

CalAdvocates Data Request 16.1

The following questions pertain to PacifiCorp's response to CalAdvocates-PacifiCorp-2023WMP-14, question 1 and the file it submitted on June 12, 2023 (Excel spreadsheet named "Attach CalAdvocates 14.1.xlsx").

In its response to question 1 of CalAdvocates-PacifiCorp-2023WMP-14, PacifiCorp states:

the Company designates all Level 1 priority work orders as A conditions. The data in the attachment includes all conditions designated as an A condition in 2020 through 2022 per Company Procedure 069. The Company's internal Policy 192 requires A conditions that are imminent dangers to be corrected immediately. For any A conditions that are not imminent dangers, the policy allows for up to 30 days for corrective action.

- (a) Please provide a copy of Company Procedure 069.
- (b) Please provide a copy of Company Procedure 192.
- (c) Please describe how PacifiCorp determines whether an "A condition" is or is not an imminent danger.
- (d) Please state the basis for classifying an A condition as imminent.
- (e) Please state the basis for classifying an A condition as non-imminent.

Response to CalAdvocates Data Request 16.1

The Company assumes that the reference to "question 1 of CalAdvocates-PacifiCorp-2023WMP-14" is intended to be a reference to CalAdvocates Data Request 14.1. Based on the foregoing assumption, the Company responds as follows:

- (a) Please refer to Attachment CalAdvocates 16.1 which provides a copy of PacifiCorp's Procedure (SOP) 069.
- (b) Please refer to Attachment CalAdvocates 16.1 which provides a copy of PacifiCorp's Asset Management Policy 192.
- (c) As stated in PacifiCorp's Asset Management Policy 192, page 2, an imminent threat/danger is a condition that poses a present and significant threat to human life or property.

CalAdvocates Data Request 16.2

The following questions pertain to PacifiCorp's response to CalAdvocates-PacifiCorp-2023WMP-14, question 1 and the file it submitted on June 12, 2023 (Excel spreadsheet named "Attach CalAdvocates 14.1.xlsx").

- (a) For asset work orders that are designated as Level 1 priority but non-imminent dangers, does PacifiCorp take any interim measures or actions (temporary repairs, increased inspections, or patrols, etc.) to ensure that the problem is made safe until the corrective action is completed?
- (b) If the answer to subpart (a) is "yes," please describe the types of interim measures or actions that PacifiCorp takes.
- (c) If the answer to subpart (a) is "no," please explain why not.

Response to CalAdvocates Data Request 16.2

The Company assumes that the reference to "question 1 of CalAdvocates-PacifiCorp-2023WMP-14" is intended to be a reference to CalAdvocates Data Request 14.1. Based on the foregoing assumption, the Company responds as follows:

- (a) Yes, depending on the severity and if possible, the Company may take interim measures or actions to ensure the condition is made safe until correction action can be completed.
- (b) Interim measures or actions the Company may take on a condition prior to corrective action include:
 - 1. Temporary covering – The company may install a temporary covering, which is used temporarily until corrective work is performed; examples of a temporary covering are an insulating sleeve and an avian hose
 - 2. Temporary reinforcement/supports – The company may install a temporary reinforcement/support, which is used temporarily until corrective work is performed; examples of a temporary reinforcement/support are steel plating, guying, and extension arms
 - 3. Follow-up inspections – An inspector may visit the site prior to the correction date to ensure the condition has not further deteriorated and does not require escalation.
- (c) Not applicable.

CalAdvocates Data Request 16.3

The following questions pertain to PacifiCorp's response to CalAdvocates-PacifiCorp-2023WMP-14, question 1 and the file it submitted on June 12, 2023 (Excel spreadsheet named "Attach CalAdvocates 14.1.xlsx").

This question pertains to the Excel spreadsheet named "Attach CalAdvocates 14.1.xlsx." In this spreadsheet, 41 asset work orders have damage codes listed as "CONDUCTOR DAMAGED/FRAYED," including the following 3 examples:

- (1) Work order ID 493720784-86299-DTLSB-11_08_2021-CONDFRAY-1^06148004.0259004, created on 11/8/2021.
- (2) Work order ID 474471051-73741-DETAIL-09_21_2020-CONDFRAY-1^06147001.0081701, created on 9/21/2020.
- (3) Work order ID 78988906-65431-DTLSB-03_17_2022-CONDFRAY-1^06146005.0230801, created on 3/17/2022.

For each of the work orders listed above, please answer the following questions:

- (a) Please explain why the work order was not classified as an imminent threat.
- (b) Why did PacifiCorp deem it prudent to set a deadline of approximately 30 days to remediate the condition?
- (c) Did PacifiCorp take any interim remedial actions to make the condition safe before the work order could be completed?
- (d) If the answer to subpart (c) is yes, please describe the interim remedial actions taken.
- (e) If the answer to subpart (c) is no, why not?

Response to CalAdvocates Data Request 16.3

The Company assumes that the reference to "question 1 of CalAdvocates-PacifiCorp-2023WMP-14" is intended to be a reference to CalAdvocates Data Request 14.1. Based on the foregoing assumption, the Company responds as follows:

- (a) The work orders listed in this data request were not classified as an imminent threat because the Company's inspector made the determination that they did not meet the definition of an imminent threat per PacifiCorp's Asset Management Policy 192. PacifiCorp's Procedure 069 allows for inspectors to specify an "A" priority for CONDFRAY condition, which allows up to 30 days for correction per PacifiCorp's

Asset Management Policy 192, if it is deemed not an imminent threat. Application of Asset Management Policy 192 to a particular circumstance in the field requires an inspector to exercise judgment regarding the severity of the condition; inspector training contemplates that an “A” priority CONDFRAY condition is any conductor that has greater than 50 percent of conductor strands cut. If a condition is determined to be an “A” priority condition, the inspector may make an additional determination that the condition poses a present and significant threat to human life or property. With respect to each particular condition addressed in the work orders referenced in this request, the inspector did not make a determination the condition posed a present and significant threat to human life or property.

- (b) Any “A” condition that is deemed not an imminent threat is allowed up to 30 days for correction per PacifiCorp’s Asset Management Policy 192.
- (c) No, the Company did not take any interim remedial actions for these conditions.
- (d) Not applicable.
- (e) In this case, the Company’s inspector made the determination interim remedial action was not needed for the conditions.

CalAdvocates Data Request 16.4

The following questions pertain to PacifiCorp's response to CalAdvocates-PacifiCorp-2023WMP-14, question 1 and the file it submitted on June 12, 2023 (Excel spreadsheet named "Attach CalAdvocates 14.1.xlsx").

This question pertains to the Excel spreadsheet named "Attach CalAdvocates 14.1.xlsx." In this spreadsheet, 13 asset work orders have damage codes listed as "DISTRIBUTION - TREE CONTACTING PRIMARY" or "TREE CONTACTING OPEN SECONDARY," including the following 3 examples:

- (1) Work order ID 574335972-98671-DTLTRT-06_22_2021-TREDIST-1^668041/004/030, created on 6/22/2021.
- (2) Work order ID 739842814-48640-DETAIL-06_02_2020-TREDIST-1^07218001.0262905, created on 6/2/2020.
- (3) Work order ID 515963558-30409-DETAIL-02_01_2022-TRESCBRN-1^06147005.0265404, created on 2/1/2022.

For each of the work orders listed above, please answer the following questions:

- (a) Please explain why the work order was not classified as an imminent threat.
- (b) Why did PacifiCorp deem it prudent to set a deadline of approximately 30 days to remediate the condition?
- (c) Did PacifiCorp take any interim remedial actions to make the condition safe before the work order could be completed?
- (d) If the answer to subpart (c) is yes, please describe the interim remedial actions taken.
- (e) If the answer to subpart (c) is no, why not?

Response to CalAdvocates Data Request 16.4

The Company assumes that the reference to "question 1 of CalAdvocates-PacifiCorp-2023WMP-14" is intended to be a reference to CalAdvocates Data Request 14.1. Based on the foregoing assumption, the Company responds as follows:

- (a) The work orders listed in this data request were not classified as an imminent threat because the Company's inspector made the determination that they did not meet the definition of an imminent threat per PacifiCorp's Asset Management Policy 192. PacifiCorp's Procedure 069 allows for inspectors to specify an "A" priority for

TREDIST and TRESBURN conditions, which allows up to 30 days for correction per PacifiCorp's Asset Management Policy 192, if it is deemed not an imminent threat.

- (b) Any "A" condition that is deemed not an imminent threat is allowed up to 30 days for correction per PacifiCorp's Asset Management Policy 192.
- (c) No, the Company did not take any interim remedial actions for these conditions.
- (d) Not applicable.
- (e) In this case, the Company's inspector made the determination interim remedial action was not needed for the conditions.

CalAdvocates Data Request 16.5

The following questions pertain to PacifiCorp's response to CalAdvocates-PacifiCorp-2023WMP-14, question 1 and the file it submitted on June 12, 2023 (Excel spreadsheet named "Attach CalAdvocates 14.1.xlsx").

This question pertains to the Excel spreadsheet named "Attach CalAdvocates 14.1.xlsx." In this spreadsheet, 107 asset work orders have damage codes listed as "POLE-DECAY/REJECT/REPLACE" or "POLE-DAMAGE/REJECT/REPLACE," including the following 3 examples:

- (1) Work order ID 616243056-22831-ADMIN-01_27_2020-POLEREPL-1^668038/001/055, created on 1/27/2020.
- (2) Work order ID 983435913-45949-ADMIN-05_03_2021-POLEREPL-1^07114001.0276306, created on 5/3/2021.
- (3) Work order ID 169522597-70849-ADMIN-01_02_2020-POLEDERP-1^07114001.0341100, created on 1/2/2020.

For each of the work orders listed above, please answer the following questions:

- (a) Please explain why the work order was not classified as an imminent threat.
- (b) Why did PacifiCorp deem it prudent to set a deadline of approximately 30 days to remediate the condition?
- (c) Did PacifiCorp take any interim remedial actions to make the condition safe before the work order could be completed?
- (d) If the answer to subpart (c) is yes, please describe the interim remedial actions taken.
- (e) If the answer to subpart (c) is no, why not?

Response to CalAdvocates Data Request 16.5

The Company assumes that the reference to "question 1 of CalAdvocates-PacifiCorp-2023WMP-14" is intended to be a reference to CalAdvocates Data Request 14.1. Based on the foregoing assumption, the Company responds as follows:

- (a) The work orders listed in this data request were not classified as an imminent threat because the Company's inspector made the determination that they did not meet the definition of an imminent threat per PacifiCorp's Asset Management Policy 192. PacifiCorp's Procedure 069 allows for inspectors to specify an "A" priority for

POLEREPL and POLEDERP conditions, which allows up to 30 days for correction per PacifiCorp's Asset Management Policy 192, if it is deemed not an imminent threat. The amount of pole decay is determined by the Company's intrusive testing that is performed per PacifiCorp's Asset Management Policy 298. Please refer to Attachment CalAdvocates 16.5 which provides a copy of PacifiCorp's Asset Management Policy 298

- (b) Any "A" condition that is deemed not an imminent threat is allowed up to 30 days for correction per PacifiCorp's Asset Management Policy 192.
- (c) No, the Company did not take any interim remedial actions for these conditions.
- (d) Not applicable.
- (e) In this case, the Company's inspector made the determination interim remedial action was not needed for the conditions.

STATE OF CALIFORNIA CORRECTION MANAGEMENT PLAN, CORRECTION TIME PERIODS AND COMPLIANCE REQUIREMENTS Asset Management Policy No. 192 (Pacific Power)

Author: Jonathan Connelly.
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 Approved Location: Pdxshrn104\shr04\Eng\Publications\FPP\DIS\POL
 File Number-Name: 192-California Condition and Correction.docx
 Revision Number: 7
 Revision date: 12/19/2022

Summary of Policy: Provide guidance and requirements for patrol inspections of transmission and distribution lines.

Affected Departments: Transmission & Distribution Operations (line) – Pacific Power
 Field Inspection – Pacific Power

Document Security Category			
	Confidential	X	External
	Restricted		BES Cyber System Information (BCSI)
X	Internal		

Revision Log		
0	3/31/09	Original policy created.
1	5/31/13	Correction timeframe clarification.
2	7/11/13	Added section 4.1 – establish one year time frame for climbing condition corrections. Revise Scope section to clarify third party responsibilities.
3	4/15/14	Added descriptions of priority levels and updated correction timeframes.
4	8/08/18	Updated to reflect new requirements for patrol / visual assurance inspections.
5	10/3/18	Updated policy to reflect update to the May 31, 2018, version of GO 95.
6	03/16/2020	Re-work of document to clarify Suggested Correction Dates in GISMO and Compliance Requirements. Terms were updated to match GO95 more closely and the 2020 WMP submission.
7	12/19/2022	Updated policy to reflect Energy Release Risk language specified in Procedure 069.

STATE OF CALIFORNIA CORRECTION MANAGEMENT PLAN, CORRECTION TIME PERIODS AND COMPLIANCE REQUIREMENTS

Asset Management Policy No. 192 (Pacific Power)

1 Scope

The policies and work practices that follow apply to Pacific Power's employees and contractors who address transmission and distribution facilities within the State of California which have potential violations.

The corrective action management plan and time period included within this policy are those for which Pacific Power is responsible. The establishment of correction time periods for Conditions attributable to other parties (such as communication infrastructure providers) is not within the scope of this policy.

2 References

Decision 17-12-024 *Decision Adopting Regulations to Enhance Fire Safety in the High Fire-Threat District*, December 14, 2017

Decision 18-05-042 *Decision Approving A Settlement Agreement That Amends Rule 18 of General Order 95*, May 31, 2018

General Order 95 *Rules for Overhead Electric Line Construction, Public Utilities Commission of the State of California*

PacifiCorp Policy No. [009](#), *Detailed Inspections for Transmission and Distribution Lines for ID, OR, UT, WA, WY*

PacifiCorp Policy No. [299](#), *Wood Pole Test & Treatment: Transmission and Distribution Lines for OR*

PacifiCorp Procedure [069](#), *Clearance Table for Distribution and Transmission Line Inspectors NESC and GO 95 Grandfathering Matrix Facility Point Inspection NESC and GO 95 Frequently Asked Questions Condition Code Dropdowns*

PacifiCorp Safety Rules and Procedures

3 Definitions

The following are specific defined terms as used throughout Policy 192.

- **Condition** – The state of something with regard to appearance, quality, or working order which can sometimes be used to identify potential impact to normal system operation or clearance, which is typically identified by an inspection.
- **Energy Release Risk Condition** – A type of condition that, under certain circumstances, can correlate to increase risk of a fault event and potential release of energy at the location of the condition.
- **Condition Code** – Predetermined list of codes for use by inspectors to efficiently capture, categorize, and communicate observations and inform the scope of and timeline for potential corrective action.
- **Correction** – Scope of work required to remove a Condition within a specified time period.
- **FPI (Facility Point Inspection)** – Pacific Power's official source of records for captured Conditions or other noteworthy observations
- **GISMO (Geographic Information Systems Maintenance Organizer)** – Web based application which pulls data from FPI and is used as an operational tool which allows a user to view, filter and export remaining work still to be done on overhead and underground structures.

- **Imminent Threat** – Condition that poses a present and significant threat to human life or property.
- **Priority Level** – The level of risk assigned to the Condition observed.
- **Safety Hazard** – Condition that poses a significant threat to human life or property as per GO 95.
- **Suggested Correction Date** – A date in GISMO set by Pacific Power to meet or exceed requirements in GO95. While GISMO Suggested Correction Dates are developed to align with compliance requirements, in many cases the Suggested Correction Date will not match compliance required time period for Correction exactly.

4 Corrective Action Management Plan for Pacific Power Equipment Conditions

The following subsections describe the methodology, tools, and Condition Priority Levels employed by Pacific Power to align with GO95.

4.1 General Methodology

During an inspection, regardless of the type of inspection, the inspector conducting the inspection will notate any potential violations or noteworthy observations by assigning a Condition Code and Priority Level in Pacific Power's Facility Point Inspection (FPI) system per PacifiCorp Procedure 069. Priority Levels are assigned to align with GO95 Rule 18. In PacifiCorp Procedure 069, applicable Condition Codes are also categorically designated as a Fire Risk Condition, a subset of Conditions which require accelerated correction time periods, to align with GO95 Rule 18, amended per D. 17-12-024 on December 14, 2017, and effective per D. 18-05-042 on May 31, 2018.

After Conditions are entered into FPI, the GISMO application tool is used to identify Suggested Correction Dates. Corrections are then planned with the intent to complete on or prior to the GISMO Suggested Correction Date. While GISMO Suggested Correction Dates are developed to facilitate prioritization in Correction and align with compliance requirements, they are not meant to indicate compliance requirements and, in many cases, will not match compliance requirements exactly.

For example, a PacifiCorp C priority, which maps to a GO95 Level 3 priority, requires correction within 60 months as per GO95. However, to promote operational efficiency and bundle the Correction of both B priority and C priority Conditions, Pacific Power plans to complete C priority Conditions within 36 months. Therefore, the Suggested Correction Date in GISMO reflects this 36-month correction timeframe per business rules. The inability to correct a C priority Condition within 36 months is not indicative of failure to meet compliance requirements per GO95.

In GISMO, a month is the from day to day. To expand on the previous example, a C priority condition found on August 20, 2019, will have a GISMO correction due date of August 20, 2022. The GO95 Level 3 priority requires 60 months, which would correlate to a compliance correction due date of August 31, 2024. Setting the GISMO correction due date ahead of the compliance required date promotes completing the work ahead of requirements. Should corrections be completed after the GISMO date but before the compliance date, they are considered compliant.

Another example where the Suggested Correction Date in GISMO aligns with but does not necessarily match GO95 requirements is evident in Pacific Power's decision to implement new accelerated correction timeframes for Fire Threat Conditions and Priority C conditions per D.18-05-042 on January 01, 2019, instead of June 30, 2019.

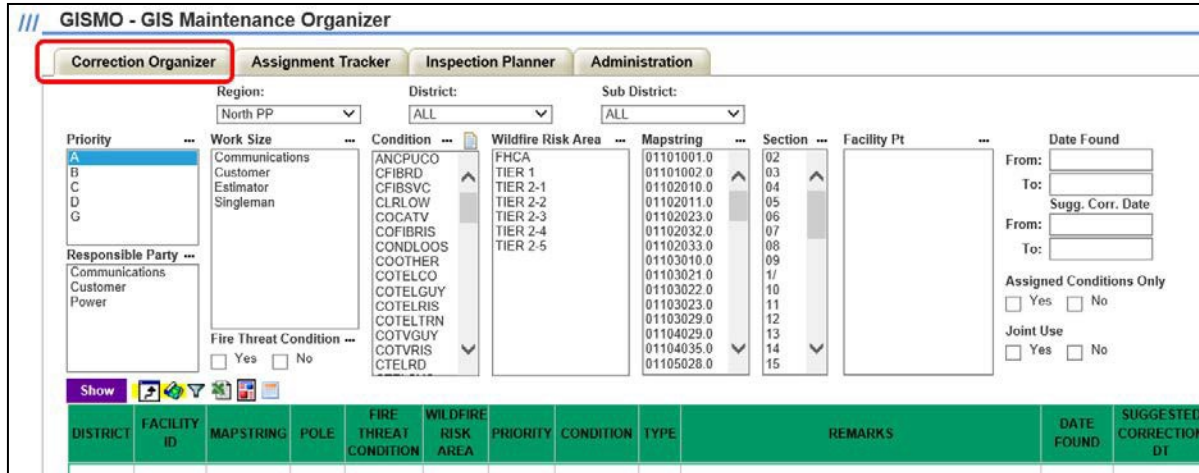
Circumstances may also exist where, to promote operational efficiency, Corrections may be bundled or prioritized in a manner that the Correction is completed after the GISMO Suggested Correction Date but still before the GO95 compliance correction date. Additional scenarios are contemplated in Section 5.3. However, these circumstances should not be common and are not necessarily viewed as non-compliance.

Furthermore, it is critical to note that Suggested Correction Dates may change with time to reflect changes in regulation or due to operational efficiency requirements.

Upon completion of the Corrections, FPI shall be updated to show the nature of the work, the completion date, and the identity of the persons performing the work.

4.2 Tools

FPI is used as the formal database for inspections and Corrections. GISMO, pictured below, is an operational tool used by operations to plan the Corrections. The inspection data in GISMO comes directly from FPI but the Suggested Correction Date (see image below) is set by Pacific Power business practices to meet or exceed GO95 requirements. For GISMO, months are month-to-date and not calendar months.



4.3 Condition Priority Levels

Pacific Power's FPI system has a predetermined list of condition codes for use by inspectors to efficiently capture, categorize, and communicate observations and inform the scope of potential corrective actions. The Condition Codes are assigned Priority Levels, as follows:

4.3.1 Priority A

Conditions where there's a risk of high potential impact to safety or reliability which includes, as a subset, Imminent Threats. "A" Priorities align with GO95 Level 1 priority levels (GO95 18-B-1-a). "A" priorities meet the criteria in Pacific Power's Policy 298 or Procedure 069. Imminent Threats are items that pose a significant present threat to human life or property and corrective action shall be taken immediately, either by fully repairing or by temporarily repairing.

4.3.2 Priority B

Conditions where there's a risk of at least a moderate potential impact to safety or reliability are given priority B. "B" priorities meet the criteria in Pacific Power's Policy 298 or Procedure 069. "B" priorities align with GO95 Level 2 priority levels (GO95 18-B-1-a).

4.3.3 Priority C

Conditions where there's a risk of low potential impact to safety or reliability are given priority C. "C" priorities meet the criteria in Pacific Power's Procedure 069. "C" priorities align with GO95 Level 3 priority levels (GO95 18-B-1-a). "C" priorities are only assigned to locations in California.

4.3.4 Priority D

Conditions where there's no corrective action required but it's desirable to record informational issues for engineering and planning purposes are given priority "D". Common examples include "locked gate" and "missing intersection identification sign."

4.3.5 Priority G

Conditions where there's an exemption from corrective action due to the age of the equipment. Grandfathered priorities are considered conforming, they are recorded for future inspection references and audit purposes.

5 Corrective Action Business Rules

The Correction time periods discussed in this section generate the Suggested Correction Date in GISMO. The set time periods in this section meet or exceed the requirements set by GO95 and may not match GO95 requirements exactly.

5.1 January 1st, 2019, to present

5.1.1 General Time Period

Conditions found and entered into the FPI system on or after January 01, 2019 are assigned Suggested Correction Dates consistent with the time periods below unless the Condition Code is noted in section 5.1.2 or there's a special exception as per section 5.3.

PRIORITY	ENERGY RELEASE RISK ¹	Geographic Wildfire Tier Location ²		
		NON-TIER	TIER 2	TIER 3
A ³	Y	30 days	30 days	30 days
A	N	30 days	30 days	30 days
B	Y	3 years	1 year	6 months
B	N	3 years	3 years	3 years
C ⁴	Y	3 years	1 year	6 months
C	N	3 years	3 years	3 years

Priority D and G items do not require corrective action.

5.1.2 Conditions with Corrective Time Period Exceptions to Section 5.1.1

While most of Pacific Power's Condition Codes represent levels of risk consistent with GO 95 priority levels and the definitions in Section 18.B.1.a, a few exceptions exist. In these instances, Pacific Power has evaluated these specific Condition Codes and assigned a Suggested Correction Date consistent with the level of risk, which either meets or exceeds equivalent GO 95.

¹ Energy Release Risks are determined and distinguished in Procedure 069. These were defined as Fire Threats prior to January 1, 2023.

² Per California High Fire Threat Map.

³ Exception: Priority A Conditions which are Imminent Threats require correction immediately.

⁴ As Pacific Power defined an Energy Release Risk to have at least a moderate level of risk, there are no Energy Release Risk Conditions with C priority. However, in the event that a system error occurs of a Condition priority is documented incorrectly, Energy Release Risk Conditions improperly assigned a C priority receive the same Suggested Correction Date as B priorities which are an Energy Release Risk.

Based on this evaluation, the table below reflects the specific Condition Codes with alternative corrective time periods to those listed in Section 5.1.1.

CONDITION	PRIORITY	ENERGY RELEASE RISK ⁵	ANY LOCATION	RATIONALE
CLMBHAZ	B/C	N	12 Months	Potential violation can impact worker safety, therefore an expedited time period is assigned to this code.
GO95CLMP	B/C	N	12 Months	
POLEDERP	A	Y	90 Days	The risk level associated with this level A is indicative of a 90-day level risk unless it is an Imminent Threat exception ⁶ .
POLEDMRS	A	Y	90 Days	
POLEREPL	A	Y	90 Days	
POLEREST	A	Y	90 Days	
CANTINSP ⁷	ALL	ALL	CANTINSP calculated as 12/31 of same year as inspection date	Reasonable correction is to complete inspection during the originally prescribed time period

5.1.3 Examples

A standard condition, recorded on 1/02/2019, in FPI states that it is a priority A, non-fire threat, tier 2 type. The GISMO correction date will be 02/02/2019.

A standard condition, recorded on 1/02/2019, in FPI states that it is a priority B, non-fire threat. The GISMO correction date will be 01/02/2022.

A standard condition, recorded on 1/02/2019, in FPI states that it is a priority B, fire threat, tier 2 type. The GISMO correction date will be 01/02/2020.

⁵ Energy Release Risks are determined and distinguished in Procedure 069. These were defined as Fire Threats prior to January 1, 2023.

⁶ Exception: Priority A Conditions which are Imminent Threats require correction immediately.

⁷ Exception only applies to Conditions entered after January 1st, 2020.

5.2 Prior to January 01, 2019

In Decision 17-12-024 on December 14, 2017, High Fire Threat districts were defined with tiers as below. Conditions found and entered into the FPI system before January 01, 2019, shall be corrected per the time periods below unless the Condition Code is noted in section 5.2.2 or there is a special exception as per section 5.3.

5.2.1 General Time Period

Conditions found and entered into the FPI system after January 01, 2019, are assigned Suggested Correction Dates consistent with the time periods below.

PRIORITY	ENERGY RELEASE RISK ⁸	Geographic Wildfire Tier Location ⁹		
		NON-TIER	TIER 2	TIER 3
A ¹⁰	All	30 days	30 days	30 days
B	All	48 months	48 months	48 months
C	All	N/A	N/A	N/A

Priority D and G items are not in the table do not require corrective action.

5.2.2 Condition Exceptions

Poles determined by the pole test and treat program to be A Condition shall be addressed in accordance with Pacific Power policies and procedures within 90 days of discovery.

5.2.3 Examples

A standard condition, recorded on 12/02/2018, in FPI states that it is a priority A, non-fire threat, tier 2 type. The GISMO correction date will be 01/02/2019.

A standard condition, recorded on 1/02/2018, in FPI states that it is a priority B. The GISMO correction date will be 01/02/2022.

5.3 Exceptions to all Corrective Action Time Periods

Correction time periods may be extended under reasonable circumstances, such as:

- Third Party refusal
- Customer issue
- No access
- Permits required
- System emergencies, such as fires or severe weather conditions, etc.

These exceptions to the correction time periods are to be documented in GISMO. Correction time periods may be shortened at the direction of the Commission staff to correct violation(s) of GO 95 at specific location(s) sooner than the maximum time periods.

⁸ Energy Release Risks are determined and distinguished in Procedure 069. These were defined as Fire Threats prior to January 1, 2023.

⁹ Per California High Fire Threat Map.

¹⁰ Exception: Priority A Conditions which are Safety Hazards require correction immediately.

6 Corrective Action Compliance Requirements

The sub-sections in this section define requirements set by GO95. Sometimes GO95 uses the term calendar month and sometimes the term month. For the purposes of compliance, month refers to the last day of the calendar month.

6.1 Joint Condition Notification Time Periods

Conditions found to be on or near a facility involving another company (such as a communications facility) shall transmit a single documented notice of identified potential violations as per the time period table below.

Equipment Owner Status	Safety Hazard	Notify Within ¹¹	Notification Sent To	Notes
Known	Yes	10 days	Equipment Owner	N/A
Known	No	180 days	Equipment Owner	N/A
Unknown	Yes	10 days	Pole Owner	Pole owner must notify equipment owner within 5 business days
Unknown	No	180 days	Pole Owner	Pole owner must notify equipment owner within 180 business days

The notification shall be documented, and such documentation must be preserved by all parties for at least 10 years.

6.2 June 30th, 2019, to present Correction Time Periods

In Decision 17-12-024 on December 14, 2017, High Fire Threat districts were defined with tiers as below. The effective date of subsequent changes to GO95 were memorialized in D. 18-05-042. As a result, the maximum time periods for Corrections associated with a potential violation of GO 95 or a Safety Hazard are based on the following priority levels:

PRIORITY	ENERGY RELEASE RISK ¹²	Geographic Wildfire Tier Location ¹³		
		NON-TIER	TIER 2	TIER 3
A ¹⁴	All	Immediately	Immediately	Immediately
B	Y	36 months	12 months	6 months
B	N	36 months	36 months	36 months
C	N	60 months	60 months	60 months

¹¹ All days are business days.

¹² Energy Release Risks are determined and distinguished in Procedure 069. These were defined as Fire Threats prior to January 1, 2023.

¹³ Per California High Fire Threat Map.

¹⁴ GO95 refers to Imminent Threats which have a present threat to safety. These are a subset of standard Priority A Conditions.

6.3 Prior to June 30th, 2019, Correction Time Periods

Prior to June 30th, 2019, the maximum time periods for Corrections associated with a potential violation of GO 95 or a Safety Hazard are based on the following priority levels:

PRIORITY	ENERGY RELEASE RISK ¹⁵	Geographic Wildfire Tier Location ¹⁶		
		NON-TIER	TIER 2	TIER 3
A ¹⁷	All	Immediately	Immediately	Immediately
B	All	59 months	59 months	59 months
C	N	N/A	N/A	N/A

END

¹⁵ Energy Release Risks are determined and distinguished in Procedure 069. These were defined as Fire Threats prior to January 1, 2023.

¹⁶ Per California High Fire Threat Map.

¹⁷ GO95 refers to Imminent Threats which have a present threat to safety. These are a subset of standard Priority A Conditions.

**STATE OF CALIFORNIA
WOOD POLE TEST & TREATMENT
TRANSMISSION AND DISTRIBUTION LINES
Asset Management Policy No. 298**

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 Authoring Department: Asset Management/Asset Strategy
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**STATE OF CALIFORNIA
 WOOD POLE TEST & TREATMENT
 TRANSMISSION AND DISTRIBUTION LINES
 Asset Management Policy No. 298**

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1 Scope

The policies, procedures and work practices that follow apply to all PacifiCorp employees and contract employees who perform inspections on PacifiCorp's transmission and distribution systems in California. The purpose of this policy is to present methods and procedures for utility pole inspection and maintenance; this includes testing poles for continued serviceability and providing information/guidance on preventive and remedial treatment.

All poles are to be tested by trained personnel. Any pole or item found with a potential of failing shall be considered out of compliance and shall be recorded into PacifiCorp's Facility Point Inspection (FPI) system. The appropriate coding for the condition discovered shall be entered along with any appropriate comments. The FPI system allows codes to be assigned to the conditions that are used for prioritizing subsequent repair work. Each condition shall have the appropriate priority code assigned as per the Policies in the References section. After a nonconforming condition has been corrected, the FPI database must be updated to reflect the changes.

All poles will be inspected in accordance with Section [5.2.1](#) for transmission poles, and per Section [5.2.2](#) for distribution poles. All poles will be designated as either Satisfactory, Reject/Reinforceable, or Reject/Replace. It is intended that poles deemed Reject/Reinforceable be reinforced in accordance with PacifiCorp [Policy 014](#), *Wood Pole Reinforcing*. However, replacement versus reinforcement will ultimately be a business unit decision at the time the work is performed due to ensuing engineering assessments, possible additional pole damage after the initial inspection, and other factors.

Personnel performing inspections shall follow and comply with all federal, state, and local requirements and strictly adhere to all PacifiCorp's policies and procedures.

2 General References

California General Orders 95 and 165 (GO 95 and GO 165)

- PacifiCorp [Safety Rules and Safety Procedures](#)
- PacifiCorp [Procedure 069](#), *Clearance Table, Grandfathering Matrix, FAQs, Condition Code Dropdowns*
- PacifiCorp [Policies, Procedures and Standards](#)
- Policy [009](#), *Detailed Inspections for Transmission and Distribution Lines*
- PacifiCorp [Policy 192](#), *California Condition Priorities and Correction Timeframes*
- PacifiCorp [Policy 297](#), *California Detailed Inspections for T & D Lines*
- PacifiCorp [Policy 014](#), *Wood Pole Reinforcing*
- PacifiCorp Construction Standard EB [141](#), *Poles, Reinforcing*

- Berkshire Hathaway Energy, [Policy EBU-PL-S03](#), *Supplemental Wood Pole Test and Treatment – Distribution and Transmission Poles*

3 Test and Treat Cycles and Data Entry

The inspection cycle for test and treatment of wood poles shall be recommended by asset management. The cycles are based on statutory requirements of California as well as age, climate, location, performance history, and other factors associated with these assets.

The results of the pole testing activity as well as any appropriate comments such as shell thickness, shell rot severity, pole treatment applied, etc. shall be entered into the company's FPI system. The date of the inspection and name of inspector shall be entered in the FPI system for all facility points inspected. Upon correction of the condition, the FPI system shall be updated accordingly.

By entering a completed inspection, which is uploaded into the FPI system, the inspector is confirming that they have performed the inspection per the applicable requirements of this policy including recording of conditions found that require corrective maintenance.

In California, all pole inspection records must be retained for the life of the pole.

4 General

4.1 Personnel Requirements

The quality and effectiveness of a pole inspection and treatment program is highly influenced by the experience of the personnel performing the inspection. Determination of remaining pole strength and serviceability is not an exact science, and there is no substitute for the good judgement of an experienced field pole inspector. Therefore, all pole inspection and treating specialists shall be experienced pole inspectors.

Supervisors of pole inspecting personnel shall have inspection and treatment experience that includes all wood pole species used by PacifiCorp. Each inspector shall satisfy PacifiCorp that they have sufficient training and knowledge to satisfactorily determine the serviceability of wood poles.

4.2 Permits

All permits required by federal, state, and local agencies necessary for application of preservatives, and sterilants shall be obtained before any pole treatment is performed.

4.3 Rights-of-Way or Easements

All rights-of-way or easements for the line equipment under inspection shall be verified by PacifiCorp before proceeding with any pole inspection or treatment. Pole-inspection supervisors shall comply with all reasonable requests of landowners and tenants relative to access to rights-of-way or easement.

4.4 Safety

Employees shall conduct all work with due regard to adequate safety and sanitary requirements and shall maintain all plant and equipment in safe condition. All procedures and precautions involved in the safe handling and use of treatment chemicals shall be observed. Inspectors shall review all safety data sheets and manufacturer's labels prior to using any treatment preservatives.

5 Inspection / Testing of Poles

5.1 Inspection Requirements

5.1.1 Detailed Inspections

A detailed inspection of each structure shall be completed per PacifiCorp Policy [009](#), *Detailed Inspections for Transmission and Distribution Lines*.

5.1.2 Inspection of Pole Top

The pole top shall be visually inspected to determine its general condition. If it is not satisfactory, then it shall be determined if the pole can be framed down for a bad top while still meeting clearance requirements. If not, the pole should be classified as Reject/Replace and no further inspection, testing or treatment should be performed on that pole. Personnel performing inspections should not climb poles without prior approval of PacifiCorp.

5.1.3 Sound Test

A pole-sound test is performed on all poles, and is utilized to locate external decay and internal decay pockets. The pole shall be tapped with a metal hammer from the groundline to as high as the inspector can reach to reveal soft spots or hollow-sounding areas. An experienced inspector can obtain significant information about the pole by listening to the sounds. Internal decay pockets cause a sound that is dull compared to the crisp sound of a solid pole section. In addition, the hammer rebounds more from a solid pole than when hitting a section that has an internal decay pocket. If the pole has been excavated in accordance with Section [5.3](#), then the sounding shall be performed starting as far below the groundline as practical.

5.1.4 Bore Inspection

If decay is suspected, inspection holes shall be drilled to determine the extent of the internal decay. Foreign owned distribution poles shall receive sterilization of the inspection hole only. An experienced inspector will notice a change in resistance against the drill when it contacts decayed wood. Borings shall be performed for transmission and distribution poles as follows:

Transmission Poles: The pole shall be drilled for preservative treatment in accordance with Section [7.1](#). If decay is found during treatment hole drilling, then evaluate the pole's condition in accordance with Section [6](#). If the pole condition is Satisfactory, apply treatment to internal pockets/void per section [7.4](#).

Distribution Poles: All poles shall have three bores (inspection holes) to evaluate the pole condition in accordance with Section [6](#). All inspection holes shall be sterilized and be plugged with plastic plugs. Unless directed by asset management, distribution poles should not receive preventive treatment.

Poles utilizing wood stubs shall have both the pole and the stub inspected and sounded as above. Additionally, they shall both be drilled at the band locations. If there is any decay in a wood stub it shall be classified as Reject/Replace. Poles utilizing steel reinforcers shall be drilled at the band locations.

5.1.5 Through-Bore Area

A through-bore pole has had preservative treatment applied by the manufacturer via multiple horizontally-drilled small holes. For the purposes of this policy, a through-bore is defined as any bore that goes all the way through the pole. Through-bored poles shall be inspected above the through-bore area. The top of the through-bore area is approximately 4 feet above the groundline for transmission poles and three feet for distribution poles.

5.1.6 Climbing Inspections

5.1.6.1 Communications Level

The inspection cycles and locations for communications level climbing inspections shall be as directed by asset management. Climbing inspections shall include sounding, boring, and fumigant application, with the same requirements utilized for the pole inspection requirements included in this policy with the exception of bore hole location and spacing. For climbing inspections, a single bore spaced every 5 feet up the pole to the communications level shall be made. If at any point decay is found that would classify the pole as a reject, then no further climbing or testing is to be performed and the pole will be recorded as a bad order pole as appropriate.

5.1.6.2 Inspector-Recommended GO 95

Climbing/bucket truck inspections may also be authorized by PacifiCorp if an inspector detects damage such as a woodpecker hole or a cracked or burned pole that may result in a possible GO 95 nonconformance strength pole, and the inspector is unable to determine the extent of the damage from the ground. If the pole's integrity is in doubt, or if a climbing space obstruction exists, then the pole should not be climbed and a bucket truck inspection should be scheduled.

5.2 Pole Inspection/Excavation/Boring by Species and Type

5.2.1 Transmission Poles

Transmission poles, including guy stubs and foreign-owned poles, shall receive test and treatment as follows, and per Section 7. Any new inspection hole shall be sterilized. Coastal is defined as being within 30 miles of the Pacific Ocean.

1. Poles 10 years old or newer are to be inspected and sounded only. No excavation, boring, or treatment is required; these poles will have an intrusive test at the next pole inspection test and treat cycle.
2. Through-bore poles shall be inspected, sounded, bored above the through-bore area, and the hole sterilized. (Do not treat.)
3. Non-through-bore poles set in concrete/asphalt shall be inspected, sounded, bored, and shall be bored from groundline to below groundline.
4. In coastal California, Douglas fir, Larch, and Western Red Cedar poles shall be inspected, sounded, bored, and treated. In non-coastal areas, they shall be inspected, partially excavated, sounded, bored, and treated.

5. All poles that have been gas-treated or salt-treated shall be fully excavated, then sounded, bored, and treated.
6. Pine poles shall be inspected, fully excavated, then sounded, bored, and treated.
7. For all poles, fully excavate if external decay is found at groundline, then sound, bore, and treat. Internal decay/hollow heart does not require a full excavate.

5.2.2 Distribution Poles

Distribution poles shall be inspected and/or excavated and/or bored per the following requirements. In California, poles will be intrusively tested and the hole sterilized, unless decay is found during excavation in which case the pole will be treated if not rejected. As a general rule, any inspection hole that is drilled shall be sterilized.

1. Poles four years old or newer are to be inspected and sounded only; these poles will have an intrusive test at the next pole inspection test and treat cycle.
2. Through-bore poles shall be inspected, sounded, and receive a single bore above the through-bore area.
3. Non-through-bore poles set in concrete/asphalt shall be inspected, sounded, bored above groundline, and bored from groundline to below groundline.
4. Douglas fir, Larch, and Western Red Cedar poles shall be inspected, sounded and bored.
5. All gas- or salt-treated poles shall be inspected, sounded, and bored.
6. Pine poles shall be inspected, sounded and bored.
7. If external decay is found in any pole at or below groundline, do a partial excavate, sound, bore, and treat.

5.3 Pole Excavation

5.3.1 Partial Excavation

1. At decayed area or largest open check to reach the ground, excavate exposing the pole for a 12-inch wide, 18-inch deep area. The diameter of this excavation shall be sufficient to permit at least a 4 inches workspace at 18 inches below groundline.
2. Measure and record the pole circumference at groundline.
3. If decay is found, perform a full excavate. Remove exposed decay from the pole exterior from its lowest point to 2 inches above groundline using a specialized shaving tool (not a shovel), taking care that no sound wood is removed. All loose wood chips and decayed matter shall be removed from the excavation prior to backfilling.

5.3.2 Full Excavation

1. Excavate around the entire circumference of the pole to a depth of 20 inches, with a diameter sufficient to allow at least a 4 inches workspace at 20 inches below groundline.
2. Measure and record the pole circumference at groundline.
3. Remove exposed decay from the pole exterior from its lowest point to two inches above groundline using a specialized shaving tool (not a shovel), taking care that no sound wood is removed. All loose wood chips and decayed matter shall be removed from the excavation prior to backfilling.

6 Pole Evaluation

All poles owned by PacifiCorp shall be evaluated using the methods described below to determine strength and serviceability. Poles not owned by PacifiCorp are in all cases to receive no more than a single bore under this program. All information obtained during this evaluation shall be recorded.

6.1 Pole Shell Thickness

If inspection holes determine that the pole has internal decay, then the procedures in this section shall be followed.

6.1.1 Shell Thickness Measurement

Pole shell thickness shall be measured using a metal shell gauge approved by PacifiCorp. The gauge shall be calibrated in inches for measuring both horizontally-drilled inspection holes and inclined treatment holes.

6.1.2 Shell Thickness Deductions

6.1.2.1 Fir and Pine

For fir and pine poles the inspector shall deduct ½ inch from the measured shell thickness to allow for the effects of incipient decay. Any decayed wood should be scraped clear, and care should be taken to ensure that only sound wood is being measured.

6.1.2.2 Cedar

For cedar poles there is no deduction since cedar typically has an abrupt, well-defined transition from sound wood to decayed wood. Any decayed wood should be scraped clear, after which the gauge reading can be recorded directly with no adjustments.

6.2 Pole Strength Analysis

6.2.1 Reduced Circumference

Reduced circumference poles are those with exterior decay sufficient to potentially jeopardize structural integrity. These poles with external shell rot shall have the exterior decay removed from the pole surface at or below the groundline and the resulting pole circumference will be compared to the pole's original circumference as referenced in Table 3.

The strength of a pole containing random pockets of external and/or internal decay will be further determined using Tables 1, 2, and 3, as follows:

6.2.1.1 External Decay Pockets

After an external decay pocket is measured, the pole circumference deduction can be obtained from Table 1 (Distribution poles with external decay pockets larger than those shown in Table 1 shall be classified as Priority A, Reject/Replace). That value is subtracted from the original pole circumference as measured where the pocket was found. If there is no internal decay, Table 3 is then used directly to compare original versus current circumference and will be classified according to Section [6.2.1.3](#) below.

6.2.1.2 Internal Decay Pockets

If a pole has an internal decay pocket, the size of the pocket shall be measured and the pole circumference deduction is then obtained from Table 2 (If the pocket is larger than those listed in Table 2, then proceed to Section [6.2.2](#), Hollow Heart Poles). The appropriate value in Table 2 is subtracted from the pole circumference. If a pole has both internal and external decay, the values from both Table 1 and Table 2 shall be subtracted from the pole's original circumference. Table 3 is then used to compare original versus current circumference and the pole then is classified according to Section [6.2.1.3](#) below.

6.2.1.3 Reduced-Circumference Pole Classification

Poles falling below the "Reject Circumference" value but above the "Replace Circumference" value in Table 3 will be classified as Priority B, Reject/Reinforceable poles.

Most poles falling below the "Replace Circumference" value in Table 3 will be classified as Priority A, Reject/Replace. However, in some cases, such as when the decay is at or near groundline, or with fire damage, a pole may be classified as Priority A, Reject/Reinforceable per Policy 014, but the reinforcement work must be completed within the Priority A timeframe.

Table 1—Reduced Pole Circumference for External Decay Pockets

Circumference Deduction For External Decay Pockets								
All Figures in Inches								
<i>Pocket Width</i>								
Pocket Depth	1	2	3	4	5	6	7	8
1	1	1	2	2	3	3	4	5
2	1	2	3	4	5	6	7	8
3	1	2	4	5	6	8	9	11
4	2	3	4	5	7	9	10	13
5	2	3	4	6	7	9	11	-

Any pole with an external decay pocket larger than those shown in Table 1 shall have its deduction calculated by addressing the pocket as if it were two smaller pockets and adding them together. For example, a 3-inch deep by 12-inch wide pocket would be addressed as though it were two 3-inch deep by 6-inch wide pockets.

Table 2—Reduced Pole Circumference for Internal Decay Pockets

Pole Circumference, Inches	Shell Thickness at Pocket Side, Inches	Circumf. Deduction For Internal Decay Pockets		
		Depth of Internal Pocket, Inches:		
		3" Deep	4" Deep	5" Deep
22 – 30	1	2	2	3
	2	-	1	1
	3	-	-	-
30.1 – 38	1	2	3	3
	2	1	1	2
	3	1	1	1
38.1 – 50	1	2	3	4
	2	1	2	2
	3	1	1	1

Poles with internal decay pockets larger than those shown in Table 2 shall be treated as Hollow Heart Poles, Section [6.2.2](#).

Poles must have a shell thickness of at least one inch to be reinforceable in accordance with Policy 014 and Standard EB [141](#), *Poles, Reinforcing*.

The “Reject Circumference” column in Table 3 gives the minimum pole circumference (88% of original) required to maintain 67% pole strength. The “Replace Circumference” column gives the minimum pole circumference (69% of original) required to maintain 33% pole strength. If the pole circumference after deductions falls between the Reject and Replace values, then the pole will be classified as Priority B, Reject/Reinforceable. Poles falling below the “Replace Circumference” value will be classified as Priority A, Reject/Replace or Reject/Reinforceable.

Any pole with a remaining shell thickness of less than one inch will be classified as a Priority A, Reject/Replace pole.

Table 3—Minimum Pole Circumference (All measurements in inches)

Original Circumf.	Priority B Reject Circumf.	Priority A Replace Circumf.	Original Circumf.	Priority B Reject Circumf.	Priority A Replace Circumf.
25.0	22.0	17.3	58.0	51.0	40.1
26.0	22.9	18.0	59.0	51.9	40.8
27.0	23.8	18.7	60.0	52.8	41.5
28.0	24.6	19.3	61.0	53.7	42.2
29.0	25.5	20.0	62.0	54.6	42.8
30.0	26.4	20.7	63.0	55.4	43.5
31.0	27.3	21.4	64.0	56.3	44.2
32.0	28.2	22.1	65.0	57.2	44.9
33.0	29.0	22.8	66.0	58.1	45.6
34.0	29.9	23.5	67.0	59.0	46.3
35.0	30.8	24.2	68.0	59.8	47.0
36.0	31.7	24.9	69.0	60.7	47.7
37.0	32.6	25.6	70.0	61.6	48.4
38.0	33.4	26.3	71.0	62.5	49.1
39.0	34.3	27.0	72.0	63.4	49.8
40.0	35.2	27.6	73.0	64.2	50.4
41.0	36.1	28.3	74.0	65.1	51.1
42.0	37.0	29.0	75.0	66.0	51.8
43.0	37.8	29.7	76.0	66.9	52.5
44.0	38.7	30.4	77.0	67.8	53.2
45.0	39.6	31.1	78.0	68.6	53.9
46.0	40.5	31.8	79.0	69.5	54.6
47.0	41.4	32.5	80.0	70.4	55.3
48.0	42.2	33.2	81.0	71.3	56.0
49.0	43.1	33.9	82.0	72.2	56.7
50.0	44.0	34.6	83.0	73.0	57.4
51.0	44.9	35.2	84.0	73.9	58.0
52.0	45.8	35.9	85.0	74.8	58.7
53.0	46.6	36.6	86.0	75.7	59.4
54.0	47.5	37.3	87.0	76.6	60.1
55.0	48.4	38.0	88.0	77.4	60.8
56.0	49.3	38.7	89.0	78.3	61.5

57.0	50.2	39.4	90.0	79.2	62.2
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6.2.2 Hollow Heart Poles

Hollow heart poles are those with significantly decayed or void centers but may have sound shell wood. For internal voids greater than shown in Table 2 (5 inches or deeper), evaluate the pole as follows:

Transmission Poles: Remaining shell thickness of 2 inches or less will be a Priority A Reject/Replace; 2-3 inches will be a Priority B Reject/Replace; shell thickness greater than 3 inches and meeting the Satisfactory strength requirement per Table 3 shall receive internal void treatment per Section [7.4](#).

Distribution Poles: Remaining shell thickness of 1 inch or less will be a Priority A Reject/Replace; 1-2 inches will be a Priority B Reject/Replace; shell thickness greater than 2 inches and meeting the Satisfactory strength requirement per Table 3 shall receive internal void treatment per Section [7.4](#).

For fir and pine poles the inspector shall deduct ½ inch from the measured shell thickness to allow for the effects of incipient decay.

7 Treatment Preservatives

Treatments shall be applied on poles that pass inspection and evaluation tests and qualify as being either Sound or Reinforceable, and that have not been treated within the last five years. Poles not owned by PacifiCorp are not to receive treatments under this program; document foreign-owned poles that have been treated by others within the past 5 years.

The Environmental Protection Agency must approve all chemical treatments used on wood poles. All manufacturer labels and safety data sheets shall be strictly followed.

The PacifiCorp authorized preservative treatment supplier is Genics™. Only the authorized preservatives supplied by Genics™ should be used. The use of any other preservative treatments must be pre-approved by PacifiCorp. Table 4 shows the approved preservatives.

Table 4—Authorized Preservatives

Product	Type	Ingredients
Cobra™ Rod	Internal Preservative (Solid Rod)	Anhydrous disodium octaborate tetrahydrate, copper (from copper hydroxide), boric acid
Genics™ CuB	Internal Preservative (Liquid)	Disodium octaborate tetrahydrate, boric acid, copper hydroxide
Cobra™ Wrap (Standard)	External Preservative	Copper naphenate, hydrocarbon solvent

Below are general guidelines for installing Genics™ preservatives. The information provided below is either a direct quote or paraphrased from material and documents provided by

Genics™. Inspectors and individuals providing pole treatment should follow all manufacturer's recommendations and safety precautions.

The amount of treatment to be applied is provided in [Policy EBU-PL-S03](#), *Supplemental Wood Pole Test and Treatment – Distribution and Transmission Poles*.

7.1 Internal Preventive Treatment

Serviceable poles are to be internally treated for protection against fungal decay and insects and to interrupt degradation. Serviceable and reinforced poles and all non-decayed wood stubs shall also be treated. Decayed wood stubs on serviceable poles shall be replaced.

For preventive treatment, Cobra™ Rods (diffusible rods comprised of copper and boron) shall be used on all poles requiring treatment. Cobra™ Rods are placed into treatment holes as described below:

1. Measure the pole circumference at the groundline.
2. Determine the number and depth of the holes for preservative treatment to be used as indicated in [Policy EBU-PL-S03](#) (Table 6 or 7).
3. Drill ½-inch treatment holes at a 45-degree angle following manufacturer's recommendation for drill pattern. Do not allow the drill to exit the opposite side of the pole.
4. Apply Genics™ CuB to holes starting from the bottom hole to the top hole.
5. Insert Cobra™ Rods in accordance with [Policy EBU-PL-S03](#) (Table 6 or 7).
6. Plug the bore holes with 9/16-inch Cobra™ Plug.

7.2 Internal Preventive Treatment for Poles Previously Treated with MITC

PacifiCorp poles were treated with Methyl-isothiocyanate (MITC) fume in the past. The following guidelines should be followed to install Cobra™ Rods on poles previously treated with MITC fume:

1. If the pole is not in need of replacement or can be reinforced, drill out the existing wood dowel or remove plastic plug from previous installation of MITC fume. Be careful to not drill too deep, so as not to drill into the MITC vial.
2. Remove the MITC fume vials from the hole and dispose in accordance with manufacturer recommendations and local regulations.
3. Use [Policy EBU-PL-S03](#) (Table 8) to determine the number of rods and ounces of liquid preservative to be applied.
4. Apply liquid preservative (Genics™ CuB) to holes starting from the bottom hole moving to the top hole.
5. Insert Cobra™ Rods into the borings as per [Policy EBU-PL-S03](#) (Table 8) starting from the bottom hole moving towards the top hole.
6. Push the rods to the bottom of the hole and add more additive as needed to fill the hole, but do not exceed the maximum recommended amount.
7. Plug all holes with 15/16-inch Cobra™ Plugs.

7.3 External Pole Treatment

Poles that have been excavated and meet evaluation requirements as serviceable shall have their external surfaces treated using Cobra™ Wrap. Cobra™ Wrap is a copper naphthenate bandaging system. It comes pre-packaged with preservatives and requires no additional chemicals to be applied. The following guidelines should be used for installing Cobra™ Wraps:

1. Fully excavate around the poles in accordance with Section 5.3.
2. Excess dirt and decayed wood should be removed from sound wood with a wire brush or pole shaving tool (do not use shovels, axes, or hatches).
3. Measure the circumference of the pole and determine the amount of bandage required per [Policy EBU-PL-S03](#) (Table 10).
4. Lay out the required number of sections and expose the copper naphthene solution pad by cutting diagonal slits every 1-½ inches in the inner plastic when using the Cobra Wrap SD. (If using the Cobra Wrap Standard, peel the backing off to expose the copper naphthene solution.) On the overlap portion, leave a sufficient tail attached to the outermost edge forcing preservative to move back into wood zone for penetration.
5. Wrap proper length Cobra™ Wrap around the pole with saturated pad against the pole and staple or tack firmly in place. Staple short side of the backing first and overwrap with longer edge. Allow wrap to extend 2" above groundline.
6. After complete inspection and installation of the protective wrap, the excavation shall be backfilled and compacted by tamping firm every 6 to 8 inches. The backfill should mound up the pole to allow for future setting and drainage away from the pole. Care must be exercised to avoid damaging the wrapping during backfilling. All landscaping shall be replaced in good condition. All ground wires, straps and ground rods disturbed during inspection or treatment shall be reinstalled to acceptable condition by a qualified electrical worker.

7.4 Internal Void Treatment

Poles with internal voids but still having acceptable strength or that can be reinforced shall be filled with Genics™ CuB, a preservative solution containing copper hydroxide and disodium octaborate tetrahydrate. All internal voids and inspection holes shall be treated in accordance with this section.

The Genics™ CuB solution shall be mixed with a foaming agent in accordance with manufacturer recommendations and be applied with a pressurized garden sprayer. The treatment shall be applied through the lowest inspection hole and forced upward filling the entire void as follows:

1. Drill a ½-inch hole into the vertical center of the void at a 45-degree angle downward from the horizon.
2. Continue drilling holes at increments of approximately six inches until solid wood is reached. Keep the holes clean of sawdust.
3. Avoid checks. If a hole intersects a check, plug the hole and drill another. Drill from side to side that will not allow for intersection with a check.

4. Using a sprayer, flood the void with foaming Genics™ CuB. If the preservative is escaping through a check or crack, plug the hole and apply foam to a drill hole which does not intersect a check or crack.
5. Starting from the bottom hole, apply the foaming Genics™ CuB until the foam escapes from the hole above it. Stop and plug the original hole. Then apply in the hole immediately above until the foam comes out of the hole above it. Continue this process until all holes and the void are filled.
6. Occasionally shake canister well, especially between poles, to ensure the foaming agent and preservative stay mixed. Try to divide the chemical equally between holes.
7. Apply Genics™ CuB foam solution to any exposed check and inspection holes.
8. Plug the bore holes with 7/16-inch, boron-treated, plastic Cobra™ Plugs.

8 Pole Tagging

When required, pole tags shall be installed in accordance with PacifiCorp standard [EB 461, Tag— Pole](#). Tags shall be held in place by aluminum or galvanized nails.

8.1 Reject/Replace Pole Tags

Poles evaluated as Reject/Replace Priority A shall be tagged with two plain white aluminum tags, SI# 6156251.

Poles evaluated as Reject Priority B shall be tagged with one plain white aluminum tag, SI# 6156251.

8.2 Reject/Reinforceable Pole Tags

Priority B poles evaluated as Reject/Reinforceable shall be tagged with one yellow aluminum tag, SI# 6156252.

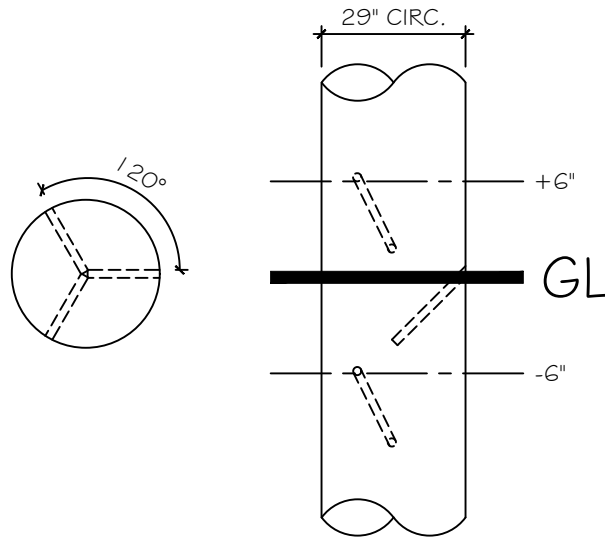
Priority A poles evaluated as Reject/Reinforceable shall be tagged with two yellow aluminum tags, SI# 6156252.

8.3 Pole Treatment Tags

All treated poles shall be tagged to indicate type of inspection and treatment applied. Tag the pole at eye level to indicate treatment and year. Keep records of all poles including the location, date, number of borings, type of treatment, and number of rods installed

END

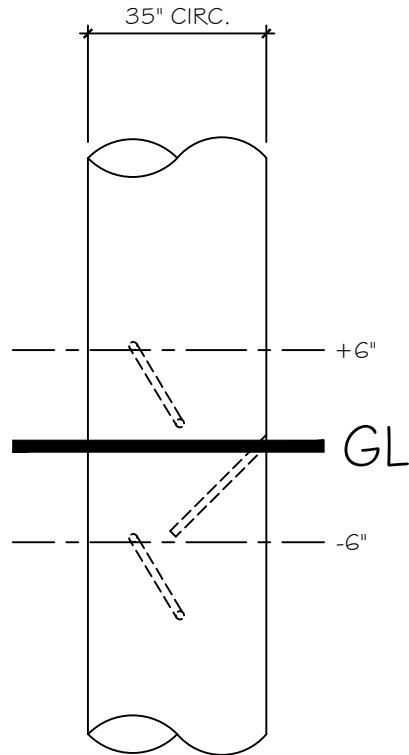
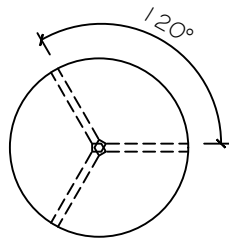
Reference Example: 29" Pole



Loading Table				
Boring Location	Depth	Boring Diameter	Chemical Loading	
	Inches	Inches	# of 1/2" Cobra Rods	Volume of CuB (Oz)
6" Above GL	10	1/2"	0	0.92
Groundline	10	1/2"	0	0.92
6" Below GL	10	1/2"	1	0.48

SCALE: 1" = 1' 0"

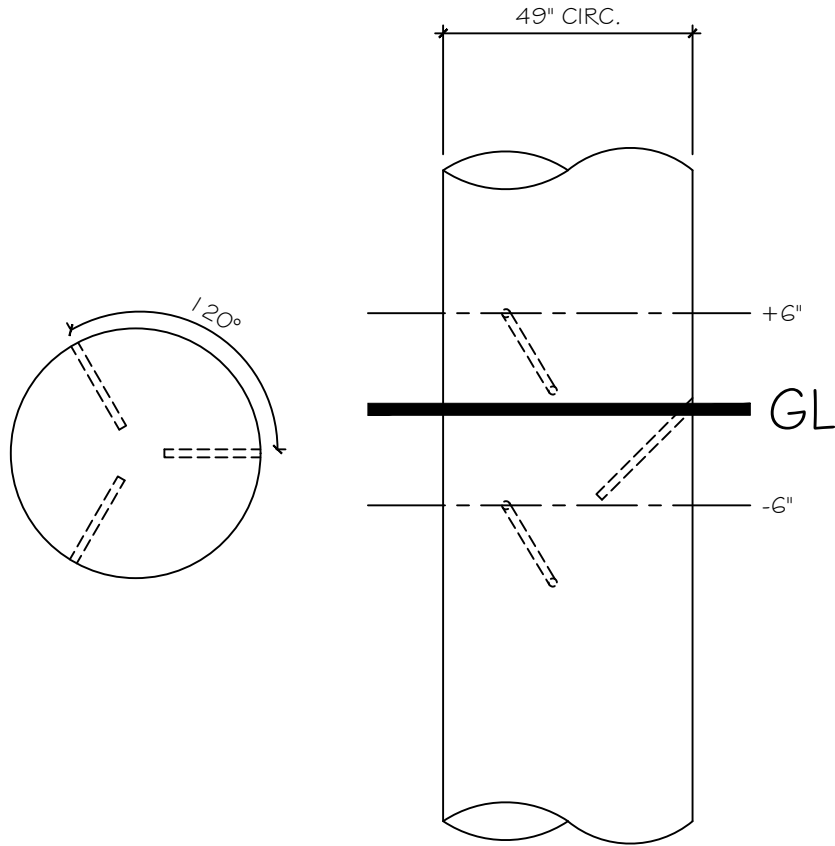
Reference Example: 35" Pole



Loading Table					
Boring Location	Depth	Boring Diameter	Chemical Loading		
	Inches		Inches	# of 1/2" Cobra Rods	Volume of CuB (Oz)
6" Above GL	10	1/2"	0	0.92	
Groundline	10	1/2"	1	0.48	
6" Below GL	10	1/2"	1	0.48	

SCALE: 1" = 1' 0"

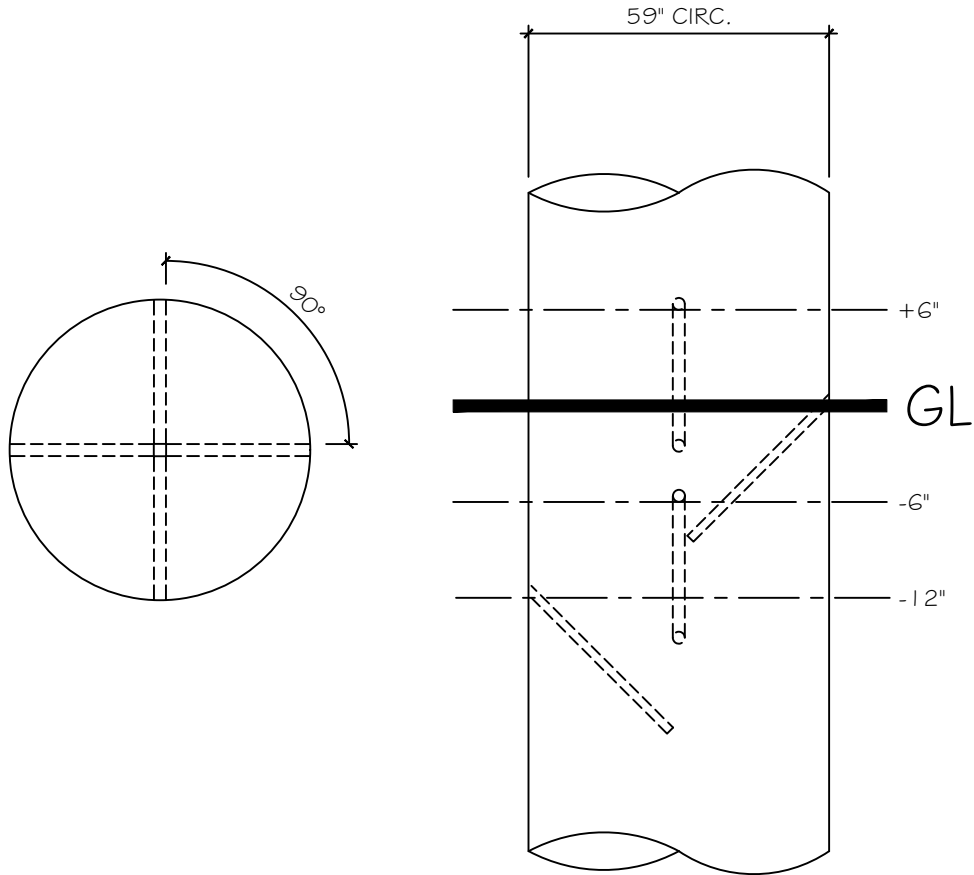
Reference Example: 49" Pole



Loading Table				
Boring Location	Depth Inches	Boring Diameter Inches	Chemical Loading	
			# of 1/2" Cobra Rods	Volume of CuB (Oz)
6" Above GL	15	1/2"	0	1.47
Groundline	15	1/2"	2	0.6
6" Below GL	15	1/2"	2	0.6

SCALE: 1" = 1' 0"

Reference Example: 59" Pole



Loading Table				
Boring Location	Depth	Boring Diameter	Chemical Loading	
	Inches	Inches	# of 1/2" Cobra Rods	Volume of CuB (Oz)
6" Above GL	15	1/2"	0	1.47
Groundline	15	1/2"	2	0.6
6" Below GL	15	1/2"	2	0.6
12" Below GL	15	1/2"	2	0.6

SCALE: 1" = 1' 0"



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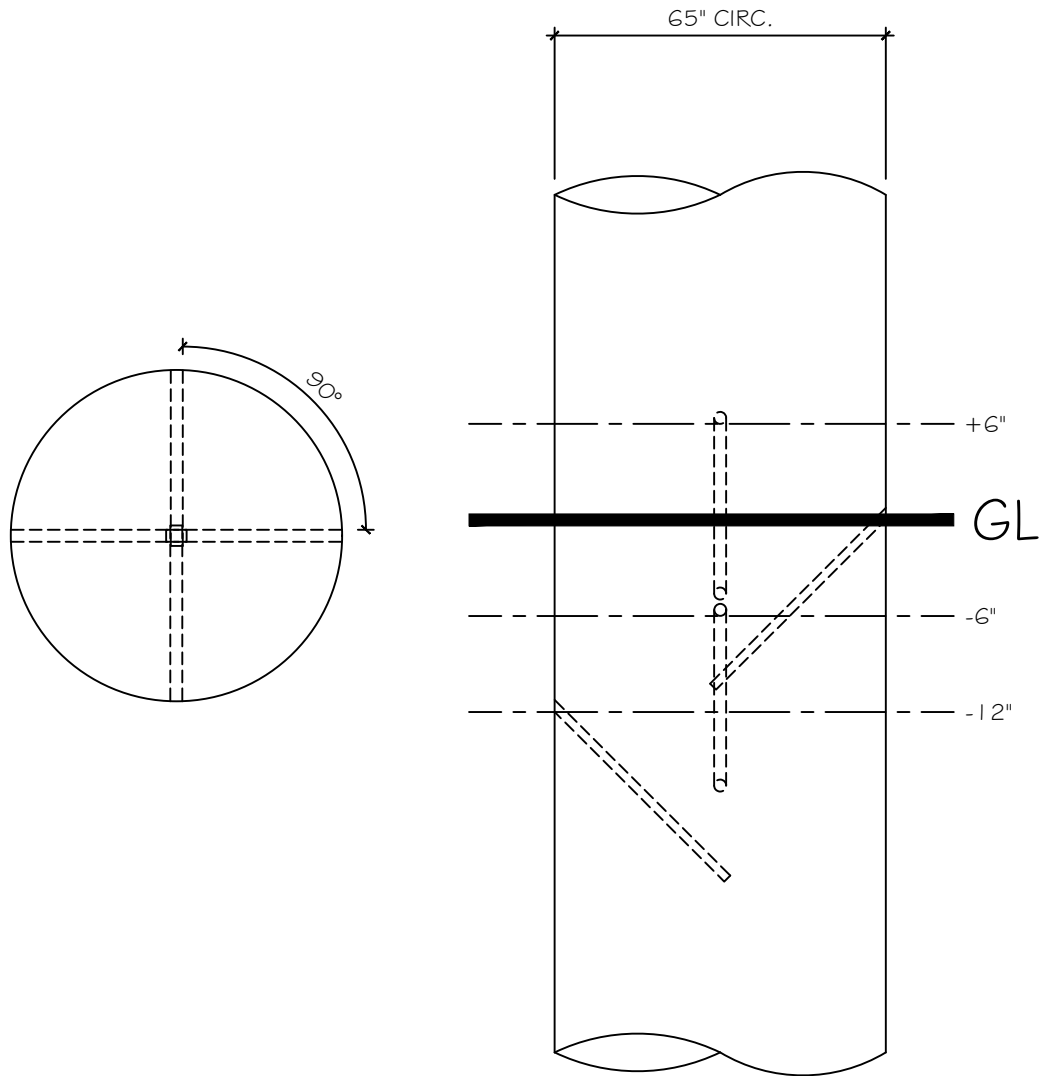
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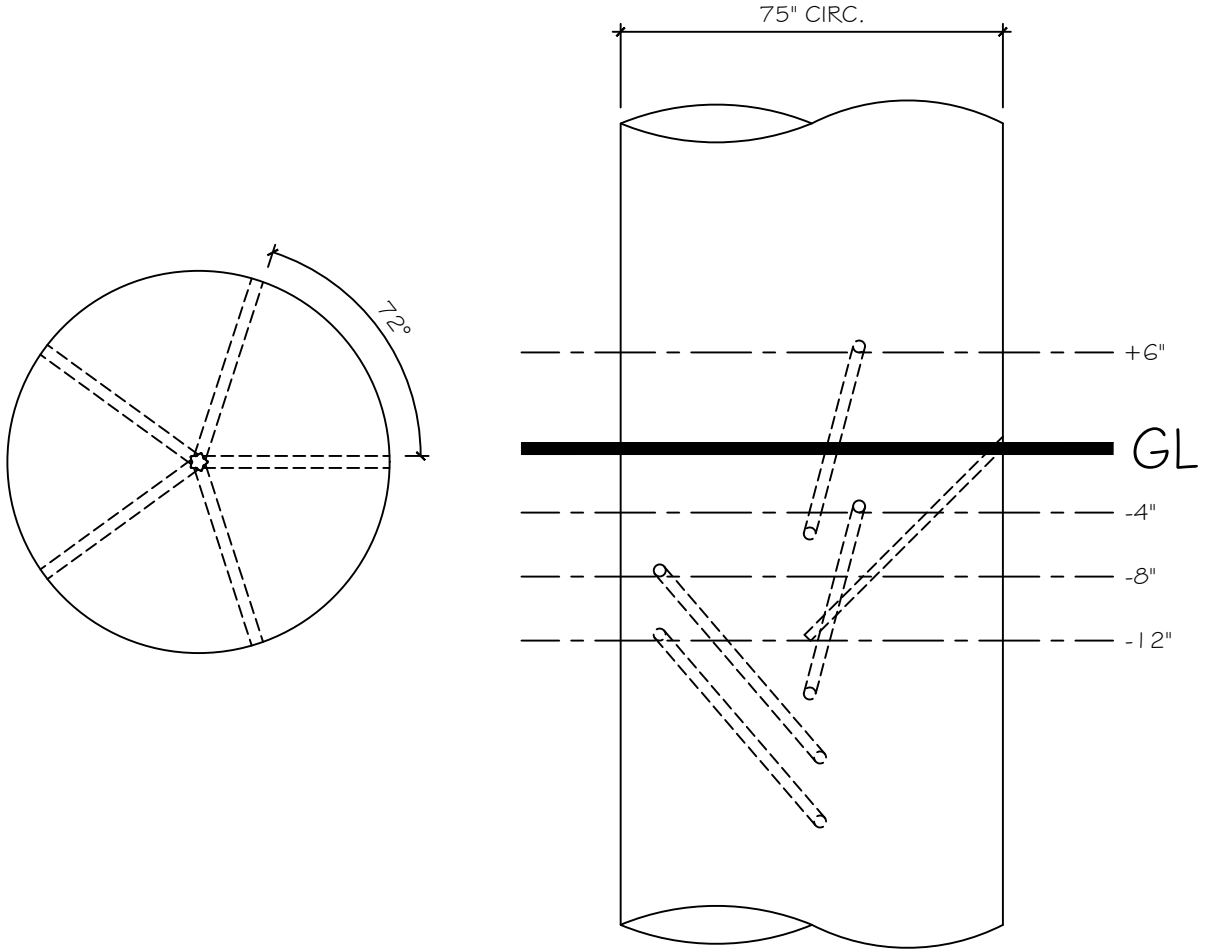
Reference Example: 65" Pole



Loading Table					
Boring Location	Depth Inches	Boring Diameter Inches	Chemical Loading		
			# of 1/2" Cobra Rods	Volume of CuB (Oz)	
6" Above GL	15	1/2"	1	1.03	
Groundline	15	1/2"	2	0.6	
6" Below GL	15	1/2"	2	0.6	
12" Below GL	15	1/2"	2	0.6	

SCALE: 1" = 1' 0"

Reference Example: 75" Pole



Loading Table				
Boring Location	Depth	Boring Diameter	Chemical Loading	
	Inches	Inches	# of 1/2" Cobra Rods	Volume of CuB (Oz)
6" Above GL	16	1/2"	1	1.14
Groundline	16	1/2"	2	0.7
4" Below GL	16	1/2"	2	0.7
8" Below GL	16	1/2"	3	0.27
12" Below GL	16	1/2"	3	0.27

SCALE: 1" = 1' 0"



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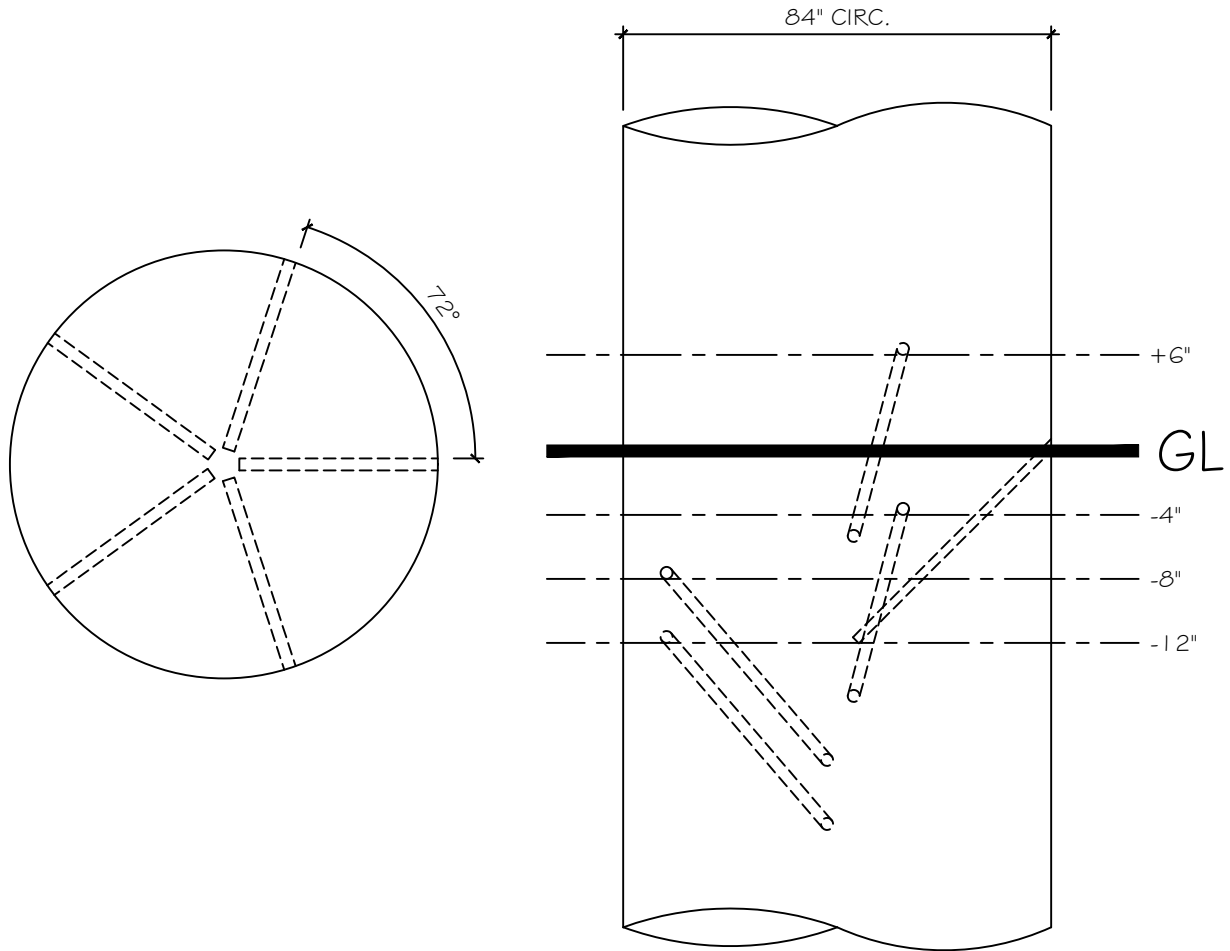
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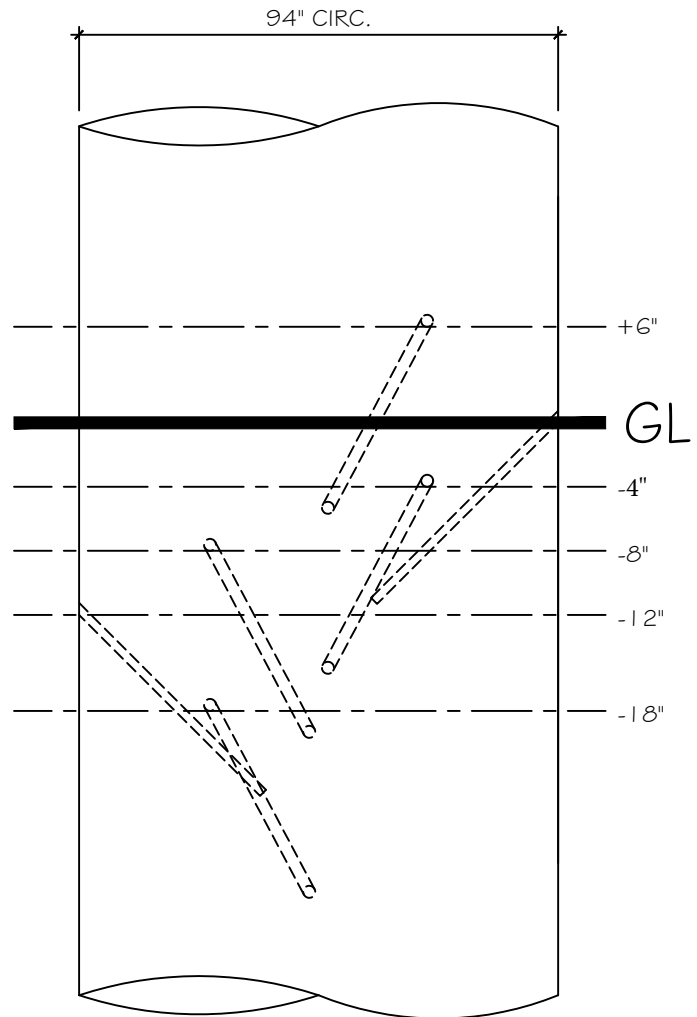
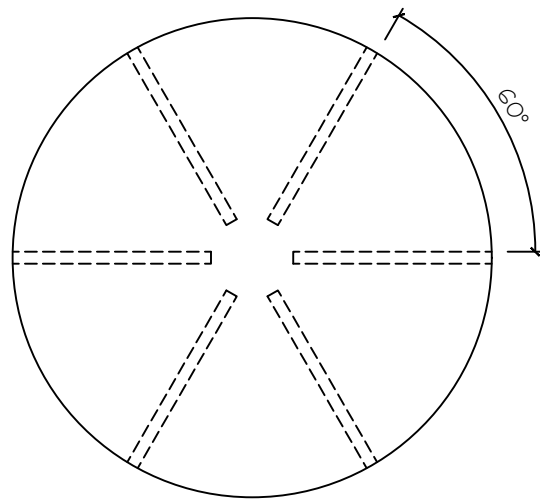
Reference Example: 84" Pole



Loading Table				
Boring Location	Depth Inches	Boring Diameter Inches	Chemical Loading	
			# of 1/2" Cobra Rods	Volume of CuB (Oz)
6" Above GL	16	1/2"	2	0.7
Groundline	16	1/2"	3	0.27
4" Below GL	16	1/2"	3	0.27
8" Below GL	16	1/2"	3	0.27
12" Below GL	16	1/2"	3	0.27

SCALE: 1" = 1' 0"

Reference Example: 94" Pole



Loading Table				
Boring Location	Depth Inches	Boring Diameter Inches	Chemical Loading	
			# of 1/2" Cobra Rods	Volume of CuB (Oz)
6" Above GL	16	1/2"	3	0.27
Groundline	16	1/2"	3	0.27
4" Below GL	16	1/2"	3	0.27
8" Below GL	16	1/2"	3	0.27
12" Below GL	16	1/2"	3	0.27
18" Below GL	16	1/2"	3	0.27

SCALE: 1" = 1' 0"



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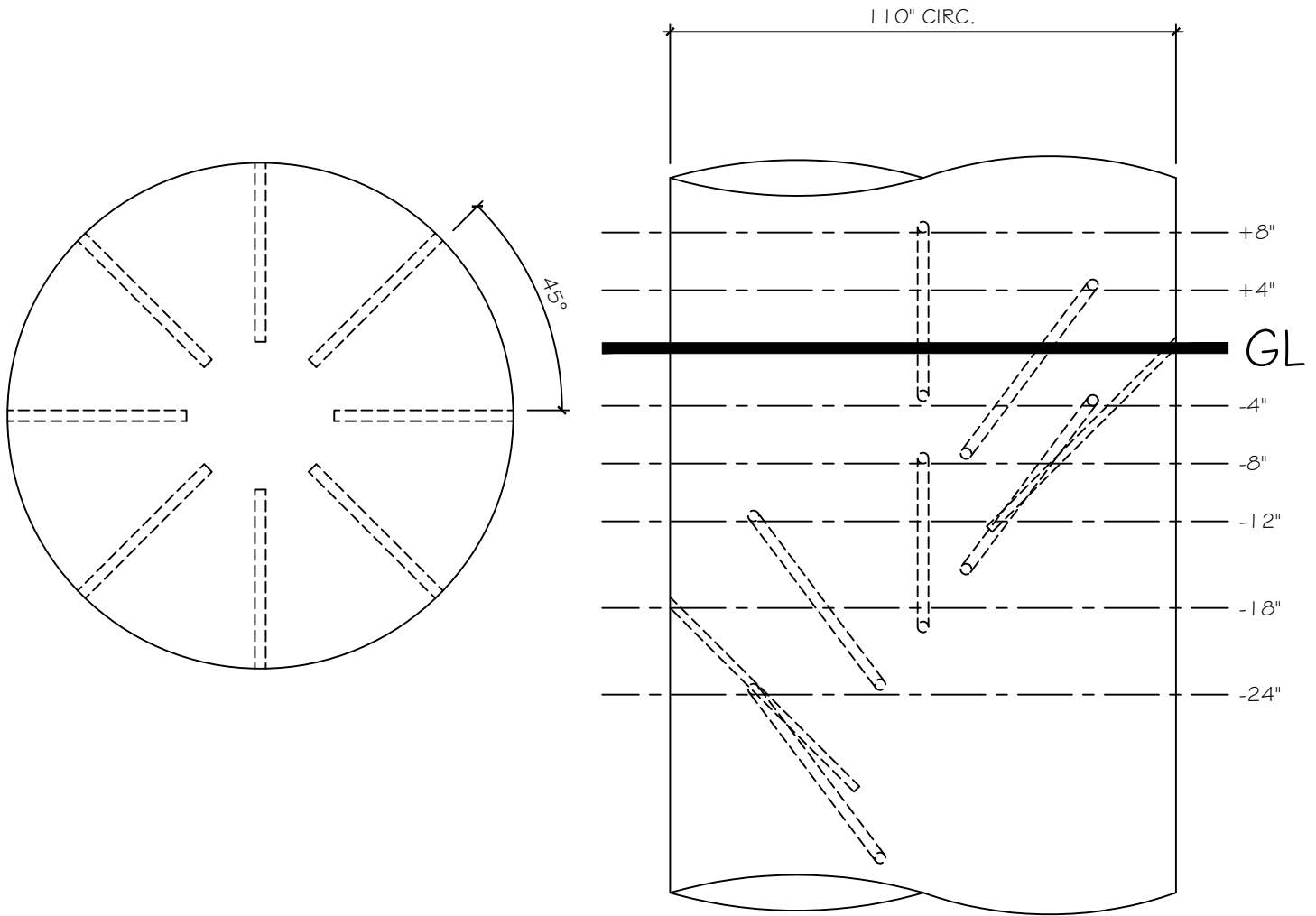
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Reference Example: 110" Pole

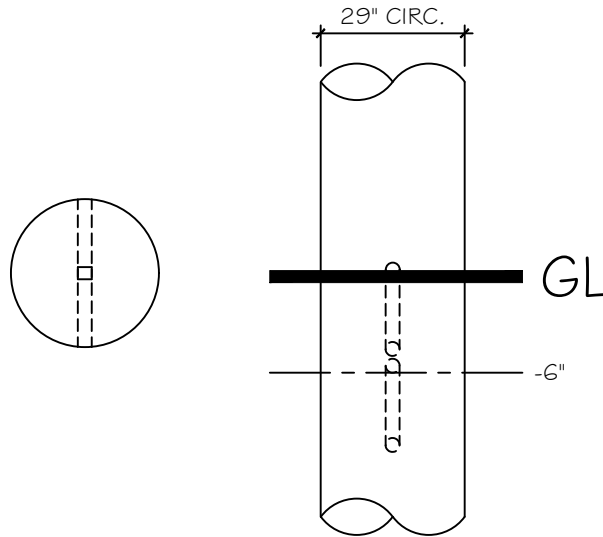


Loading Table				
Boring Location	Depth Inches	Boring Diameter Inches	Chemical Loading	
			# of 1/2" Cobra Rods	Volume of CuB (Oz)
8" Above GL	18	1/2"	1	1.35
4" Above GL	18	1/2"	2	0.91
Groundline	18	1/2"	3	0.47
4" Below GL	18	1/2"	3	0.47
8" Below GL	18	1/2"	3	0.47
12" Below GL	18	1/2"	4	0.08
18" Below GL	18	1/2"	4	0.08
24" Below GL	18	1/2"	4	0.08

SCALE: 1" = 1' 0"

NOTE: 7/8" BORING HOLES @ 10" LONG

Reference Example: 29" Pole



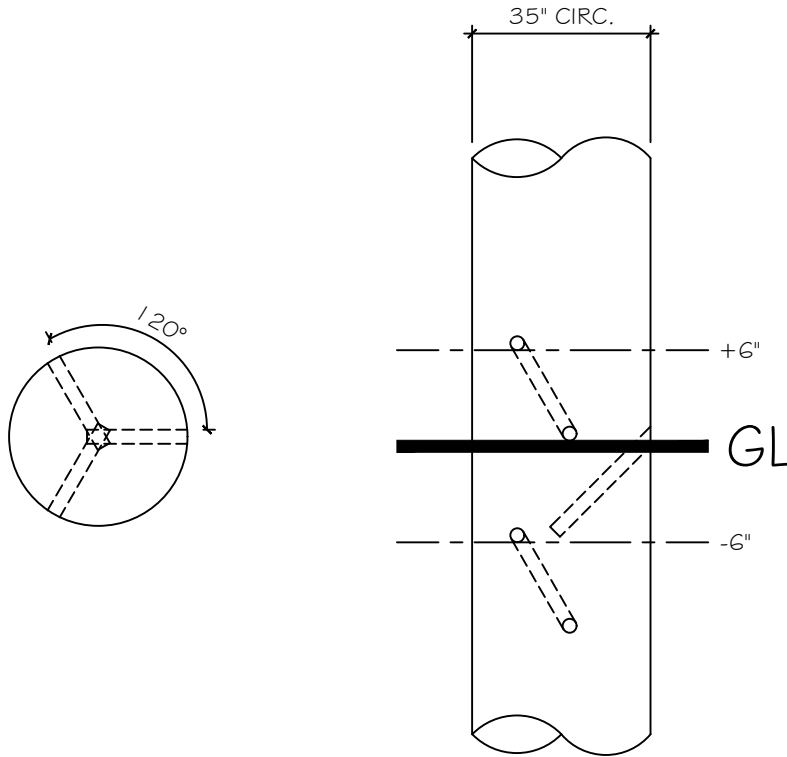
Loading Table				
Boring Location	Depth	Boring Diameter	Chemical Loading	
	Inches	Inches	# of 3/4" Cobra Rods	Volume of CuB (Oz)
Groundline	10	7/8"	0	2.86
6" Below GL	10	7/8"	1	1.97

SCALE: 1" = 1' 0"

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NOTE: 7/8" BORING HOLES @ 10" LONG

Reference Example: 35" Pole



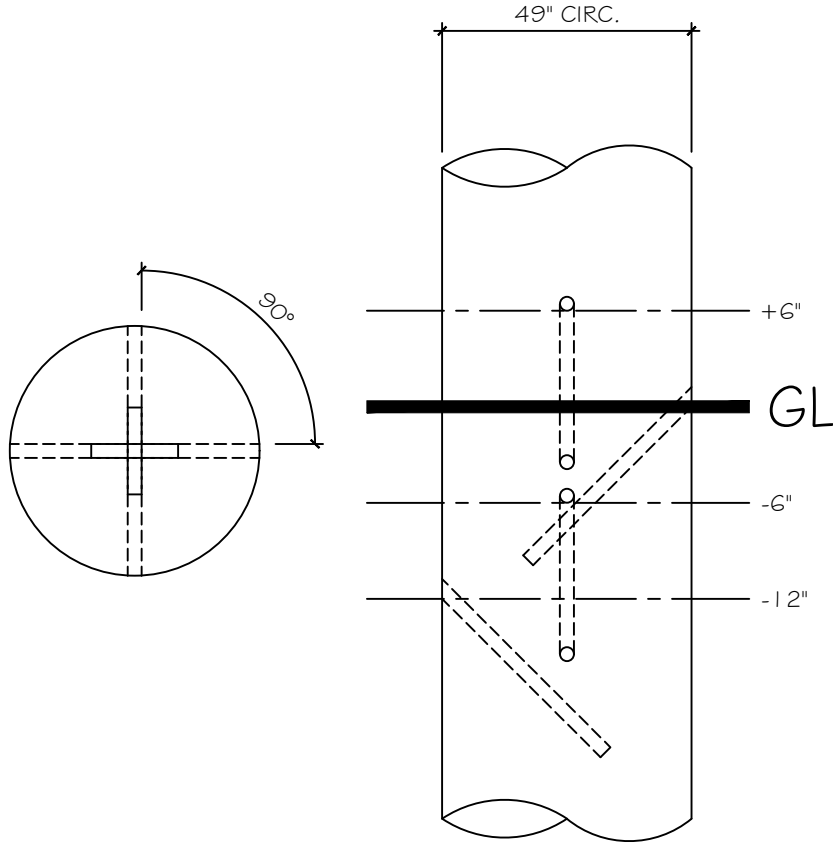
Loading Table				
Boring Location	Depth Inches	Boring Diameter Inches	Chemical Loading	
			# of 3/4" Cobra Rods	Volume of CuB (Oz)
6" Above GL	10	7/8"	0	2.83
Groundline	10	7/8"	1	1.97
6" Below GL	10	7/8"	1	1.97

SCALE: 1" = 1' 0"

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NOTE: 7/8" BORING HOLES @ 14" LONG

Reference Example: 49" Pole



Loading Table				
Boring Location	Depth	Boring Diameter	Chemical Loading	
	Inches	Inches	# of 3/4" Cobra Rods	Volume of CuB (Oz)
6" Above GL	14	7/8"	1	3.3
Groundline	14	7/8"	1	3.3
6" Below GL	14	7/8"	1	3.3
12" Below GL	14	7/8"	1	3.3

SCALE: 1" = 1' 0"



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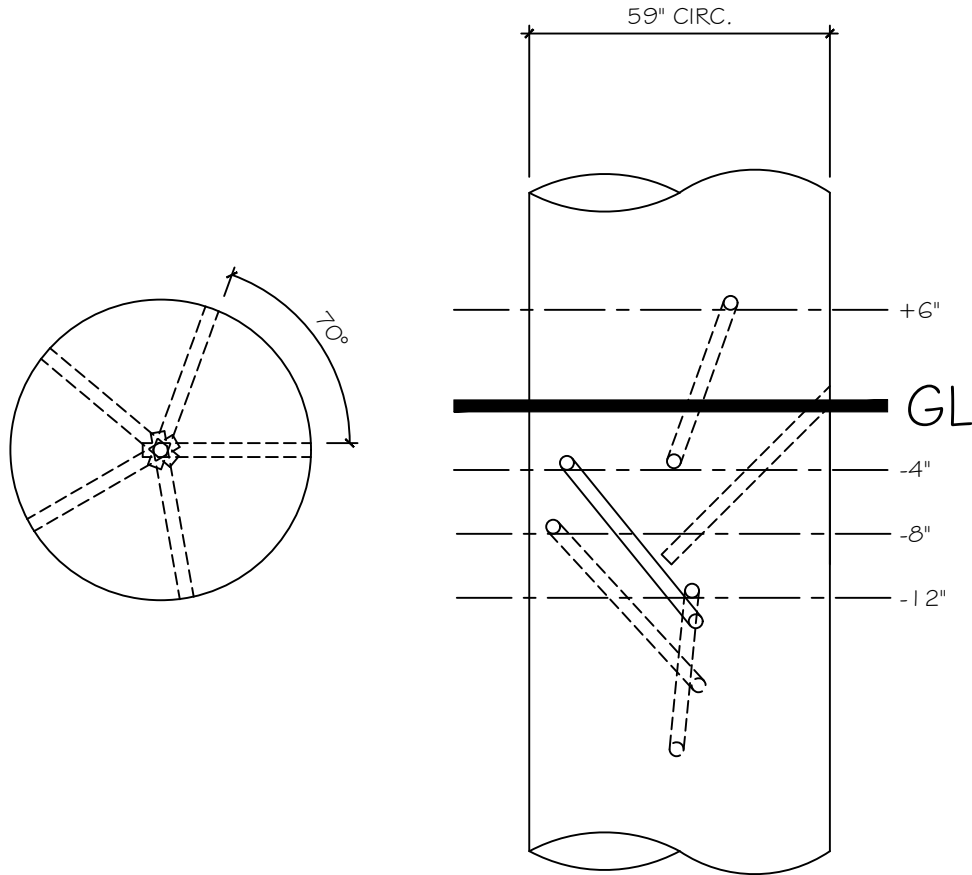
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NOTE: 7/8" BORING HOLES @ 14" LONG

Reference Example: 59" Pole



Loading Table				
Boring Location	Depth Inches	Boring Diameter Inches	Chemical Loading	
			# of 3/4" Cobra Rods	Volume of CuB (Oz)
6" Above GL	14	7/8"	0	4.16
Groundline	14	7/8"	1	3.3
4" Below GL	14	7/8"	1	3.3
8" Below GL	14	7/8"	2	2.44
12" Below GL	14	7/8"	2	2.44

SCALE: 1" = 1' 0"



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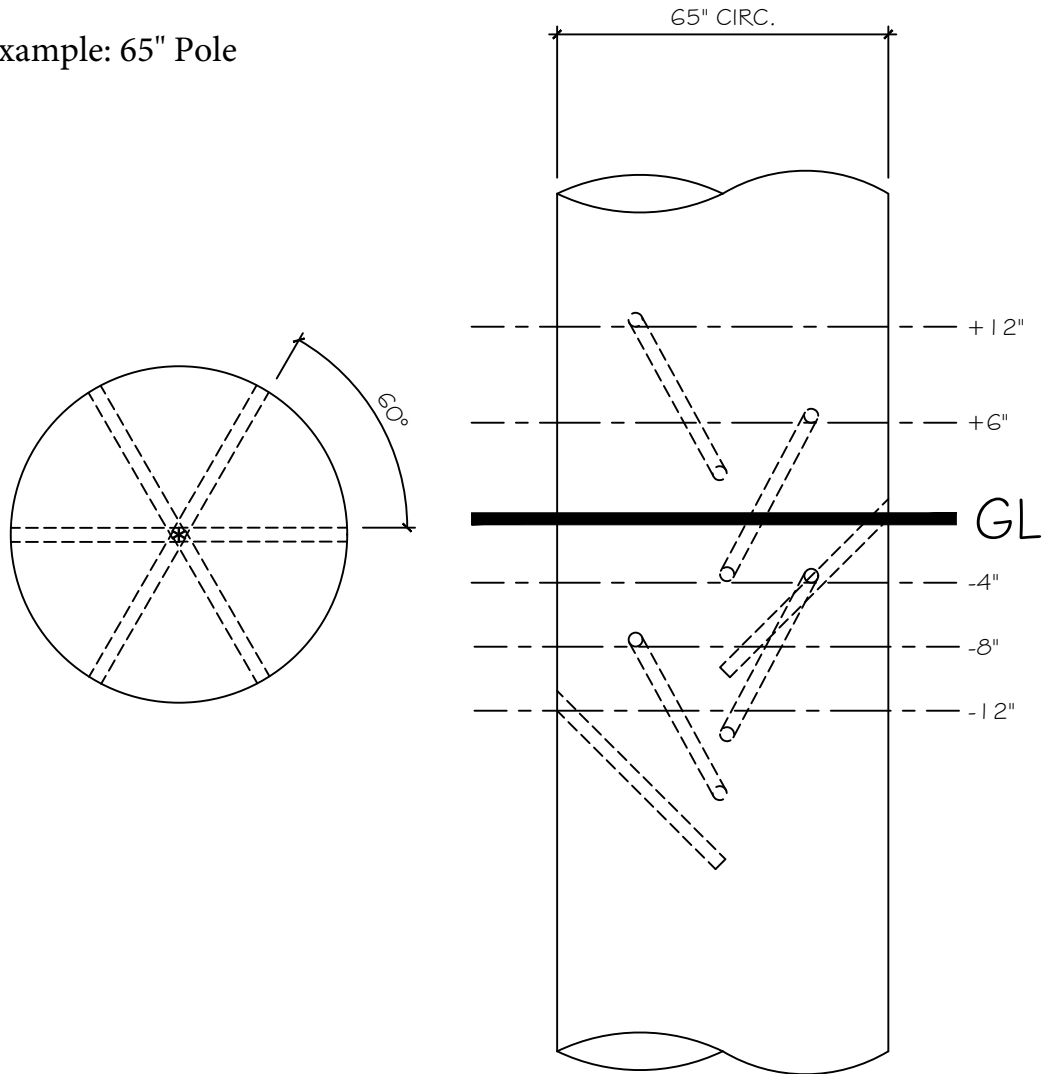
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NOTE: 7/8" BORING HOLES @ 14" LONG

Reference Example: 65" Pole



Loading Table				
Boring Location	Depth	Boring Diameter	Chemical Loading	
	Inches	Inches	# of 3/4" Cobra Rods	Volume of CuB (Oz)
12" Above GL	14	7/8"	0	4.16
6" Above GL	14	7/8"	1	3.3
Groundline	14	7/8"	1	3.3
4" Below GL	14	7/8"	1	3.3
8" Below GL	14	7/8"	2	2.44
12" Below GL	14	7/8"	2	2.44

SCALE: 1" = 1' 0"



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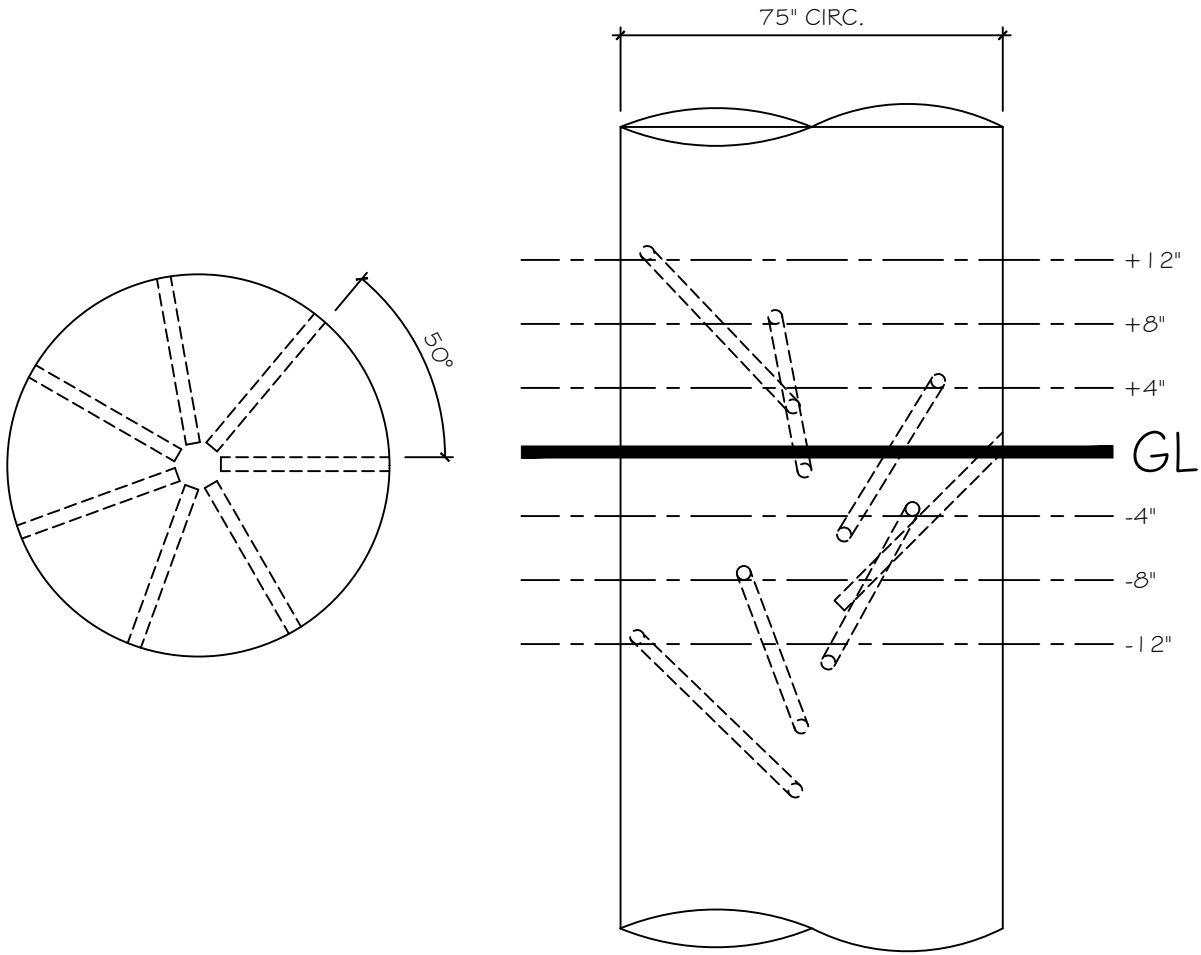
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NOTE: 7/8" BORING HOLES @ 14" LONG

Reference Pole: 75" Pole



Loading Table				
Boring Location	Depth Inches	Boring Diameter Inches	Chemical Loading	
			# of 3/4" Cobra Rods	Volume of CuB (Oz)
12" Above GL	14	7/8"	0	4.16
8" Above GL	14	7/8"	1	3.3
4" Above GL	14	7/8"	1	3.3
Groundline	14	7/8"	2	2.44
4" Below GL	14	7/8"	2	2.44
8" Below GL	14	7/8"	2	2.44
12" Below GL	14	7/8"	3	1.58

SCALE: 1" = 1' 0"



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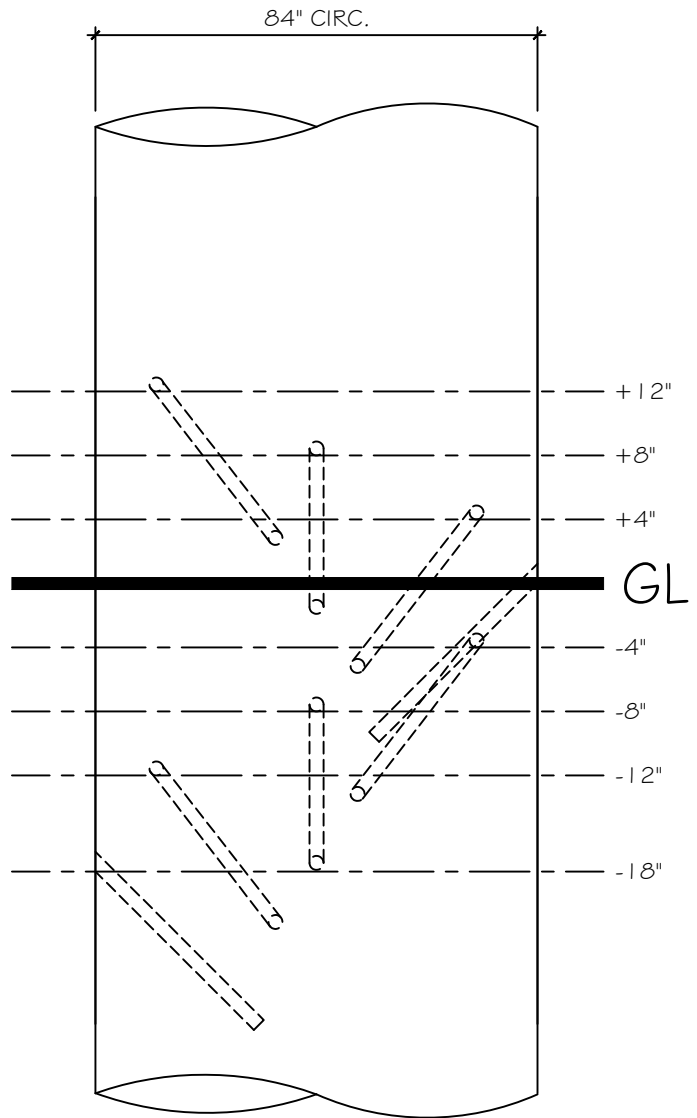
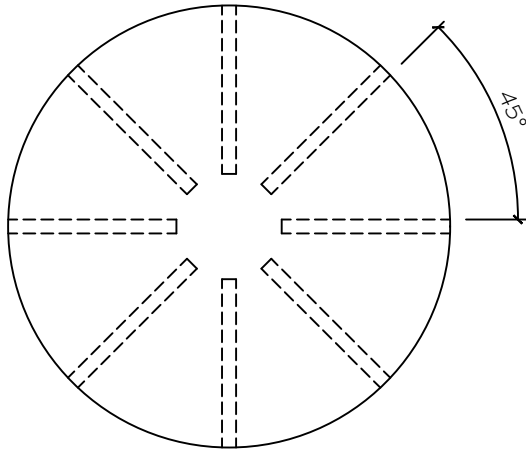
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NOTE: 7/8" BORING HOLES @ 14" LONG

Reference Example: 84" Pole



Loading Table				
Boring Location	Depth Inches	Boring Diameter Inches	Chemical Loading	
			# of 3/4" Cobra Rods	Volume of CuB (Oz)
12" Above GL	14	7/8"	0	4.16
8" Above GL	14	7/8"	1	3.3
4" Above GL	14	7/8"	2	2.44
Groundline	14	7/8"	3	1.58
4" Below GL	14	7/8"	3	1.58
8" Below GL	14	7/8"	3	1.58
12" Below GL	14	7/8"	3	1.58
18" Below GL	14	7/8"	3	1.58

SCALE: 1" = 1' 0"



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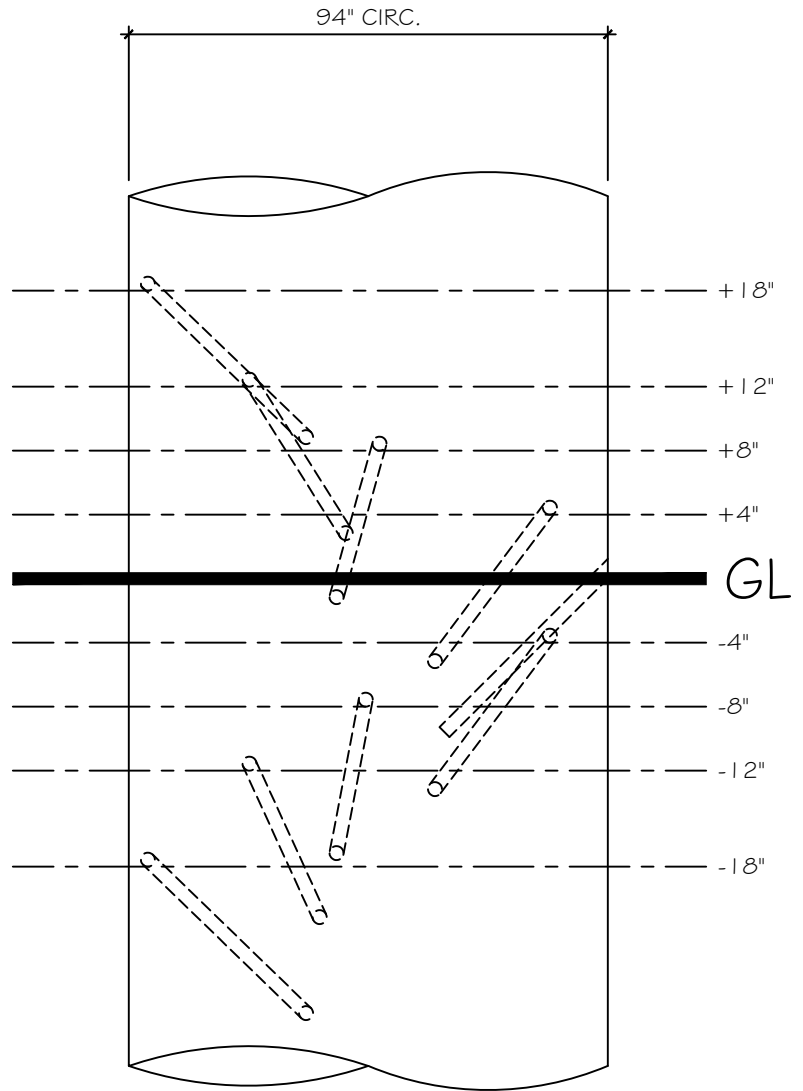
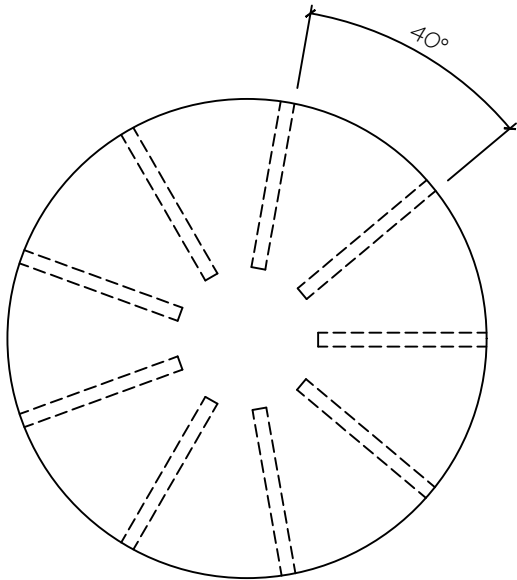
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NOTE: 7/8" BORING HOLES @ 14" LONG

Reference Example: 94" Pole



Loading Table				
Boring Location	Depth	Boring Diameter	Chemical Loading	
	Inches		Inches	# of 3/4" Cobra Rods
18" Above GL	14	7/8"	0	4.16
12" Above GL	14	7/8"	1	3.3
8" Above GL	14	7/8"	2	2.44
4" Above GL	14	7/8"	2	2.44
Groundline	14	7/8"	3	1.58
4" Below GL	14	7/8"	3	1.58
8" Below GL	14	7/8"	3	1.58
12" Below GL	14	7/8"	3	1.58
18" Below GL	14	7/8"	3	1.58

SCALE: 1" = 1' 0"



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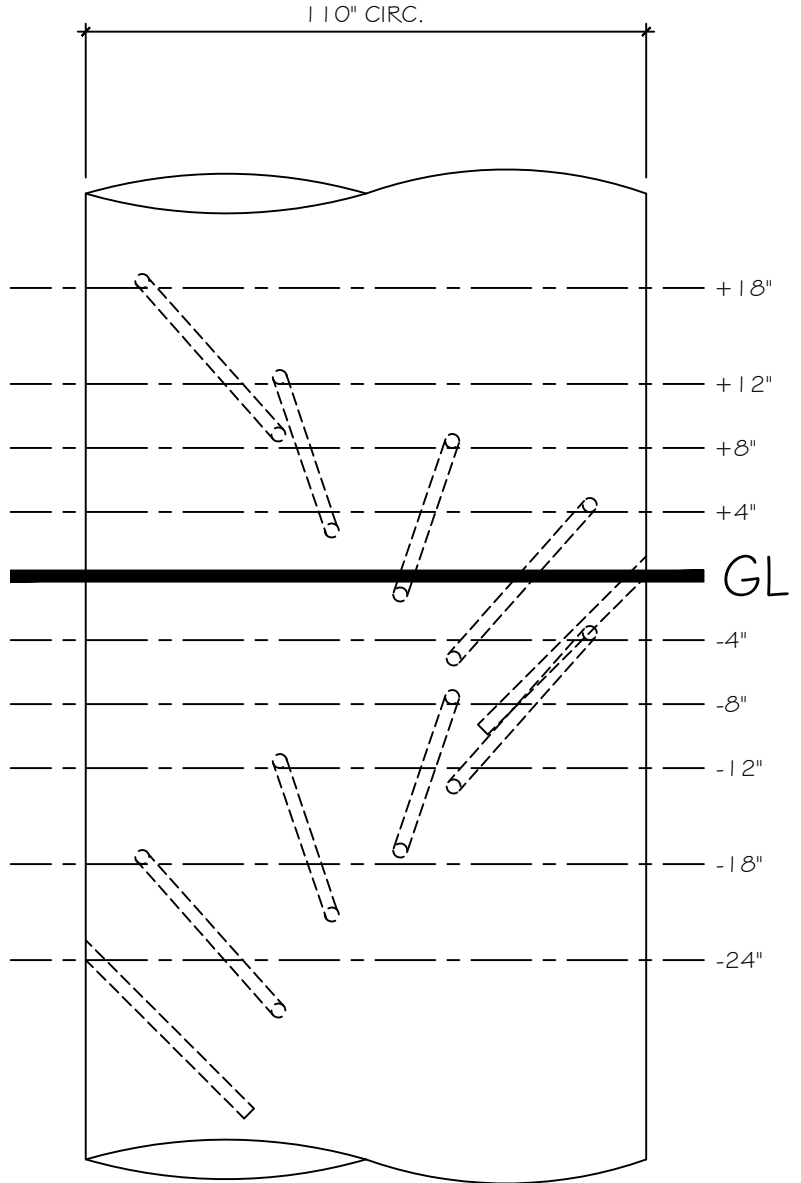
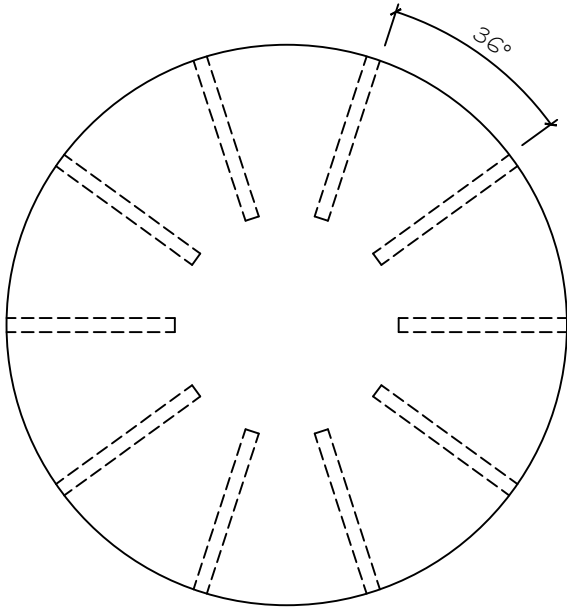
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NOTE: 7/8" BORING HOLES @ 14" LONG

Reference Example: 110" Pole



Loading Table				
Boring Location	Depth Inches	Boring Diameter Inches	Chemical Loading	
			# of 3/4" Cobra Rods	Volume of CuB (Oz)
18" Above GL	14	7/8"	0	4.16
12" Above GL	14	7/8"	3	1.58
8" Above GL	14	7/8"	3	1.58
4" Above GL	14	7/8"	3	1.58
Groundline	14	7/8"	3	1.58
4" Below GL	14	7/8"	3	1.58
8" Below GL	14	7/8"	3	1.58
12" Below GL	14	7/8"	3	1.58
18" Below GL	14	7/8"	3	1.58
24" Below GL	14	7/8"	3	1.58

SCALE: 1" = 1' 0"



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- (d) The classifying of an “A” condition as imminent is based on if an “A” condition meets the definition of an imminent threat as stated in PacifiCorp’s Asset Management Policy 192; then it is imminent.

- (e) If an “A” condition does not meet the definition of an imminent threat as stated in PacifiCorp’s Asset Management Policy 192, then it is non-imminent.