

The Hot Cut Process allows telecommunications customers to be converted from one provider to another. The actual hot cut is performed when a customer is not using the circuit and therefore, will not noticeably impact their service. To complete this conversion, it requires that the customer's line be physically switched from the original provider's circuit to the new provider's circuit. The conversion, performed by a technician within the central office, is referred to as a "Hot Cut."

Currently this process is performed one order at a time.

A proposed new process referred to as the Batch Hot Cut Process will allow the work steps for multiple orders to be handled concurrently by two technicians working in tandem.

The following video will demonstrate both the current hot cut process and the proposed Batch Hot Cut Process and will not only follow the various tasks performed while making a hot cut, but will also demonstrate that the batch hot cut process is faster and more efficient than current procedures.

The "Hot Cut" consists of four basic parts: Receiving the Service Order, circuit pre-wiring and testing, the actual Hot Cut and re-testing, and lastly the updating of software and records to reflect the transfer.

The proposed Batch Hot Cut Process will provide additional efficiency by allowing C-LECs to submit multiple loop service orders which Qwest will combine on a single spread sheet for internal use to assist the central office technicians to prioritize by the cross connection location on the InterConnection Distribution Frame and COSMIC or Main Distribution Frame, per C-LEC so that the technicians can perform multiple functionality in each working location more efficiently.

Phone calls traverse a Central Office a facility where subscribers' telephone lines are joined to switching equipment for the connection of local and long distance calls.

Within the Central Office are distribution frames, which are termination points for wiring on one side of the protector frame connecting thousands of wires from the outside world; on the other side are the wires coming from the Central Office switch itself. Both sides are connected with a "jumper" wire that completes the circuit which is the physical connection or path between

two given points through which an electric current may be established, and is required for a customer to receive telephone service.

To change switch service providers, one end of the jumper wire is moved from its current location to a new location, called a “hot cut.”

The existing circuit from the central office to the end user will remain the same with a hot cut however the portion of the circuit within the central office connecting the switch to the outside world must be transferred from the Qwest Switch to the C-LEC Switch.

Using information provided to Qwest by the C-LEC, Qwest prepares a service order that includes detailed circuit information, including block location and the telephone number, from which the technicians are able to locate and prepare the circuit for the transfer.

To create the new C-LEC portion of the circuit, technicians begin at the C-LEC’s Interconnect Distributing Frame or ICDF, the ICDF is the location in the central office where the C-LEC interconnects into the Qwest Network.

A jumper wire is connected from the connecting block on which the C-LEC’s service is terminated to a connecting block that terminates to an existing tie cable that runs between the ICDF and the MDF.

The tie pair cables terminating connector block location on the COSMIC Frame is then wired to a jumper that will terminate on the end user’s existing cable pair when the Hot Cut is performed.

When the hot cut is completed the dial tone will then be provided by the C-LEC.

Let’s look at a simple overview of how the actual hot cut is performed today.

First the technicians check the CLEC’s Connecting Facility Assignment located on their ICDF block and terminal location for dial tone.

If dial tone is not present this is noted and properly reported and wiring continues.

The wiring consists of first running a jumper wire from the block and terminal location on the ICDF is run to an open tie cable pair. In the current process the technician wires only a single circuit at this stage.

After completing work at the ICDF, the technician moves to the COSMIC Frame, where the network is connected to the end user and where the actual hot cut will be performed.

At the COSMIC Frame the technician attaches a jumper wire from the connecting block on which the tie cable from the ICDF is terminate

which runs to the appropriate plant cable termination block going to the outside world.

The jumper wire is then tied in a knot or kinked and left unconnected so that it may be easily identified at the time of the hot cut.

Continuity and Automatic Number Identification known as ANI testing of the Qwest customer line are now performed. Any problems detected are reported. Preparatory work is now complete.

Prior to the actual hot cut being performed, a second ANI test is conducted verifying the telephone number on the circuit and the line is monitored to ensure that the CLEC's end user is not currently utilizing the line. If the line is idle, COT will perform the hot cut or lift and lay process which removes the Qwest service to the customer as shown and replaces the jumper wire with the jumper ran during the pre-wire step as identified earlier in the process. In this step the technician is shown running a jumper from (ICDF) Interconnection Distribution Frame to the Cosmic or Main Distribution Frame or MDF.

The technician then moves to the facility protection Heat Coil blocks which acts like a fuse box, protecting the central office equipment from outside power surges.

The Heat Coil block is where final dial tone and ANI testing of the C-LEC service occurs.

Any problems encountered at the protectors will be isolated to the central office wiring and corrected immediately or properly reported and the technician will complete on their WFADI terminal the customer circuit work requests.

After completing the physical work the technician will update Qwest records to indicate that actual connectivity of the circuit serving the end user is no longer served with Qwest dial tone. (End of Current Process)

Now that we have reviewed the Hot Cut Process, let's take a look at the proposed Batch Hot Cut Process which would allow two technicians to wire multiple circuits for the entire end user batch at the ICDF rather than performing only one order at a time, significantly increasing efficiency.

Because current process only allows a technician to wire one circuit at a time, multiple trips must be made by the technicians between the ICDF and the COSMIC Frame. By using a batch hot cut process multiple trips will be eliminated creating a more efficient process.

After completing work at the ICDF, the technicians move to the COSMIC Frame, where the network is connected to the end user and where the actual batch hot cuts are performed.

At the COSMIC Frame the technician attaches a jumper wire from the connecting block on which the tie cable from the ICDF is terminated which runs to the appropriate plant cable termination block going to the outside world where the jumper wire is then tied in a knot or kinked and left unconnected so that it may be easily identified at the time of the batch hot cut. Again with the batch hot cut process this will be performed multiple times.

Continuity and ANI testing of the C-LEC facilities are performed at this time. Any problems detected are reported. At time of cut testing is repeated and the lift and lay operation is performed.

The proposed Batch Hot Cut Process will give end users a transparent and low cost transition between Qwest and C-LEC because of efficiencies gained when the pre-wiring is placed in groups reducing the time spent placing individual orders and performing unneeded steps before the batch migrations are started.