

OHLs legal approach boundary distances with pipeline

B2 OHLs- PS1- Q 1.13

Discussion on statutory requirements/conditions of
constructing overhead lines in proximity
with gas/oil pipe lines or fuel storage

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Türkiye's Electric Power Current Regulation

Underground Cables (0-170 kV)	
Adverse or parallel distances	0.6 m
Intersection distances	0.4 m
OHLs (0-420 kV)	
Adverse or parallel distances (0-72 kV)	4 (10*) m
Adverse or parallel distances (72-420 kV)	10 (30*) m
Intersecting (from tower foot) distances (0-72 kV)	3 m
Intersecting (from tower foot) distances (72-420 kV)	10 m
With Grounding Systems Distances from tower or other electrical grounds (0-420 kV)	2 m

Also minimum vertical distances over which the OHLs conductor passes is minimum 9 m.

Group Discussion Meeting

When it is investigated induced voltage and current limit values at parallel or intersection points with pipeline OHLs

- According to the Crude Oil And Natural Gas Pipeline Facilities Technical Safety In Construction And Operation and Environmental Regulation, the induced AC Voltage level on the pipeline is reduced below 15 Volts and 1 cm² holiday current density is 30 A/cm².
- If the current density level is more than 30 A/m², the ratio between the AC current density measured through the pipeline and the DC current density is less than five. In order to minimize the risk of AC corrosion, it is preferred that the ratio is less than three.
- Limits for interference voltage related to danger to (electrically) instructed persons 60 V in GB 6830-86 and BS EN 50443 and 33 V in IEC6120.