



Maintenance, Interconnection and Emergency Restoration Policies

Effective Date August 1, 2015

Restoration and Emergency Response

MFC will respond to any failure, interruption or impairment in the operation of the fiber optic strands within two (2) hours of notification. MFC will use commercially reasonable efforts to have service restored to proper working order within twenty four (24) hours of any such failure, interruption or impairment. The **Maine Fiber Company Emergency contact number is (207) 321- 6169**. This number is dedicated only to Maine Fiber Company emergency issues.

Customer Responsibilities

The Customer is responsible for identifying service outages that appear to be a result of damage to dark fiber, and for immediately contacting **Maine Fiber Company's 7x 24 Emergency Repair number which is 207-321-6169**. The reporting party should provide the following information to MFC Emergency Repair:

- Company name
- Reporting party name
- Reporting party contact information
- Circuit ID for the affected fiber segment
- Diagnostic information, including estimate of location, isolated equipment location, time/date stamp of alarms in customer optronics or monitoring software, etc.

MFC Operations Responsibilities

MFC has contracted with NextGen Telecom Services Group, Inc. and additional qualified telecom contractors for 24/7/365 emergency response restoration services. NextGen is well known in the telecom industry as being one of the leading fiber optic cable construction contractors in the Northeast. NextGen offers a complete line of telecom services. Fiber optic cable *strand & lash* construction, fiber optic cable fusion splicing, all types of fiber cable testing and pole setting are just a few of the services NextGen offers. NextGen has provided MFC with a 24/7/365 hotline phone number for MFC to use when necessary. The NextGen Telecom Services Group, Inc. on call supervisor will obtain relevant failure, interruption or impairment information from MFC and dispatch appropriate resources. Triage will be coordinated between NextGen Telecom Services Group, Inc. and the Outage Coordinator from MFC. MFC will be updated on individual links as they are restored. MFC will update the customer periodically with progress on restoration until service is



restored. NextGen maintains a revolving employee “on call” schedule to ensure the required resources are available during off hours and weekends when needed. NextGen has an office in Gardiner, ME and also has multiple satellite offices/lay downs across the state. They also operate an office in Rochester, NH which is located next to the Maine border and assists with Southern Maine response support. NextGen currently provides similar services to multiple telecom providers throughout the Northeast.

MFC and NextGen maintain multiple “emergency response kits”. These kits are designated to be used on the MFC fiber network for emergency restoration efforts only. Each kit consists of enough materials to repair/replace two sections of cable and complete two splice locations. The restoration kits consist of multiple lengths of cable with multiple strand counts, 5/16 EHS messenger strand, multiple FOSC450D splice enclosures, splice trays, snow shoes and hardware (bolts, nuts, clamps, dead-ends, strand splices, etc.) NextGen also maintains an inventory of anchors and utility poles that are available for restoration when needed.

Emergency Response Escalation Procedure

Customers may use the Emergency Response Escalation Procedure in the event that MFC has not met the (2) hour notification objective and/or the 24 hour restoration objective noted above. Please refer to the table below for escalation steps and contact information.

Contact	First Escalation	Second Escalation	Third Escalation	Fourth Escalation
Name	On-Call Supervisor	Tim LaBreck Operations Manager	Ron Maynard Outside Plant Engineer	Dewey Allison VP
Phone	207-321-6169	207-650-0702	207-245-8076	603-860-0605

In the event that the Restoration and Emergency Response objective is *missed*, MFC will conduct a ‘Root Cause Analysis’ and make the written results, including recommendations for improvements, available to the customer as well as any third parties or contractors that may have had an impact on the event.

Fiber Tagging, Interconnections, Route Maintenance and Construction Integrity

MFC uses only custom ordered and manufactured fiber optic cable. The cable sheath is embossed with the MFC emergency call-in number of “(207) 321-6169” and “Maine Fiber Company” on the outside sheath of the cable. In addition to the MFC contact info being embedded into the cable sheath, MFC has two distinct yellow stripes manufactured into the cable sheath that are used for identification and can be seen from a reasonable distance away. MFC is also installing custom orange wrap around fiber tags with the same telephone number and company name at each fiber optic cable pole attachment and manhole/handhole. MFC is confident that custom labeling all cable and fiber tags will assist in quickly identifying MFC owned



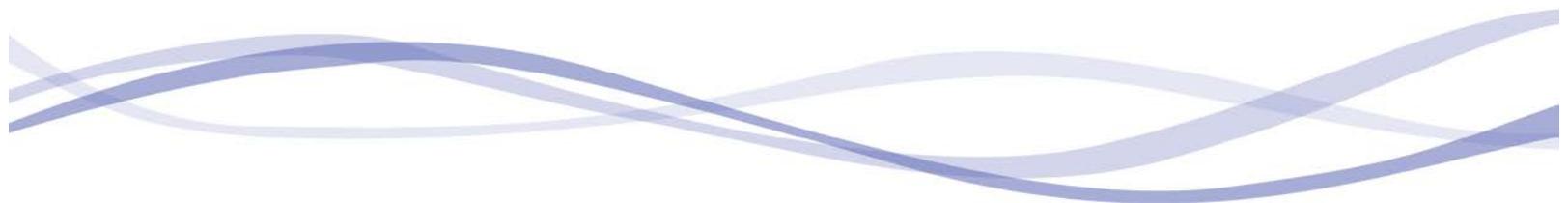
cable which will ultimately expedite restoration response and restoration of customer service. Additional fiber optic cable slack loops designated as “restoration slack” have been engineered into the network design and are located throughout the entire network. These slack loops are to be used for restoration and maintenance only. This will ensure cable slack is available for restoration for years to come.

In order to maintain reliability and decrease service interruptions, Maine Fiber Company proactively patrols the MFC fiber every 6 to 8 months to identify areas needing maintenance and possible future problems. Inspections are typically completed in a 2-4 week window and any corrective work is scheduled following the completion of each inspection, and is generally completed within 60 days of inspection commencement. MFC allows only pre-approved contractors under the direction and supervision of MFC to perform work on the MFC Fiber. The Planned Maintenance Schedule below provides additional detail regarding planned maintenance notification procedures. The design and engineering of MFC fiber infrastructure was done with durability, serviceability, and reliability goals in mind. The network is being constructed with 5/16” EHS strand, Prysmian FlexLink, All-Dielectric cable with gel filled tubes, Corning SMF28e+ fiber with a maximum dB loss of .22db/km and Tyco FOSC450D splice enclosures in support of these goals.

Type of Work	Notice To	Notice Interval	Work Window
Non-emergency service Interrupting fiber maintenance	Lessees in affected cable, via e-mail and telephone	2 Weeks in advance	Mondays, Tuesdays, Wednesdays & Thursdays 12AM and 6AM
Routine fiber maintenance	Lessees in affected cable, via e-mail	1 Week in advance	Mondays, Tuesdays, Wednesdays & Thursdays 12AM and 6AM
Pole transfers and cable relocation	Lessees in affected cable, via e-mail	Best effort	7x24x365

Notes:

- 1) The routine fiber maintenance schedule is subject to change. Notice Interval is best effort. Please check our website at www.mainefiberco.com for the latest updates.
- 2) Certain segments of the MFC network utilize an underlying fiber provider. Those segments are between Bangor and Orono, between Ellsworth and Bar Harbor, and between Brunswick and Portland. In the event an outage occurs on any of these segments, MFC Operations coordinates with the underlying provider for maintenance and restoration activity.





New Interconnection Activity

New interconnections to the MFC fiber network are considered normal course of business, but are strictly controlled in order to avoid disruption to existing connections and services. Interconnection activities include, but are not limited to, accessing the MFC backbone fiber, delashing/lashing, movement of slack, ring cutting cable, installation of new splice cases, access to existing splice cases, splicing, testing and inspection. Each Interconnection Application is reviewed and approved by an MFC Engineer prior to scheduling activity on the MFC network. All interconnection activity is conducted per the table below.

Type of Work	Notice To	Notice Interval	Work Window
Routine interconnection related splicing activities	Lessees in affected splice tray or buffer tube, via e-mail	One (1) week in advance	Mondays, Tuesdays, Wednesdays & Thursdays 12AM and 6AM

New interconnections may be performed during normal working hours in the event that a single customer occupies the affected buffer tube, and/or splice tray, provided that the customer approves the daytime work in advance.

Interconnection on segments utilizing underlying providers is provided on an individual case basis. Please contact MFC in advance to determine whether interconnection is available in the segments between Bangor and Orono, between Ellsworth and Bar Harbor, and between Brunswick and Portland.

Fiber Management Software

Maine Fiber Company knows the importance of accurate, as-build documentation and has invested in one of the most sophisticated and reliable tools on the market to manage this information. MFC has purchased Telvent, ArcFM and Fiber Manager, a GIS driven fiber management software system with a detailed attachment database that will ensure efficient identification and management of all fiber routes, strands, and splice points. This will aid in the tracking and fault isolation resulting in quicker restoration and faster provisioning. The Telvent software is one of the most robust, user friendly fiber management software packages available on the market. Maine Fiber Company is able to access the software remotely from any computer from any location. This will aid in complicated troubleshooting and restoration efforts and assist in quicker service restoration. Every piece of data associated with the MFC fiber optic infrastructure will be stored and managed within the Telvent software. Such as, GIS locations of every utility pole, manhole, handhole, splice point and slack loop location within the network. Every pole number and the cable sheath footage at every pole will also be stored in the data base. Telvent software tracks and documents fiber usage, availability and customer designation which will assist in quicker repairs. The software also generates detailed splice schematics based on the information stored in the data base. The splice schematics are color

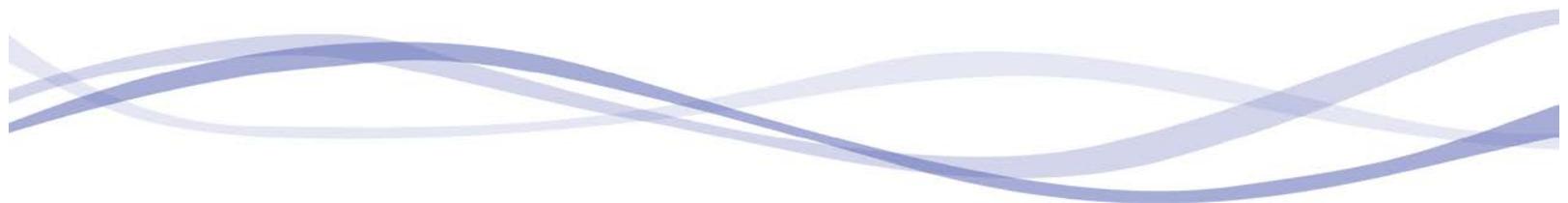


coded and easy to interpret which reduces the opportunity of error out in the field. Additional information regarding the Telvent, ArcFM & Fiber Manager can be found at the web site listed below:

www.telvent.com/en/business_areas/smart_grid/solutions_overview/utilities_gis/arcfm_solution/index.cfm

Maine Fiber Company has built a fiber optic cable network with some of the best materials available on the market. We are confident the combination of utilizing industry leading products, superior construction craftsmanship, Telvent fiber management software and having a clear and dependable restoration process, our customers will enjoy reliable, secure, state of the art MFC dark fiber for many years to come.

Issue Date: August 2015





Emergency Response Number

For dark fiber outages and other emergencies, please contact

Maine Fiber Company Repair (7x24x365 NOC) at:

207-321-6169

Emergency Response Escalation

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Contact	First Escalation	Second Escalation	Third Escalation	Fourth Escalation
Name	On-Call Supervisor	Tim LaBreck Operations Manager	Ron Maynard OSP Engineer	Dewey Allison, VP
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