



Dark Fiber

Carrier Services

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Created: 5/27/2010

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Dark Fiber

Before placing an order for Unbundled ("UNE") Dark Fiber, a CLEC must have an executed Dark Fiber Interconnection Agreement/amendment in the state where the CLEC is seeking dark fiber, unless there is an approved tariff in the state for Dark Fiber.

The ordering process for UNE Dark Fiber consists of a two-step sequential process. The first step consists of submitting a Dark Fiber Inquiry Request to determine if spare UNE Dark Fiber is available. If available, the CLEC can proceed to submit an ASR to order the UNE Dark Fiber Network Element.

Dark Fiber Inquiry Request

The CLEC will be required to submit a Dark Fiber Inquiry request to determine if spare UNE Dark Fiber is available prior to placing a firm order. E-mail the form to your Account Manager. For assistance in filling out this form, view the Dark Fiber Inquiry Instruction sheet

Upon receipt of the CLEC's accurate and complete UNE Dark Fiber Inquiry Form, Frontier will initiate a review of its cable records to determine whether spare UNE Dark Fiber may be available between the locations and in the quantities specified (additional locations will require additional requests).

Except for voluminous requests, Frontier will respond to the CLEC within fifteen (15) business days from receipt of the CLEC's complete and accurate request, indicating whether the Frontier records show UNE Dark Fiber as available. For voluminous requests, Frontier reserves the right to negotiate a different interval. The CLEC will be billed for each Dark Fiber Service Inquiry submitted. When the direct route requested is not available, Frontier will check into and provide alternate routing information if available, provided that such services are included in an approved tariff or interconnection agreement.

The CLEC may proceed to place a firm order for UNE Dark Fiber via an ASR any time following the completion of the request if Dark Fiber is found to be available. UNE Dark Fiber is provided subject to the availability of facilities on a first-come, first-served basis. Frontier is not responsible if the identified spare Dark Fiber is utilized before the CLEC submits its ASR. Frontier will not reserve spare dark fiber unless such reservation is explicitly authorized by a CLEC's Interconnection Agreement (or unless the CLEC requests parallel provisioning in accordance with such Interconnection Agreement and/or amendment). Frontier will, however, accept a firm order based on the original ASR Inquiry (if the fiber is still available). Except as set forth above, then a CLEC may not reserve UNE Dark Fiber.

Frontier shall provide CLECs with access to UNE Dark Fiber in accordance with, but only to the extent required by applicable law.

Ordering

UNE Dark Fiber will only be provided on a contractual basis or under a state tariff. Update of an existing contract is required should the underlying agreement not contain Dark Fiber terms and conditions. Access to UNE Dark Fiber at a Frontier premises requires collocation and optical cross-connects.

Parallel Provisioning

Parallel Provisioning allows the CLEC to order and pay for the UNE Dark Fiber facilities in our network until their Collocation Arrangement/Augment for fiber terminations is complete. Frontier will bill the CLEC for these UNE Dark Fiber facilities even though they are not working (not connected) to the CLEC's Collocation Arrangement.

Before the CLEC submits a request for Parallel Provisioning of Collocation and UNE Dark Fiber, the CLEC will:

Submit a Dark Fiber Inquiry Form with parallel provisioning in the remarks section (and receive a response from Frontier that UNE Dark Fiber is available on the requested route) and submit a Collocation application for the Frontier Central Office(s) where the UNE Dark Fiber terminates and receive confirmation from Frontier that the CLEC's Collocation/Augment request can be accommodated. If UNE Dark Fiber is available, the fiber is automatically reserved for 10 business days from the date of the response.

Dark Fiber IOF - Parallel Provisioning may be applied at either the ACTL or the SECLOC or both.

A CLEC must submit two ASRs, described below, in order to obtain Parallel Provisioning.

1. The first ASR will order the circuit between the two designated locations. The CCEA/SCCEA information on this ASR will be populated with the **2STEP/FHS/1/2STEP/2STEP** at the location where the cage is being constructed or the fiber terminations are being established. Since the collocation arrangement or augment for fiber terminations is not yet complete the CLEC will not be able to provide Frontier with the actual cable CCEA or SCCEA information. Frontier will provision and complete the ASR and begin billing. While the collocation arrangement/augment for fiber terminations is being completed, a CLEC will be charged for having the facilities between the two locations provisioned (assigned).

For the fields on the 1st ASR:

CLLI	must be 11 characters, not 8
Project	2STEP
CCEA	2STEP/FHS/1/2STEP/2STEP
SCCEA	2STEP/FHS/1/2STEP/2STEP
REMARKS	Parallel Provisioning

Note: Use **2STEP/FHS/1/2STEP/2STEP** only at the location where the cage and/or fiber facilities are being constructed (could be one or both ends). This field should be populated with the actual cable CCEA information when the ACTL or SECLOC is a Collocation arrangement that is complete and has sufficient fiber facilities in place.

2. The second ASR will be issued after the Collocation Cross Connecting Facility Assignment (CFA) information is complete and provided by Frontier to the CLEC. At this time the service order from the first ASR will have been completed. This second ASR will provide the actual cable CCEA information that connects the Dark Fiber circuit to the CLEC's new cage. This ASR will be a re-arrangement to put the UNE Dark Fiber circuit onto the correct span CFA (ACT = C).

On the 2nd (change/rearrange) ASR enter the following information:

RPON	enter the original Service Inquiry PON
Project	2STEP
CCEA	actual CFA
SCCEA	actual CFA
REMARKS	Parallel Provisioning

Optional Services

Upon request, and subject to time and materials charges to be quoted by Frontier, Frontier may provide the following Optional Engineering Services to CLEC's to facilitate ordering decisions:

Routine Network Modification (RNM)

Upon request, Frontier may provide routine network modifications, subject to time and material charges to be quoted by Frontier, as are necessary to permit access by CLEC to Dark Fiber Transport facilities available, where the facility has already been constructed.

Routine network modifications applicable to Dark Fiber Transport may include, but are not limited to, splicing of in-place dark fiber at existing splice points; accessing manholes; deploying bucket trucks to reach aerial cable; and routine activities, if any, needed to enable CLEC to light a Dark Fiber Transport facility that it has obtained from Frontier under the Amended Agreement.

Routine network modifications do not include the construction of new Transport facilities, trenching, the pulling of cable, the installation of new aerial, buried, or underground cable for a requesting telecommunications carrier, or the placement of new cable. Frontier shall not be required to perform any routine network modifications to any facility that is or becomes a Discontinued Facility.

To request a RNM, the CLEC must complete and forward the Dark Fiber Engineering Services Form to their Account Manager, who in turn will request a RNM from Frontier Engineering. The Engineer will ascertain the scope and cost of the work to be performed and provide the quote directly to the CLEC. Once advanced payment and the signed letter

of intent are received, an Engineer Work Order (EWO) will be prepared directing the appropriate technician(s) to perform the RNM requested.

Field Survey

A CLEC can request two types of Field Surveys to verify the accuracy of Frontier's response to a Dark Fiber Inquiry.

- **Field Survey Request for Transmission Test:** When Frontier's response to an UNE Dark Fiber inquiry is positive (UNE Dark Fiber is available), the CLEC can request a Field Survey to verify fibers are available and have Frontier perform a transmission test to provide the CLEC with the actual transmission characteristics of the requested UNE Dark Fiber.
- **Field Survey Request for Fiber Records:** When Frontier's response to an UNE Dark Fiber inquiry is negative (UNE Dark Fiber is not available), the CLEC can request a Field Survey to have Frontier physically verify the accuracy of Frontier's fiber records.

To request a Field Survey, the CLEC must complete and forward the Dark Fiber Engineering Services Form to their Account Manager, who in turn will request a Field Survey from Frontier Engineering. The Engineer will ascertain the scope and cost of the work to be performed and provide the quote directly to the CLEC.

Connector Cleaning/Retrofitting

Frontier shall not be obligated to make UNE Dark Fiber conform to any industry standards. After a CLEC has ordered and accepted the UNE Dark Fiber, the CLEC can request Frontier perform the following basic engineering services in an effort to improve the transmission characteristics of the fiber, which shall be performed on a time and material basis. Such work shall include and be limited to the following:

- Frontier will not provide any splicing, re-splicing, conditioning, service improvement or electronics on UNE Dark Fiber, except as may be required by federal law.
- The UNE Dark Fiber is provided "As Is".
- Frontier UNE Dark Fiber may contain mechanical splices.
- A CLEC may ask Frontier to perform Connector Retrofitting/Cleaning Connectors to improve the transmission characteristics of the UNE Dark Fiber only after the CLEC has ordered and accepted the UNE Dark Fiber pair(s). Such a request may be for Frontier to retrofit and/or clean the Frontier connectors attached to the UNE Dark Fiber.

To request a Field Survey, the CLEC must complete and forward the Dark Fiber Engineering Services Form to their Account Manager Engineer, who will ascertain the scope and cost of the work to be performed, and provide a quote directly to the

CLEC. Once advanced payment and the signed letter of intent are received, an Engineer Work Order (EWO) will be prepared directing the appropriate technician(s) to either retrofit or clean the connectors. The following caveats apply:

1. Frontier will not perform engineering services if there is any risk of disrupting existing fiber optic services.
2. Frontier will make no guarantees to the CLEC that the work performed by its personnel will increase connector performance and/or improve the transmission characteristics to the level desired by the CLEC.
3. As standard business practice calls for all connectors in a ribbon to be retrofitted at the same time, the CLEC will be charged for each connector changed on the ribbon on a time & material basis.