

December 10, 2018

VIA ELECTRONIC FILING

Public Utility Commission of Oregon
201 High Street SE, Suite 100
Salem, OR 97301-3398

Attn: Filing Center

RE: NC 386—PacifiCorp's Compliance Filing

Consistent with the Public Utility Commission of Oregon's (Commission) Order No. 18-373 in docket NC 386 (the Order), PacifiCorp d/b/a Pacific Power has conducted an internal review of practices and procedures to assure compliance with the requirements of this Order and the statutes established by the Oregon Utility Coordinating Council (OUCC).

Two separate regulatory violations were addressed in Order. The first incident occurred on January 14, 2018, and the second on May 9, 2018. In both cases, the incidents were known and Pacific Power took corrective actions before receiving notification of a formal complaint filing with the Commission.

The first incident occurred in Portland, Oregon, and involved a failure to notify an excavator that no Pacific Power facilities were in the area of the planned excavation. The work area was actually in the Portland General Electric (PGE) service area but close to a PGE/Pacific Power service boundaries. The Oregon One Call Notification Center (OUNC) nevertheless generated a locate request that Pacific Power identified as out-of-bounds. Pacific Power, however, failed to provide a positive response to the excavator. The incident was reviewed with the responsible parties and their management. Additionally for locate requests handled by our internal workforce, as was the case for this request, the method of receipt for all future locate requests was switched from fax transmission to email. Fax transmission and the potential for a request to become buried in the pile of other faxed documents was considered to be a contributing factor in this instance.

The second incident took place in Grants Pass, Oregon, and involved a locate performed by our locating contractor. On the Pacific Power system, 98.5% of all locate request are handled by our contract locating company. We closely monitor their procedures and performance and conduct quarter reviews of their performance. Pacific Power also conducts audits to validate that locate requests are being handled properly from a field performance, documentation and management of the process perspective.

This second incident resulted from an incorrectly performed locate that was reported to our Grants Pass operations manager by the excavator. The Pacific Power operations manager dispatched a crew to examine and correctly perform the locate. The operations manager reported the incident to the contractor who dispatched a supervisor to conduct an investigation. It was found that the original locate marks were inaccurate due to a locating device hook-up error. The

individual who performed the original locate was counselled and retrained to assure that he fully understood the correct procedure. Training details were documented and the incident was a subject during our next quarterly review of performance with the contractor.

The attached Underground Utility Locating Policy and Procedural Guideline has been revised to apply lessons learned from these two incidents. The Commission's request that Pacific Power provide this procedure (policy) covering specific areas prompted further review. In addition to switching locate ticket transmission from fax to email, the personnel back up arrangement to assure that a locate request will not be overlooked has been strengthened. A system of positive response feedback to the excavator has been deployed. This system provides information that the locating service has been completed and depicts the details including a sketch of the locate marks, photos, copy of the power utility map and a finished copy of the locate ticket request. Our locating contractor provides this service and notifies the excavator via email that the locate has been completed. A link embedded in that email provides access to the completed ticket information. In December, this email enhanced positive response notification will be provided through the OUNC as a part of the overall ticket management notification system.

The attached Underground Utility Locating Policy and Procedural Guideline includes the required items specified in the Order and more including:

1. Purpose of the policy and commitment thereof by leadership, management, and employees;
2. Notifications and types of responses for marking underground facilities;
3. Tasks assigned to participants by title or position and their roles and responsibilities in the workflow process;
4. Technology or systems and methods used throughout the policy that enables the completion of identified tasks; and
5. Criteria for periodic review of effectiveness and identify best practices

Please let me know if you have any questions or need further detail.

Sincerely,



Tim Adams
Director, Resource & Contract
PacifiCorp, T&D Operations

Pacific Power Underground Utility Locating Policy and Procedural Guideline

Purpose:

- Establishes the requirement to properly locate Pacific Power underground facilities and accurately mark their location, document those findings and comply with notification requirements as prescribed by laws.
- Prevent damage to underground utilities, protect excavators and the public from injury.
- Assure that practices are in place and followed to properly locate and identify Pacific Power underground facilities prior to any excavation activity.
- Comply with federal and state regulations of the utility notification authorities of California, Oregon and Washington.

State and Federal Rules and Requirements:

California: Government Code 4216, Cal OSHA Title 8 – Construction Safety Orders

Oregon: ORS 757.542 – Oregon Revised Statutes establishing the OUCC (Oregon Utilities Coordinating Council)

Washington: RCW 19.122 Revised Code of Washington – established by the WUCC (Washington Utility Coordinating Council)

Federal – Federal legislation requires that all states enact legislation providing a process for facilitation and communication between underground facility owners and those who do excavation work.

Related Documents:

- Pacific Power Damage Investigation Report formats
- PacifiCorp Underground Locating Marking Procedures
- Contract Scope of Work for contract locating
- State of Oregon – Oregon Utility Coordinating Council – Locating Standards Manual
- State of Washington – Guide to Safe Digging
- State of California – USA North 811 – California Excavation Manual

General:

Laws were enacted several years ago requiring underground utilities to be identified and their location marked prior to any excavation work. These laws are there to protect the public and prevent damage to the underground utility plant. Each state has statutes in place requiring specific

actions which include response requirements, utility marking standards, and notification protocols. The laws in each state are similar but not completely the same in important areas of marking standards and timing requirements. Underground locate requests are submitted to a state call center by persons intending to excavate in an area. Utility operators have the responsibility to visit the site and perform “the locate” within a specified timeframe (usually two days commencing upon receipt and transmission of the request to the utility operator). The details of the marking standards for each state are thoroughly described in the above referenced locating standards handbooks. A current copy of the applicable locating standards handbook shall be retained for reference at each service center location. It is imperative that all aspects of the locate, including locating and marking accuracy within the described bounds of the ticket, meet the specified state code standards and that the notification protocols be precisely followed.

Contract Locates Procedural Overview:

Pacific Power contracts with a professional locating service to perform most of the underground utility locates.

For locating requests handled by the locating contractor, the requests are transmitted directly from the call center to the contract locator. The contractor performs the locate service and communicates the results electronically back to the requesting excavator. Information provided includes a copy of the completed locate request along with a sketch of the marking performed at the site, photos of the locate area with marks and a copy of the Pacific Power facilities map for the area of the locate. This verification documentation specific to the locate request is sent to the excavator who originated the locate request via the email address provided with the locate request.

This system of verification is called *Enhanced Positive Response*. In any interaction with excavators, all contract locating personnel and Pacific Power operations representatives should take the opportunity to discuss and encourage use of *Enhanced Positive Response* to verify locate performance and accuracy.

For locate requests performed by our locating contractor, interaction with Pacific Power is not normally required. The exceptions are when the contract locator is unable to perform the locate and needs assistance or when Pacific Power underground facilities have been damaged. In those instances where locating assistance is needed, the contract locator will contact Pacific Power operations in the area and arrange a meeting at the site to complete the locate. Contact information for both the locating company and Pacific Power operations centers is updated quarterly and distributed to each Pacific Power operations center and the locating contractor. Contact information is also available on the PacifiCorp T&D Operations Contracting Web Site. The request

for assistance does not revise the timing requirement for performing the locate and; therefore, response to the request for assistance needs to be timely.

In the event of damage to Pacific Power facilities, the excavator is instructed by the one-call center to immediately contact Pacific Power. If the damage is associated with a locate performed by the contract locator, the contract locator will be notified by Pacific Power operations and is required to respond to the site within one hour or at a time arranged between Pacific Power operations and the locator. The locator will verify the locate and re-mark facilities as needed in order to accomplish the repair and continue the excavation work that had been planned. A damage investigation will be conducted by the involved parties including the operations representative, the locator and the excavator. Separate damage reports are prepared by the contract locator and Pacific Power Operations. The completed Pacific Power damage report with photos is to be forwarded to the Pacific Power claims representative for processing. Attached are the doForm Dig-in form to be used for collecting and reporting the required damage information. An example of a DCP Claims Damage Report is also attached and may be used if the doForm is not accessible from the location of the investigation.

The contract between the locating contractor and Pacific Power contains the scope of work and conditions for performing the work. Pacific Power and our locating contractor have developed a marking procedures guideline (attached) which provides detailed marking standards and expected practices.

Resource & Contract Management manages the locating contract activities. Issues around performance should be first handled at the local level. If repetitive or serious performance concerns arise, Resource & Contract Management should be notified to institute corrective actions. Field audits are performed throughout the year to evaluate performance and assure compliance with locating standards and the law. Meetings are held quarterly or as needed with the locating contractor to discuss performance and issues.

Locates Performed by Pacific Power Operations

Portions (typically less than 2% of the Pacific Power total locates) of five Pacific Power districts receive locate requests for critical service areas.

The locates for those areas are performed by Pacific Power employees. Included are:

- Portland District – for Portland Airport and Portland Downtown Underground,
- Coos Bay District – for The North Spit,
- Albany District – for Oregon State University,
- Klamath Falls District – for Kingsley Airfield, and

- Enterprise.

Locate requests for those areas are transmitted directly to those service centers via either fax (Coos Bay, Klamath Falls and Enterprise) or email (Portland and Albany).

Performance requirements are the same for internally performed locates with respect to the governing law in each state where the facilities are located. Locate requests transmitted to those locations shall be received by a formally designated individual or her/his previously established back up. In the absence of the person primarily responsible for managing the locate request, the designated back up shall be formally notified that he/she has assumed primary responsibility. It is imperative that locate request receive timely attention and not be overlooked.

Complying with the attached marking standards, a site visit for marking or verifying the area is all clear of Pacific Power facilities, documentation and retention of the record of having performed the locate are all requirements necessary to demonstrate compliance with the law and provide a record in the event of a damage or other claim action. The completed ticket shall include the details of the locate and a sketch of the marked facilities. Any exceptions to the excavator's original request and communications of exceptions or clarifications between the locator and the originator should also be noted on the ticket. Completed locate request shall be filed at each service center in a central location known to all who have responsibility for management and performance of locating activities. All active tickets shall be on file and remain on file for a period of six months after expiration of the ticket.

The operations manager at each location is responsible to see that the above procedures, assignment of personnel roles, record keeping and compliance with required documentation completion are strictly followed.

In the event of damage to Pacific Power facilities where the locate was performed by Pacific Power directly, the same above described protocol will be followed with the exception of that portion involving the locating contractor. The Pacific Power representative will meet with the excavator at the site, make sure the area is secure and safe, adjust the locate as required, conduct and document a damage investigation.

As service providers, any complaints or customer satisfaction matters related to underground locating performance are ultimately the responsibility of Pacific Power, regardless of who we may use to perform the work. As such, Pacific Power owns all locating issues and is fully responsible for their complete resolution and assuring corrective actions where performance expectations have not been met in serving the excavation community and our customers.

REVISION HISTORY:

Revision Log				
Revision	Date	Action	Author	Approved By
0.0	8/8/16	Original	Towne-Smith/Horning	
1.0	6/27/18	Clarification of policy	Adams	



PacifiCorp Underground Locating Marking Standards

10.1.18

All electric lines are to be marked with red paint with the combination of whisksers & red flags

- Whiskers may to be used in areas where the dirt is compact & flags can not be inserted
- Flags are used in grass and soft dirt areas
- A combination of paint and either whiskers or red flags are required for each field site unless the hard surface does not allow
- All markings should appear orderly and professional
- Each and every site will be marked even when there are no electrical facilities present within the scope of the ticket

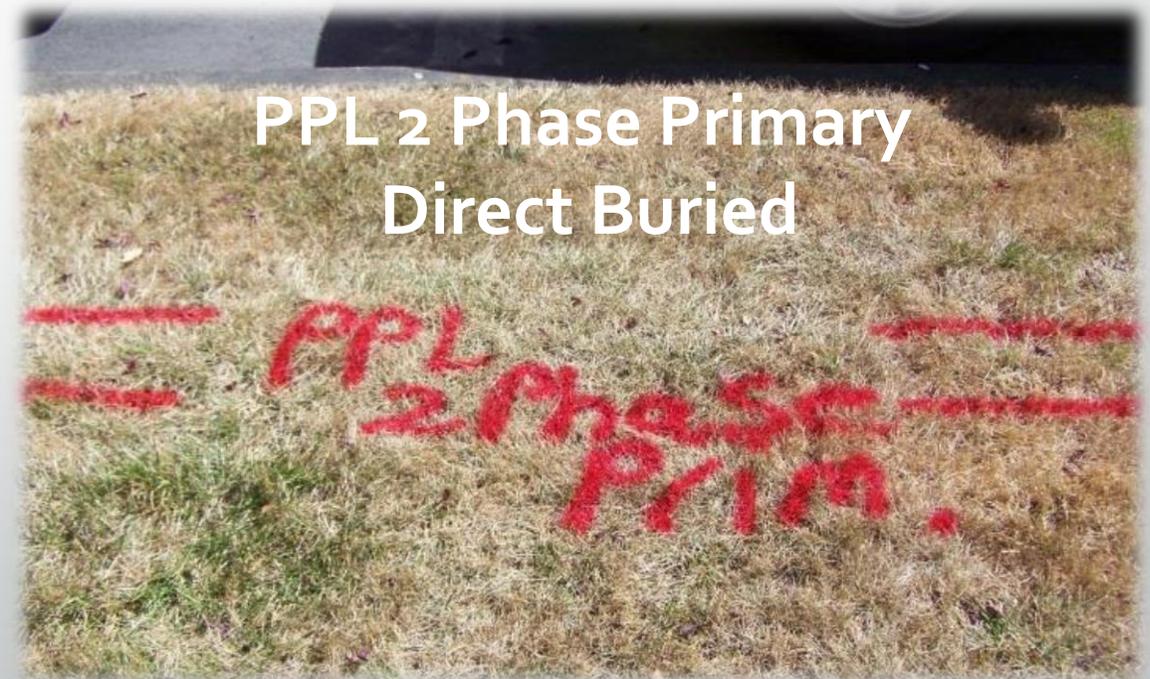
Field Delineation

- Mark in **RED** paint
- Company identifier; Pacific Power (PPL) or Rocky Mountain Power (RMP)
- Marks painted 12" to 18" long & 1" wide, spaced approximately 4' to 10' apart depending on the terrain of the land & type of excavation being done



Field Delineation

- PRIMARY/SECONDARY marking, one line for each facility containing a label of the facility & line quantity



Field Delineation

- STREETLIGHTS will be labeled S/L or STLT on the ground along with the total number of lines if known



Field Delineation

- EXTENSION ARROWS should be used anytime the line continues past the scope of the ticket

RMP/PPL Primary/Secondary

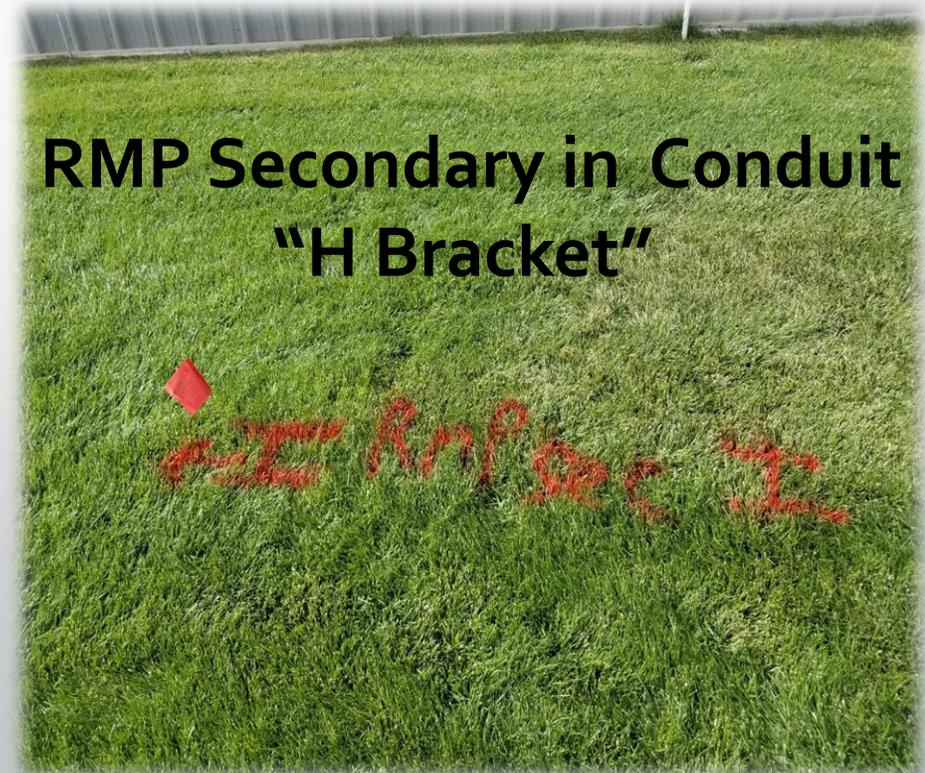
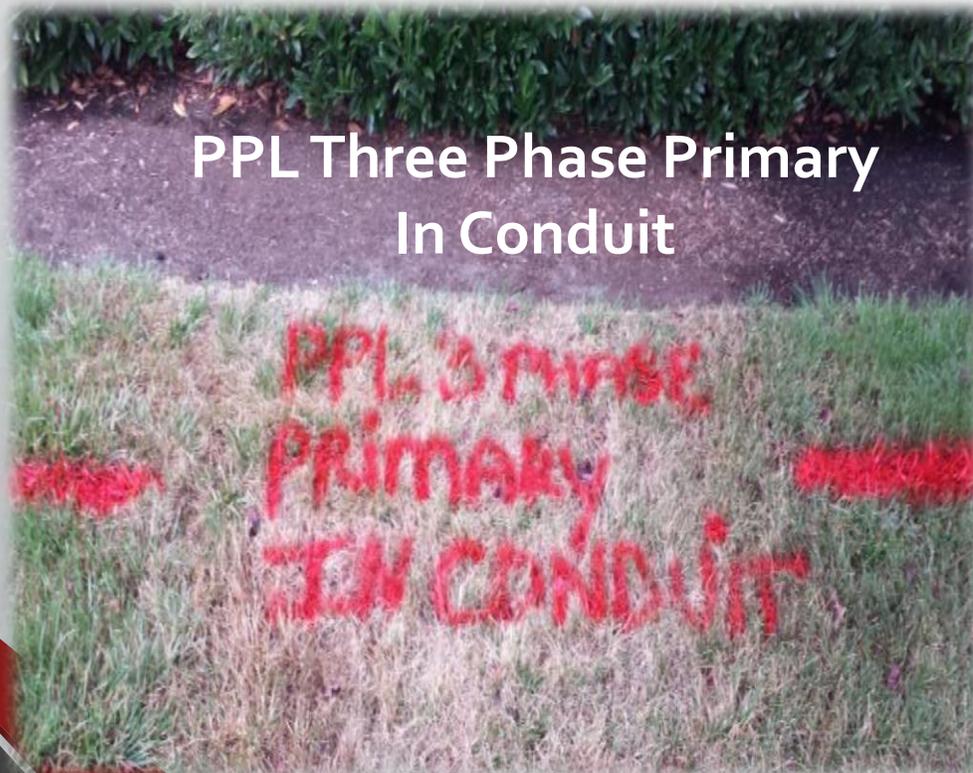


- NO ELECTRIC FACILITIES should read "*NO PPL or NO RMP*" supporting the facilities are not in conflict with the scope of the ticket



Field Delineation

- PRIMARY/SECONDARY in conduit when known; H Brackets/Diamond Shape/Conduit abbreviated or spelled out are all acceptable for showing line in conduit



Field Delineation

- OFFSETS are placed in a location in which the hard marks will not remain as part of the construction and/or the markings would be intrusive to the homeowner or business owner. Offsets will be marked as typically but will be placed in a non-obstruction area stating the measurement from where the actual lines are located lasting through out the excavation.



Common Underground Construction Descriptions

when use is needed

C	Conduit
D	Distribution Facility
DB	Direct Buried
PLA	Plastic (Conduit)
R	Radius
SL/STLT	Street Light
STR	Structure (vaults, junction box, inlets)
T	Transmission Facility

EXHIBIT A
SCOPE OF WORK
For
UNDERGROUND LOCATING SERVICES
Doc 1510287011

Locating Service

Locating Contractor (“Contractor”) shall provide underground locating services for buried electrical facilities at various locations in Company’s service territories including portions of Utah, Idaho, Wyoming, Washington, Oregon, and California. Contractor shall perform work as directed, which will be coordinated between Company and other entities requiring similar services. Contractor shall perform the work in strict accordance with such specifications, schedules, and drawings as may be furnished to Contractor by Company or its designated representative. All work is to conform to “Blue Stake” or “One Call” law, state and local regulations, industry standards, and generally accepted locating practices.

Contractor shall assume full responsibility for locating all below ground electrical facilities belonging to Company. Maps provided by Company are for general reference and not to be used as the sole reference for the location of Company facilities. At each excavation site, Contractor shall visually inspect the area of the proposed excavation for other visibly recognizable facilities not indicated on Company’s records. Contractor shall locate and mark such facilities and report the omitted information to Company.

Unless otherwise provided in the Contract, Contractor shall furnish all supervision, labor, equipment, and materials, and necessary utilities and support services, and shall obtain all licenses and permits required for the performance of such work.

Contractor shall assess the site to determine the best marking method required for the surface and environmental conditions. Flags, whiskers, and other approved marking techniques and devices should be used where appropriate and legal to depict the location of Company’s electrical facilities. Paint marks shall be made in such a way as not to deface public or private property. Offset marks should be used wherever possible for reference points once the line has been located and marked. All marks made on behalf of the Company shall have the Company’s identification in accordance to the Uniform Color Code and Marking Guidelines, published by the Common Ground Alliance, applicable state law and PacifiCorp company standards.

Contractor shall respond to all tickets by visiting the site, performing, locating and marking

services. If no Company underground facilities are present, Contractor shall mark the site accordingly. When the facility is unlocatable, Contractor must immediately contact Company representative and advise the representative of the situation. Company representative will determine the course of action to be taken.

For large projects, Contractor shall meet with ticket holder to determine the exact locating requirements when possible.

Positive response shall be provided to the excavator upon completion of each locate ticket. A copy of the ticket, photos, sketch and PacifiCorp FAAR map will be provided to the excavator concerning details of the performed locate. The information shall be provided to the excavator through email, text or mobile applications upon completion of locate service.

Contractor will be expected to utilize the latest technology to perform and report on locate results.

Company will require periodic performance reports to validate compliance and acceptability of performance.

Any field modifications to the ticket shall be discussed and agreed between the Locating Contractor and excavator and documented in such a way that the locate boundaries and timing are indisputable. Failure to document changes, including names, times, and phone numbers in such a manner will result in Locating Contractor liability for damages. Should it be determined that damage was due in whole or in part to Locating Contractor's failure to properly mark, Locating Contractor shall assume full responsibility for all costs incurred.

Contractor shall perform locating services at or above industry and Company quality standards. Company may perform field and administrative audits to validate Contractor performance.

Contractor shall take the necessary safety precautions as required by federal, state, and local authorities to protect pedestrian and vehicle traffic in the area to be marked and to comply with applicable regulations, and any other measures to safely and accurately perform the work.

Training

The Contractor shall assure that all locators are fully trained and meet or exceed competency requirements in the NULCA Standard 101 – Standards for Locating Technicians and Company's

standards. Contractor will be called upon to present the details of their training, quality and quality assurance programs. All locators are to be fully trained before performing locating services without direct onsite direction.

Work Assignment

Work assignment will generally consist of routine locating requests with completion intervals of less than 48 hours or two business days as defined in applicable state laws after the receipt of a request to locate by the “Blue Stakes” or “One Call” center. Contractor must respond immediately to any locate request that is identified as an ‘Emergency Locate’ from the “Blue Stakes” or “One Call Center”, an emergency response agency, or Company. (A locate will be considered an emergency locate when a condition exists which demands immediate action to prevent loss of or damage to life, health, property, essential public services or to prevent a customer service outage). The required response time for arrival at the work site is within one (1) hour. If Contractor is unable to respond within one (1) hour, Contractor shall immediately notify the Company representative to determine an acceptable alternate arrangement. The Contractor shall notify the excavator of the anticipated delay and the estimated time of arrival at the site.

After-hour emergency calls will be paid in accordance with the hourly rate indicated for outside regular hours as shown in the pricing schedule. Emergency calls that are performed during the designated regular hours will be paid at the same rate as designated in the pricing schedule for a 48-hour notice locate.

A locate is generally defined as a ticket area up to 700 linear feet. Tickets with a locate area in excess of 700 feet may be billed in unit increments of 700 feet or Contractor shall request hourly billing, whichever is the lowest cost option. For large projects, unusually complex locates or locates that require an unusual amount of time to mark, Contractor may request that the ticket be paid at an hourly rate prior to performance of the work. Contractor shall maintain records of all hourly approvals and rationale for billings of more than one locate per ticket.

Contractor is required to visit **all** sites and apply markings including those where there are no underground facilities. Only one locate charge will be allowed per ticket where no facilities are present regardless of the ticket scope size.

Dig-ins, Damages and Claims

Company shall notify Locating Contractor of damages made to Company's facilities as soon as possible. Locating Contractor shall also notify Company of any damage to Company's facilities as soon as they become aware of damage.

Upon being made aware of a dig-in, the Locating Contractor shall be at the site of the dig-in within one (1) hour to perform an investigation unless other arrangements are made. Locating Contractor shall assist Company with the investigation to determine the cause of damage. A written report, copy of the ticket, pictures, and any other documentation to support the findings shall be submitted to the Company within ten (10) business days. If Locating Contractor fails to respond within the time allowed, Company shall determine who is at fault, and Locating Contractor shall abide by such decision. The Locating Contractor's damage investigation shall be at Locating Contractor's sole expense.

Locating Contractor shall be liable for all damages resulting from underground locating that does not meet the requirements specified in this scope of work. Locating Contractor must prove the locate service was performed correctly and meets all locating standards. Company's claim representative will decide fault after all documented evidence is presented. That decision will be final and the party at fault will be billed. Payment will be due within thirty (30) days based on that determination of fault without regard to any other third party claims to the contrary. After Company has made determination of fault, any further dispute between the Locating Contractor and excavator or other third party will be resolved between those parties without involvement of Company.

Claims Damage Report

Employee Name:

Employee P#:

Date:

Milt Buker
P22558
06/06/2018

RCMS Work Order Number	District	Mapstring & Facility Point
	Hood River	01102011.0011140

CADOPS Outage Number	One Call Ticket Number	GPS Coordinate
	None	45.681078, -121.396296

Address
5th and Center Mosier, OR

Street Intersection	County
	Wasco

Right of Way where event occurred	
Type of Facility Operation Affected	Electric
Type of Facility Affected	Distribution
Type of Excavator	Contractor
Type of Excavation Equipment	Backhoe/Trackhoe
Did this event involve a cross bore	No
Measured depth from grade	>36" / 91cm
Type of Work Performed	Site Development
Type of Locator	Unknown/Other
Was work area white-lined	No
Has the Locator been called	No

Responsible Party to Bill
Summit excavation, 541-993-5254 OR ccb#181488

Was there damage to a facility?	Did damage cause an Interruption in service?
Yes	Yes

Brief Description of Damage
Broke conduit for 5 ft, took outage to repair.

Report Delivered To
claimswest@pacificorp.com; SmartForms_HDR@PacifiCorp.com

Photo 1



Photo 2



Photo 3

Photo 4

Photo 5

Photo 6

doForm Dig-In Form

Damage vs. Dig-in

- The Dig-in form is used specifically to record underground dig-in events.
- The Damage Assessment form is used to record other types of damage occurring from storm events, car hit poles, etc. Users are challenged in the Damage Assessment form and are instructed to use the dig-in form.

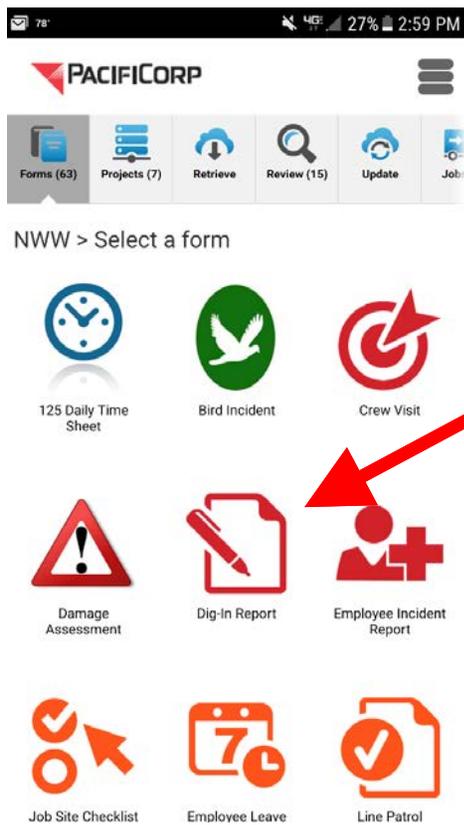
The screenshot shows a mobile application interface for PacificCorp. At the top, there is a status bar with icons for notifications, battery (60%), and time (11:37 AM). Below the status bar is the PacificCorp logo and a hamburger menu icon. The main content area is titled "Damage Assessment" with a subtitle "Use for facility or storm damage reporting". A form field asks "Was this a Dig-In Event?" with a dropdown menu currently set to "Yes". Below this, a red text instruction reads "Please use the Dig-In Report Form". A grey button labeled "Exit Form" is positioned below the instruction. The form continues with several input fields: "Date" (06/13/2018 11:37 AM), "Damage Assessor" (with a search icon and the instruction "Enter your name and pick from list"), "Employee PNUM", and "District *" (with a search icon and the instruction "Select the district where the damage is located").

Dig-In Form

- Form is used to record damage to underground facilities.
- Form data is submitted back to portal
- Completed forms generate a PDF report which are emailed to the shared district mailbox and claims representatives.

 PACIFIC POWER <small>A DIVISION OF PACIFICORP</small>		Claims Damage Report	
Employee Name:		Employee P#:	Date:
Milt Buker		P22558	06/06/2018
RCMS Work Order Number	District	Mapstring & Facility Point	
	Hood River	01102011.0011140	
CADOPS Outage Number	One Call Ticket Number	GPS Coordinate	
	None	45.681078, -121.396296	
Address			
5th and Center			
Mosier, OR			
Street Intersection		County	
		Wasco	
Right of Way where event occurred			
Type of Facility Operation Affected	Electric		
Type of Facility Affected	Distribution		
Type of Excavator	Contractor		
Type of Excavation Equipment	Backhoe/Trackhoe		
Did this event involve a cross bore	No		
Measured depth from grade	>36" / 91cm		
Type of Work Performed	Site Development		
Type of Locator	Unknown/Other		
Was work area white-lined	No		
Has the Locator been called	No		
Responsible Party to Bill			
Summit excavation, 541-993-5254			
OR ccb#181488			
Was there damage to a facility?		Did damage cause an interruption in service?	
Yes		Yes	
Brief Description of Damage			
Broke conduit for 5 ft, took outage to repair.			
Report Delivered To			
claimswest@pacificcorp.com; SmartForms_HDR@PacifiCorp.com			

Select the Dig-in Report form



Complete the form – some fields are *required.

PACIFICORP

Dig-In Damage Claim Report

Employee Name *

Employee P# *

District *

CADOPS Outage Number

RCMS#

One Call Ticket Number

Event Date

Where event occurred

Event Type

Underground Damage

What Type of Facility was Affected?

Distribution

Did event involve a Cross Bore?

Yes No

Measured depth from grade

Choose from list or enter specific measurement

Type of Excavator

Type of Excavation Equipment

Type of Work Performed

Was Locator Called? *

Yreka, CA. call 866-788-0166 | All other areas call 503-255-4634

Yes No

Was work area white-lined?

Yes No Unknown

Responsible Party to Bill

Was there damage to facilities?

Yes No

Did the damage cause an interruption in service?

Yes No Unknown/Other

Brief Description of Damage

Save and send the form

The screenshot shows a mobile application interface for PACIFICORP. At the top, the status bar displays signal strength, Wi-Fi, 75% battery, and 11:31 AM. The app header features the PACIFICORP logo and a hamburger menu icon. Below the header is a section titled '- Photos (1)'. This section contains a 'Photo *' field with the instruction 'Use landscape photo orientation' and a large empty rectangular area for the photo. Below the photo area are two buttons: 'Capture' and 'Select'. Underneath these is a button labeled 'Add another photo?'. The next section is 'E-mail Report', which lists two email addresses: 'claimswest@pacifcorp.com;' and 'SmartForms_COB@PacifiCorp.com'. Below the email addresses is a text input field labeled 'Optional message...'. At the bottom of the form is a 'Send Report' button. A prominent red arrow points from the right side of the screen towards the 'Send Report' button.