

Oxnard Dig-in Incident

Safety and Enforcement Division

Electric Safety and Reliability Branch

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California Public
Utilities Commission

Presentation Overview

1. Timeline of Events
2. Incident Specifics
 - The Carport Project
 - Dig Ticket Process
 - UtiliQuest
 - The Underground Conductor
 - Day of the Accident
3. Applicable General Orders and Public Utilities Codes
4. SED Citation and Utility Response

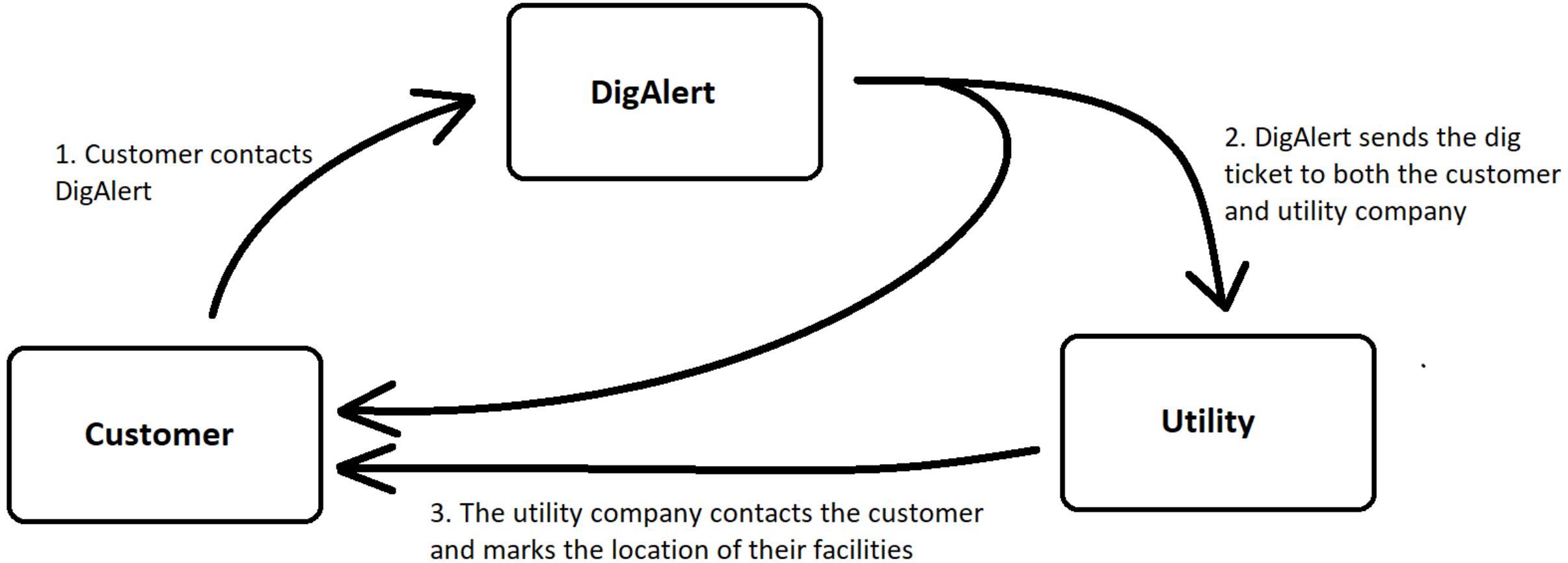
Timeline of Events

- November 8, 2017: Baja Construction called DigAlert
- November 10, 2017: UtiliQuest responded to the location
- November 28, 2017: Southern California Edison (SCE) installed and energized new conductor
- December 2, 2017: Baja Construction began excavation and incident occurred
- December 4, 2020: SED issued a citation to SCE in the amount of \$1,000,000

The Carport Project

- McCarthy Companies was the general contractor for the construction of a new carport at a senior living facility in Oxnard.
- McCarthy Companies hired subcontractors, including Baja Construction and Light and Power, Inc.
- The project included a new underground 16 kV conductor and a new transformer to be installed by SCE.
- Baja Construction, the subcontractor responsible for excavating the carport's footings, called DigAlert (Underground Service Alert) on November 8, 2017.

The Dig Ticket Process



The Dig Ticket

MBRCOD 00000 USAS 11/08/17 16:28:28 A173121598-00A NORM NEW POLY

Ticket : A173121598 Date: 11/08/17 Time: 16:20 Oper: ADW Chan: 100
Old Tkt: A173121598 Date: 11/08/17 Time: 16:20 Oper: ADW Revision: 00A

Company: BAJA CONSTRUCTION Caller: VANESSA FABIAN
Co Addr: 233 FOSTER ST
City&St: MARTINEZ, CA Zip: 94553
Phone: 925-229-0732 Ext: Call back: 7AM-5PM
Formn: JOSE CISNEROS Phone: 925-586-5434
Email: FABIANVAN14@GMAIL.COM

State: CA County: VENTURA Place: OXNARD
Delineated: Y
Delineated Method: WHITEPAINT
Address: 750 Street: CLYDE RIVER PL
X/ST 1 : N VENTURA RD
MPM 1: MPM 2:
Locat: PARKING LOTS AT ADDRESS, WHICH IS RIVER PARK SENIOR LIVING APARTMENT
: COMPLEX LOC ON S/COR/OF INTER/OF CLYDE RIVER PL & N VENTURA RD

Excav Enters Into St/Sidewalk: N

Grids:
Lat/Long : 34.245800/-119.182105 34.243060/-119.178285
: 34.243025/-119.184095 34.240285/-119.180276
Caller GPS:

Boring: Y Explosives: N Vacuum: N
Re-Mark: N

Work : INSTALL FOOTINGS FOR CARPORT
Wkend: N Night: N
Work date: 11/13/17 Time: 17:01 Hrs notc: 121 Work hrs: 020 Priority: 2
Instruct : MARK BY Permit: NOT AVAILABLE
Done for : MCCARTHY COMPANY

Tkt Exp: 12/06/17

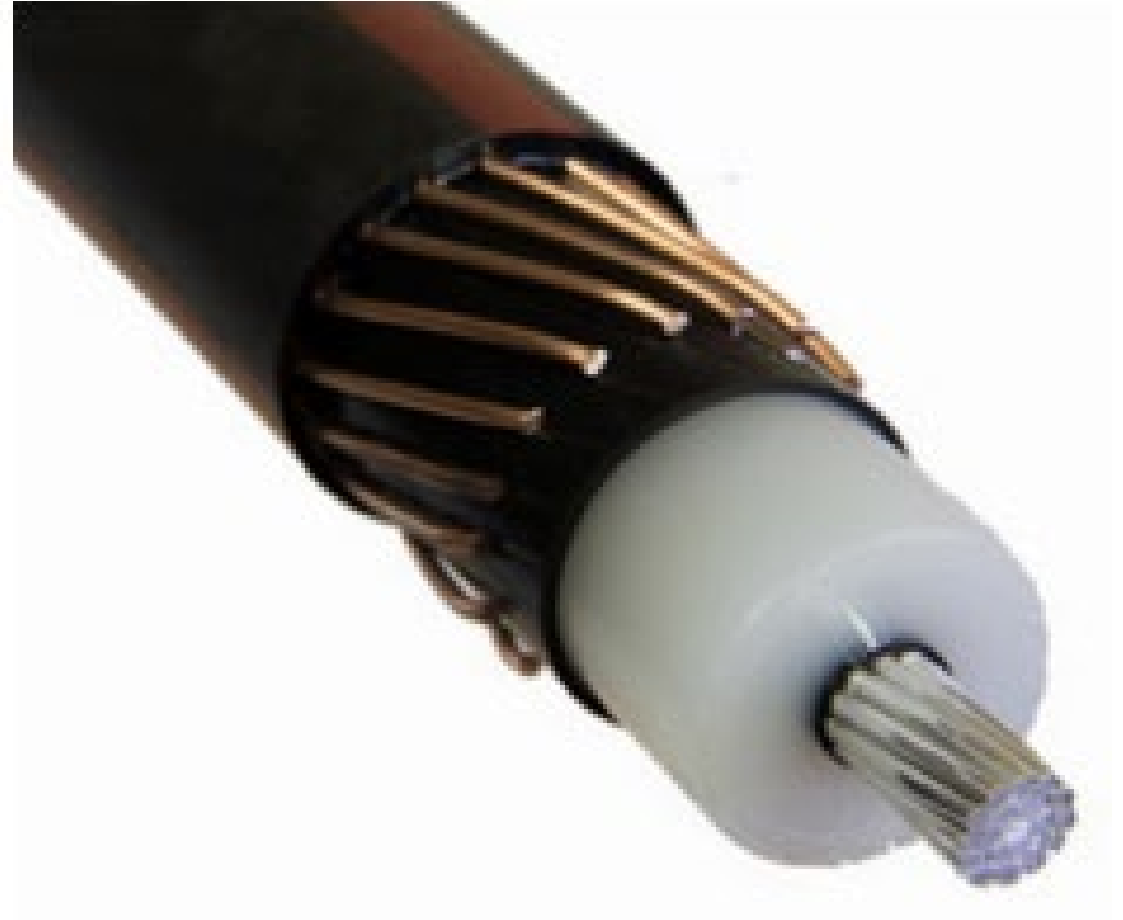
UtiliQuest

- UtiliQuest is SCE's designated locator service.
- DigAlert contacts UtiliQuest directly.
- UtiliQuest uses Facility Inventory Maps (FIMs) from SCE but does not rely on them while locating underground facilities.
- At the time SCE only sent monthly updates to UtiliQuest.
- UtiliQuest responded to DigAlert's notification and visited the worksite on November 10, 2017 where they correctly determined that no underground conductors were present.

The Underground Conductor

- On November 28, 2017, SCE installed the new underground conductor.
- Due to delays, no excavation activity had yet begun.
- SCE did not mark the location of the new conductor.
- McCarthy Companies did not notify Baja Construction of the new conductor.
- SCE also did not notify UtiliQuest of the newly installed conductor.

Underground Concentric Cable



Day of the Accident

- On December 2, 2017, Baja Construction began excavation activities.
- A Baja Construction employee exposed and damaged the conduit while digging with an auger.
- Baja Construction staff sought the expertise of a Light & Power, Inc. Foreman Electrician.
- Despite the new condition of the conductor, the new conduit, the visible trench marks, and the new padmounted transformer, the employee determined that the conductor was most likely inactive and cut it with a hand-held tool.

Applicable General Orders and Public Utility Codes

GO 128, Rule 17.1

General Order (GO) 128, Rule 17.1 Design, Construction and Maintenance, forbids the operators of underground electric utility facilities from establishing any conditions unusually dangerous to workers.

SCE's practice of sharing their updated underground facility maps with their contractor UtiliQuest on a monthly basis can create a dangerous situation for workers in active excavation areas.

GO 128, Rule 17.1

GO 128, Rule 17.1 also requires that construction of such facilities be done in accordance with accepted good practices.

California Government Code § 4216.3(a)(1)(B) states:

An operator shall mark newly installed subsurface installations in areas with continuing excavation activity.

SCE failed to mark the location of their new conductor after installing it in an area with ongoing excavation activity in violation of an accepted good practice codified by California Government Code § 4216.3(a)(1)(B).

GO 128, Rule 17.7

GO 128, Rule 17.7, Location Information, requires the operators of underground electric utility facilities to locate and mark the location of those facilities upon request.

SCE failed to mark the newly installed conductor and did not provide that information to UtiliQuest nor directly to Baja Construction. SCE failed to ensure that its underground facilities were marked properly prior to excavation as requested.

PU Code § 451

California Public Utilities Code (PU Code) § 451 requires every public utility to maintain its facilities and furnish its services in such a way as to promote the safety of the public.

SCE installed a new 16 kV underground conductor in an active excavation area without marking the conductor, without informing the excavator Baja Construction, and without informing SCE's locator UtiliQuest. Therefore, SCE is in violation of PU Code § 451 for not furnish its services as necessary to promote the safety of the public.

The Excavator's Responsibility

California Government Code § 4216.4 states in part:

(a)(3) An excavator shall presume all subsurface installations to be active, and shall use the same care around subsurface installations that may be inactive as the excavator would use around active subsurface installations.

(c)(1) An excavator discovering or causing damage to a subsurface installation... shall immediately notify the subsurface installation operator.

Baja Construction and the Foreman Electrician should have presumed that the underground conductor was active and should have ceased work and reported it to SCE.

SED Citation and Utility Response

- In response to the incident, SED fined SCE \$1,000,000 for the four violations cited.
- SCE also submitted a corrective action plan in response to the citation. SCE's plan includes the following changes to its processes and procedures:
 1. SCE created a new procedure for UtiliQuest to follow. This procedure includes a requirement to report discrepancies between map and field data to SCE.
 2. SCE will increase its efforts to educate excavators on their responsibilities and proper courses of action to take when they discover underground conductors.
 3. SCE will reinforce to its employees and contractors that they must notify UtiliQuest whenever installing or energizing new underground facilities in areas of apparent excavation activity.
 4. SCE plans to eventually increase the frequency of map updates to UtiliQuest via a cloud-based file sharing system.
 5. SCE will require its employees and contractors to check for active dig tickets whenever installing new underground conductors.

Questions?

