



Edison Electric
INSTITUTE



HECA Calibration Cases

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See Excel Table for Solutions

Scenario A



Description:

Transformer replacement

Observations:

- 8 ft deep vault next to traffic
- Vault is de-energized, verified and grounded
- Load is 3000lbs moving at 4 mph
- 1 am, temperature 30F
- Traffic is blocked by machinery and work vehicles that can handle the energy of traffic incursion
- Transformer is rigged properly
- Crane is not moving but the load is being lowered
- Air monitoring indicated no toxic chemical in vault

Scenario B



Description:

Feeding pipe underground

Observations:

- Work is in a residential road
- Hole is 6 ft deep
- Locates are completed
- No flagger or blocking vehicles/equipment
- Excavator is moving as work is performed
- Pipe is not moving
- An employee is in the hole with a gas monitor
- No other utilities (gas, electric, steam) in the hole

Scenario C



Description:

Welding on a scaffold

Observations:

- 23 feet high
- No one is working above or below
- Gas welding
- Fall arrest is not properly tied off
- Employee has proper gloves

Scenario D



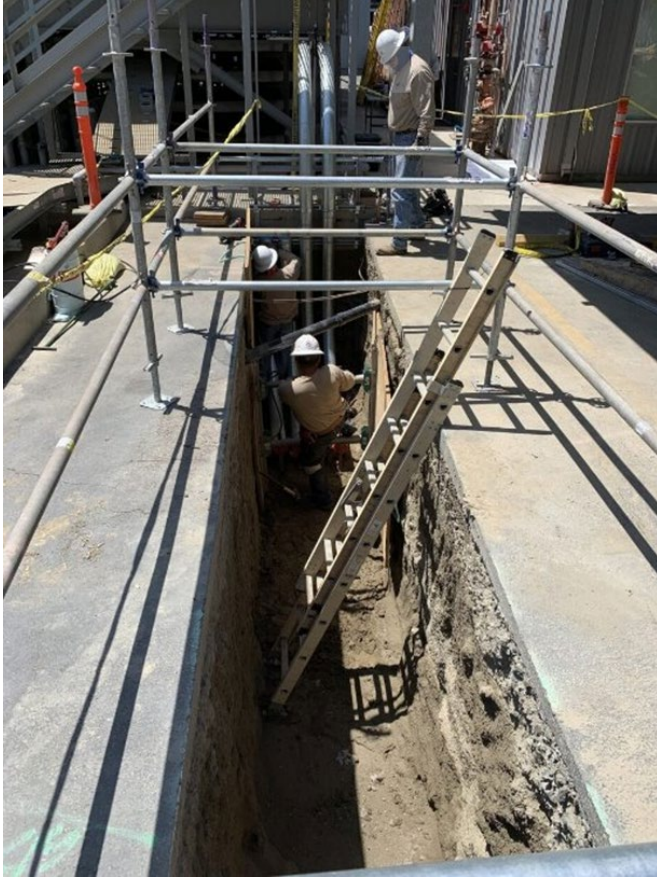
Description:

Live-line electrical work

Observations:

- Power lines are live (not de-energized)
- Proper PPE for electrical contact is used
- Cover on all conductors, live line insulation is sufficient
- Work is adjacent to an industrial road
- Roadway is closed to traffic with hard barricades
- Hole was prepared for installation
- Bucket trucks are set up properly and stabilized
- No swinging control on the load (sling job rather than claw on digger)
- Proper fall protection is used for work in buckets
- Equipment was moving

Scenario E



Description:

Underground electrical work at generation facility

Observations:

- Trench is 7' deep
- Electrical cables in trench are deenergized with zero voltage test
- No loads suspended over the crew
- Grey steam pipes are pressurized and insulated above ground. The wall thickness of the pipe is $\frac{1}{4}$ inch
- Black pipe is part of the shoring system
- Equipment or tools used cannot rupture the steel pipe

Scenario F



Descriptions:

Supporting broken pole with the truck boom

Observations:

- Road is closed to traffic with cones and signs
- Line de-energized with zero voltage test
- Two workers are in buckets and are both wearing proper fall protection
- Worker who is sitting on the truck is operating the boom

Scenario G



Description:

Tree removal activity using a bucket truck

Observations:

- Falling tree limbs are tied off and being held by a worker on the ground using a rope
- Proper fall protection is used for work in the bucket
- Primary and secondary line is energized and within proximity to worker aloft
- Residential roadway is active, addressed with flaggers and cones
- AR/FR clothing meets requirements
- Tools used in the bucket are tethered
- 24" Chainsaw is used for removing limbs

Scenario H



Description:

Vegetation work after a wildfire

Observations:

- Log is smoldering
- Limbs are being dropped during vegetation removal
- Worker holding the line is within the drop zone of falling limbs
- 12" chainsaw
- All lines are deenergized
- Fall protection is used properly
- Roadway is open to response vehicles, address with cones

Scenario I

Description:

Trench box installation

Observations:

- Crane is in place, and the boom is moving
- Suspended load is supported by rated rigging and monitored by a spotter
- No traffic control
- 12' deep trench
- No workers in the trench
- Underground electrical cables are present and energized in the trench, but there are no gas or chemicals
- Employees are qualified electrical workers





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CONTROL ASSESSMENTS
