

Scenic Rivers Energy Cooperative

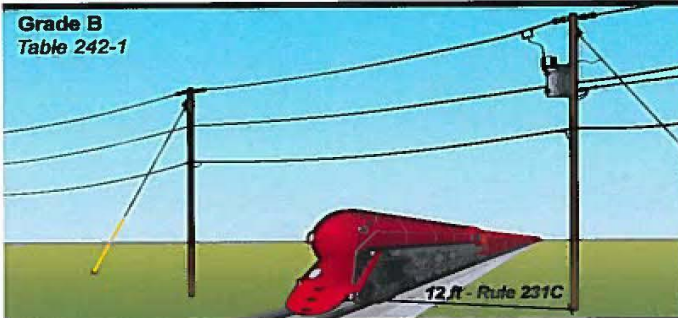
Wiring/Service Specifications and Recommendations

Appendix 10: Clearance Code Diagrams

Application Guide for 2012 NESC Table 232-1 - see NESC for details and exceptions

Railroads*

Grade B
Table 242-1



12 ft - Rule 231C


Vertical Clearance at Largest Vertical Sag Table 232-1

Neutral or Comm.	Grounded Span Guy	TPX	7.2/12.5 kV	14.4/25 kV	19.9/35 kV
23.5 ft		24.0 ft		26.5 ft	

*Railroad company may require greater clearance

Trucks Over 8 Feet*

Grade B - for limited access highway
Grade C - over other areas subject to truck traffic
Table 242-1



4 ft - Rule 231A


Vertical Clearance at Largest Vertical Sag Table 232-1

Neutral or Comm.	Grounded Span Guy	TPX	7.2/12.5 kV	14.4/25 kV	19.9/35 kV
15.5 ft		16.0 ft		18.5 ft	

*DOT may require greater clearance

Water - No Sailboats

Grade B - when a crossing permit is required
Table 242-1




Vertical Clearance at Largest Vertical Sag Table 232-1

Neutral or Comm.	Grounded Span Guy	TPX	7.2/12.5 kV	14.4/25 kV	19.9/35 kV
14.0 ft		14.5 ft		17.0 ft	

*see NESC for sailboat clearances

Over fields, orchards, forest, etc.



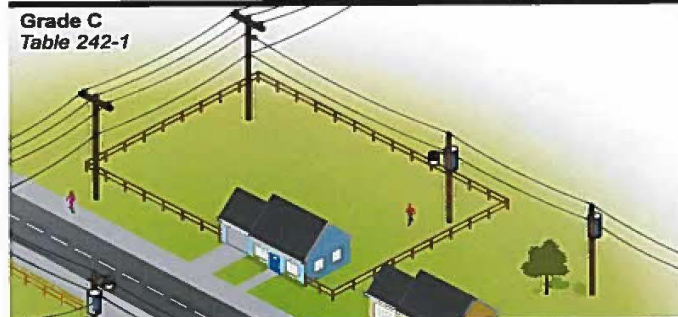
Vertical Clearance at Largest Vertical Sag Table 232-1

Neutral or Comm.	Grounded Span Guy	TPX	7.2/12.5 kV	14.4/25 kV	19.9/35 kV
15.5 ft		16.0 ft		18.5 ft	

*used by vehicles over 8 feet tall or riders on horseback

Pedestrians Only*

Grade C
Table 242-1

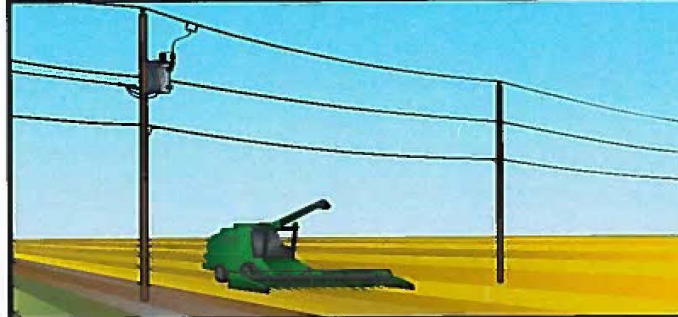


Vertical Clearance at Largest Vertical Sag Table 232-1

Neutral or Comm.	Grounded Span Guy	TPX	7.2/12.5 kV	14.4/25 kV	19.9/35 kV
9.5 ft		12.0 ft		14.5 ft	

*Not normally used by trucks or riders on horseback (very steep hills, swamps, etc.)

Oversized Vehicles - greater than 14 feet in height



Vertical Clearance at Largest Vertical Sag Table 232-1

Neutral or Comm.	Grounded Span Guy	TPX	7.2/12.5 kV	14.4/25 kV	19.9/35 kV
X + 1.5 ft		X + 2 ft		X + 4.5 ft	

X = Known Height of oversized vehicle



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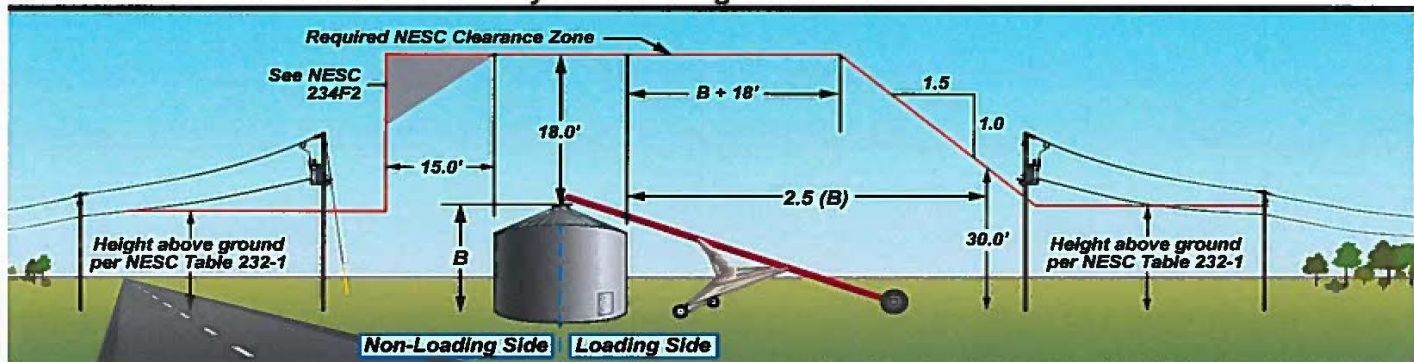


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Appendix 10: Clearance Code Diagrams

Application Guide for 2012 NESC - see NESC for details and exceptions

Clearance* Near Grain Bins Loaded by Portable Auger NESC 234F2



B = Vertical height to highest filling or probing port

Note: Vertical height of conductors is 30 feet at a distance equal to 2.5 times B

*Largest vertical sag

Non-Loading Side is when use of portable auger is limited by:

1. Permanent building/structure
2. Physical obstruction
3. Public road or other right of way
4. Designation or agreement

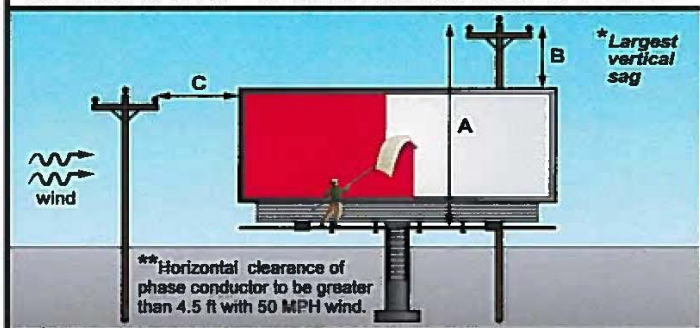
Clearance Over* or Near Swimming Pools NESC 234E1



Neutral	TPX	7.2/12.5 kV	14.4/25 kV	19.9/35 kV
22.0 ft	22.5 ft	25.0 ft		

*Largest vertical sag

Clearance Over* or Near Billboards NESC 234C



	Neutral	TPX	7.2/12.5kV	14.4/25kV	19.9/35kV
A - Where personnel walk	10.5 ft	11.0 ft	13.5 ft		
B - Other Surfaces	3.0 ft	3.5 ft	8.0 ft		
C - Horizontal**	4.5 ft	5.0 ft	7.5 ft		

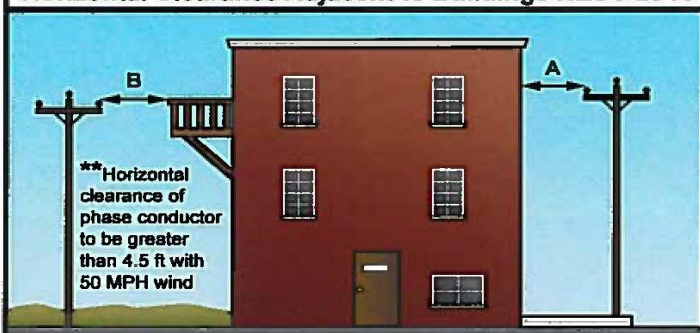
Vertical Clearance Over* Buildings NESC 234C



	Neutral	TPX	7.2/12.5kV	14.4/25kV	19.9/35kV
Roof					
Accessible**	10.5 ft	11.0 ft	13.5 ft		
Non-Accessible	3.0 ft	3.5 ft	12.5 ft		

*Largest vertical sag

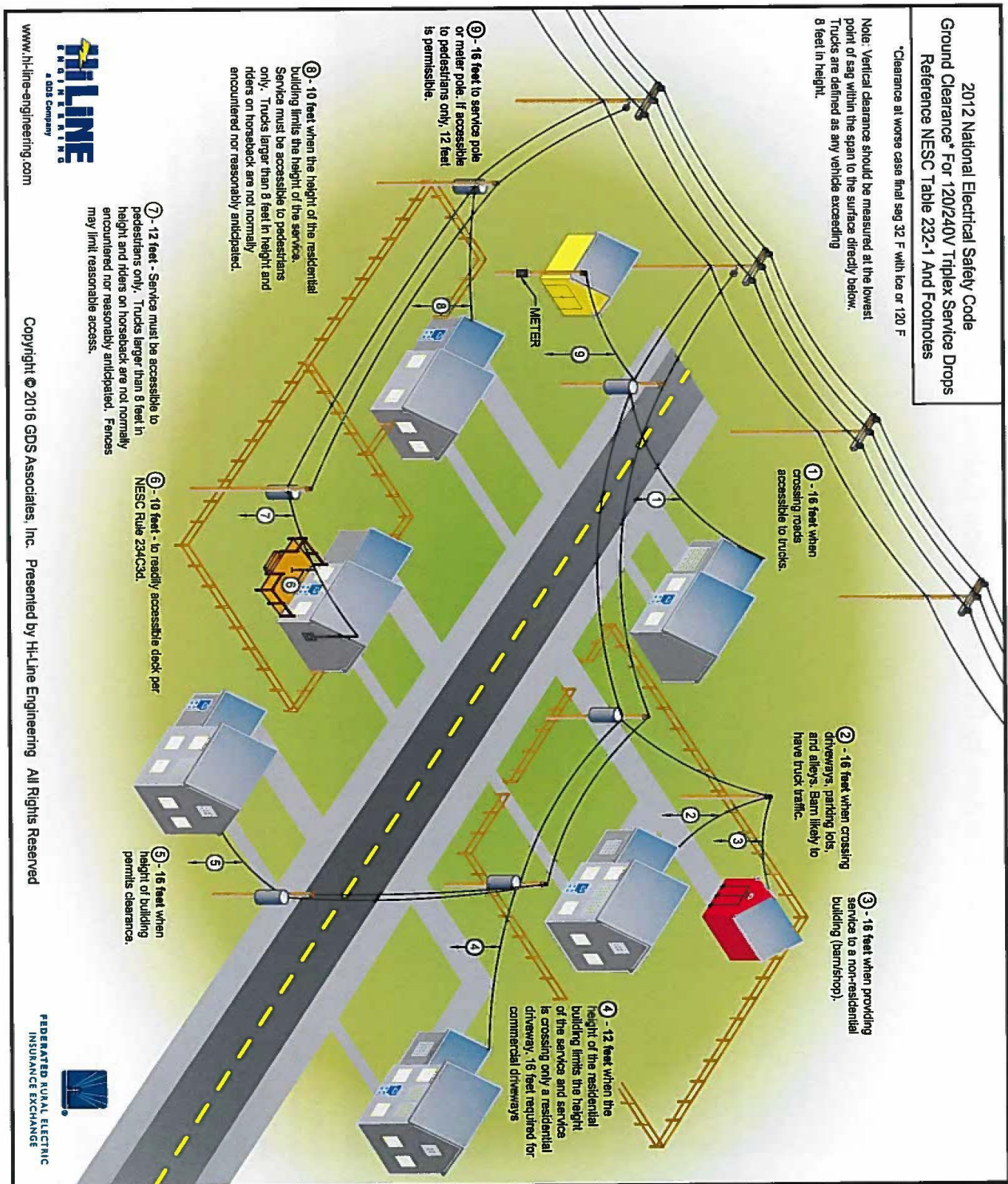
Horizontal Clearance Adjacent to Buildings NESC 234C



	Neutral	TPX	7.2/12.5kV	14.4/25kV	19.9/35kV
A - To Walls**	4.5 ft	5.0 ft	7.5 ft		
B - Accessible Areas**	4.5 ft	5.0 ft	7.5 ft		

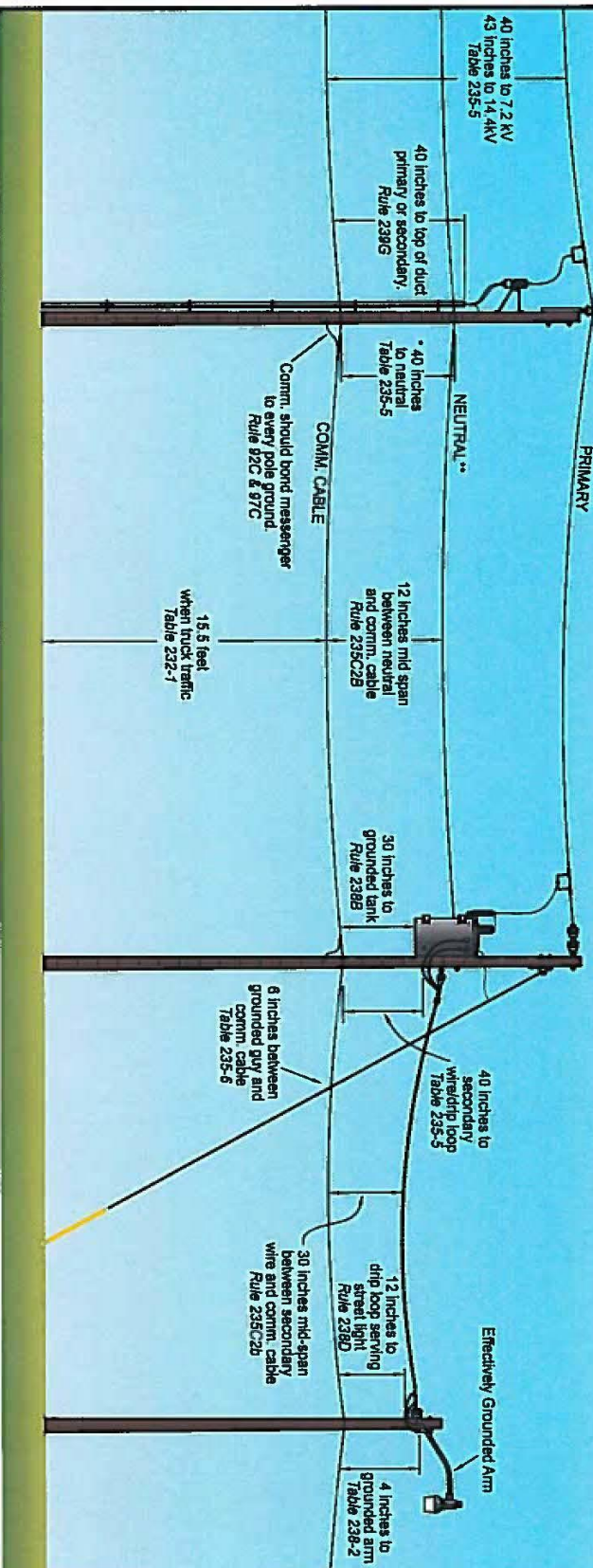
Scenic Rivers Energy Cooperative Wiring/Service Specifications and Recommendations

Appendix 10: Clearance Code Diagrams



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Summary of NESC Clearances to Communication Cables - see NESC for details and exceptions



* 30 inches is allowed if the communication messenger is bonded to the neutral throughout the service area. Table 235-5

** Fiber Optic Cables in the supply space (Rule 224A) will have the same required clearance as a multi-ground neutral (Rule 235C)

A communication worker safety zone is 40 inches of clearance between communication lines and supply lines/equipment per Rule 235C4 & 238E



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