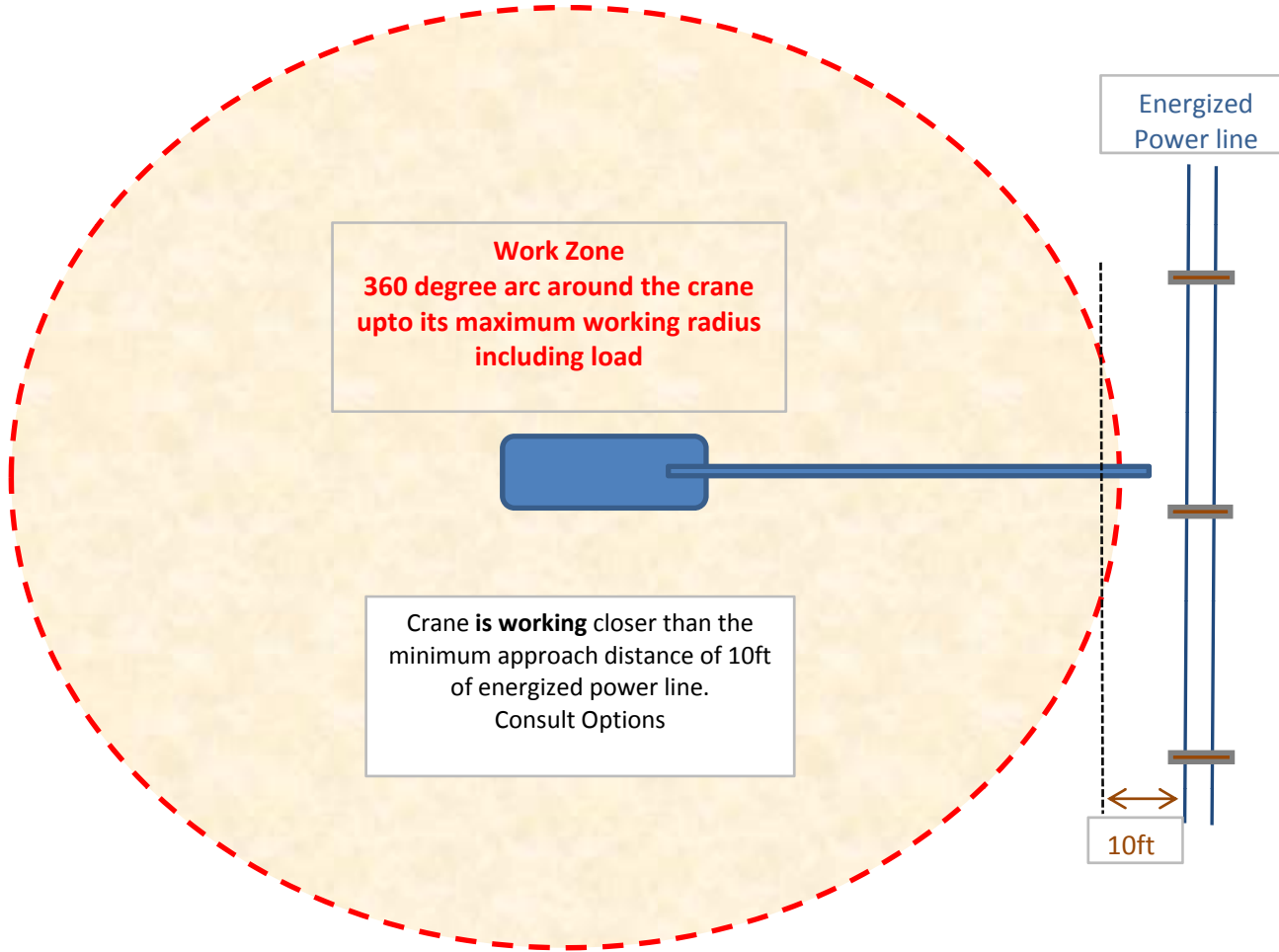


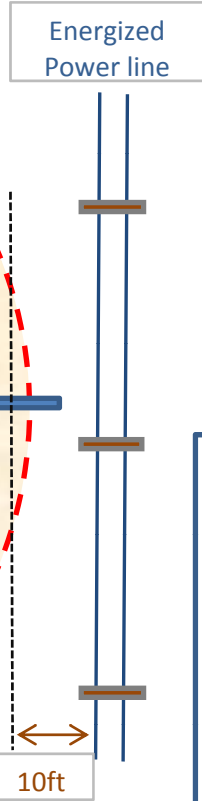
North Carolina State Law 13 NCAC 07F. 0900

Example shows a power line at less than 50kV



Work Zone
360 degree arc around the crane
upto its maximum working radius
including load

Crane is **working** closer than the
minimum approach distance of 10ft
of energized power line.
Consult Options



Option 1
De-energize and ground power line ✓

or

Option 2
Re-position crane and therefore move
working area away from power line ✓

or

Option 3
Establish **minimum clearance distance**
from power line taking into account
prevailing conditions.
Then
Conduct **Planning Meeting** and
Implement **all** of the following

- Insulating link
- Prohibit touching of load line above insulating link other than by operator
- Deactivate power line re-energiser
- Crane to be grounded
- Non-conductive rigging
- Non-conductive Tag line if used
- Only essential personnel in the area of the crane and load
- Dedicated spotter
- Barricade perimeter at least 10ft from equipment
- Where available insulated line-hose or cover-ups to be installed
- Elevated warning line or barricade
- Automatic range limiter ✓

The information contained in this guide is an interpretation of the state law as understood by Insulatus Inc. It should be read in conjunction with the actual published law. If further clarification is needed we strongly recommend that advice is taken from N.C Department of Labor.

Definitions

North Carolina State Law 13 NCAC 07F. 0900

Dedicated spotter must be:

In continuous contact with the operator

Equipped with visual aid to assist in identifying the minimum clearance distance

Positioned to effectively gauge the clearance distance

Where necessary in direct contact with the operator

Able to give timely information to operator

“Dedicated spotter (power lines)” is defined as follows: “In order to be considered a dedicated spotter, the requirements of signal person qualifications must be met and his/her **sole** responsibility is to watch the separation between the power line and: the equipment, load line and load (including rigging and lifting accessories), and ensure through communication with the operator, that the applicable minimum approach distance is not breached.”

Insulating link must be:

An insulating device that is approved by a Nationally Recognized Testing Laboratory(NRTL)

Proximity alarm must be:

A device that is approved by a Nationally Recognized Testing Laboratory(NRTL)

Non-conductive Tag line must also be:

Dry and free from contamination

Table A - Minimum Clearance Distances

Voltage (Nominal kV,AC)	Minimum clearance distance (feet)
Upto 50	10
50 - 200	15
200 - 350	20
350 - 500	25
500 - 750	35
750 -1000	45
Over 1000	

Minimum clearance distance:

The power line owner or qualified engineer who is a qualified person with respect to electrical power transmission and distribution determines the minimum clearance distance that shall be maintained to prevent electrical contact in light of the on-site conditions. The factors to be considered include atmospheric conductivity, time necessary to bring the equipment to a complete stop, wind conditions degree of sway in the power line, lighting conditions and other conditions affecting the ability to prevent electrical contact

N.B.

If the crane operated closer than the normal clearance distance, and the additional protective measures required in that circumstance were complied with, an insulating link would be in place. In such a case, **even if there was a failure of the encroachment prevention measures** and electrical contact resulted, the insulating link would prevent the load from becoming energized and prevent the employee guiding the load from being electrocuted.

N.B.

OSHA defines a **wilful violation** as one committed with intentional, knowing or voluntary disregard for the law's requirements, or with plain indifference to employee safety and health.