# Public Utilities Commission of the State of California

#### REGULATIONS GOVERNING CLEARANCES ON RAILROADS AND STREET RAILROADS WITH REFERENCE TO SIDE AND OVERHEAD STRUCTURES, PARALLEL TRACKS, CROSSINGS OF PUBLIC ROADS, HIGHWAYS AND STREETS.

#### Adopted January 19, 1948. Effective February 1, 1948

As Amended:

Decision No. 49925, April 20, 1954, Effective May 10, 1954; Decision No. 55025, May 21, 1957, Effective June 10, 1957; Decision No. 58439, May 19, 1959, Effective June 8, 1959; Decision No. 63722, May 22, 1962, Effective June 11, 1962: Decision No. 66725, January 28, 1964, Effective February 17, 1964; Decision No. 68264, November 24, 1964, Effective December 14, 1964; Decision No. 74065, April 30, 1968, Effective May 20, 1968; Decision No. 74486, August 6, 1968, Effective August 26, 1968; Resolution No. ET-1115, November 26, 1968, Decision No. 80051, May 16, 1972, Effective June 5, 1972; Decision No. 86809, January 5, 1977, Effective January 25, 1977; Decision No. 93702, November 3, 1981, Effective December 3, 1981.

It Is Hereby Ordered by the Public Utilities Commission of the State of California that the minimum clearance requirements for railroads and street railroads hereinafter prescribed shall hereafter be observed in this state in all construction or reconstruction of tracks or structures adjacent to tracks.

It Is Hereby Further Ordered that no railroad or street railroad corporation shall operate any cars, trains, motors, engines, or other rolling equipment over its own or other tracks, except as hereinafter provided, on which overhead or side clearances, or clearances between tracks, are less than the minimum herein prescribed, if such tracks or structures adjacent to such tracks are constructed or reconstructed subsequent to the effective date hereof.

## DEFINITIONS

#### Section 1

# For the purposes of these regulations definitions as hereinafter prescribed will govern.

- 1.1 *Height of a Freight Car* is the distance between the top of rail and the top of the running board.
- 1.2 *Side of a Freight Car* is that part or appurtenance of a car at the maximum distance measured at right angles from the center line of the car.
- 1.3 *Width of a Freight Car* is twice the distance from the center line to the side of a car as defined herein.
- 1.4 *Overhead Clearance* is the vertical distance from the level of the top of the highest rail to a structure or obstruction above.
- 1.5 *Side Clearance* is the shortest distance from the center line of track to a structure or obstruction at the side of track.

#### STANDARD GAUGE RAILROADS AND STREET RAILROADS TRANSPORTING FREIGHT CARS Section 2—Overhead Clearances

- 2.1 The minimum overhead clearance above railroad and street railroad tracks, which are used or proposed to be used for transporting freight cars, shall be twenty-two (22) feet six (6) inches. Structures constructed prior to the effective date of this order may be maintained at such clearances as was lawful at the time of construction.
- 2.2 The overhead clearance above top of rail of such tracks located inside of buildings may be reduced to eighteen (18) feet, provided that this clearance shall apply only to tracks terminating within the building, and further provided, that when an overhead clearance of less than twenty-two (22) feet exists on tracks inside such building, all cars, trains, motors, engines or other equipment shall be brought to a stop before entering such building, the conditions provided to require such stop to be approved by the Commission.
- 2.3 Unless otherwise provided herein, overhead clearances autheorized in this section are applicable only to tracks on which freight cars having a height not exceeding fifteen (15) feet six (6) inches are transported. Freight cars of a height exceeding fifteen (15) feet four (4) inches, but not greater than fifteen (15) feet six (6) inches shall be permanently marked, stenciled, or placarded as hereinafter required, and such markings maintained in a legible condition reading as follows:

# "This Car

# EXCESS HEIGHT"

The markings required in this subsection shall be made permanent on owned cars as soon as practicable with a  $\frac{3}{4}$ " stripe outlining an area not less than seven (7) inches by ten (10) inches, such stripes and lettering to be of a color contrasting with the car body color. All such required markings and placarding shall be placed on the side adjacent to the ladder or hand-holds near the floor line of the car at each of the four corners.

- 2.4 Freight cars not exceeding a height of fifteen (15) feet six (6) inches may be transported without compliance with the requirements of subsection 2.3 of this order provided that the tracks over which such operations are conducted exhibit throughout the route an overhead clearance of twenty-two (22) feet six (6) inches as required in subsection 2.1 of this order.
- 2.5 If freight cars of a height greater than fifteen (15) feet six (6) inches are transported or proposed to be transported,

minimum overhead clearances shall be increased by an amount of not less than such additional height provided that such cars are exempt from this subsection when the top running boards have been removed, ladders and hand brakes lowered, cars painted, stenciled, and otherwise modified in compliance with the provisions of Section 231.24 of Part 231, U. S. Safety Appliance Standards (railroad).

## Section 3—Side Clearances

3.1 Minimum side clearances from center line of tangent standard gauge railroad and street railroad tracks, which are used or proposed to be used for transporting freight cars, except as hereinafter prescribed, shall be as shown below.

Minimum

Description		Minimum Side Clearance
<i>Description</i> 3.2 All structures and	d obstructions above the top of	
	ose hereinafter specifically mo	
•		8' 6"
	, warning signs and similar obstructions sho	
where practicable, have	a side clearance of ten (10) feet.	, uru,
3.3 Platforms eight (	8) inches or less above top of 1	ail
		4′ 8″
3.4 Platforms four (4)	feet or less above top of rail	7′ 6″
3.5 Platforms four (4	) feet six (6) inches or less abo	ove
top of rail who	en used principally for loading	or
unloading refrig	erator cars	8′ 0″
3.6 Platforms previo	usly constructed at clearance	not
less than seven	(7) feet three (3) inches may	be
extended at suc	ch clearance unless such extensi	ion
is in connection	on with the reconstruction of	the
original platform	n.	
	s of platforms under subsections 3.4 and 3.5	
	mbinations of platforms under subsection 3.3 subsections 3.4 or 3.5 is permitted provided	
	bsection 3.3 presents a level surface from a $p$	
	4) feet eight (8) inches from center line of t e platform with which it is combined.	Гаск
3.7 Poles supporting	trolley contact conductors supp	ly-
ing motive pov	ver to track affected, if of brack	ket
construction, o	on either single or double ma	ain
track		8′3″
	bring switch stand targets into clear vision w	
	e been constructed at legal clearance on railro d trolley contact the clearance as applied	
switch stands may be re	duced to seven (7) feet six (6) inches.	
	0	ind
	essary for the control and ope	
-	and interlockers projecting for	
(4) inches or les	s above the top of rail	3'0"

	Minimum
Descrip	
3.9	Signals and switch stands three (3) feet or less above top of rail and located between tracks where not practicable to provide clearances oth- erwise prescribed in this order
3.10	Through bridges supporting track affected, tun-
	nels, water columns and oil columns
3.11	nels, water columns and oil columns
3 12	De SIX (O) feet fille (9) finches. NOTE: Unless previously approved by the Commission, the clear- ances authorized in subsection 3.11 of this order, except as provided for handrails and water barrels, are not permitted on through bridges where the work of trainmen or yardmen require them to be upon the decks of such bridges for the purpose of coupling and uncoupling cars in the performance of switching service on a switching led. The side clearances specified herein shall not apply

- 3.12 The side clearances specified herein shall not apply to mail cranes during such times as the arms of such mail cranes are supporting a mail sack for delivery, provided that the top arm is not then higher than ten (10) feet eight (8) inches above top of rail and neither arm extends within six (6) feet five (5) inches from the center line of track.
- 3.14 Operations over portions of track adjacent to icing platforms heretofore constructed with a side clearance of less than seven (7) feet eight (8) inches shall be restricted to the movement or switching of trains containing refrigerator cars to be iced, and the necessary use of such tracks for the unloading of supplies required for the operation of the icing dock.
- 3.15 Proposed extension of existing icing platforms at less than

seven (7) feet eight (8) inches shall be referred to the Commission for approval before proceeding with such project.

- 3.16 All minimum side clearances prescribed in this section are for tangent track. In general, all structures adjacent to curved track, shall have a minimum side clearance one (1) foot greater than the minimum side clearance otherwise required for tangent track. Where the Commission has determined that space is limited, the minimum side clearances for structures adjacent to tracks of not over twelve (12) degree curvature may be the same as for tangent track, but where track curvature exceeds twelve (12) degrees, one-half (½) inch for each degree of the curve shall be added to the minimum side clearance required for tangent track.
- 3.17 The center line of any track constructed in and along a public street shall be at least ten (10) feet from the property line of said street, or if the street has a lawfully established curb line, such track shall be at least ten (10) feet from such line.
- 3.18 When tracks are operated exclusively for logging purposes, log rollways which serve them may be erected at less than the minimum side clearances herein prescribed.
- 3.19 Minimum side clearances authorized in this section are applicable to tracks on which freight cars having a width not greater than ten (10) feet ten (10) inches are transported. Freight cars of a width exceeding ten (10) feet ten (10) inches but not greater then eleven (11) feet one (1) inche may be transported for a period of not more than one (1) year after the effective date of this order, provided they shall be permanently marked, stenciled, or placarded, and such markings maintained in a legible condition reading.

# "This Car

## EXCESS WIDTH"

All such required markings and placarding shall be placed on the side adjacent to the ladder or handholds near the floor line of the car at each of the four corners.

3.20 Except as provided in subsection 3.19 of this order, if freight cars of a width greater than ten (10) feet ten (10) inches are transported or proposed to be transported, minimum side clearances shall be increased by an amount equal to one-half such additional width, and the distance between parallel tracks as provided in subsection 5.4 of this order shall be increased by the amount of such additional width.

#### Section 4—Overhead and Side Clearances

Minimum overhead and side clearances as prescribed in Sections 2 and 3 of this order may be decreased to the extent defined by the half circumference of a circle having a radius of eight (8) feet six (6) inches and tangent to a horizontal line twenty-two (22) feet six (6) inches above top of rail at a point directly over the center line of track; provided, however, that for tunnels and through bridges such radius may be eight (8) feet, and provided further, that subsections 2.3 and 3.19 of this order shall apply hereto.

## Section 5—Clearance Between Parallel Tracks

- 5.1 The minimum distance between the center lines of parallel standard gauge tracks shall be fourteen (14) feet except as hereinafter provided.
- 5.2 The center line of any standard gauge track, except a main track or a passing track, parallel and adjacent to a main track or a passing track, shall be at least fifteen (15) feet from the center line of such main track or passing track; provided, however, that where a passing track is adjacent to and at least fifteen (15) feet distant from the main track, any other track may be constructed adjacent to such passing track with clearance prescribed in subsection 5.1 of this order.
- 5.3 The center line of any standard gauge ladder track, constructed parallel to any other adjacent track, shall have a clearance of not less than twenty (20) feet from the center line of such other track.
- 5.4 The minimum distance between the center lines of parallel team, house and industry tracks shall be thirteen (13) feet.
- 5.5 Main, siding and yard tracks constructed prior to the effective date of this order with distance of not less than thirteen (13) feet between track centers may be extended without increasing such distances.

#### Section 6—Other Conditions and Obstructions Adjacent to Tracks

- 6.1 No merchandise, material or other articles shall be placed or permitted to remain either on the ground or on platforms adjacent to any track at a distance less than eight (8) feet six (6) inches from the center line of track.
- 6.2 A suitable line or other marker should be maintained at a distance of eight (8) feet six (6) inches from the center line of track, on all platforms, excluding passenger platforms, to indicate the space along edge of the platform which must be kept clear of merchandise, material or other articles.

#### Section 7—Lading on Open Top Cars

7.1 No movements shall be made of open top cars containing lading extending in excess of fifteen (15) feet six (6)

inches in height above top of rail or extending laterally in excess of five (5) feet five (5) inches from center line of car, except as hereinafter prescribed.

- 7.2 The operation of cars, the lading of which extends laterally in excess of five (5) feet five (5) inches from center line of car, shall be restricted to lading the size or dimensions of which cannot be reduced.
- 7.3 All open top cars with lading extending laterally in excess of five (5) feet five (5) inches from center line of car or in excess of fifteen (15) feet six (6) inches in height above top of rail, shall be placarded on the load itself in a conspicuous place when practicable, and the car shall be marked, stenciled, or placarded at locations specified in subsection 3.19 of this order.
- 7.4 All open top cars with lading extending laterally in excess of five (5) feet five (5) inches from center line of car shall, if train length permits, be trained at least five (5) cars distant from both the caboose and the engine.
- 7.5 A train order shall be delivered to every train containing any car the lading of which extends laterally in excess of five (5) feet five and one-half (5½) inches from the center line of car or in excess of fifteen (15) feet six (6) inches in height above top of rail, informing the crew of the train that the train includes such car or cars, except that a message may be used for such notification provided that such notification shall be on paper of a fixed distinctive color other than the color used for other messages and that the conductor and engineer shall be required to make such messages available to all other members of the crew and that such messages shall remain in the records of each railroad for a period of not less than 90 days.
- 7.6 A train order shall be delivered to every train the operation of which may be affected by the presence or movement of a train containing such wide loads, described in subsection 7.5 of the order, informing the crew of the train of that fact, except that a message may be used for such notification provided that such notification shall be on paper of a fixed distinctive color other than the color used for other messages and that the conductor and engineer shall be required to make such messages available to all other members of the crew and that such messages shall remain in the records of each railroad for a period of not less than 90 days.
- 7.7 Yard supervisors shall be given notifications sufficiently in advance of the arrival of cars, the lading of which extends laterally in excess of five (5) feet five and one-half (5<sup>1</sup>/<sub>2</sub>) inches from center line of car, to enable them to take

necessary precautions to safeguard employees in yard.

7.8 Cars on which the lading exceeds 15'6" above top of rail if otherwise in compliance with these requirements as to width of lading and the nature of which precludes the probability of employees getting on top of or passing over them are exempt from the conditions of this section, provided, however, that if train length permits, any such cars except cars transporting highway trucks or trailers, multilevel freight cars either loaded or unloaded, automobile underframe cars, wood chip cars transporting wood chips when loaded and covered in such a manner to preclude any material from being dislodged en route, and doublestacked container on flatcar (COFC) equipment when containers are precluded from shifting or movement while in transit, shall be trained at least five cars distant from the caboose. For the purpose of this section, automobile underframe cars are either flat cars upon which automobile underframes are stacked and firmly secured in a horizontal position or gondola cars in which such underframers are placed on end and firmly secured to the gondola cars.

#### NARROW GAUGE RAILROADS TRANSPORTING FREIGHT CARS Section 8—Overhead and Side Clearances

- 8.1 For the operation of equipment on narrow gauge tracks, the minimum overhead clearance shall provide a distance above the top of the highest car operated not less than that provided in this order for cars fifteen (15) feet six (6) inches in height operated on standard gauge tracks; the side clearances and distances between center lines of tracks shall provide a distance from the sides of, or between the widest cars operated, not less than those distances herein provided for cars ten (10) feet ten (10) inches in width operated on standard gauge tracks.
- 8.2 All other requirements of this order where applicable shall be observed by narrow gauge railroads.

#### RAILROADS AND STREET RAILROADS NOT TRANSPORTING FREIGHT CARS Section 9—Overhead and Side Clearances

- 9.1 The minimum overhead clearance above railroad and street railroad tracks which are not used or proposed to be used for transporting freight cars shall be fourteen (14) feet.
- 9.2 Minimum side clearances of railroad and street railroad tracks which are not used or proposed to be used for transporting freight cars shall be thirty (30) inches from the side of the widest equipment operated, except that for poles supporting trolley contact conductors between

main line double tracks such distance may be decreased to twenty-four (24) inches.

- 9.3 Minimum overhead and side clearances as prescribed in this section may be decreased to the extent defined by a line extending diagonally downward from a point fourteen (14) feet above the top of rail and four (4) feet distant laterally from the center line of track to a point eight (8) feet above the top of rail and distant laterally thirty (30) inches from the side of the widest equipment operated.
- 9.4 Minimum side clearances as prescribed in this section may be decreased in bridges, tunnels or subways to the extent defined by a line extending diagonally upward from a point level with the top of rail and five (5) feet distant laterally from the center line of track to a point four (4) feet above the top of rail and distant laterally thirty (30) inches from the side of the widest equipment operated.

#### Section 10—Clearance Between Parallel Tangent Tracks

The minimum distance between the center lines of parallel tangent tracks shall be not less than the width of the widest car operated plus twenty-four (24) inches.

## Section 11—Exceptions

- 11.1 Minimum clearances prescribed in Sections 9 and 10 of this order may be reduced along passenger platforms subject to approval by the Commission.
- 11.2 Minimum clearances prescribed in Sections 9 and 10 of this order may be reduced for trackage located in subways and tunnels or compartments thereof, which are used exclusively for railroad passenger traffic; provided that the passenger equipment operated thereon shall have all windows and other openings effectively barred.

## PUBLIC ROADS, HIGHWAYS, AND STREETS CROSSING UNDER OR OVER RAILROADS AND STREET RAILROADS

- Section 12—Public Roads, Highways, and Streets Crossing Under Tracks
  12.1 Where a railroad or street railroad crosses above any public road, highway, or street, a minimum overhead clearance of fifteen (15) feet shall be provided above the surface of such road, highway or street.
- 12.2 Where a railroad or street railroad crosses above any public road, highway, or street on a single supporting span, a minimum width of twenty-four (24) feet shall be provided for the opening for such public road, highway or street. Where two or more supporting-spans are used over the public road, highway or street, a minimum width of twelve (12) feet shall be provided for each opening.
- 12.3 When the public road, highway or street is occupied by one or more tracks, minimum clearance dimensions shall be

determined by this Commission for the case under consideration.

## Section 13—Public Roads, Highways, and Streets Crossing Over Tracks

- 13.1 Where a public road, highway, or street crosses above any railroad or street railroad track used or proposed to be used for transporting freight cars, the minimum clear-ances prescribed in this order for such tracks must be observed.
- 13.2 Where a public road, highway, or street crosses over a railroad or street railroad track which is not used or proposed to be used for transporting freight cars, minimum clearances as prescribed in this order must be provided, except that a minimum overhead clearance of nineteen (19) feet above top of rail shall be provided unless otherwise ordered by the Commission.

#### GENERAL REQUIREMENTS Section 14—Electrical Construction

All clearances of electrical construction over, above, adjacent to, along or across railroads and street railroads shall conform to the requirements specified in General Order No. 95, or such other and further general orders covering similar requirements as may be currently effective.

#### Sections 15—Lesser Clearances Lawfully Created Prior to the Effective Date of This Order

Where the overhead or side clearances between a track and any building, structure or facility are less than the minimum prescribed in this order, but were lawfully created prior to the effective date thereof, the minimum clearances prescribed herein shall be provided whenever the building, structure or facility is relocated or reconstructed; however, the Commission will consider specific requests for the future continuance of heretofore lawful clearances at such reconstructed building, structure or facility when application therefor has been made as provided in subsection 16.2 of this order.

#### Section 16—Exemptions

- 16.1 Nothing herein shall be construed as preventing the movement of material over tracks when such material is necessary in the construction or maintenance of such tracks, nor in the movement of special work equipment used in the construction, maintenance or operation of the railroad, provided such movements shall be carried on under such conditions as are necessary to provide for the safety of all concerned.
- 16.2 If in any particular case, exemption from any of the requirements herein is deemed necessary by the carrier concerned, the Commission will consider the application of

such carrier for such exemption when accompanied by a full statement of the conditions existing and the reason why such exemption is asked. Any exemption so granted will be limited to the particular case covered by the application.

16.3 The Commission reserves the right to modify any of the provisions of these regulations in specific cases when, in the Commission's opinion, public safety, convenience or necessity would be served by so doing.

## Section 17—Prior Orders, Decision, and Exemptions

This order supersedes all regulations governing clearances between tracks of railroads or street railroads and structures or obstructions adjacent to such tracks heretofore promulgated under General Order No. 26, General Order No. 26-A, General Order No. 26-B, General Order No. 26-C, and Decisions Nos. 36007 and 39472 in Case No. 2290, provided however, that any exemption or deviation heretofore granted and now in force and effect shall not be affected by this order and shall remain in force and effect until the further order of this Commission.

This order shall be effective February 1, 1948.

Approved and dated at San Francisco, California, this 19th day of January, 1948.

## PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

By H. L. Farmer Acting Executive Director