	RELAY	Microprocessor	12kV	OPERATING	76F7 S1 OC/G/R
Point Street 76	RELAY	Microprocessor	12kV	OPERATING	1 TR DOC/G/IOC
Point Street 76	RELAY	Microprocessor	12kV	OPERATING	76F1 S1 OC/G/R
Point Street 76	RELAY	Microprocessor	12kV	OPERATING	2 TR TD/OC/G
Point Street 76	RELAY	Microprocessor	12kV	OPERATING	76F6 S1 OC/G/R
Point Street 76	RELAY	Microprocessor	12kV	OPERATING	76F3-F4 (BU) S2 OC/G
Point Street 76	RELAY	Microprocessor	12kV	OPERATING	Single Chnl, Open Brkrs keying, Direct Trip Fields Poir
Point Street 76	RELAY	Microprocessor	12kV	OPERATING	76F8 S1 OC/G/R
Point Street 76	RELAY	Microprocessor	12kV	OPERATING	76F7-F8 (BU) S2 OC/G
Point Street 76	RELAY	Microprocessor	12kV	OPERATING	Single Chnl, Open Brkrs keying, Direct Trip NBC only
Point Street 76	RELAY	Microprocessor	12kV	OPERATING	76F5-F6 (BU) S2 OC/G
Point Street 76	RELAY	Microprocessor	12kV	OPERATING	76F1-F2 (BU) S2 OC/G
Point Street 76	RELAY	Microprocessor	12kV	OPERATING	76F3 S1 OC/G/R
Point Street 76	RELAY	Microprocessor	12kV	OPERATING	76F2 S1 OC/G/R
Point Street 76	RELAY	Microprocessor	12kV	OPERATING	1 TR TD/OC/G
Pontiac 27	RELAY	ElectroMechSS	0kV	OPERATING	UNDERFREQUENCY
Pontiac 27	RELAY	ElectroMechSS	13kV	OPERATING	1 TR TLOL
Pontiac 27	RELAY	ElectroMechSS	13kV	OPERATING	2 TR TLOL
Pontiac 27	RELAY	ElectroMechSS	13kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Pontiac 27	RELAY	ElectroMechSS	13kV	OPERATING	2 TR TFP
Pontiac 27	RELAY	ElectroMechSS	13kV	OPERATING	1 TR TFP
Pontiac 27	RELAY	ElectroMechSS	13kV	OPERATING	LOAD SHED - DST
Pontiac 27	RELAY	Microprocessor	13kV	OPERATING	3-4 OC/G/R
Pontiac 27	RELAY	Microprocessor	13kV	OPERATING	27F2 OC/G/R
Pontiac 27	RELAY	Microprocessor	13kV	OPERATING	27F4 OC/G/R
Pontiac 27	RELAY	Microprocessor	13kV	OPERATING	27F1 OC/G/R
Pontiac 27	RELAY	Microprocessor	13kV	OPERATING	5-6 OC/G/R
Pontiac 27	RELAY	Microprocessor	13kV	OPERATING	27F6 OC/G/R
Pontiac 27	RELAY	Microprocessor	13kV	OPERATING	27F3 OC/G/R
Pontiac 27	RELAY	Microprocessor	13kV	OPERATING	27F5 OC/G/R
Pontiac 27	RELAY	Microprocessor	13kV	OPERATING	1-2 OC/G/R
Pontiac 27	RELAY	Microprocessor	23kV	OPERATING	1 TR OC
Pontiac 27	RELAY	Microprocessor	23kV	OPERATING	1 TR DIFF
Pontiac 27	RELAY	Microprocessor	23kV	OPERATING	2 TR DIFF
Pontiac 27	RELAY	Microprocessor	23kV	OPERATING	2 TR OC
Putnam Pike 38	RELAY	ElectroMechSS	0kV	OPERATING	UNDERFREQUENCY
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	38F3 GROUND
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	2 TR TNG
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	C2 OV

location	equip_category	equip_type	equip_class	status	equip_description
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	1 TR TNG
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	C2 OV
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	2 TR C PH DDOC
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	2 TR DDOC T
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	1 TR TD
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	2 TR DDOC
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	2 TR VB
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	1 TR DDOC T
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	2 TR IOC
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	1 TR DDOC
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	1 TR C PH DDOC
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	2 TR TD
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	2 TR TFP
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	2 TR A PH DDOC
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	2 TR B PH DDOC
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	38F3 C PH OC
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	38F3 B PH OC
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	1 TR IOC
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	1 TR A PH DDOC
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	1 TR TFP
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	1 TR VB
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	38F2 A PH OC
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	38F1 GROUND
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	38F4 B PH OC
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	38F1 A PH OC
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	38F2 C PH OC
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	38F2 GROUND
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	38F4 A PH OC
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	38F3 A PH OC
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	38F4 C PH OC
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	38F2 B PH OC
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	38F1 B PH OC
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	38F6 OC/G/R
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	38F1 C PH OC
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	C1 UV
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	C2 UV
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	38F5 OC/G/R
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	C1 OV T
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	C1 OV
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	C1 OV
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	2 TR GROUND
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	1 TR GROUND
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	C2 OV T
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	38F2 R
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	3-4 R
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	38F3 R
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	5-6 R
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	38F4 R
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	38F4 GROUND
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	1-2 R
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	1 TR B PH DDOC
Putnam Pike 38	RELAY	ElectroMechSS	13kV	OPERATING	38F1 R
Putnam Pike 38	RELAY	Microprocessor	13kV	OPERATING	38F6 (BU) OC/G
Putnam Pike 38	RELAY	Microprocessor	13kV	OPERATING	C1-C2 OC/NSOC/G
Putnam Pike 38	RELAY	Microprocessor	13kV	OPERATING	38F5 (BU) OC/G
Quonset 83	RELAY	ElectroMechSS	12kV	OPERATING	C2 N OV
Quonset 83	RELAY	ElectroMechSS	12kV	OPERATING	#1 STATION SERV UV
Quonset 83	RELAY	ElectroMechSS	12kV	OPERATING	#2 BUS UV
Quonset 83	RELAY	ElectroMechSS	12kV	OPERATING	#1 BUS UV
Quonset 83	RELAY	ElectroMechSS	12kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Quonset 83	RELAY	ElectroMechSS	12kV	OPERATING	C2 OV
Quonset 83	RELAY	ElectroMechSS	12kV	OPERATING	C3 N OV

location	equip_category	equip_type	equip_class	status	equip_description
Quonset 83	RELAY	ElectroMechSS	12kV	OPERATING	#2 STATION SERV UV
Quonset 83	RELAY	ElectroMechSS	12kV	OPERATING	C1 OV
Quonset 83	RELAY	ElectroMechSS	12kV	OPERATING	C1 N OV
Quonset 83	RELAY	ElectroMechSS	12kV	OPERATING	C4 N OV
Quonset 83	RELAY	Microprocessor	12kV	OPERATING	C1 BACKUP
Quonset 83	RELAY	Microprocessor	12kV	OPERATING	83F2 PRIMARY
Quonset 83	RELAY	Microprocessor	12kV	OPERATING	83F4 BACKUP
Quonset 83	RELAY	Microprocessor	12kV	OPERATING	83F1 PRIMARY
Quonset 83	RELAY	Microprocessor	12kV	OPERATING	83F3 BACKUP
Quonset 83	RELAY	Microprocessor	12kV	OPERATING	83F1 BACKUP
Quonset 83	RELAY	Microprocessor	12kV	OPERATING	C2/C4 CAP CONTROLLER
Quonset 83	RELAY	Microprocessor	12kV	OPERATING	83F2 BACKUP
Quonset 83	RELAY	Microprocessor	12kV	OPERATING	83F4 PRIMARY
Quonset 83	RELAY	Microprocessor	12kV	OPERATING	83F3 PRIMARY
Quonset 83	RELAY	Microprocessor	12kV	OPERATING	12 TIE RECLOSING
Quonset 83	RELAY	Microprocessor	12kV	OPERATING	C1/C3 CAP CONTROLLER
Quonset 83	RELAY	Microprocessor	12kV	OPERATING	34 TIE RECLOSING
Quonset 83	RELAY	Microprocessor	12kV	OPERATING	C1 PRIMARY
Quonset 83	RELAY	Microprocessor	12kV	OPERATING	C2 PRIMARY
Quonset 83	RELAY	Microprocessor	12kV	OPERATING	C2 BACKUP
Quonset 83	RELAY	ElectroMechSS	34kV	OPERATING	1 TR TFP
Quonset 83	RELAY	ElectroMechSS	34kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Quonset 83	RELAY	ElectroMechSS	34kV	OPERATING	2 LTC TFP
Quonset 83	RELAY	ElectroMechSS	34kV	OPERATING	2 TR TFP
Quonset 83	RELAY	Microprocessor	34kV	OPERATING	2 TR DIFF
Quonset 83	RELAY	Microprocessor	34kV	OPERATING	1 TR OC
Quonset 83	RELAY	Microprocessor	34kV	OPERATING	1 TR DIFF
Quonset 83	RELAY	Microprocessor	34kV	OPERATING	2 TR OC
Raytheon - Portsmouth	RELAY	ElectroMechSS	13kV	OPERATING	15RA1 A PH OC
Raytheon - Portsmouth	RELAY	ElectroMechSS	13kV	OPERATING	15RA1 GROUND OC
Raytheon - Portsmouth	RELAY	ElectroMechSS	13kV	OPERATING	15RA2 A PH OC
Raytheon - Portsmouth	RELAY	ElectroMechSS	13kV	OPERATING	15RA2 GROUND OC
Raytheon - Portsmouth	RELAY	ElectroMechSS	13kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Raytheon - Portsmouth	RELAY	ElectroMechSS	13kV	OPERATING	15RA1 B PH OC
Raytheon - Portsmouth	RELAY	ElectroMechSS	13kV	OPERATING	15RA1 C PH OC
Raytheon - Portsmouth	RELAY	ElectroMechSS	13kV	OPERATING	15RA2 B PH OC
Raytheon - Portsmouth	RELAY	ElectroMechSS	13kV	OPERATING	15RA2 C PH OC
Riverside 108	RELAY	ElectroMechSS	13kV	OPERATING	108C82 OC/G
Riverside 108	RELAY	ElectroMechSS	13kV	OPERATING	108W63 OC/G/R
Riverside 108	RELAY	ElectroMechSS	13kV	OPERATING	82 TR TFP (TLC)
Riverside 108	RELAY	ElectroMechSS	13kV	OPERATING	108W62 OC/G/R
Riverside 108	RELAY	ElectroMechSS	13kV	OPERATING	82 TR TLOL (LTC)
Riverside 108	RELAY	ElectroMechSS	13kV	OPERATING	82 BUS B PH BD
Riverside 108	RELAY	ElectroMechSS	13kV	OPERATING	108W65 OC/G/R
Riverside 108	RELAY	ElectroMechSS	13kV	OPERATING	108W61 OC/G/R
Riverside 108	RELAY	ElectroMechSS	13kV	OPERATING	108W55 OC/G/R
Riverside 108	RELAY	ElectroMechSS	13kV	OPERATING	108C81 OC/G
Riverside 108	RELAY	ElectroMechSS	13kV	OPERATING	82 BUS C PH BD
Riverside 108	RELAY	ElectroMechSS	13kV	OPERATING	81 BUS A PH BD
Riverside 108	RELAY	ElectroMechSS	13kV	OPERATING	81 TR TD
Riverside 108	RELAY	ElectroMechSS	13kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Riverside 108	RELAY	ElectroMechSS	13kV	OPERATING	81 BUS C PH BD
Riverside 108	RELAY	ElectroMechSS	13kV	OPERATING	82 BUS A PH BD
Riverside 108	RELAY	ElectroMechSS	13kV	OPERATING	108W60 OC/G/R
Riverside 108	RELAY	ElectroMechSS	13kV	OPERATING	81 BUS B PH BD
Riverside 108	RELAY	ElectroMechSS	13kV	OPERATING	108W53 OC/G/R
Riverside 108	RELAY	ElectroMechSS	13kV	OPERATING	82 TR TD
Riverside 108	RELAY	ElectroMechSS	13kV	OPERATING	81 TR TFP
Riverside 108	RELAY	ElectroMechSS	13kV	OPERATING	82 TR TLOL (MAIN)
Riverside 108	RELAY	ElectroMechSS	13kV	OPERATING	82 TR TFP (MAIN)
Riverside 108	RELAY	ElectroMechSS	13kV	OPERATING	108W51 OC/G/R
Riverside 108	RELAY	Microprocessor	13kV	OPERATING	82 Transformer OC
Riverside 108	RELAY	Microprocessor	13kV	OPERATING	81 Bus Feeder B/U

location	equip_category	equip_type	equip_class	status	equip_description
Riverside 108	RELAY	Microprocessor	13kV	OPERATING	82 Bus Feeder B/U
Riverside 108	RELAY	Microprocessor	13kV	OPERATING	81 Transformer OC
Rochambeau Avenue 37	RELAY	ElectroMechSS	13kV	OPERATING	2 TR 1110 TFP
Rochambeau Avenue 37	RELAY	ElectroMechSS	23kV	OPERATING	1 TR 2248 TFP
Rochambeau Avenue 37	RELAY	ElectroMechSS	23kV	OPERATING	1 TR 2248 TNG
Rochambeau Avenue 37	RELAY	ElectroMechSS	23kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Rochambeau Avenue 37	RELAY	ElectroMechSS	23kV	OPERATING	1 BUS UV
Rochambeau Avenue 37	RELAY	ElectroMechSS	23kV	OPERATING	1 TR 2248 B PH OC
Rochambeau Avenue 37	RELAY	ElectroMechSS	23kV	OPERATING	1 TR 2248 C PH OC
Rochambeau Avenue 37	RELAY	ElectroMechSS	23kV	OPERATING	1 TR 2248 A PH OC
Rochambeau Avenue 37	RELAY	ElectroMechSS	23kV	OPERATING	1 TR 2248 GROUND
Rochambeau Avenue 37	RELAY	Microprocessor	23kV	OPERATING	2248 DTT
Rochambeau Avenue 37	RELAY	ElectroMechSS	4kV	OPERATING	1-2 R
Rochambeau Avenue 37	RELAY	ElectroMechSS	4kV	OPERATING	37J5 GROUND
Rochambeau Avenue 37	RELAY	ElectroMechSS	4kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Rochambeau Avenue 37	RELAY	ElectroMechSS	4kV	OPERATING	1 BUS UV AL
Rochambeau Avenue 37	RELAY	ElectroMechSS	4kV	OPERATING	37J1 C PH OC
Rochambeau Avenue 37	RELAY	ElectroMechSS	4kV	OPERATING	1 TR TNG
Rochambeau Avenue 37	RELAY	ElectroMechSS	4kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Rochambeau Avenue 37	RELAY	ElectroMechSS	4kV	OPERATING	37J5 R
Rochambeau Avenue 37	RELAY	ElectroMechSS	4kV	OPERATING	37J1 B PH OC
Rochambeau Avenue 37	RELAY	ElectroMechSS	4kV	OPERATING	2 BUS UV
Rochambeau Avenue 37	RELAY	ElectroMechSS	4kV	OPERATING	2 BUS UV AL
Rochambeau Avenue 37	RELAY	ElectroMechSS	4kV	OPERATING	37J1 GROUND
Rochambeau Avenue 37	RELAY	ElectroMechSS	4kV	OPERATING	37J3 A PH OC
Rochambeau Avenue 37	RELAY	ElectroMechSS	4kV	OPERATING	37J2 A PH OC
Rochambeau Avenue 37	RELAY	ElectroMechSS	4kV	OPERATING	37J2 B PH OC
Rochambeau Avenue 37	RELAY	ElectroMechSS	4kV	OPERATING	37J3 GROUND
Rochambeau Avenue 37	RELAY	ElectroMechSS	4kV	OPERATING	37J2 R
Rochambeau Avenue 37	RELAY	ElectroMechSS	4kV	OPERATING	37J3 R
Rochambeau Avenue 37	RELAY	ElectroMechSS	4kV	OPERATING	37J3 B PH OC
Rochambeau Avenue 37	RELAY	ElectroMechSS	4kV	OPERATING	37J5 A PH OC
Rochambeau Avenue 37	RELAY	ElectroMechSS	4kV	OPERATING	37J5 C PH OC
Rochambeau Avenue 37	RELAY	ElectroMechSS	4kV	OPERATING	37J4 GROUND
Rochambeau Avenue 37	RELAY	ElectroMechSS	4kV	OPERATING	37J3 C PH OC
Rochambeau Avenue 37	RELAY	ElectroMechSS	4kV	OPERATING	3-4 R
Rochambeau Avenue 37	RELAY	ElectroMechSS	4kV	OPERATING	5-6 R
Rochambeau Avenue 37	RELAY	ElectroMechSS	4kV	OPERATING	37J5 B PH OC
Rochambeau Avenue 37	RELAY	ElectroMechSS	4kV	OPERATING	37J4 B PH OC
Rochambeau Avenue 37	RELAY	ElectroMechSS	4kV	OPERATING	37J4 A PH OC
Rochambeau Avenue 37	RELAY	ElectroMechSS	4kV	OPERATING	2 BUS UV T
Rochambeau Avenue 37	RELAY	ElectroMechSS	4kV	OPERATING	1 BUS UV T
Rochambeau Avenue 37	RELAY	ElectroMechSS	4kV	OPERATING	37J4 C PH OC
Rochambeau Avenue 37	RELAY	ElectroMechSS	4kV	OPERATING	37J1 A PH OC
Rochambeau Avenue 37	RELAY	ElectroMechSS	4kV	OPERATING	37J2 GROUND
Rochambeau Avenue 37	RELAY	ElectroMechSS	4kV	OPERATING	37J4 R
Rochambeau Avenue 37	RELAY	ElectroMechSS	4kV	OPERATING	37J1 R
Rochambeau Avenue 37	RELAY	ElectroMechSS	4kV	OPERATING	37J2 C PH OC
Shun Pike 128	RELAY	Microprocessor	13kV	OPERATING	128L1 OC/G/R Primary
Shun Pike 128	RELAY	Microprocessor	13kV	OPERATING	128L1 OC/G Back-up
Shun Pike 128	RELAY	Microprocessor	13kV	OPERATING	1 TR OC/G/TNG Back-up
Shun Pike 128	RELAY	Microprocessor	13kV	OPERATING	1 TR TD/OC/G/TNG Primary
Sockanosset 24	RELAY	ElectroMechSS	23kV	OPERATING	LOAD SHED DST
Sockanosset 24	RELAY	ElectroMechSS	23kV	OPERATING	1 BUS B PH BOC
Sockanosset 24	RELAY	ElectroMechSS	23kV	OPERATING	2 BUS A PH BOC
Sockanosset 24	RELAY	ElectroMechSS	23kV	OPERATING	C12 C PH OC
Sockanosset 24	RELAY	ElectroMechSS	23kV	OPERATING	C12 GROUND
Sockanosset 24	RELAY	ElectroMechSS	23kV	OPERATING	2 BUS B PH BOC
Sockanosset 24	RELAY	ElectroMechSS	23kV	OPERATING	2235 R
Sockanosset 24	RELAY	ElectroMechSS	23kV	OPERATING	33-35 R
Sockanosset 24	RELAY	ElectroMechSS	23kV	OPERATING	1 TR TNDG
Sockanosset 24	RELAY	ElectroMechSS	23kV	OPERATING	2 TR T
Sockanosset 24	RELAY	ElectroMechSS	23kV	OPERATING	C2 OV

location	equip_category	equip_type	equip_class	status	equip_description
Sockanosset 24	RELAY	ElectroMechSS	23kV	OPERATING	C1 OV
Sockanosset 24	RELAY	ElectroMechSS	23kV	OPERATING	2 TR TNDG
Sockanosset 24	RELAY	ElectroMechSS	23kV	OPERATING	2233 A PH OC
Sockanosset 24	RELAY	ElectroMechSS	23kV	OPERATING	2 BUS BG
Sockanosset 24	RELAY	ElectroMechSS	23kV	OPERATING	1 BUS C PH BOC
Sockanosset 24	RELAY	ElectroMechSS	23kV	OPERATING	2 TR TNDG
Sockanosset 24	RELAY	ElectroMechSS	23kV	OPERATING	1 TR TNDG
Sockanosset 24	RELAY	ElectroMechSS	23kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Sockanosset 24	RELAY	ElectroMechSS	23kV	OPERATING	2235 C PH OC
Sockanosset 24	RELAY	ElectroMechSS	23kV	OPERATING	2233 RB
Sockanosset 24	RELAY	ElectroMechSS	23kV	OPERATING	1 TR T
Sockanosset 24	RELAY	ElectroMechSS	23kV	OPERATING	2233 C PH OC
Sockanosset 24	RELAY	ElectroMechSS	23kV	OPERATING	2235 RB
Sockanosset 24	RELAY	ElectroMechSS	23kV	OPERATING	2 BUS C PH BOC
Sockanosset 24	RELAY	ElectroMechSS	23kV	OPERATING	2233 R
Sockanosset 24	RELAY	ElectroMechSS	23kV	OPERATING	C12 B PH OC
Sockanosset 24	RELAY	ElectroMechSS	23kV	OPERATING	1 BUS BG
Sockanosset 24	RELAY	ElectroMechSS	23kV	OPERATING	2235 GROUND
Sockanosset 24	RELAY	ElectroMechSS	23kV	OPERATING	2235 B PH OC
Sockanosset 24	RELAY	ElectroMechSS	23kV	OPERATING	2235 A PH OC
Sockanosset 24	RELAY	ElectroMechSS	23kV	OPERATING	2233 B PH OC
Sockanosset 24	RELAY	ElectroMechSS	23kV	OPERATING	2233 GROUND
Sockanosset 24	RELAY	ElectroMechSS	23kV	OPERATING	1 BUS A PH BOC
Sockanosset 24	RELAY	ElectroMechSS	23kV	OPERATING	1 TR TLOL
Sockanosset 24	RELAY	ElectroMechSS	23kV	OPERATING	C12 A PH OC
Sockanosset 24	RELAY	ElectroMechSS	23kV	OPERATING	2 TR TLOL
Sockanosset 24	RELAY	Microprocessor	23kV	OPERATING	2 TR DIFF
Sockanosset 24	RELAY	Microprocessor	23kV	OPERATING	1 TR DDOC/IOC
Sockanosset 24	RELAY	Microprocessor	23kV	OPERATING	2 TR DOC
Sockanosset 24	RELAY	Microprocessor	23kV	OPERATING	1 TR DOC
Sockanosset 24	RELAY	Microprocessor	23kV	OPERATING	1 TR DIFF
Sockanosset 24	RELAY	Microprocessor	23kV	OPERATING	2 TR DDOC/IOC
South Aquidneck 122	RELAY	ElectroMechSS	4kV	OPERATING	122J4 GROUND
South Aquidneck 122	RELAY	ElectroMechSS	4kV	OPERATING	122J2 R
South Aquidneck 122	RELAY	ElectroMechSS	4kV	OPERATING	122J6 GROUND
South Aquidneck 122	RELAY	ElectroMechSS	4kV	OPERATING	122J2 A-B-C PH OC
South Aquidneck 122	RELAY	ElectroMechSS	4kV	OPERATING	122J4 A-B-C PH OC
South Aquidneck 122	RELAY	ElectroMechSS	4kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
South Aquidneck 122	RELAY	ElectroMechSS	4kV	OPERATING	122J4 R
South Aquidneck 122	RELAY	ElectroMechSS	4kV	OPERATING	122J6 R
South Aquidneck 122	RELAY	ElectroMechSS	4kV	OPERATING	122J2 GROUND
South Aquidneck 122	RELAY	ElectroMechSS	4kV	OPERATING	122J6 A-B-C PH OC
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	2B12-1 BFI/SYNC 25/50/50N/62-3F3
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	C21 SEC OC 51/51N/46-C21B
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	SEC 3 BUS 1 DIFF SEC 87-B31B
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1158 LINE DIFF/DOC/DG 87L/67/67N-10A
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1B23 SEC DIFF 87-1B23B
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1166 DOC/DG 67/67N-34B
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	2T2 BFI/SYNC 25/50/50N/62-3K3
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	SEC 3 BUS 2 DIFF PRI 87-B32A
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1102 DOC/DG 67/67N-40B
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	Arc Flash B31B Sec 3-1
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1151 DOC/DG 67/67N-24B
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	Arc Flash B11A Sec 1-1
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1T1 BFI/SYNC 25/50/50N/62-3D1
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1113 DOC/DG 67/67N-42A
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1152 BFI/SYNC 25/50/50N/62-3L1
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	2248 BFI/SYNC 25/50/50N/62-3J1
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	2T1 BFI/SYNC 25/50/50N/62-3K1
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	3T1 BFI/SYNC 25/50/50N/62-3R1
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1104 DOC/DG 67/67N-41B
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1B23 PRI DIFF 87-1B23A
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	SEC 1 BUS 2 DIFF SEC 87-B12B

location	equip_category	equip_type	equip_class	status	equip_description
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1160 LINE DIFF/DOC/DG 87L/67/67N-5A
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	Arc Flash B21B Sec 2-1
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1TR NEUTRAL DIFF 87N-T1
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	04-13 BFI/SYNC 25/50/50N/62-3W2
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1114 BFI/SYNC 25/50/50N/62-3S1
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	2216 BFI/SYNC 25/50/50N/62-3E1
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1160 DOC/DG 67/67N-5B
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1104 BFI/SYNC 25/50/50N/62-3W1
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	Arc Flash B12A Sec 1-2
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	2248 LINE DOC/DG 67/51N-17B
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	SEC 1 BUS 2 DIFF PRI 87-B12A
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	Arc Flash B31D Sec 3-1
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	2201 DOC/DG 67/51N-4B
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1B23-2 BFI/SYNC 25/50/50N/62-3P1
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	2201 BFI/SYNC 25/50/50N/62-3B3
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1134 BFI/SYNC 25/50/50N/62-3T3
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	3TR DOC/DG 67/67N/51N-T3LB
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1101 BFI/SYNC 25/50/50N/62-3D3
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	Arc Flash B32A Sec 3-2
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	02-11 BFI/SYNC 25/50/50N/62-3V2
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	2248 LINE DOC/DG 67/51N-17A
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	3T2 BFI/SYNC 25/50/50N/62-3R3 (FUTURE)
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	C21 PRI OC 51/51N/46-C21A
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1134 DOC/DG 67/67N-36A
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	2B12 PRI DIFF 87-2B12A
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1171 BFI/SYNC 25/50/50N/62-3C3
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	Arc Flash B22B Sec 2-2
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	C23 SEC OC 51/51N/46-C23B
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1102 BFI/SYNC 25/50/50N/62-3V3
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1162 LINE DIFF/DOC/DG 87L/67/67N-22A
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	2B23-2 BFI/SYNC 25/50/50N/62-3P3
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1135 BFI/SYNC 25/50/50N/62-3U3
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	2B12 SEC DIFF 87-2B12B
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	24 LINE 67/51N-18B
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1102 DOC/DG 67/67N-40A
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	14-66 BFI/SYNC 25/50/50N/62-3S2
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1T-01 BFI/SYNC 25/50/50N/62-3D2
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	C21 BFI 50/51N/62-3A3
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	2201 DOC/DG 67/51N-4A
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1169 DOC/DG 67/67N-3A
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	SEC 2 BUS 1 DIFF PRI 87-B21A
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	C22 SEC OC 51/51N/46-C22B
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1169 BFI/SYNC 25/50/50N/62-3B1
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	C22 BFI 50/50N/62-3H3
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	2216 DOC/DG 67/51N-9A
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1B12 SEC DIFF 87-1B12B
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1166 LINE DIFF/DOC/DG 87/67/67N-34A
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	69-01 BFI/SYNC 25/50/50N/62-3B2
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	C21 MTR 55-C21/C41
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1106 BFI/SYNC 25/50/50N/62-3C1
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1162 DOC/DG 67/67N-22B
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1B12-2 BFI/SYNC 25/50/50N/62-3G1
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1113 DOC/DG 67/67N-42B
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	60-71 BFI/SYNC 25/50/50N/62-3C2
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	C22 PRI OC 51/51N/46-C22A
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1111 BFI/SYNC 25/50/50N/62-3V1
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	3TR NEUTRAL DIFF 87N-T3
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	52-62 BFI/SYNC 25/50/50N/62-3L2
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	2TR NEUTRAL DIFF 87N-T2
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	SEC 1 BUS 1 DIFF SEC 87-B11B
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	2B23 PRI DIFF 87-2B23A
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	SP3 (SPARE) BFI/SYNC 25/50/50N/62-3X3
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1151 BFI/SYNC 25/50/50N/62-3M3

location	equip_category	equip_type	equip_class	status	equip_description
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1158 DOC/DG 67/67N-10B
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1101 DOC/DG 67/67N-8A
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	68-3 BFI/SYNC 25/50/50N/62-3X2
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1168 DOC/DG 67/67N-43B
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1106 BFI/SYNC 25/50/50N/62-3U1
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1127DOC/DG 67/67N-35B
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1151 DOC/DG 67/67N-24A
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1114 DOC/DG 67/67N-33A
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1111 DOC/DG 67/67N-39B
South Street Switch Yard	RELAY	Microprocessor	11kV	SPARE	SP3 (SPARE) 67/67N-44B
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	SEC 2 BUS 1 DIFF SEC 87-B21B
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1B23-1 BFI/SYNC 25/50/50N/62-3N1
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	Arc Flash B11B Sec 1-1
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	2B23-1 BFI/SYNC 25/50/50N/62-3N3
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1B12 PRI DIFF 87-1B12A
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	3T12 BFI/SYNC 25/50/50N/62-3R2
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	SEC 2 BUS 2 DIFF PRI 87-B22A
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	SEC 3 BUS 2 DIFF SEC 87-B32B
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1162 BFI/SYNC 25/50/50N/62-3L3
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	48-24 BFI/SYNC 25/50/50N/62-3J2
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	3TR DOC/DG 67/67N/51N-T3LA
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	2TR DOC/DG/TNG 67/67N/51N-T2LB
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	Arc Flash B32C Sec 3-2
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	27-34 BFI/SYNC 25/50/50N/62-3T2
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1152 DOC/DG 67/67N-21A
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1135 DOC/DG 67/67N-38B
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	Arc Flash B21A Sec 2-1
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	06-35 BFI/SYNC 25/50/50N/62-3U2
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	24 BFI/SYNC 25/50/50N/62-3J3
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	Arc Flash B22A Sec 2-2
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1158 BFI/SYNC 25/50/50N/62-3E3
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1106 DOC/DG 67/67N-37A
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	Arc Flash B31C Sec 3-1
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	2B23 SEC DIFF 87-2B23B
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	C22 MTR 55-C22/C42
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	2TR DOC/DG/TNG 67/67N/51N-T2LA
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1113 BFI/SYNC 25/50/50N/62-3W3
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	C23 PRI OC 51/51N/46-C23A
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	SEC 3 BUS 1 DIFF PRI 87-B31A
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1168 BFI/SYNC 25/50/50N/62-3X1
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	16-58 BFI/SYNC 25/50/50N/62-3E2
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1114 DOC/DG 67/67N-33B
South Street Switch Yard	RELAY	Microprocessor	11kV	SPARE	2T2 (FUTURE) 67/67N-20A
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1164 LINE DIFF/DOC/DG 87/67/67N-23A
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1169 DOC/DG 67/67N-3B
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	Arc Flash B32D Sec 3-2
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	2T12 BFI/SYNC 25/50/50N/62-3K2
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1TR DOC/DG/TNG 67/67N/51N-T1LA
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1B12-1 BFI/SYNC 25/50/50N/62-3F1
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	24 LINE 67/51N-18A
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1101 DOC/DG 67/67N-8B
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1TR DOC/DG/TNG 67/67N/51N-T1LB
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1104 DOC/DG 67/67N-41A
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	SEC 1 BUS 1 DIFF PRI 87-B11A
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1164 BFI/SYNC 25/50/50N/62-3M1
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1171 DOC/DG 67/67N-6A
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	2216 DOC/DG 67/51N-9B
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1168 LINE DIFF/DOC/DG 87L/67/67N-43A
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1152 DOC/DG 67/67N-21B
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1127 DOC/DG 67/67N-35A
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	1171 DOC/DG 67/67N-6B
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	Arc Flash B12B Sec 1-2
South Street Switch Yard	RELAY	Microprocessor	11kV	OPERATING	2B12-2 BFI/SYNC 25/50/50N/62-3G3

location	equip_category	equip_type	equip_class	status	equip_description
South Street Switch Yard	RELAY	Microprocessor	11kv	OPERATING	SEC 2 BUS 2 DIFF SEC 87-B22B
South Street Switch Yard	RELAY	Microprocessor	11kv	SPARE	3T2 (FUTURE) 67/67N-32B
South Street Switch Yard	RELAY	Microprocessor	11kv	OPERATING	1111 DOC/DG 67/67N-39A
South Street Switch Yard	RELAY	Microprocessor	11kv	SPARE	SP3 (SPARE) 67/67N-44A
South Street Switch Yard	RELAY	Microprocessor	11kv	OPERATING	1127 BFI/SYNC 25/50/50N/62-3T1
South Street Switch Yard	RELAY	Microprocessor	11kv	OPERATING	1135 DOC/DG 67/67N-38A
South Street Switch Yard	RELAY	Microprocessor	11kv	OPERATING	C23 BFI 50/50N/62-3Q3
South Street Switch Yard	RELAY	Microprocessor	11kv	OPERATING	1166 BFI/SYNC 25/50/50N/62-3S3
South Street Switch Yard	RELAY	Microprocessor	11kv	OPERATING	64-51 BFI/SYNC 25/50/50N/62-3M2
South Street Switch Yard	RELAY	Microprocessor	11kv	OPERATING	1134 DOC/DG 67/67N-36B
South Street Switch Yard	RELAY	Microprocessor	11kv	OPERATING	Arc Flash B31A Sec 3-1
South Street Switch Yard	RELAY	Microprocessor	11kv	SPARE	3T2 (FUTURE) 67/67N-32A
South Street Switch Yard	RELAY	Microprocessor	11kv	OPERATING	Arc Flash B32B Sec 3-2
South Street Switch Yard	RELAY	Microprocessor	11kv	OPERATING	1106 DOC/DG 67/67N-37B
South Street Switch Yard	RELAY	Microprocessor	11kv	SPARE	2T2 (FUTURE) 67/67N-20B
South Street Switch Yard	RELAY	Microprocessor	11kv	OPERATING	1164 DOC/DG 67/67N-23B
South Street Switch Yard	RELAY	ElectroMechSS	23kv	OPERATING	2248 TR FP
South Street Switch Yard	RELAY	ElectroMechSS	23kv	OPERATING	24 TR FP
South Street Switch Yard	RELAY	ElectroMechSS	23kv	OPERATING	2216 LINE OV 59N-9
South Street Switch Yard	RELAY	ElectroMechSS	23kv	OPERATING	24 LINE OV 59N-18
South Street Switch Yard	RELAY	ElectroMechSS	23kv	OPERATING	2201 TR FP
South Street Switch Yard	RELAY	ElectroMechSS	23kv	OPERATING	2216 TR FP
South Street Switch Yard	RELAY	ElectroMechSS	23kv	OPERATING	2201 LINE OV 59N-4
South Street Switch Yard	RELAY	ElectroMechSS	23kv	OPERATING	2248 LINE OV 59N-17
Spare Providence	RELAY	Microprocessor	12kv	SPARE	6 TR TD/OC/G/TDG
Spare Providence	RELAY	Microprocessor	34kv	SPARE	7 TR TD/OC/G
Spare Providence	RELAY	Microprocessor	34kv	SPARE	1 TR (BU) DOC/G
Spare Providence	RELAY	Microprocessor	34kv	SPARE	2 TR (BU) DOC/G
Sprague Street 36	RELAY	ElectroMechSS	23kv	OPERATING	2201 GV1
Sprague Street 36	RELAY	ElectroMechSS	23kv	OPERATING	2203 GV1
Sprague Street 36	RELAY	ElectroMechSS	23kv	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Sprague Street 36	RELAY	ElectroMechSS	23kv	OPERATING	2201 UV
Sprague Street 36	RELAY	ElectroMechSS	23kv	OPERATING	2203 UV
Sprague Street 36	RELAY	ElectroMechSS	4kv	OPERATING	36J2 C PH OC
Sprague Street 36	RELAY	ElectroMechSS	4kv	OPERATING	36J2 GROUND
Sprague Street 36	RELAY	ElectroMechSS	4kv	OPERATING	1 BUS B PH DOC
Sprague Street 36	RELAY	ElectroMechSS	4kv	OPERATING	2 BUS C PH DOC
Sprague Street 36	RELAY	ElectroMechSS	4kv	OPERATING	2 BUS B PH DOC
Sprague Street 36	RELAY	ElectroMechSS	4kv	OPERATING	1 BUS A PH DOC
Sprague Street 36	RELAY	ElectroMechSS	4kv	OPERATING	36J1 A PH OC
Sprague Street 36	RELAY	ElectroMechSS	4kv	OPERATING	3-4 R
Sprague Street 36	RELAY	ElectroMechSS	4kv	OPERATING	36J2 A PH OC
Sprague Street 36	RELAY	ElectroMechSS	4kv	OPERATING	36J5 A PH OC
Sprague Street 36	RELAY	ElectroMechSS	4kv	OPERATING	1 BUS C PH DOC
Sprague Street 36	RELAY	ElectroMechSS	4kv	OPERATING	36J2 B PH OC
Sprague Street 36	RELAY	ElectroMechSS	4kv	OPERATING	36J5-2 BUS R
Sprague Street 36	RELAY	ElectroMechSS	4kv	OPERATING	36J3 B PH OC
Sprague Street 36	RELAY	ElectroMechSS	4kv	OPERATING	36J5-1 BUS R
Sprague Street 36	RELAY	ElectroMechSS	4kv	OPERATING	36J4 C PH OC
Sprague Street 36	RELAY	ElectroMechSS	4kv	OPERATING	36J2 R
Sprague Street 36	RELAY	ElectroMechSS	4kv	OPERATING	36J1 R
Sprague Street 36	RELAY	ElectroMechSS	4kv	OPERATING	36J5 B PH OC
Sprague Street 36	RELAY	ElectroMechSS	4kv	OPERATING	36J4 B PH OC
Sprague Street 36	RELAY	ElectroMechSS	4kv	OPERATING	36J3 C PH OC
Sprague Street 36	RELAY	ElectroMechSS	4kv	OPERATING	36J3 R
Sprague Street 36	RELAY	ElectroMechSS	4kv	OPERATING	2 BUS A PH DOC
Sprague Street 36	RELAY	ElectroMechSS	4kv	OPERATING	36J5 GROUND
Sprague Street 36	RELAY	ElectroMechSS	4kv	OPERATING	36J3 GROUND
Sprague Street 36	RELAY	ElectroMechSS	4kv	OPERATING	36J5 C PH OC
Sprague Street 36	RELAY	ElectroMechSS	4kv	OPERATING	36J4 A PH OC
Sprague Street 36	RELAY	ElectroMechSS	4kv	OPERATING	2 BUS DOC
Sprague Street 36	RELAY	ElectroMechSS	4kv	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Sprague Street 36	RELAY	ElectroMechSS	4kv	OPERATING	1 BUS DOC

location	equip_category	equip_type	equip_class	status	equip_description
Sprague Street 36	RELAY	ElectroMechSS	4kV	OPERATING	36J1 GROUND
Sprague Street 36	RELAY	ElectroMechSS	4kV	OPERATING	36J4 GROUND
Sprague Street 36	RELAY	ElectroMechSS	4kV	OPERATING	36J1 B PH OC
Sprague Street 36	RELAY	ElectroMechSS	4kV	OPERATING	36J3 A PH OC
Sprague Street 36	RELAY	ElectroMechSS	4kV	OPERATING	1-2 R
Sprague Street 36	RELAY	ElectroMechSS	4kV	OPERATING	36J1 C PH OC
Sprague Street 36	RELAY	Microprocessor	4kV	OPERATING	UNDERFREQUENCY
Staples 112	RELAY	ElectroMechSS	0kV	OPERATING	UNDERFREQUENCY
Staples 112	RELAY	ElectroMechSS	0kV	OPERATING	UNDERFREQUENCY
Staples 112	RELAY	ElectroMechSS	13kV	OPERATING	112W41 A PH OC
Staples 112	RELAY	ElectroMechSS	13kV	OPERATING	124 TR TL0L (MAIN)
Staples 112	RELAY	ElectroMechSS	13kV	OPERATING	112W42 B PH OC
Staples 112	RELAY	ElectroMechSS	13kV	OPERATING	112W42 A PH OC
Staples 112	RELAY	ElectroMechSS	13kV	OPERATING	112W43 A PH OC
Staples 112	RELAY	ElectroMechSS	13kV	OPERATING	112W43 GROUND
Staples 112	RELAY	ElectroMechSS	13kV	OPERATING	112W44 B PH OC
Staples 112	RELAY	ElectroMechSS	13kV	OPERATING	112C45 B PH OC
Staples 112	RELAY	ElectroMechSS	13kV	OPERATING	124 TR TFP (MAIN)
Staples 112	RELAY	ElectroMechSS	13kV	OPERATING	112W44 R
Staples 112	RELAY	ElectroMechSS	13kV	OPERATING	112W43 R
Staples 112	RELAY	ElectroMechSS	13kV	OPERATING	112C45 C PH OC
Staples 112	RELAY	ElectroMechSS	13kV	OPERATING	124 TR S2 B PH OC
Staples 112	RELAY	ElectroMechSS	13kV	OPERATING	112W42 C PH OC
Staples 112	RELAY	ElectroMechSS	13kV	OPERATING	112W44 GROUND
Staples 112	RELAY	ElectroMechSS	13kV	OPERATING	112W41 R
Staples 112	RELAY	ElectroMechSS	13kV	OPERATING	112C45 A PH OC
Staples 112	RELAY	ElectroMechSS	13kV	OPERATING	124 TR S2 C PH OC
Staples 112	RELAY	ElectroMechSS	13kV	OPERATING	124 TR S2 A PH OC
Staples 112	RELAY	ElectroMechSS	13kV	OPERATING	112W43 C PH OC
Staples 112	RELAY	ElectroMechSS	13kV	OPERATING	112W41 B PH OC
Staples 112	RELAY	ElectroMechSS	13kV	OPERATING	124 TR TNG
Staples 112	RELAY	ElectroMechSS	13kV	OPERATING	112C45 GROUND
Staples 112	RELAY	ElectroMechSS	13kV	OPERATING	124 TR TFP (LTC)
Staples 112	RELAY	ElectroMechSS	13kV	OPERATING	124 TR TL0L (LTC)
Staples 112	RELAY	ElectroMechSS	13kV	OPERATING	112W42 R
Staples 112	RELAY	ElectroMechSS	13kV	OPERATING	112W41 GROUND
Staples 112	RELAY	ElectroMechSS	13kV	OPERATING	112W43 B PH OC
Staples 112	RELAY	ElectroMechSS	13kV	OPERATING	112W44 A PH OC
Staples 112	RELAY	ElectroMechSS	13kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Staples 112	RELAY	ElectroMechSS	13kV	OPERATING	112W42 GROUND
Staples 112	RELAY	ElectroMechSS	13kV	OPERATING	112W44 C PH OC
Staples 112	RELAY	ElectroMechSS	13kV	OPERATING	124 TR S2 GROUND
Staples 112	RELAY	ElectroMechSS	13kV	OPERATING	112W41 C PH OC
Tiogue Ave 100	RELAY	ElectroMechSS	13kV	OPERATING	1 TR TNG
Tiogue Ave 100	RELAY	Microprocessor	13kV	OPERATING	100F1
Tiogue Ave 100	RELAY	ElectroMechSS	33kV	OPERATING	1 TR FP
Tiogue Ave 100	RELAY	Microprocessor	33kV	OPERATING	1 TR HIGH SIDE
Tiverton 2 33	RELAY	ElectroMechSS	0kV	OPERATING	UNDERFREQUENCY
Tiverton 2 33	RELAY	ElectroMechSS	13kV	OPERATING	1 TR DP
Tiverton 2 33	RELAY	ElectroMechSS	13kV	OPERATING	2 TR DP
Tiverton 2 33	RELAY	ElectroMechSS	13kV	OPERATING	2 TR A PH OC
Tiverton 2 33	RELAY	ElectroMechSS	13kV	OPERATING	1 TR A PH OC
Tiverton 2 33	RELAY	ElectroMechSS	13kV	OPERATING	33F3 R
Tiverton 2 33	RELAY	ElectroMechSS	13kV	OPERATING	2 BUS UV
Tiverton 2 33	RELAY	ElectroMechSS	13kV	OPERATING	33F3 B PH OC
Tiverton 2 33	RELAY	ElectroMechSS	13kV	OPERATING	1 BUS UV
Tiverton 2 33	RELAY	ElectroMechSS	13kV	OPERATING	33F4 B PH OC
Tiverton 2 33	RELAY	ElectroMechSS	13kV	OPERATING	33F4 C PH OC
Tiverton 2 33	RELAY	ElectroMechSS	13kV	OPERATING	2 TR A PH TD
Tiverton 2 33	RELAY	ElectroMechSS	13kV	OPERATING	33F1 B PH OC
Tiverton 2 33	RELAY	ElectroMechSS	13kV	OPERATING	33F3 A PH OC
Tiverton 2 33	RELAY	ElectroMechSS	13kV	OPERATING	33F1 C PH OC
Tiverton 2 33	RELAY	ElectroMechSS	13kV	OPERATING	33F3 C PH OC

location	equip_category	equip_type	equip_class	status	equip_description
Tiverton 2 33	RELAY	ElectroMechSS	13kv	OPERATING	33F2 C PH OC
Tiverton 2 33	RELAY	ElectroMechSS	13kv	OPERATING	33F2 B PH OC
Tiverton 2 33	RELAY	ElectroMechSS	13kv	OPERATING	33F1 A PH OC
Tiverton 2 33	RELAY	ElectroMechSS	13kv	OPERATING	2 TR GROUND
Tiverton 2 33	RELAY	ElectroMechSS	13kv	OPERATING	2 TR TFP
Tiverton 2 33	RELAY	ElectroMechSS	13kv	OPERATING	1 TR TNG
Tiverton 2 33	RELAY	ElectroMechSS	13kv	OPERATING	LOAD SHED DST
Tiverton 2 33	RELAY	ElectroMechSS	13kv	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Tiverton 2 33	RELAY	ElectroMechSS	13kv	OPERATING	1 TR TFP
Tiverton 2 33	RELAY	ElectroMechSS	13kv	OPERATING	2 TR TLOL
Tiverton 2 33	RELAY	ElectroMechSS	13kv	OPERATING	33F2 A PH OC
Tiverton 2 33	RELAY	ElectroMechSS	13kv	OPERATING	2 TR B PH OC
Tiverton 2 33	RELAY	ElectroMechSS	13kv	OPERATING	1 TR B PH OC
Tiverton 2 33	RELAY	ElectroMechSS	13kv	OPERATING	1 TR B PH TD
Tiverton 2 33	RELAY	ElectroMechSS	13kv	OPERATING	33F1 GROUND
Tiverton 2 33	RELAY	ElectroMechSS	13kv	OPERATING	2 TR TNG
Tiverton 2 33	RELAY	ElectroMechSS	13kv	OPERATING	33F2 GROUND
Tiverton 2 33	RELAY	ElectroMechSS	13kv	OPERATING	2 TR B PH TD
Tiverton 2 33	RELAY	ElectroMechSS	13kv	OPERATING	1 TR GROUND
Tiverton 2 33	RELAY	ElectroMechSS	13kv	OPERATING	33F4 GROUND
Tiverton 2 33	RELAY	ElectroMechSS	13kv	OPERATING	33F3 GROUND
Tiverton 2 33	RELAY	ElectroMechSS	13kv	OPERATING	3-4 R
Tiverton 2 33	RELAY	ElectroMechSS	13kv	OPERATING	2 TR C PH TD
Tiverton 2 33	RELAY	ElectroMechSS	13kv	OPERATING	1-2 R
Tiverton 2 33	RELAY	ElectroMechSS	13kv	OPERATING	33F4 R
Tiverton 2 33	RELAY	ElectroMechSS	13kv	OPERATING	33F1 R
Tiverton 2 33	RELAY	ElectroMechSS	13kv	OPERATING	1 TR TLOL
Tiverton 2 33	RELAY	ElectroMechSS	13kv	OPERATING	33F2 R
Tiverton 2 33	RELAY	ElectroMechSS	13kv	OPERATING	2 TR C PH OC
Tiverton 2 33	RELAY	ElectroMechSS	13kv	OPERATING	1 TR A PH TD
Tiverton 2 33	RELAY	ElectroMechSS	13kv	OPERATING	1 TR C PH TD
Tiverton 2 33	RELAY	ElectroMechSS	13kv	OPERATING	1 TR C PH OC
Tiverton 2 33	RELAY	ElectroMechSS	13kv	OPERATING	33F4 A PH OC
Tower Hill 88	RELAY	ElectroMechSS	12kv	OPERATING	1TR TFP MAIN TANK
Tower Hill 88	RELAY	ElectroMechSS	12kv	OPERATING	1 TR TFP MAIN TANK
Tower Hill 88	RELAY	ElectroMechSS	12kv	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Tower Hill 88	RELAY	ElectroMechSS	12kv	OPERATING	1TR TFP LTC
Tower Hill 88	RELAY	ElectroMechSS	12kv	OPERATING	1TR LOL MAIN TANK
Tower Hill 88	RELAY	ElectroMechSS	12kv	OPERATING	C3 OV
Tower Hill 88	RELAY	ElectroMechSS	12kv	OPERATING	C1 OV
Tower Hill 88	RELAY	ElectroMechSS	12kv	OPERATING	1 BUS UV
Tower Hill 88	RELAY	ElectroMechSS	12kv	OPERATING	1TR LOL MAIN TANK
Tower Hill 88	RELAY	ElectroMechSS	12kv	OPERATING	1TR TFP LTC
Tower Hill 88	RELAY	ElectroMechSS	12kv	OPERATING	1TR LOL LTC
Tower Hill 88	RELAY	ElectroMechSS	12kv	OPERATING	1TR LOL LTC
Tower Hill 88	RELAY	Microprocessor	12kv	OPERATING	1TR TD/OC/G
Tower Hill 88	RELAY	Microprocessor	12kv	OPERATING	88F5 OC/G/R
Tower Hill 88	RELAY	Microprocessor	12kv	OPERATING	88F1 / F3 OC/G
Tower Hill 88	RELAY	Microprocessor	12kv	OPERATING	88F5 / F7 OC/G
Tower Hill 88	RELAY	Microprocessor	12kv	OPERATING	1TR DOC/G/IOC
Tower Hill 88	RELAY	Microprocessor	12kv	OPERATING	88F7 OC/G/R (NIS - FUTURE)
Tower Hill 88	RELAY	Microprocessor	12kv	OPERATING	88F3 OC/G/R
Tower Hill 88	RELAY	Microprocessor	12kv	OPERATING	88F1 OC/G/R
Tower Hill 88	RELAY	Microprocessor	12kv	OPERATING	1 BUS DIFF
Tower Hill 88	RELAY	Microprocessor	12kv	OPERATING	1 BUS OC/G
Valley Sub 102	RELAY	ElectroMechSS	13kv	OPERATING	102W41 B PH OC
Valley Sub 102	RELAY	ElectroMechSS	13kv	OPERATING	102W54 R
Valley Sub 102	RELAY	ElectroMechSS	13kv	OPERATING	22 TR B PH OC
Valley Sub 102	RELAY	ElectroMechSS	13kv	OPERATING	21 TR TNG
Valley Sub 102	RELAY	ElectroMechSS	13kv	OPERATING	21 TR A PH TD
Valley Sub 102	RELAY	ElectroMechSS	13kv	OPERATING	22 TR A PH OC
Valley Sub 102	RELAY	ElectroMechSS	13kv	OPERATING	22 TR B PH TD
Valley Sub 102	RELAY	ElectroMechSS	13kv	OPERATING	102C43 A PH OC

location	equip_category	equip_type	equip_class	status	equip_description
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102W52 A PH OC
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102W42 A PH OC
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	21 TR B PH OC
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	21 TR TFP
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	22 BUS C PH BD
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	21 BUS B PH BD
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	22 BUS B PH BD
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	21 TR C PH OC
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102W42 C PH OC
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102W44 A PH OC
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102C43 B PH OC
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102W50 B PH OC
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	21 BUS A PH BD
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102W51 A PH OC
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	22 TR C PH OC
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102W41 GROUND
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102W44 C PH OC
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102W41 C PH OC
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102W42 B PH OC
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102W50 C PH OC
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102W44 GROUND
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102W54 C PH OC
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102W52 B PH OC
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102W52 C PH OC
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102C53 A PH OC
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102C53 B PH OC
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102W54 GROUND
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102C43 R
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102W41 R
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102C43 GROUND
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102W54 B PH OC
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102W51 R
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102W50 R
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102C53 C PH OC
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102W50 GROUND
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102W54 A PH OC
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102W51 B PH OC
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102W50 A PH OC
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102C43 C PH OC
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102W42 GROUND
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102W51 C PH OC
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102W41 A PH OC
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	21 TR A PH OC
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	21 BUS C PH BD
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	22 TR C PH TD
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	22 TR A PH TD
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	21 TR B PH TD
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102W52 GROUND
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102W52 R
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102W44 B PH OC
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102W44 R
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	22 BUS A PH BD
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102C53 GROUND
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102W42 R
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	22 TR TNG
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	21 TR C PH TD
Valley Sub 102	RELAY	ElectroMechSS	13kV	OPERATING	102W51 GROUND
Valley Sub 102	RELAY	ElectroMechSS	23kV	OPERATING	23 TR TNG
Valley Sub 102	RELAY	ElectroMechSS	23kV	OPERATING	23 TR A PH TD
Valley Sub 102	RELAY	ElectroMechSS	23kV	OPERATING	23 TR B PH OC
Valley Sub 102	RELAY	ElectroMechSS	23kV	OPERATING	23 TR TFP
Valley Sub 102	RELAY	ElectroMechSS	23kV	OPERATING	23 TR B PH TD
Valley Sub 102	RELAY	ElectroMechSS	23kV	OPERATING	23 TR A PH OC

location	equip_category	equip_type	equip_class	status	equip_description
Valley Sub 102	RELAY	ElectroMechSS	23kV	OPERATING	23 TR C PH OC
Valley Sub 102	RELAY	ElectroMechSS	23kV	OPERATING	23 TR C PH TD
Valley Sub 102	RELAY	Microprocessor	23kV	OPERATING	102K22 Station Breaker Form 6
Wakefield 17	RELAY	ElectroMechSS	0kV	OPERATING	UNDERFREQUENCY
Wakefield 17	RELAY	ElectroMechSS	12kV	OPERATING	17F2 A PH OC
Wakefield 17	RELAY	ElectroMechSS	12kV	OPERATING	17F1 R
Wakefield 17	RELAY	ElectroMechSS	12kV	OPERATING	3 TR TNG
Wakefield 17	RELAY	ElectroMechSS	12kV	OPERATING	17F3 GROUND
Wakefield 17	RELAY	ElectroMechSS	12kV	OPERATING	17F3 R
Wakefield 17	RELAY	ElectroMechSS	12kV	OPERATING	17F2 R
Wakefield 17	RELAY	ElectroMechSS	12kV	OPERATING	17F3 B PH OC
Wakefield 17	RELAY	ElectroMechSS	12kV	OPERATING	5TR TNG
Wakefield 17	RELAY	ElectroMechSS	12kV	OPERATING	17F2 C PH OC
Wakefield 17	RELAY	ElectroMechSS	12kV	OPERATING	17F1 A PH OC
Wakefield 17	RELAY	ElectroMechSS	12kV	OPERATING	17F3 C PH OC
Wakefield 17	RELAY	ElectroMechSS	12kV	OPERATING	17F2 B PH OC
Wakefield 17	RELAY	ElectroMechSS	12kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Wakefield 17	RELAY	ElectroMechSS	12kV	OPERATING	17F1 B PH OC
Wakefield 17	RELAY	ElectroMechSS	12kV	OPERATING	17F3 A PH OC
Wakefield 17	RELAY	ElectroMechSS	12kV	OPERATING	17F1 C PH OC
Wakefield 17	RELAY	ElectroMechSS	12kV	OPERATING	17F2 GROUND
Wakefield 17	RELAY	ElectroMechSS	12kV	OPERATING	17F1 GROUND
Wakefield 17	RELAY	ElectroMechSS	34kV	OPERATING	3 TR IOC
Wakefield 17	RELAY	ElectroMechSS	34kV	OPERATING	C2 OV
Wakefield 17	RELAY	ElectroMechSS	34kV	OPERATING	3307 UV
Wakefield 17	RELAY	ElectroMechSS	34kV	OPERATING	BUS GROUND
Wakefield 17	RELAY	ElectroMechSS	34kV	OPERATING	3 TR GROUND
Wakefield 17	RELAY	ElectroMechSS	34kV	OPERATING	5 TR TLOL T
Wakefield 17	RELAY	ElectroMechSS	34kV	OPERATING	5 TR GROUND
Wakefield 17	RELAY	ElectroMechSS	34kV	OPERATING	3 TR TFP
Wakefield 17	RELAY	ElectroMechSS	34kV	OPERATING	3 TR TLOL T
Wakefield 17	RELAY	ElectroMechSS	34kV	OPERATING	5 TR A PH OC
Wakefield 17	RELAY	ElectroMechSS	34kV	OPERATING	BUS A PH OC
Wakefield 17	RELAY	ElectroMechSS	34kV	OPERATING	3 TR C PH OC
Wakefield 17	RELAY	ElectroMechSS	34kV	OPERATING	3308 UV
Wakefield 17	RELAY	ElectroMechSS	34kV	OPERATING	4 TR TFP
Wakefield 17	RELAY	ElectroMechSS	34kV	OPERATING	3302 UV
Wakefield 17	RELAY	ElectroMechSS	34kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Wakefield 17	RELAY	ElectroMechSS	34kV	OPERATING	BUS C PH OC
Wakefield 17	RELAY	ElectroMechSS	34kV	OPERATING	1 BUS UV
Wakefield 17	RELAY	ElectroMechSS	34kV	OPERATING	5 TR TFP
Wakefield 17	RELAY	ElectroMechSS	34kV	OPERATING	5 TR IOC
Wakefield 17	RELAY	ElectroMechSS	34kV	OPERATING	3 TR A PH OC
Wakefield 17	RELAY	ElectroMechSS	34kV	OPERATING	5 TR B PH OC
Wakefield 17	RELAY	ElectroMechSS	34kV	OPERATING	5 TR C PH OC
Wakefield 17	RELAY	ElectroMechSS	34kV	OPERATING	3 TR B PH OC
Wakefield 17	RELAY	ElectroMechSS	34kV	OPERATING	BUS B PH OC
Wakefield 17	RELAY	ElectroMechSS	34kV	OPERATING	1 BUS UV
Wakefield 17	RELAY	Microprocessor	34kV	OPERATING	3307 DOC/DG
Wakefield 17	RELAY	Microprocessor	34kV	OPERATING	3302 DOC/DG
Wakefield 17	RELAY	Microprocessor	34kV	OPERATING	3308 DOC/DG/R
Wakefield 17	RELAY	Microprocessor	34kV	OPERATING	3308 DOC/DG
Wakefield 17	RELAY	Microprocessor	34kV	OPERATING	3302 DOC/DG/R
Wakefield 17	RELAY	Microprocessor	34kV	OPERATING	SYNC 3301 brkr
Wakefield 17	RELAY	Microprocessor	34kV	OPERATING	3301 DDOC SEC
Wakefield 17	RELAY	Microprocessor	34kV	OPERATING	3301 LD/DD/DDG/DG PRI
Wakefield 17	RELAY	Microprocessor	34kV	OPERATING	3307 DOC/DG/R
Wampanoag 48	RELAY	ElectroMechSS	0kV	OPERATING	UNDERFREQUENCY
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	48F6 A PH OC
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	48F4 C PH OC
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	48F1 GROUND
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	48F5 A PH OC
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	48F2 B PH OC

location	equip_category	equip_type	equip_class	status	equip_description
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	48F1 C PH OC
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	48F2 GROUND
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	1 TR T
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	48F3 C PH OC
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	48F5 B PH OC
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	48F6 R
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	48F1 B PH OC
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	48F2 C PH OC
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	48F3 A PH OC
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	48F3 R
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	48F3 B PH OC
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	48F4 R
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	48F5 R
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	48F6 C PH OC
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	1-2 R
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	48F5 C PH OC
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	48F6 B PH OC
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	3-4 R
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	2 TR TFP
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	48F1 R
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	48F6 GROUND
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	48F2 R
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	48F1 A PH OC
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	48F4 B PH OC
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	48F4 GROUND
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	5-6 R
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	48F2 A PH OC
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	1 TR TFP
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	48F5 GROUND
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	48F4 A PH OC
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	48F3 GROUND
Wampanoag 48	RELAY	ElectroMechSS	12kV	OPERATING	2 TR T
Warren 5	RELAY	ElectroMechSS	0kV	OPERATING	UNDERFREQUENCY
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	2 BUS VB
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	3-4 R
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	1 TR TD
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	2 TR C PH DDOC
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	2 TR IOC
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	5F1 A PH OC
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	2 TR TFP
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	1 TR TFP
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	5F2 C PH OC
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	1-2 R
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	1 BUS VB
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	5F3 GROUND
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	5F1 B PH OC
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	5F2 R
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	5F4 GROUND
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	5F4 B PH OC
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	5F1 C PH OC
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	2 TR TD
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	5F3 C PH OC
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	5F3 R
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	1 TR C PH DDOC
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	1 TR B PH DDOC
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	5F1 GROUND
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	1 TR TNG
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	5F3 A PH OC
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	5F2 B PH OC
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	2 TR T
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	2 TR B PH DDOC
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	1 TR A PH DDOC

location	equip_category	equip_type	equip_class	status	equip_description
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	5F4 R
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	5F4 A PH OC
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	1 TR IOC
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	5F3 B PH OC
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	5F4 C PH OC
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	5F2 A PH OC
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	1 TR T
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	1 TR GROUND
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	2 TR A PH DDOC
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	5F2 GROUND
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	2 TR GROUND
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	2 TR DDOC
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	1 TR DDOC
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	2 TR TNG
Warren 5	RELAY	ElectroMechSS	12kV	OPERATING	5F1 R
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	5 TR T
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	6 TR T
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	2291 R
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	6 TR DDOC
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	5 TR DDOC
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	2295 GROUND
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	6 TR A PH TD
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	2295 C PH OC
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	2295 R
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	6 TR TLOL T
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	BUS B PH BD
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	6 TR B PH TD
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	BUS A PH BD
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	6 TR A PH DDOC
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	2291 B PH OC
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	2291 A PH OC
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	2295 A PH OC
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	5 TR B PH DDOC
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	BUS BDG
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	6 TR IOC
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	BUS C PH BD
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	5 TR IOC
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	5 TR DP
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	6 TR C PH DDOC
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	6 TR C PH TD
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	5 TR B PH TD
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	5 TR C PH TD
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	5 TR A PH DDOC
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	5 TR TFP
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	6 TR IOC
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	2291 C PH OC
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	5 TR TLOL T
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	6 TR TFP
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	2295 B PH OC
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	6 TR TNDG
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	5 TR TNDG
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	2291 GROUND
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	5 TR A PH TD
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	6 TR B PH DDOC
Warren 5	RELAY	ElectroMechSS	23kV	OPERATING	5 TR C PH DDOC
Warwick 52	RELAY	ElectroMechSS	0kV	OPERATING	UNDERFREQUENCY
Warwick 52	RELAY	Microprocessor	12kV	OPERATING	Underfrequency
Warwick 52	RELAY	ElectroMechSS	13kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Warwick 52	RELAY	Microprocessor	13kV	OPERATING	52F1 OC/G/R
Warwick 52	RELAY	Microprocessor	13kV	OPERATING	52F3 OC/G/R
Warwick 52	RELAY	Microprocessor	13kV	OPERATING	52F2 OC/G/R

location	equip_category	equip_type	equip_class	status	equip_description
Warwick 52	RELAY	ElectroMechSS	23kV	OPERATING	1 TR TCG
Warwick 52	RELAY	ElectroMechSS	23kV	OPERATING	4 TR TCG
Warwick 52	RELAY	ElectroMechSS	23kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Warwick 52	RELAY	ElectroMechSS	23kV	OPERATING	2222 - 2262 AB
Warwick Mall 28	RELAY	Microprocessor	12kV	OPERATING	28F2 OC/G/R
Warwick Mall 28	RELAY	Microprocessor	12kV	OPERATING	28F1 OC/G/R
Warwick Mall 28	RELAY	ElectroMechSS	13kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Warwick Mall 28	RELAY	ElectroMechSS	23kV	OPERATING	2 TR TCG
Warwick Mall 28	RELAY	ElectroMechSS	23kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Warwick Mall 28	RELAY	ElectroMechSS	23kV	OPERATING	1 TR TCG
Washington Sub 126	RELAY	ElectroMechSS	13kV	OPERATING	1 BUS A PH BD
Washington Sub 126	RELAY	ElectroMechSS	13kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Washington Sub 126	RELAY	ElectroMechSS	13kV	OPERATING	2 BUS C PH BD
Washington Sub 126	RELAY	ElectroMechSS	13kV	OPERATING	262 TR OC/TNG
Washington Sub 126	RELAY	ElectroMechSS	13kV	OPERATING	1 BUS C PH BD
Washington Sub 126	RELAY	ElectroMechSS	13kV	OPERATING	2 BUS B PH BD
Washington Sub 126	RELAY	ElectroMechSS	13kV	OPERATING	262 TR TD
Washington Sub 126	RELAY	ElectroMechSS	13kV	OPERATING	261 TR B PH TD
Washington Sub 126	RELAY	ElectroMechSS	13kV	OPERATING	126W53 OC/G/R
Washington Sub 126	RELAY	ElectroMechSS	13kV	OPERATING	126W54 OC/G/R
Washington Sub 126	RELAY	ElectroMechSS	13kV	OPERATING	261 TR A PH TD
Washington Sub 126	RELAY	ElectroMechSS	13kV	OPERATING	126C43 C PH OC
Washington Sub 126	RELAY	ElectroMechSS	13kV	OPERATING	126C43 B PH OC
Washington Sub 126	RELAY	ElectroMechSS	13kV	OPERATING	261 TR OC/TNG
Washington Sub 126	RELAY	ElectroMechSS	13kV	OPERATING	2 BUS A PH BD
Washington Sub 126	RELAY	ElectroMechSS	13kV	OPERATING	1 BUS B PH BD
Washington Sub 126	RELAY	ElectroMechSS	13kV	OPERATING	126C43 T
Washington Sub 126	RELAY	ElectroMechSS	13kV	OPERATING	261 TR TFP
Washington Sub 126	RELAY	ElectroMechSS	13kV	OPERATING	126C55 T
Washington Sub 126	RELAY	ElectroMechSS	13kV	OPERATING	126C43 A PH OC
Washington Sub 126	RELAY	ElectroMechSS	13kV	OPERATING	262 TR TFP
Washington Sub 126	RELAY	ElectroMechSS	13kV	OPERATING	261 TR C PH TD
Washington Sub 126	RELAY	ElectroMechSS	13kV	OPERATING	126C43 GROUND
Washington Sub 126	RELAY	Microprocessor	13kV	OPERATING	126C55 OC/G
Washington Sub 126	RELAY	Microprocessor	13kV	OPERATING	126W53 OC/G/R
Washington Sub 126	RELAY	Microprocessor	13kV	OPERATING	126W51 OC/G/R
Washington Sub 126	RELAY	Microprocessor	13kV	OPERATING	126W40 OC/G/R
Washington Sub 126	RELAY	Microprocessor	13kV	OPERATING	2 Bus & Fdr BU, OC/G
Washington Sub 126	RELAY	Microprocessor	13kV	OPERATING	126W54 OC/G/R
Washington Sub 126	RELAY	Microprocessor	13kV	OPERATING	126W50 OC/G/R
Washington Sub 126	RELAY	Microprocessor	13kV	OPERATING	1 Bus & Fdr BU, OC/G
Washington Sub 126	RELAY	Microprocessor	13kV	OPERATING	126W41 OC/G/R
Washington Sub 126	RELAY	Microprocessor	13kV	OPERATING	126W42 OC/G/R
Waterman Ave 78	RELAY	ElectroMechSS	0kV	OPERATING	UNDERFREQUENCY
Waterman Ave 78	RELAY	ElectroMechSS	12kV	OPERATING	1 TR TNG
Waterman Ave 78	RELAY	ElectroMechSS	12kV	OPERATING	1 TR - ALARM
Waterman Ave 78	RELAY	ElectroMechSS	12kV	OPERATING	78F3 OC/G/R
Waterman Ave 78	RELAY	ElectroMechSS	12kV	OPERATING	2 TR TNG
Waterman Ave 78	RELAY	ElectroMechSS	12kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Waterman Ave 78	RELAY	ElectroMechSS	12kV	OPERATING	3-4 OC/G/R
Waterman Ave 78	RELAY	ElectroMechSS	12kV	OPERATING	2 TR - ALARM
Waterman Ave 78	RELAY	Microprocessor	12kV	OPERATING	78F1 OC/G/R
Waterman Ave 78	RELAY	Microprocessor	12kV	OPERATING	1-2 OC/G/R
Waterman Ave 78	RELAY	Microprocessor	12kV	OPERATING	78F4 OC/G/R
Waterman Ave 78	RELAY	Microprocessor	12kV	OPERATING	78F2 OC/G/R
Waterman Ave 78	RELAY	ElectroMechSS	23kV	OPERATING	2 TR GROUND
Waterman Ave 78	RELAY	ElectroMechSS	23kV	OPERATING	2 TR C PH OC
Waterman Ave 78	RELAY	ElectroMechSS	23kV	OPERATING	2 TR TFP
Waterman Ave 78	RELAY	ElectroMechSS	23kV	OPERATING	1 TR A PH OC
Waterman Ave 78	RELAY	ElectroMechSS	23kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Waterman Ave 78	RELAY	ElectroMechSS	23kV	OPERATING	2 TR A PH OC
Waterman Ave 78	RELAY	ElectroMechSS	23kV	OPERATING	2 BUS UV
Waterman Ave 78	RELAY	ElectroMechSS	23kV	OPERATING	1 TR TFP

location	equip_category	equip_type	equip_class	status	equip_description
Waterman Ave 78	RELAY	ElectroMechSS	23kV	OPERATING	1 TR B PH OC
Waterman Ave 78	RELAY	ElectroMechSS	23kV	OPERATING	1 TR GROUND
Waterman Ave 78	RELAY	ElectroMechSS	23kV	OPERATING	1 TR C PH OC
Waterman Ave 78	RELAY	ElectroMechSS	23kV	OPERATING	1 BUS UV
Waterman Ave 78	RELAY	ElectroMechSS	23kV	OPERATING	LOAD SHED DST
Waterman Ave 78	RELAY	ElectroMechSS	23kV	OPERATING	2 TR B PH OC
West Cranston 21	RELAY	ElectroMechSS	0kV	OPERATING	UNDERFREQUENCY
West Cranston 21	RELAY	ElectroMechSS	13kV	OPERATING	1 BUS UV
West Cranston 21	RELAY	ElectroMechSS	13kV	OPERATING	2 BUS UV
West Cranston 21	RELAY	ElectroMechSS	13kV	OPERATING	2 TR TFP
West Cranston 21	RELAY	ElectroMechSS	13kV	OPERATING	2 TR - ALARMS
West Cranston 21	RELAY	ElectroMechSS	13kV	OPERATING	1 TR TFP
West Cranston 21	RELAY	ElectroMechSS	13kV	OPERATING	1 TR TLOL
West Cranston 21	RELAY	ElectroMechSS	13kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
West Cranston 21	RELAY	ElectroMechSS	13kV	OPERATING	LOAD SHED DST
West Cranston 21	RELAY	ElectroMechSS	13kV	OPERATING	2 TR TLOL
West Cranston 21	RELAY	Microprocessor	13kV	OPERATING	1 TR OC/G/TNG/GV3
West Cranston 21	RELAY	Microprocessor	13kV	OPERATING	21F4 OC/G BU
West Cranston 21	RELAY	Microprocessor	13kV	OPERATING	21F4 OC/G/R PRI
West Cranston 21	RELAY	Microprocessor	13kV	OPERATING	12 OC/G/R
West Cranston 21	RELAY	Microprocessor	13kV	OPERATING	1 TR DIFF
West Cranston 21	RELAY	Microprocessor	13kV	OPERATING	21F1 OC/G/R
West Cranston 21	RELAY	Microprocessor	13kV	OPERATING	2 TR OC/G/TNG/GV3
West Cranston 21	RELAY	Microprocessor	13kV	OPERATING	3-4 R
West Cranston 21	RELAY	Microprocessor	13kV	OPERATING	2 TR DIFF
West Cranston 21	RELAY	Microprocessor	13kV	OPERATING	21F2 OC/G/R
West Farnum 17	RELAY	ElectroMechSS	13kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
West Greenville 45	RELAY	ElectroMechSS	12kV	OPERATING	45F2 OC/G/R
West Greenville 45	RELAY	ElectroMechSS	12kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
West Greenville 45	RELAY	ElectroMechSS	12kV	OPERATING	3 TR TNG
West Greenville 45	RELAY	Microprocessor	12kV	OPERATING	Underfrequency
West Greenville 45	RELAY	ElectroMechSS	23kV	OPERATING	3 TR OCVI T
West Greenville 45	RELAY	ElectroMechSS	23kV	OPERATING	3 TR TFP
West Greenville 45	RELAY	ElectroMechSS	23kV	OPERATING	3 TR IG
West Greenville 45	RELAY	ElectroMechSS	23kV	OPERATING	BUS UV
West Greenville 45	RELAY	ElectroMechSS	23kV	OPERATING	3 TR OCVI
West Greenville 45	RELAY	ElectroMechSS	23kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
West Greenville 45	RELAY	ElectroMechSS	23kV	OPERATING	2227 AB UV
West Greenville 45	RELAY	ElectroMechSS	23kV	OPERATING	2221 AB UV
West Howard 154	RELAY	ElectroMechSS	0kV	OPERATING	UNDERFREQUENCY
West Howard 154	RELAY	ElectroMechSS	0kV	OPERATING	UNDERFREQUENCY
West Howard 154	RELAY	ElectroMechSS	0kV	OPERATING	UNDERFREQUENCY
West Howard 154	RELAY	ElectroMechSS	23kV	OPERATING	54K21 C PH OC
West Howard 154	RELAY	ElectroMechSS	23kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
West Howard 154	RELAY	ElectroMechSS	23kV	OPERATING	54K21 A PH OC
West Howard 154	RELAY	ElectroMechSS	23kV	OPERATING	38K21 DG
West Howard 154	RELAY	ElectroMechSS	23kV	OPERATING	38K21 C PH DOC
West Howard 154	RELAY	ElectroMechSS	23kV	OPERATING	54K23 C PH OC
West Howard 154	RELAY	ElectroMechSS	23kV	OPERATING	38K21 A PH DOC
West Howard 154	RELAY	ElectroMechSS	23kV	OPERATING	54K21 B PH OC
West Howard 154	RELAY	ElectroMechSS	23kV	OPERATING	54K23 A PH OC
West Howard 154	RELAY	ElectroMechSS	23kV	OPERATING	54K23 GROUND
West Howard 154	RELAY	ElectroMechSS	23kV	OPERATING	38K21 B PH DOC
West Howard 154	RELAY	ElectroMechSS	23kV	OPERATING	54K23 B PH OC
West Howard 154	RELAY	ElectroMechSS	23kV	OPERATING	54K21 GROUND
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J12 R
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	5400 BT C PH OC
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J6 C PH OC
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	542 TR C PH OC
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J6 R
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J18 C PH OC
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	541 TR B PH OC
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J4 A PH OC

location	equip_category	equip_type	equip_class	status	equip_description
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	5400 BT B PH OC
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J18 B PH OC
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J6 A PH OC
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J2 B PH OC
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J2 R
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J12 GROUND
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J18 GROUND
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J16 GROUND
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J18 R
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J8 B PH OC
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J4 B PH OC
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J6 B PH OC
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J14 R
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J2 A PH OC
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J14 GROUND
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J12 B PH OC
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J6 GROUND
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	5400 BT A PH OC
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J16 B PH OC
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J16 C PH OC
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J4 R
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J2 C PH OC
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J8 R
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J12 A PH OC
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J16 R
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J8 C PH OC
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J18 A PH OC
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	5400 BT GROUND
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J14 C PH OC
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J4 C PH OC
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J8 A PH OC
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J16 A PH OC
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J14 A PH OC
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J12 C PH OC
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	542 TR B PH OC
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	542 TR GROUND
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J8 GROUND
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	541 TR A PH OC
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	541 TR C PH OC
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J2 GROUND
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J4 GROUND
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	154J14 B PH OC
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	541 TR GROUND
West Howard 154	RELAY	ElectroMechSS	4kV	OPERATING	542 TR A PH OC
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	2 TR A PH TD
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	2 TR DG
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	3308 BFI
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	C2208 R
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	1 TR DG
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	C21 A PH OC
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	C4 OV
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	2 TR TFP
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	1 TR C PH TD
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	1 TR B PH DDOC
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	2 TR B PH TD
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	2 TR DP T
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	C12 OV
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	2 TR IOC
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	C21 GROUND
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	1 TR C PH DDOC
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	1 BUS BDG
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	2 TR DDOC

location	equip_category	equip_type	equip_class	status	equip_description
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	C8 OV
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	1 TR A PH DDOC
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	C2107 R
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	3307 BFI
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	C21 BKR BFI
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	C2107 BKR BFI
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	C2 OV
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	C21 B PH OC
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	C2208 BFI
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	1 TR DDOC
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	C21 C PH OC
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	1 TR DP T
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	2 TR C PH DDOC
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	C22 BKR BFI
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	C10 OV
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	1 TR IOC
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	1 TR DP
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	1 TR A PH TD
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	1 TR B PH TD
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	2 TR B PH DDOC
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	2 TR A PH DDOC
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	2 BUS BDG
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	2 TR C PH TD
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	C6 OV
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	1 TR TLOL
West Kingston 62	RELAY	ElectroMechSS	34kV	OPERATING	2 TR TLOL
West Kingston 62	RELAY	Microprocessor	34kV	OPERATING	C22 OC/G
West Kingston 62	RELAY	Microprocessor	34kV	OPERATING	3308A DOC/DG/R
West Kingston 62	RELAY	Microprocessor	34kV	OPERATING	3307B DOC/DG
West Kingston 62	RELAY	Microprocessor	34kV	OPERATING	3307A DOC/DG/R
West Kingston 62	RELAY	Microprocessor	34kV	OPERATING	3308B DOC/DG
Westerly 16	RELAY	ElectroMechSS	13kV	OPERATING	BUS TRANSFER 27L-1
Westerly 16	RELAY	ElectroMechSS	13kV	OPERATING	BUS TRANSFER 27L-1
Westerly 16	RELAY	ElectroMechSS	13kV	OPERATING	BUS TRANSFER 27L-1
Westerly 16	RELAY	ElectroMechSS	13kV	OPERATING	BUS TRANSFER 27L-1
Westerly 16	RELAY	ElectroMechSS	13kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Westerly 16	RELAY	Microprocessor	13kV	OPERATING	16F1 OC/G/R
Westerly 16	RELAY	Microprocessor	13kV	OPERATING	1-2 TIE OC/G/R
Westerly 16	RELAY	Microprocessor	13kV	OPERATING	16F2 OC/G/R
Westerly 16	RELAY	Microprocessor	13kV	OPERATING	16F3 OC/G/R
Westerly 16	RELAY	Microprocessor	13kV	OPERATING	3-4 TIE OC/G/R
Westerly 16	RELAY	Microprocessor	13kV	OPERATING	16F4 OC/G/R
Westerly 16	RELAY	ElectroMechSS	34kV	OPERATING	2 TR FP
Westerly 16	RELAY	ElectroMechSS	34kV	OPERATING	2 TR LOL
Westerly 16	RELAY	ElectroMechSS	34kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Westerly 16	RELAY	ElectroMechSS	34kV	OPERATING	4 TR FP
Westerly 16	RELAY	ElectroMechSS	34kV	OPERATING	4 TR TFP
Westerly 16	RELAY	ElectroMechSS	34kV	OPERATING	4 TR LOL
Westerly 16	RELAY	ElectroMechSS	34kV	OPERATING	2 TR TFP
Westerly 16	RELAY	Microprocessor	34kV	OPERATING	4 TR TD
Westerly 16	RELAY	Microprocessor	34kV	OPERATING	2 TR DDOC
Westerly 16	RELAY	Microprocessor	34kV	OPERATING	2 TR TD
Westerly 16	RELAY	Microprocessor	34kV	OPERATING	4 TR DDOC
Westerly 16	RELAY	ElectroMechSS	4kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Wolf Hill 19	RELAY	ElectroMechSS	23kV	OPERATING	1 TR TFP
Wolf Hill 19	RELAY	ElectroMechSS	23kV	OPERATING	2221 DG
Wolf Hill 19	RELAY	ElectroMechSS	23kV	OPERATING	2219 R
Wolf Hill 19	RELAY	ElectroMechSS	23kV	OPERATING	2221 A PH OC
Wolf Hill 19	RELAY	ElectroMechSS	23kV	OPERATING	2219 C PH OC
Wolf Hill 19	RELAY	ElectroMechSS	23kV	OPERATING	2221 R
Wolf Hill 19	RELAY	ElectroMechSS	23kV	OPERATING	2219 B PH OC
Wolf Hill 19	RELAY	ElectroMechSS	23kV	OPERATING	2219 A PH OC

location	equip_category	equip_type	equip_class	status	equip_description
Wolf Hill 19	RELAY	ElectroMechSS	23kV	OPERATING	1TR A PH OC
Wolf Hill 19	RELAY	ElectroMechSS	23kV	OPERATING	2221 C PH OC
Wolf Hill 19	RELAY	ElectroMechSS	23kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Wolf Hill 19	RELAY	ElectroMechSS	23kV	OPERATING	1 TR C PH TD
Wolf Hill 19	RELAY	ElectroMechSS	23kV	OPERATING	1TR C PH OC
Wolf Hill 19	RELAY	ElectroMechSS	23kV	OPERATING	2221 B PH OC
Wolf Hill 19	RELAY	ElectroMechSS	23kV	OPERATING	2219 GROUND
Wolf Hill 19	RELAY	ElectroMechSS	23kV	OPERATING	1 TR A PH TD
Wolf Hill 19	RELAY	ElectroMechSS	23kV	OPERATING	1TR GROUND
Wolf Hill 19	RELAY	ElectroMechSS	23kV	OPERATING	1TR TNG
Wolf Hill 19	RELAY	ElectroMechSS	23kV	OPERATING	2288 B PH DOC
Wolf Hill 19	RELAY	ElectroMechSS	23kV	OPERATING	1 TR B PH TD
Wolf Hill 19	RELAY	ElectroMechSS	23kV	OPERATING	1TR B PH OC
Wood River 85	RELAY	Microprocessor	0kV	OPERATING	UNDERFREQUENCY
Wood River 85	RELAY	ElectroMechSS	34kV	OPERATING	20 TR TNG
Wood River 85	RELAY	ElectroMechSS	34kV	OPERATING	10 TR B PH DDOC
Wood River 85	RELAY	ElectroMechSS	34kV	OPERATING	20 TR TFP
Wood River 85	RELAY	ElectroMechSS	34kV	OPERATING	20 TR B PH DDOC
Wood River 85	RELAY	ElectroMechSS	34kV	OPERATING	20 TR T
Wood River 85	RELAY	ElectroMechSS	34kV	OPERATING	2 BUS UV T
Wood River 85	RELAY	ElectroMechSS	34kV	OPERATING	C1 OV
Wood River 85	RELAY	ElectroMechSS	34kV	OPERATING	20 TR C PH DDOC
Wood River 85	RELAY	ElectroMechSS	34kV	OPERATING	BATT. CHG. ALARM
Wood River 85	RELAY	ElectroMechSS	34kV	OPERATING	ASSOCIATED SECONDARY EQUIPMENT
Wood River 85	RELAY	ElectroMechSS	34kV	OPERATING	10 TR C PH DDOC
Wood River 85	RELAY	ElectroMechSS	34kV	OPERATING	1 BUS UV T
Wood River 85	RELAY	ElectroMechSS	34kV	OPERATING	10 TR UV
Wood River 85	RELAY	ElectroMechSS	34kV	OPERATING	20 TR DDOC
Wood River 85	RELAY	ElectroMechSS	34kV	OPERATING	10 TR DDOC
Wood River 85	RELAY	ElectroMechSS	34kV	OPERATING	10 TR TFP
Wood River 85	RELAY	ElectroMechSS	34kV	OPERATING	10 TR T
Wood River 85	RELAY	ElectroMechSS	34kV	OPERATING	10 TR TLOL
Wood River 85	RELAY	ElectroMechSS	34kV	OPERATING	10 TR GROUND
Wood River 85	RELAY	ElectroMechSS	34kV	OPERATING	20 TR DP
Wood River 85	RELAY	ElectroMechSS	34kV	OPERATING	20 TR TLOL
Wood River 85	RELAY	ElectroMechSS	34kV	OPERATING	10 TR TNG
Wood River 85	RELAY	ElectroMechSS	34kV	OPERATING	20 TR A PH DDOC
Wood River 85	RELAY	ElectroMechSS	34kV	OPERATING	10 TR DP
Wood River 85	RELAY	ElectroMechSS	34kV	OPERATING	20 TR UV
Wood River 85	RELAY	ElectroMechSS	34kV	OPERATING	10 TR A PH DDOC
Wood River 85	RELAY	ElectroMechSS	34kV	OPERATING	20 TR GROUND
Wood River 85	RELAY	Microprocessor	34kV	OPERATING	10TR TD/OC/G
Wood River 85	RELAY	Microprocessor	34kV	OPERATING	1-2 OC/G/R
Wood River 85	RELAY	Microprocessor	34kV	OPERATING	85T2 OC/G/R
Wood River 85	RELAY	Microprocessor	34kV	OPERATING	10TR DOC/G/G
Wood River 85	RELAY	Microprocessor	34kV	OPERATING	85T4 OC/G/R
Wood River 85	RELAY	Microprocessor	34kV	OPERATING	85T1 OC/G/R
Wood River 85	RELAY	Microprocessor	34kV	OPERATING	85T3 OC/G/R
Wood River 85	RELAY	Microprocessor	34kV	OPERATING	10TR DOC/G/TNG
Wood River 85	RELAY	Microprocessor	34kV	OPERATING	20TR DOC/G/TNG
Woonsocket 26	RELAY	Microprocessor	13kV	OPERATING	26C1 OC
Woonsocket 26	RELAY	Microprocessor	13kV	OPERATING	26C1 OV
Woonsocket 26	RELAY	Microprocessor	13kV	OPERATING	26W3 OC B/U
Woonsocket 26	RELAY	Microprocessor	13kV	OPERATING	26W3 OC/G/R
Woonsocket 26	RELAY	Microprocessor	13kV	OPERATING	26W7 OC B/U
Woonsocket 26	RELAY	Microprocessor	13kV	OPERATING	1 Bus DIFF
Woonsocket 26	RELAY	Microprocessor	13kV	OPERATING	26W5 OC B/U
Woonsocket 26	RELAY	Microprocessor	13kV	OPERATING	1 BIUS OC
Woonsocket 26	RELAY	Microprocessor	13kV	OPERATING	26W1 OC B/U
Woonsocket 26	RELAY	Microprocessor	13kV	OPERATING	1 TR DDOC
Woonsocket 26	RELAY	Microprocessor	13kV	OPERATING	26W1 OC/G/R
Woonsocket 26	RELAY	Microprocessor	13kV	OPERATING	26W5 OC/G/R
Woonsocket 26	RELAY	Microprocessor	13kV	OPERATING	1 TR DIFF

location	equip_category	equip_type	equip_class	status	equip_description
Woonsocket 26	RELAY	Microprocessor	13kV	OPERATING	26W7 OC/G/R
Woonsocket 26	RELAY	Microprocessor	13kV	OPERATING	26C3 OV

Division 1-13

Request:

The Company proposes minimal capital spend for VVO. Are future VVO projects planned or otherwise suspended?

Response:

The Company is pausing additional VVO efforts in Rhode Island until PPL Corporation (PPL) determines what the implementation strategy in RI will be. The Company's plan prior to PPL acquiring The Narragansett Electric Company was ultimately to transition to an advanced distribution management system (ADMS) based solution for a more holistic Grid Modernization Plan approach.

The Narragansett Electric Company
d/b/a National Grid
In Re: Division's Review of FY 2023 Proposed Electric ISR Plan
Responses to Division's First Set of Data Requests
Issued October 26, 2021

Division 1-14

Request:

Provide an updated 3V0 chart in executable format, specifically identifying projects in the FY 2023 ISR Plan (see response to R-III-2 in FY2022 ISR Plan).

Response:

An updated 3V0 chart is included below. Note that there are some changes from the FY23 Proposed Plan. Peacedale increased due to specific design complexities at the station that required a unique solution to install 3V0 at an additional cost and spend at Langworthy has shifted from FY22 to FY23. There were slight decreases in Wampanoag and Clarkson St. (\$5,000 each).

See Attachment DIV 1-14-1 for this data in executable format.

Substation	Project Estimate		Actual Spend through 11/1/21		Remaining FY22 forecast		FY23 forecast		3V0 Targeted Completion Date	3V0 Actual Completion Date
	Capex	Opex	Capex	Opex	Capex	Opex	Capex	Opex		
Tiverton	\$60,000	\$10,000	\$60,000	\$0	\$0	\$0	\$0	\$0	3/31/2019	5/30/2019
Kilvert St.	\$40,000	\$10,000	\$13,978	\$0	\$0	\$0	\$0	\$0	3/31/2019	12/14/2018
Old Baptist Road	\$40,000	\$10,000	\$40,000	\$0	\$0	\$0	\$0	\$0	3/31/2019	12/14/2018
Davisville	\$60,000	\$10,000	\$35,086	\$0	\$0	\$0	\$0	\$0	3/31/2019	10/21/2020
Wolf Hill	\$40,000	\$10,000	\$60,134	\$0	\$0	\$0	\$0	\$0	3/31/2020	5/16/2020
Pontiac	\$60,000	\$10,000	\$34,875	\$0	\$0	\$0	\$0	\$0	3/31/2020	2/21/2020
Riverside	\$40,000	\$10,000	\$322,012	\$0	\$0	\$0	\$0	\$0	3/31/2020	4/9/2021
Quonset Sub	\$430,000	\$20,000	\$525,000	\$0	\$0	\$0	\$0	\$0	3/31/2020	6/22/2020
Chopmist	\$285,000	\$15,000	\$287,252	\$0	\$0	\$0	\$0	\$0	3/31/2021	2/24/2021
Putnam Pike	\$90,000	\$10,000	\$72,734	\$0	\$3,600	\$0	\$0	\$0	3/31/2021	6/7/2021
Eldred	\$550,000	\$50,000	\$407,237	\$0	\$0	\$0	\$0	\$0	3/31/2021	3/30/2021
Peacedale	\$427,500	\$22,500	\$37,998	\$0	\$41,230	\$0	\$430,916	\$0	3/31/2022	Projected 1/9/2023
Langworthy	\$275,000	\$25,000	\$25,608	\$0	\$79,657	\$0	\$196,852	\$0	3/31/2022	Projected 11/18/2022
Wampanoag	\$95,000	\$5,000	\$0	\$0	\$0	\$0	\$95,000	\$5,000	3/31/2023	TBD
Clarkson St	\$95,000	\$5,000	\$0	\$0	\$0	\$0	\$95,000	\$5,000	3/31/2023	TBD
TOTAL FORECAST for FY22-FY23					\$124,487	\$0	\$817,768	\$10,000		

The Narragansett Electric Company
d/b/a National Grid
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Attachment DIV 1-14

Please see the Excel version of Attachment DIV 1-14.

Substation	Project Estimate		Actual Spend through 11/1/21		Remaining FY22 forecast		FY23 forecast		3V0 Targeted Completion Date	3V0 Actual Completion Date
	Capex	Opex	Capex	Opex	Capex	Opex	Capex	Opex		
Tiverton	\$60,000	\$10,000	\$60,000	\$0	\$0	\$0	\$0	\$0	3/31/2019	5/30/2019
Kilvert St.	\$40,000	\$10,000	\$13,978	\$0	\$0	\$0	\$0	\$0	3/31/2019	12/14/2018
Old Baptist Road	\$40,000	\$10,000	\$40,000	\$0	\$0	\$0	\$0	\$0	3/31/2019	12/14/2018
Davisville	\$60,000	\$10,000	\$35,086	\$0	\$0	\$0	\$0	\$0	3/31/2019	10/21/2020
Wolf Hill	\$40,000	\$10,000	\$60,134	\$0	\$0	\$0	\$0	\$0	3/31/2020	5/16/2020
Pontiac	\$60,000	\$10,000	\$34,875	\$0	\$0	\$0	\$0	\$0	3/31/2020	2/21/2020
Riverside	\$40,000	\$10,000	\$322,012	\$0	\$0	\$0	\$0	\$0	3/31/2020	4/9/2021
Quonset Sub	\$430,000	\$20,000	\$525,000	\$0	\$0	\$0	\$0	\$0	3/31/2020	6/22/2020
Chopmist	\$285,000	\$15,000	\$287,252	\$0	\$0	\$0	\$0	\$0	3/31/2021	2/24/2021
Putnam Pike	\$90,000	\$10,000	\$72,734	\$0	\$3,600	\$0	\$0	\$0	3/31/2021	6/7/2021
Eldred	\$550,000	\$50,000	\$407,237	\$0	\$0	\$0	\$0	\$0	3/31/2021	3/30/2021
Peacedale	\$427,500	\$22,500	\$37,998	\$0	\$41,230	\$0	\$430,916	\$0	3/31/2022	Projected 1/9/2023
Langworthy	\$275,000	\$25,000	\$25,608	\$0	\$79,657	\$0	\$196,852	\$0	3/31/2022	Projected 11/18/2022
Wampanoag	\$95,000	\$5,000	\$0	\$0	\$0	\$0	\$95,000	\$5,000	3/31/2023	TBD
Clarkson St	\$95,000	\$5,000	\$0	\$0	\$0	\$0	\$95,000	\$5,000	3/31/2023	TBD
TOTAL FORECAST for FY22-FY23					\$124,487	\$0	\$817,768	\$10,000		

Division 1-15

Request:

Provide an update using the most recent load forecasts to the East Bay Area Study Table 3.2, Table 4.1.1 and Table 4.1.2.

Based on the results, discuss the timing of the proposed East Bay Area system capacity improvement projects currently scheduled in the FY 2023 ISR Plan (East Providence) relative to the need as dictated by the load forecast.

Discuss how the Company aligns implementation of projects to resolve system capacity issues at the optimal time, and specifically how the Company plans to sequence East Bay work to achieve alignment.

Response:

Revised tables 3.2, 4.1.1 and 4.1.2 are included below. The East Bay area study used the 2014 New England Electric Peak Forecast. The most current Company forecast report is the 2021 Electric Peak Forecast which was used as the basis for the updated tables.

It is important to note that there are significant asset condition drivers for the East Providence and Warren Sub Expansion projects which are not reflected in the updated tables. Due to the significant asset condition issues within this area, the priority of these projects remains the same. East Providence (also known as First Street) and Warren Sub expansions should progress as currently scheduled in the FY 2023 ISR Plan. The Company endeavors to assign each project to one Spending Rationale but have found that many projects, such as these, have more than one significant need driver.

East Providence (First Street) substation will allow for retirement of Waterman Ave substation, portions of the 2242 and 2243 circuits, the Kent Corners substation and the 2267 circuit. All of these facilities have major asset condition concerns. If the East Providence (First Street) substation is delayed, the Company may have to progress asset replacement projects out of line with study recommendations.

The Warren substation expansion project allows retirement of the Barrington substation and the 2291 circuit. The Barrington substation has asset condition issues as well as significant unserved load during contingencies. If the Warren substation expansion is delayed, the Company may have to progress asset replacement projects out of line with study recommendations.

Division 1-15, page 2

Load related issues are also a factor in these projects and even though the forecast has decreased in recent years, there are still some feeder normal loading and contingency concerns at Wampanoag, Barrington, and Warren substations. East Providence (First Street) substation and Warren substation expansion will solve the normal and contingency concerns at these substations.

As a result of the asset condition issues and remaining loading concerns, the East Providence (First St) and Warren substation expansion projects should progress as currently scheduled in the FY 2023 ISR Plan.

The Company reviews completed Area Study projects before they enter detailed design to validate the need has not changed based on the most recent forecast. If the review indicates that the need or need date of the proposed project(s) has changed or no longer exists, the project(s) will be reanalyzed to align with the new need or need date or when applicable, removed from the plan. The Company will continue to sequence all East Bay study projects in order to address issues in the most efficient way.

Division 1-15, page 3

Table 3.2 Forecasted Load Growth Rate

Source	2014 forecast	2021 forecast
2014	4.7%	
2015	2.3%	
2016	1.4%	
2017	1.0%	
2018	0.6%	
2019	0.7%	
2020	0.7%	
2021	0.7%	4.4%
2022	0.7%	-0.9%
2023	0.7%	-0.3%
2024	0.8%	0.3%
2025	0.8%	0.5%
2026	0.8%	0.2%
2027	0.8%	0.2%
2028	0.8%	0.2%
2029	0.8%	0.2%
2030	0.8%	0.2%
2031		0.1%
2032		0.1%
2033		0.1%
2034		0.1%
2035		0.1%

*The 4.4% growth rate in 2021 includes a weather adjustment of +5.5% and an economic growth rate of -1.0%.

The Narragansett Electric Company
d/b/a National Grid
In Re: Division's Review of FY 2023 Proposed Electric ISR Plan
Responses to Division's First Set of Data Requests
Issued October 26, 2021

Division 1-15, page 4

Table 4.1.1 Projected Summer Normal Feeder Loading

Substation	Feeder	2021		2025		2030		2035	
		Amps	%SN	Amps	%SN	Amps	%SN	Amps	%SN
BARRINGTON 4	4F1	433	84%	429	83%	434	84%	436	85%
BARRINGTON 4	4F2	470	92%	466	91%	471	92%	473	93%
BRISTOL 51A	51F1	458	71%	456	71%	461	71%	463	72%
BRISTOL 51A	51F2	469	88%	467	88%	472	89%	474	89%
BRISTOL 51A	51F3	338	67%	337	67%	340	68%	341	68%
WAMPANOAG 48	48F1	565	112%	562	112%	568	113%	571	114%
WAMPANOAG 48	48F2	381	74%	380	74%	383	74%	385	75%
WAMPANOAG 48	48F3	406	80%	404	79%	408	80%	410	80%
WAMPANOAG 48	48F4	445	84%	443	84%	448	84%	450	85%
WAMPANOAG 48	48F5	330	62%	329	62%	332	63%	334	63%
WAMPANOAG 48	48F6	315	59%	314	59%	317	60%	318	60%
WARREN 5	5F1	390	92%	388	91%	392	92%	394	93%
WARREN 5	5F2	385	89%	383	88%	387	89%	389	90%
WARREN 5	5F3	383	74%	381	74%	385	75%	387	75%
WARREN 5	5F4	435	85%	433	85%	438	86%	440	86%
OUT OF PHASE FEEDERS									
PHILLIPSDALE 20	20F1	275	65%	274	64%	276	65%	278	65%
PHILLIPSDALE 20	20F2	344	81%	343	81%	346	81%	347	82%
WATERMAN AVENUE 78	78F3	175	43%	174	43%	176	43%	177	43%
WATERMAN AVENUE 78	78F4	163	40%	162	40%	163	40%	164	40%
4.16 kV POCKET OF LOAD									
KENT CORNERS 47	47J2	287	70%	284	70%	287	70%	289	71%
KENT CORNERS 47	47J3	326	80%	323	79%	326	80%	327	80%
KENT CORNERS 47	47J4	310	76%	307	75%	310	76%	311	76%

Division 1-15, page 5

Table 4.1.2 - Calculated MWh exposure and Un-Served Load on Feeders

Substation	Feeder	MWh	Un-Served
		Exposure	MW
BARRINGTON 4	4F1	22.7	4.8
BARRINGTON 4	4F2	29.5	6.7
BRISTOL 51A	51F1	13.0	1.7
BRISTOL 51A	51F2	18.6	3.4
BRISTOL 51A	51F3	10.4	1.5
WAMPANOAG 48	48F1	11.3	0.7
WAMPANOAG 48	48F2	6.2	0.0
WAMPANOAG 48	48F3	14.9	2.6
WAMPANOAG 48	48F4	17.9	3.3
WAMPANOAG 48	48F5	7.1	0.6
WAMPANOAG 48	48F6	5.1	0.0
WARREN 5	5F1	23.3	5.2
WARREN 5	5F2	22.4	5.0
WARREN 5	5F3	14.1	2.4
WARREN 5	5F4	18.6	3.6
PHILLIPSDALE 20	20F1	18.2	4.2
PHILLIPSDALE 20	20F2	5.6	0.0
WATERMAN AVEN	78F3	2.8	0.0
WATERMAN AVEN	78F4	2.6	0.0

December 9, 2021

ELECTRONIC MAIL

Luly E. Massaro, Clerk
Rhode Island Division of Public Utilities and Carriers
89 Jefferson Boulevard
Warwick, RI 02888

**RE: National Grid's Proposed FY 2023 Electric Infrastructure, Safety, and Reliability Plan
Supplemental Responses – Division Set 1**

Dear Ms. Massaro:

On behalf of The Narragansett Electric Company d/b/a National Grid ("National Grid" or the "Company"), enclosed please find the electronic version of the Company's supplemental responses to Division 1-5 and 1-6 in the above-reference matter.¹

Thank you for your attention to this transmittal. If you have any questions, please contact me at 401-784-7263.

Sincerely,



Andrew S. Marcaccio

Enclosure

cc: Leo Wold, Esq.
Christy Hetherington, Esq.
John Bell, Division
Greg Booth, Division
Al Contente, Division

¹ The Company is providing the Division with four (4) copies of this transmittal.

Division 1-5 (Supplemental)

Request:

Provide results of the Company's most recent annual capacity review indicating any feeder with imminent thermal capacity constraints. Indicate the substation, feeder, voltage, load forecast and spot load assumptions, and resulting constraint. Identify the alternatives considered to resolve the constraint, the selected alternative, estimated cost, and construction timeline.

Response:

The 2022 annual capacity review (FY23) is in progress and the 2022 forecast report is currently under development. As stated in the October 2021 FY23 ISR filing submitted to the Division, the Company anticipates completion of the FY2023 annual capacity review by February 2022. The Company is targeting early completion of the feeder annual capacity reviews, working towards completion by early December 2021. As agreed upon in the conference call between the Company and the Division on 11/9/21, the Company will provide the results of the 2022 feeder annual capacity reviews upon completion in early December 2021.

Supplemental Response:

The 2022 annual capacity reviews were completed using the 2022 electric forecast. All feeders with imminent thermal capacity constraints are included in the table below. Please note switching only recommendations show an estimated cost of \$0 in the table below as there is no capex associated with switching work and there is minimal opex associated with switching.

Due to the short timeframe between identification and anticipated occurrence of the projected overload, solutions developed for annual capacity review overloads are normally small in scope and cost. Alternatives considered for these overloads normally include monitoring or switching of some type. If the projected overload is significant and/or there is the potential for other issues to arise where monitoring the feeder may not be adequate to address the performance issue, the Company will make a capital project recommendation. Otherwise, the Company will monitor the feeder for the summer months and take action if necessary.

The Narragansett Electric Company
d/b/a National Grid

In Re: Division's Review of FY 2023 Proposed Electric ISR Plan
Responses to Division's First Set of Data Requests
Issued October 26, 2021

Division 1-5 (Supplemental), page 2

Study Area	Substation	Feeder	Voltage	Load forecast 2022 projected peak (Amps)	2022 projected peak % Summer Normal (SN) Rating	Spot load assumptions	Recommended solution	Estimated cost (Capex)	Construction timeline
Blackstone Valley North	Staples	112W44	13.8	430	100%	N/A	The Company will monitor this feeder. If the feeder exceeds its SN rating, the Company has a switching plan in place.	\$0.00	N/A
Blackstone Valley South	Pawtucket #1	107W81	13.8	366	100%	14A new spot load	The spot load is a new service to existing cell tower for a new customer. The Company will monitor this feeder. If the feeder exceeds its SN rating, the Company has a switching plan in place.	\$0.00	N/A
Blackstone Valley South	Pawtucket #1	102W51	13.8	382	112%	22A new spot load	The spot load is a new apartment building. Switching is Recommended. The Blackstone Valley South (BSVS) area study identified load transfers that included the 102W51. Load will be transferred from 102W51 to 102W52 and from 126W51 to 102W51 by opening and closing existing load breaks. This will reduce all feeders to below their SN ratings.	\$0.00	Construction complete targeted prior to summer 2022
Blackstone Valley South	Washington	126W41	13.8	530	102%	N/A	Switching is Recommended. The BSVS area study identified a load transfer that included the 126W41. Load will be transferred from 126W41 to 102W44 by opening and closing existing load breaks. This will reduce loading on all feeders below their SN ratings.	\$0.00	Construction complete targeted prior to summer 2022
East Bay	Bristol	51F2	12.47	542	102%	60A new spot load	The spot load is a new multi use commercial building load. The Company will monitor this feeder. If the feeder exceeds its SN rating, the Company has a switching plan in place.	\$0.00	N/A
East Bay	Wampanoag	48F1	12.47	511	102%	N/A	The Company will monitor this feeder. If the feeder exceeds its SN rating, the Company has a switching plan in place.	\$0.00	N/A
East Bay	Wampanoag	48F3	12.47	548	107%	104A new spot load	The spot load is a new apartment complex. The Company recommends installation of feeder monitors. The Company will monitor this feeder. If the feeder exceeds its SN rating, the Company has a switching plan in place.	\$32,000.00	N/A
North Central RI	Manton	69F3	12.47	511	102%	N/A	The Company recommends installation of feeder monitors. The Company will monitor this feeder. If the feeder exceeds its SN rating, the Company has a switching plan in place.	\$32,000.00	N/A
Providence	Clarkson St	13F9	12.47	555	105%	N/A	The Company will monitor this feeder. If the feeder exceeds its SN rating, the Company has a switching plan in place. Long term plan - As part of the Providence Area study, approximately 400A will be transferred to Admiral St 12kV feeders in 2025 as part of the Providence 1B work.	\$0.00	N/A
Providence	Point St	76F2	12.47	542	108%	N/A	This overload is a result of the ongoing DOT Reservoir Ave Bridge work. The Company will monitor this feeder. Area engineers are developing a switching plan if the feeder does exceed its SN ratings.	\$0.00	N/A
Providence	East George St	77J3	4.16	376	101%	N/A	Switching is recommended. Transfer approximately 60A from East George 77J3 to Dyer 2J7 by opening and closing existing load breaks. The Dyer 2J7 feeder will also need to be balanced after the transfer has been completed.	\$0.00	Construction complete targeted prior to summer 2022
Providence	Knightsville	66J2	4.16	327	104%	N/A	The Company will monitor this feeder. If the feeder exceeds its SN rating, the Company has a switching plan in place.	\$0.00	N/A
Newport	Eldred	45J3	4.16	555	100%	N/A	The Company will monitor this feeder. If the feeder exceeds its SN rating, the Company has a switching plan in place.	\$0.00	N/A
Newport	Harrison	32J12	4.16	383	103%	N/A	The Company will monitor this feeder. If the feeder exceeds its SN rating, the Company has a switching plan in place.	\$0.00	N/A
Central RI West	Hopkins Hill	63F6	12.47	535	101%	14A new spot load	The spot load is an upgrade to an existing commercial customer's service. The Company will monitor this feeder. If the feeder exceeds its SN rating, the Company has a switching plan in place. Long term Plan - The Central Rhode Island West area study recommends building a new substation to relieve this feeder.	\$0.00	N/A
Total cost of Recommended Solutions								\$64,000.00	

The Narragansett Electric Company
d/b/a National Grid
In Re: Division's Review of FY 2023 Proposed Electric ISR Plan
Responses to Division's First Set of Data Requests
Issued October 26, 2021

Division 1-6 (Supplemental)

Request:

For each completed Area Study, indicate each project that is or could be considered for an NWA. Provide a brief project description identifying the system condition to be resolved, timing of need, the scope and current cost estimate for the traditional wires solution, and status of the NWA analysis and/or selection process.

Response:

There are two active projects from recently completed area studies being considered for an NWA. The table below includes additional information about these opportunities.

Area study	Wires solution project name	Description of need	Timing of need	Scope of wires solution	Current cost estimate of wires solution	NWA process status
South County West	Kenyon 68F2	The 68F2 feeder out of Kenyon Substation violates the feeder contingency loading criteria, due to the lack of ties (23MWhr by 2025). Additionally, the circuit is overloaded to 110% by 2025. The load must either be reduced or additional ties must be added.	2025	-Extend the existing 68F5 circuit, from Biscuit City Road 6,500', using a mixture or existing 1 phase wire (adding new additional phases) and new 3 phase wire, to create a N/O loadbreak tie with the 68F2 at Shannock Rd. -Transfer ~180 Amps of single phase load from the 68F2 to the 68F5 at Wardens Pond Road. -Feeder balancing will be required on the 68F5 and 68F2.	\$ 1,541,000.00	Not started - RFP release anticipated early 2023
Blackstone Valley South	Valley 102W54 MWhr violation	The 102W54 feeder out of the Valley Substation violates the feeder contingency loading criteria, due to the lack of ties (16.9MWhr by 2025). The 102W54 only ties with the Valley 102W44 feeder and the Washington 126W41 feeder. The load must either be reduced or additional ties must be added.	2025	Re-route the 102W50 feeder to transfer load from the 102W54 and add an additional tie to the 102W54. This work includes: -Transfer the load on 102W50 to 102W52 -Remove the OH Conductor on 102W50 south of the Valley Substation from P3-50 in the R/W to P90 High St -Re-route the 102W50 feeder north of Valley Substation in the same path as the existing 102K22 by installing ~1,710 circuit feet of 477 OH Conductor -Reconductor ~7,980 circuit feet of existing single phase 1/0 OH conductor to three phase 477 OH to tie 102W50 to 102W54. This section is currently a single phase branch of 102W54 with a load of 765kVA. The load will be transferred to 102W50 and balanced across the three phases	\$ 2,382,000.00	Not started - RFP release anticipated early 2023

The Narragansett Electric Company
d/b/a National Grid
In Re: Division's Review of FY 2023 Proposed Electric ISR Plan
Responses to Division's First Set of Data Requests
Issued October 26, 2021

Division 1-6 (Supplemental), page 2

Supplemental Response:

There are two active projects from recently completed area studies being considered for an NWA and six NWA efforts that have been completed. The table below includes additional information about these opportunities. If the technical and economic requirements of the system need and corresponding wires option change significantly following initial NWA options analysis and the timeframe allows according to the screening criteria, then the DPAM team notifies the NWA team and the NWA team begins a new NWA options analysis. As shown below, this occurred for the South Kingston and Bonnet 42F1 opportunities which were both analyzed twice.

Area study	Wires solution project name	Description of need	Timing of need	Scope of wires solution	Current cost estimate of wires solution	NWA process status
South County West	Kenyon 68F2	The 68F2 feeder out of Kenyon Substation violates the feeder contingency loading criteria, due to the lack of ties (23MWhr by 2025). Additionally, the circuit is overloaded to 110% by 2025. The load must either be reduced or additional ties must be added.	2025	-Extend the existing 68F5 circuit, from Biscuit City Road 6,500', using a mixture of existing 1 phase wire (adding new additional phases) and new 3 phase wire, to create a N/O loadbreak tie with the 68F2 at Shannock Rd. -Transfer ~180 Amps of single phase load from the 68F2 to the 68F5 at Wardens Pond Road. -Feeder balancing will be required on the 68F5 and 68F2.	\$1,541,000.00	Not started - RFP release anticipated early 2023
Blackstone Valley South	Valley 102W54 MWhr violation	The 102W54 feeder out of the Valley Substation violates the feeder contingency loading criteria, due to the lack of ties (16.9MWhr by 2025). The 102W54 only ties with the Valley 102W44 feeder and the Washington 126W41 feeder. The load must either be reduced or additional ties must be added.	2025	Re-route the 102W50 feeder to transfer load from the 102W54 and add an additional tie to the 102W54. This work includes: -Transfer the load on 102W50 to 102W52 -Remove the OH Conductor on 102W50 south of the Valley Substation from P3-50 in the R/W to P90 High St -Re-route the 102W50 feeder north of Valley Substation in the same path as the existing 102K22 by installing ~1,710 circuit feet of 477 OH Conductor -Reconductor ~7,980 circuit feet of existing single phase 1/0 OH conductor to three phase 477 OH to tie 102W50 to 102W54. This section is currently a single phase branch of 102W54 with a load of 765kVA. The load will be transferred to 102W50 and balanced across the three phases.	\$2,382,000.00	Not started - RFP release anticipated early 2023

The Narragansett Electric Company
d/b/a National Grid
In Re: Division's Review of FY 2023 Proposed Electric ISR Plan
Responses to Division's First Set of Data Requests
Issued October 26, 2021

Division 1-6 (Supplemental), page 3

Area study	Wires solution project name	Description of need	Timing of need	Scope of wires solution	Current cost estimate of wires solution	NWA process status
South County East	Narragansett 17F2	The Town of Narragansett is mostly supplied by (4) 12.47 kV distribution feeders. Two feeders (42F1 and 17F2) are projected to be loaded above summer normal ratings by 2021 and lack useful feeder ties to reduce loading below their ratings. Either more capacity must be added or load must be reduced in the town. This NWA is for Feeder 17F2.	2021	Upgrade the Wakefield 17F2 feeder ratings (inside station) and modify the 17F3 feeder (creating new feeder tie and shifting load). This investment increases capacity and switching flexibility to relieve the heavily loaded facilities and resolves the projected overloads.	\$1,590,000.00	Completed - NWA did not progress. No viable bids received.
South County East	South Kingstown (1st attempt)	The western section of the Town of South Kingstown is mostly supplied by (3) 12.47 kV distribution feeders. Two feeders (59F3 and 68F2) are projected to be loaded above summer normal ratings and lack useful feeder ties to reduce loading below their ratings. Either new feeder ties must be created or load must be reduced in the western half of the town.	2022	Establish a new feeder tie between the 68F5 feeder and the 59F3 feeder. This new feeder tie provides switching flexibility to relieve both the 59F3 and the 68F2 feeders.	\$1,740,000.00	Completed - NWA did not progress. No viable bids received.
South County East	South Kingstown (2nd attempt)	The western section of the Town of South Kingstown is mostly supplied by (3) 12.47 kV distribution feeders. Two feeders (59F3 and 68F2) are projected to be loaded above summer normal ratings and lack useful feeder ties to reduce loading below their ratings. Either new feeder ties must be created or load must be reduced in the western half of the town.	2022	Establish a new feeder tie between the 68F5 feeder and the 59F3 feeder. This new feeder tie provides switching flexibility to relieve both the 59F3 and the 68F2 feeders.	\$1,740,000.00	Completed - NWA did not progress. Bids received had worse customer bill impact than the wires option (in accordance with Least-Cost Procurement Standard 1.3.H)

The Narragansett Electric Company
d/b/a National Grid
In Re: Division's Review of FY 2023 Proposed Electric ISR Plan
Responses to Division's First Set of Data Requests
Issued October 26, 2021

Division 1-6 (Supplemental), page 4

Area study	Wires solution project name	Description of need	Timing of need	Scope of wires solution	Current cost estimate of wires solution	NWA process status
South County East	Bonnet 42F1 (First attempt, as "Narragansett 42F1")	The Town of Narragansett is supplied mostly by (4) 12.47 kV distribution feeders. Feeder 42F1 is projected to be loaded above summer normal ratings and lacks useful feeder ties to reduce loading below its ratings. Either more capacity must be added or load must be reduced in the town. Additionally, the 42F1 circuit experiences a violation of National Grid's distribution planning criteria during a contingency event.	2024	In order to alleviate the thermal overloads on the 42F1, and provide additional switching capacity during contingency events, the following scope was proposed: - Extend the 59F4 out of Peacedale down to the 17F3 out of Wakefield and create a new feeder tie, as well as move existing load. - Make switching steps to further adjust load on the system.	\$570,000.00	Completed - NWA did not progress. No viable bids received.
South County East	Bonnet 42F1 (2nd attempt)	The Town of Narragansett is supplied mostly by (4) 12.47 kV distribution feeders. Feeder 42F1 is projected to be loaded above summer normal ratings and lacks useful feeder ties to reduce loading below its ratings. Either more capacity must be added or load must be reduced in the town. Additionally, the 42F1 circuit experiences a violation of National Grid's distribution planning criteria during a contingency event.	2023	In order to alleviate the thermal overloads on the 42F1, and provide additional switching capacity during contingency events, the following scope was proposed: - Extend the 59F4 out of Peacedale down to the 17F3 out of Wakefield and create a new feeder tie, as well as move existing load. - Make switching steps to further adjust load on the system.	\$570,000.00	Completed - NWA did not progress. Bids received had worse customer bill impact than the wires option (in accordance with Least-Cost Procurement Standard 1.3.H)
East Bay	Bristol 51	In the Town of Bristol, the study identified feeder MWh violations that exceed the recommendations in the Distribution Planning Guide.	2028	To resolve the projected MWh exposure and un-served load in the Bristol area, a new feeder is recommended at Bristol substation along with some feeder mainline upgrades and area feeder reconfigurations.	\$1,210,000.00	Completed - NWA did not progress. No viable bids received.

November 16, 2021

VIA ELECTRONIC MAIL

Luly E. Massaro, Clerk
Rhode Island Division of Public Utilities and Carriers
89 Jefferson Boulevard
Warwick, RI 02888

**RE: National Grid's Proposed FY 2023 Electric Infrastructure, Safety, and Reliability Plan
Responses to Division Set 2**

Dear Ms. Massaro:

On behalf of The Narragansett Electric Company d/b/a National Grid ("National Grid" or the "Company"), enclosed please find the electronic version of the Company's responses to the Division's Second Set of Data Requests in the above-reference matter.¹

Thank you for your attention to this transmittal. If you have any questions, please contact me at 401-784-7263.

Sincerely,



Andrew S. Marcaccio

Enclosure

cc: Leo Wold, Esq.
Christy Hetherington, Esq.
John Bell, Division
Greg Booth, Division
Al Contente, Division

¹ The Company is providing the Division with four (4) copies of this transmittal.

Division 2-1

Request:

Attachment 4, Chart 7 indicates that customer interruptions due to trees continues to trend upward despite the Company's vegetation management program including 4 year cycle clearing, hazard tree removals and focused dollars on pockets of poor performance. Provide an explanation or analysis to explain this trend including but not limited to those presented during the 11-22-21 conference with the Division. What vegetation management enhancements or strategies are being considered to address increasing tree related interruptions?

Response:

Tree events have been increasing across Rhode Island for several years. The primary reason for this increase is an increase in storm activity throughout the state. Looking at trends in outage data, we have seen a substantial increase in the number of days with more than 10 tree events, days that have more than 1,000 customers interrupted, and days with over 100,000 customer minutes interrupted.

From 2015-2017, the Company averaged 21 days with more than 10 tree events. From 2018-2021, the Company has averaged 32 – a 56% increase. Days with more than 1,000 customers interrupted have increased by 59%, and days with more than 100,000 customer minutes interrupted have increased by 40% in the same period. Through the end of November 2021, just twenty days have accounted for 32% of our tree-related events, 29% of customers interrupted, and 36% of customer minutes interrupted.

With the positive results of our pockets of poor performance work, the Company will consider expanding the scope of the program in future years and possibly other strategic modifications.

Division 2-2

Request:

Regarding vegetation management spend for pockets of poor performance: The Company states that it will track tree-related reliability in these areas to determine the effectiveness of the program and evaluate whether or not the program should continue and/or possibly be expanded in the future. What is the status of these efforts and results of data collected?

Response:

Fiscal year 2021 was the first year of the pockets of poor performance. The Company has completed work in three different pockets of poor performance. In those areas, we have seen a 51% reduction in tree events compared to the monthly average prior to beginning work. We also show a 60% reduction in customers interrupted in the same areas. These early results are extremely promising, especially when considering that tree outages have been increasing throughout the state of Rhode Island.

Division 2-3

Request:

Explain the drivers for the vegetation management budget increase.

Response:

The Company requested an additional \$500,000 over the originally proposed FY 2023 budget to address cost increases for the cycle pruning program. During fiscal year 2022, the Company paid an average of \$5,199.12 per mile for cycle pruning. The bids for fiscal year 2023 work are currently \$6,151.21 per mile. These cost increases are primarily due to a shortage in qualified tree workers. Additionally, rising fuel costs and inflation have played a part in the increases.

Division 2-4

Request:

Provide more context on increasing underground cable replacement spending.

Response:

The Company's latest revision of the Underground Cable Replacement Program recommended replacement of approximately 76 miles of cable. The Company will have replaced approximately 37 miles by the end of FY22. In order to replace the approximately 38 miles remaining, the Company must increase underground cable spending from prior years. In FY23, the Company plans to replace approximately 11.2 total miles of UG cable which corresponds to the \$5.7M in the FY23 plan. One contributing factor to increased costs over the next few years is network secondaries being more complex and costly per mile than radial secondaries. Additionally, the work included in the underground cable replacement program must be sequenced appropriately in order to efficiently perform construction. For example, a specific duct bank might have multiple cables to be replaced. Deferring a subset of those cables would result in additional mobilization and demobilization costs. Secondly, there are also cases where a cable or set of cables needs to be replaced to provide better accessibility to another cable or set of cables. Lastly, other area construction work can influence the sequencing of programmatic cable replacement work. All of the work proposed in the Underground Cable Replacement category aligns with the latest strategy document provided in DIV 1-10.

Division 2-5

Request:

The Company's response to DIV 1-15 indicates that previously identified system capacity issues in the East Bay Area have not materialized yet the Company is progressing East Bay projects primarily due to major asset condition concerns. Discuss prioritization of East Bay over projects identified in other area studies with asset condition issues, particularly since several studies will be completed this year. Describe how the Company determines when specific area study projects rise to the level of need for inclusion in the ISR Plan, circumstances that would occur to re-prioritize projects, and how the Company performs this holistic review given that area studies are always in various phases across the system?

Response:

The Company first prioritizes its study efforts. Annual planning reviews and consultation with Operations and Control Center subject matter experts are used to determine which study area may contain the most severe issues and are used to rank areas for area study completion by highest to lowest priority. Generally, the highest priority work is associated with the study completed first. With one or more studies complete, the Company continues to evaluate the number and severity of the issues across the studies. However, some asset condition work is difficult to precisely prioritize. Specifically, for the East Bay study projects, substantial site acquisition and permitting work has been completed. To defer this work for other projects that are not clearly more critical would result in inefficiencies and potential rework.

The Company determines when area study projects rise to the level of need for inclusion into the ISR Plan as part of the area study process. The completed area study identifies a need date based on when the adverse condition is anticipated and severity of the issues at the time the study is performed. The Company reviews area study projects again before they enter detailed design to validate the need has not changed based on the most recent forecast. If the review indicates that the need or need date of the proposed project(s) has changed or no longer exists, the project(s) will be reanalyzed to align with the new need or need date or when applicable, removed from the plan.

Circumstances that could occur to re-prioritize asset condition projects could include, but are not limited to, failures on the system that result in Damage/Failure replacement projects, customer projects that impact or change the original scope or work, new maintenance information from subject matter experts, severe weather impacts, or other unanticipated events.

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Circumstances that could occur to re-prioritize system capacity and performance projects could include, but are not limited to, changes to annual forecasts, Distributed Generation and/or load customer projects changing load profiles, recent outage events or reliability issues, or system reconfigurations.

The Company performs a holistic review of projects as part of the capital planning process. The initial plan is created as part of annual ISR process and is continually updated via monthly meetings held across numerous departments to ensure the Company maintains proper prioritization of projects.

As discussed with the Division in previous meetings, with the finalization of all area studies being completed this year, the Company will be performing a detailed review of all area studies and prioritize projects based on the severity of the need.

Division 2-6

Request:

Based on the 11-22-21 conference between the Company and the Division, provide a detailed discussion of the changes in the Dyer Street substation schedule and fiscal year budgets including the impact on the FY2023 proposed budget.

Response:

The Dyer St schedule of completion for both the Substation and Distribution Line components of the project has been delayed from Q4 FY22 to QY1 FY23. This delay is mainly driven by supply chain issues with the supply of the metal clad switchgear. The switchgear delivery has moved from November 2021 to February 2022 based on manufacturer delays. This equipment is on the critical path for project completion. The late delivery shifted the completion of downstream activities into the next fiscal year.

The schedule shift resulted in an approx. \$3M shift from FY22 to FY23. This cost is approximately split equally between the Substation and Distribution Line scope.

The overall costs of the project were not increased because of this delay. The project civil construction is currently active on-site and on-schedule. Resequencing of the electrical and above grade work was completed through the schedule shift without overall cost increases.

Division 2-7

Request:

Discuss the current adequacy of meter supply and budget.

Response:

The Company's meter vendors are experiencing global supply change shortages, which has led to manufacturing delays and longer lead times for meter orders. The Company has factored in these new longer lead times when placing orders and developing the Capital budget. Our meter vendors continue to work with their suppliers to mitigate the impact of the supply shortages and to accelerate deliveries. Over the last few months, the Company's meter lab has seen an uptick in deliveries from the Company's meter vendors. The Company anticipates that to continue through the remaining months of FY22 and into FY23. Lastly, meter purchases forecasted for fiscal year 2022 and proposed in the fiscal year 2023 budget combined with existing inventory levels at the Company's meter lab are currently expected to be sufficient to support regulatory requirements, operations, and growth.

Division 2-8

Request:

Discuss all pressures on distribution transformer supply chain shortages and cost increases and the impact on the FY 2023 ISR Plan budget.

Response:

Regional and global markets for certain commodities consumed by the Company, including distribution transformers, have experienced price increases and supply chain disruptions due to a range of factors including volatility in raw material markets and global supply chain disruptions. The Company is seeing extended lead times for the purchase of transformers, as well as for the purchase of anodes, cable wire, couplings and caps and vault pads. In addition, availability of regionally located and qualified/specialized labor has been affected as market rates are increasing.

To date, outside of the cost impacts noted above, the Company has looked to mitigate price increases through prudent contracting strategies by contracting forward and negotiating terms that fix prices or limit increases. However, it is very difficult to predict the impact of this overall situation on the FY 2023 ISR budget. In cases where updated costs are available, the long-term plan has been updated, such as for contractor costs in large projects. For distribution transformers and other cases where the impact is difficult to predict, the Company has used previous practices for establishing the FY 2023 ISR budgets. There remains a risk that actual costs will exceed those used to develop the FY 2023 ISR budget for those items.

Division 2-9

Request:

Provide any other changes or adjustments to the proposed FY2023 ISR Plan, including those due to project delays, supply chain issues, and other factors identified in the FY2022 ISR Plan Q2 Report.

Response:

In the FY 2023 ISR Plan, the Company has adjusted Dyer Street Substation project's capital spending due to delays in receiving the metal clad switch gear. See the response to DIV 2-6. While changes in the timing of project work can occur frequently, at this time, the Company is not aware of any other significant changes to other projects that will impact the FY 2023 ISR Plan. However, there are some projects in the long-term forecast that are in process of having their total project cost estimates revised and the long-term forecast will be updated once those estimates are complete.

In addition, the Company has reduced capital spending associated with the URD Program from the amount originally proposed in the FY 2023 ISR Plan. The Company had proposed an increase in the URD Program budget since there have been increasing URD failures since 2017 as noted in response to DIV 1-11. However, the Company has subsequently proposed a reduction to the FY 2023 Plan for URDs. The reduction was due to multiple factors related the availability of resources.

Finally, the Company has increased Vegetation Management O&M costs in the FY 2023 ISR Plan due to market increases in Vegetation Management vendors. See the response to DIV 2-3.

As noted in the response to DIV 2-8, the Company is experiencing impacts in delivery and costs related to materials and services due to supply chain constraints. Where those impacts can be reasonably estimated, they have been included in our long-term forecast. Where those impacts are difficult to forecast, such as transformers, the Company has developed the capital budget for the FY 2023 ISR Plan using approaches consistent with those used in previous years and has not incorporated risks associated with uncertain potential cost increases and delivery delays because of difficulties with specifying the cost impact at this stage. However, the Company anticipates increasing cost risk to the FY 2022 and FY 2023 Plans due to these supply chain disruptions that may produce actual costs higher than budgeted, which could be significant and not temporary.