

ORIGINALDecision No. 47523

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of THE ATCHISON,
TOPEKA AND SANTA FE RAILWAY
COMPANY, a corporation, for
permission to operate freight
cars of the over-all height of
16 feet 8 inches over a certain
designated route in the State
of California.

Application No. 33347

Robert W. Walker and Richard K. Knowlton, for applicant. John M. Ennis for Brotherhood of Railroad Trainmen; G. W. Ballard, State Legislative Representative; Order of Railway Conductors, Fred Seig, State Legislative Representative; Brotherhood of Locomotive Engineers, Graham R. Mitchell for W. W. Stevens, State Legislative Representative; Brotherhood of Locomotive Firemen, G. F. Irvine, by O. D. Kelly, State Legislative Representative; Brotherhood of Railway Clerks, S. A. Buckley, State Legislative Representative; Brotherhood of Railway Carmen of America, C. H. Gibbens, National Vice President, by Lee Sherlock; Sheet Metal Workers of America, by LeRoy Morgan, Legislative Representative; and George D. Moe, Attorney, for State of California, Department of Public Works, Division of Highways, protestants. C. W. Sprotte for Los Angeles County Road Department, and C. A. Soothill, for T. M. Chubb, Chief Engineer and General Manager, Board of Public Utilities, City of Los Angeles, interested parties. Lynn E. Hull for Safety Division of the Commission.

O P I N I O N

Applicant herein requests authority to deviate from the provisions of General Order 26-D in the operation of rail freight cars with an over-all height of 16 feet 8 inches from the top of the rail to the top of the running board, over a designated route in California commencing at the Topock Bridge at the California-Arizona state line, thence via Needles,

Barstow, San Bernardino and Fullerton to the Hobart Yard in Los Angeles, for delivery to the Los Angeles Junction Railway and thence to the assembly plant of the Chrysler Corporation in the vicinity of Los Angeles. It is desired to use these high cars for the transportation of Chrysler and De Soto automobile bodies from Detroit, Michigan, to the Chrysler plant in the vicinity of Los Angeles.

Public hearings were held in Los Angeles on June 11, 12 and 13, 1952, before Examiner Syphers, and oral argument was heard by the examiner on July 1, at which time the matter was submitted. It is now ready for decision.

The evidence adduced at the hearing disclosed that the applicant railroad is now transporting, over the above-described route, automobile bodies for the Chrysler Corporation in freight cars having an over-all height of 16 feet 4-3/4 inches. ⁽¹⁾ However, due to model changes for the 1953 Chryslers and De Sotos, it will not be possible to transport the bodies in these cars, but rather will require a box car of 16 feet 8 inches in height.

The traffic manager of the Chrysler Corporation testified that company maintains five assembly plants in the Detroit area, and, in addition, about twenty additional plants for the manufacture of component parts. The plant in the vicinity of Los Angeles is for the assembly only of Plymouth, Dodge, De Soto and Chrysler automobiles. The various parts

(1) Authority to operate these excess height cars was granted by this Commission in Decision No. 39122, dated June 18, 1946, in Application No. 27161 (46 C.R.C. 525).

are manufactured in Detroit and, in the case of the bodies, they are assembled and painted before being shipped out by rail car to the Los Angeles plant. Due to 1953 changes in the De Soto and Chrysler automobiles, it will not be possible to ship these assembled bodies in the present freight cars, but rather will require a freight car with an over-all height of 16 feet 8 inches. The witness testified that it was not practical to ship these fully painted bodies in open-top cars because of the likelihood of damage, and, further, the Chrysler Corporation does not maintain body-painting facilities in its Los Angeles plant.

If standard size rail cars were used, it might be possible to ship eight automobile bodies in a car, but, in the opinion of the witness, this would not be practical because the cost would be prohibitive, and also it would require too many rail cars. If 16-foot 8-inch cars are permitted it will be possible to ship thirteen bodies in each freight car.

This witness further testified that if it were not possible to have rail freight cars of 16 feet 8 inches in height, then the only alternative for the Chrysler Corporation would be to discontinue the assembly of Chrysler and De Soto automobiles in the Los Angeles area. This would amount to a discontinuance of approximately 40 per cent of the operations of the Los Angeles plant, the remaining 60 per cent being devoted to Plymouth and Dodge automobiles. In this event the Chrysler Corporation would proceed to assemble the Chrysler and De Soto automobiles in Detroit and ship them to the Los Angeles

area by motor truck. He further testified that it is planned by the Chrysler Corporation to commence the assembly of their 1953 models by September 1, 1952.

Upon cross-examination this witness conceded that the principal reason for desiring the over-height rail cars was economic in that it would hold down the manufacturing costs of the Chrysler Corporation. He was of the opinion that the granting of this application was not connected with the war effort and would not reduce the price of automobiles to the public.

The applicant railroad presently uses in the transportation of automobile bodies to the Chrysler plant in Los Angeles 644 box cars of 16 feet 4-3/4 inches in height. The 16-foot 8-inch cars would be converted from this group. These 16-foot 4-3/4-inch cars are now owned by the Santa Fe and are used solely for this Chrysler haul. The route of movement is from Detroit to Joliet, Illinois, via New York Central Lines, and from Joliet to Los Angeles via the Santa Fe Lines.

The chief engineer of the Los Angeles Junction Railway, which company performs the transportation from the Hobart Yard to the Chrysler plant in the vicinity of Los Angeles, testified that there are no overhead clearances on the Los Angeles Junction Railway of less than 23 feet 8 inches in height, and that there are no overhead structures on the tracks at the Chrysler plant in the vicinity of Los Angeles which are used for the handling of these high cars.

Testimony was presented by an employee of the applicant railroad who had made a survey of all of the overhead

clearances on the lines of the applicant railroad from the Topock Bridge over the Colorado River at the California-Arizona state line, to the Hobart Yard in Los Angeles. Exhibit 1 is a list of these clearances. It was conceded that the clearances shown on Exhibit 1 do not constitute all of the clearances on the railroad tracks, yet it was the testimony of this witness that the clearances on Exhibit 1 constitute all of the clearances under which the high cars would pass.

The assistant general manager of the applicant railroad testified as to the route of movement of the high cars in California: They enter the state at Topock and travel over the main tracks to the Needles Yard, thence via Barstow, San Bernardino and Fullerton to the Hobart Yard in Los Angeles. This witness stated that all of the overhead signal clearances listed on Exhibit 1, which were lower than a height of 23 feet 8 inches, would be raised to that minimum height. The remaining clearances consist of the two bridge structures at Victorville; two tunnels in the Cajon Pass, two bridges at San Bernardino, and a bridge at Highgrove. One of the bridges at San Bernardino, designated as Bridge AA-82 and commonly referred to as the Mt. Vernon Viaduct, is a highway overpass covering twenty sets of railroad tracks. The testimony showed that tracks 1 to 4 have a clearance of less than 23 feet 8 inches, whereas tracks 5 to 20 all have a clearance of more than 23 feet 8 inches. The witness stated that high cars would only be operated over tracks 5 to 20. It should be noted that during the course of the hearings other testimony was presented

showing other tracks which had overhead clearances of less than 23 feet 8 inches. For example, the passenger and house tracks at Barstow have overhead clearances as low as 22.58 feet. However, further testimony disclosed that it was not intended to use these tracks in the operation of freight cars, and that they are not now used for this purpose.

As to the six impaired clearances under which it is intended to operate these high cars, the assistant general manager of the applicant railroad testified that precautions would be taken to advise the railroad employees as to these impaired clearances. These precautions include telldales which would be placed for the purpose of warning any one of the impaired clearance, bulletins which would be issued whenever a train had excess height cars, and also bulletins as to the impaired clearances. Exhibit 3 is a copy of such a bulletin issued at San Bernardino, and Exhibit 4 is a copy of a proposed bulletin for trains having high cars. This bulletin provides that the high cars are to be permanently marked, that each member of the train crew must be informed by a train order whenever the consist of the train includes high cars, and that no member of a train crew is required to ride on top of any such freight cars. Exhibit 7 is a copy of a proposed train order, and Exhibits 5 and 6 are copies of proposed signs which would be placed on these high cars. In addition to this, it is proposed to have a superintendent's bulletin relating to the control of high cars. Exhibit 8 is a copy of such a bulletin. This witness further introduced Exhibit 2 which is a timetable of the Santa Fe Railway in effect April 27, 1952, showing the route of movement proposed to be used for these high cars.

According to the oral testimony and the foregoing exhibits, it is not intended to operate the 16-foot 8-inch high cars under any impaired clearances other than those hereinbefore noted, namely, the two bridge structures at Victorville, the two tunnels in the Cajon Pass, the Pacific Electric bridge at San Bernardino, and the bridge at Highgrove between Colton and Riverside. The testimony showed that Bridge A-35 at Victorville consists of two steel trusses covering the eastbound and westbound tracks. The minimum clearance on the eastbound track is 22 feet 0-3/4 inches, and the minimum clearance on the westbound track is 23 feet 1-3/4 inches. Bridge aA-38 at Victorville is an overhead highway bridge covering both the east and westbound tracks, having a minimum clearance on the eastbound track of 22 feet 3-1/2 inches, and on the westbound track of 22 feet 3 inches. The assistant general manager for the railroad stated that, in his opinion, there was no reason for trains to stop at these bridges, although he did point out that trains slow down at the depot at a point a little more than a mile from Bridge A-35 to pick up a brakeman and drop one off.

The tunnels in the Cajon Pass are both on the eastbound tracks. At the present time the minimum clearance in tunnel 1 is 23 feet 2-1/3 inches, and in tunnel 2, 23 feet 0-1/2 inches. It was pointed out that the minimum clearances in these tunnels should be 23 feet 5 inches, but that, due to adding ballast on the tracks, this clearance had been lessened. The applicant railroad, through its attorney, took the position that the clearances in these tunnels would be restored to 23 feet 5 inches.

The Pacific Electric bridge at San Bernardino has a minimum clearance of 22 feet 3-3/4 inches, and the bridge at Highgrove has a minimum clearance of 23 feet 0-3/4 inches.

This witness further testified that the applicant railroad now is operating 644 over-height cars having a height of 16 feet 4-3/4 inches, and proposes to convert from these 644 approximately 120 to a height of 16 feet 8 inches. The witness further testified that there had been no injury to employees or others as a result of operating 16-foot 4-3/4-inch cars. Upon cross-examination as to any possible safety hazard which might arise from the operation of these high cars, he stated that the railroad would instruct its employees not to ride on the top of the high cars, and would abrogate any rule which now required them to ride on top. Exhibit 9 is a copy of the Rule Book of applicant railroad which, it was pointed out, contains several rules which might be construed to require men to ride on top of the cars in certain situations. The railroad would relieve the employees from responsibility for disregarding any present rules which might require them to ride on top of high cars. He further testified that the use of the high cars would be restricted to the hauling from the Chrysler plant, and that the applicant railroad was willing to accept an order of this Commission containing such a restriction.

The regional engineer of the Coast Lines of the applicant railroad presented testimony relating to the costs of correcting the impaired clearances hereinbefore mentioned. Exhibit 10, identified by this witness, is a list of the

overhead structures in California with less than 23-foot 5-inch vertical clearance under which the Santa Fe operates 16-foot 4-3/4-inch high cars at the present time. According to this witness, to raise Bridge A-35 at Victorville would cost approximately \$33,000, and to raise Bridge aA-38 would cost approximately \$15,000. As to the bridge at Highgrove, this witness was of the opinion that it would not be practicable to raise the bridge or to lower the track to provide a greater clearance. Concerning the Pacific Electric bridge at San Bernardino, this witness testified that it would cost approximately \$25,000 to raise the bridge, and that he had made no estimate as to raising the grade of the track. Exhibit 12, a study made by a committee composed of representatives of The Atchison, Topeka and Santa Fe Railway Company, the Pacific Electric Railway Company, and the Commission's staff, estimates the cost of raising this bridge and grading the track to be \$34,000.

The assistant general claim agent of the applicant railroad presented testimony to the effect that there have been no injuries as a result of the operation of high box cars since their use commenced in 1946.

A witness for the Division of Highways, Department of Public Works of the State of California, testified that, if the application should be granted and the operation permitted of cars 16 feet 8 inches in height, then a 7-foot clearance of these cars would require bridges having an over-all clearance of 23 feet 8 inches. If the State Department of Public Works is required to construct bridges of this height, it will add materially to the costs of construction. Exhibit 11, presented

by this witness, contains tables showing the existing overhead structures of various railroads in California, including applicant. In this connection, it was pointed out that if excess height cars are used by applicant railroad it would prevent standardization of the vertical clearance requirements so far as the Department of Highways is concerned. The witness suggested that if these high cars are permitted, then as to any new structures the added cost for constructing bridges of a height greater than 22 feet 6 inches should be borne by the railroads.

A representative of the Operations Safety Division of this Commission presented testimony to the effect that he had surveyed the clearances along the railroad tracks concerned from the Hobart Yard to the state line. As to the bridge structures designated as A-35 at Victorville, it was the opinion of this witness that there was no probability that men would have to be on top of the train when it went under these bridges. As to Bridge aA-38 at Victorville, this witness pointed out it was near the town, and if it could be raised for a cost of \$15,000, as testified by the regional engineer of applicant railroad, then such raising should be accomplished since there is a greater probability that men would be out on top of the trains in this area. Concerning Bridge aA-82 at San Bernardino, it was the opinion of this witness that tracks 5 to 20 have ample clearance, and that if high cars are permitted they should be restricted to those tracks. In relation to the bridge at Highgrove, this witness testified that there was ample clearance

on the westbound tracks for the proposed high cars, and that sufficient clearance could be obtained on the eastbound tracks by lowering the track bed.

The witness further testified that Bridge B-1 at San Bernardino, known as the Pacific Electric overhead bridge, is the most hazardous of any structure involved. This is a bridge by means of which the Pacific Electric Railway tracks cross over the Santa Fe railroad tracks. Due to its location, there is considerable likelihood of men being on top of the trains and, in the opinion of this witness, the bridge ought to be raised if high cars are to be used. Exhibit 12 shows the estimated cost of raising this bridge to be \$34,000.

In relation to the tunnels this witness pointed out that they are on an upgrade track and are located between six and seven miles below the summit of the grade. He expressed the opinion that men would rarely be out on top of trains going up this grade, and, accordingly, that there is not too great a degree of hazard. Under these circumstances, appropriate telldales would provide a sufficient warning to the employees.

Witnesses for the Railroad Brotherhoods presented testimony tending to show that the operation of high cars would not be safe. These witnesses pointed out that it is frequently necessary in going up to the summit of Cajon Pass to put up retainers on westbound tracks so as to control the brakes. If it should happen that the wheels become heated, then these retainers must be adjusted. In making these adjustments, men some times go on the top of the trains. Furthermore, it was

pointed out that the rules require that brakemen ride on top of the trains in various situations. These witnesses stressed that safety was the paramount concern in railroad operations, and also observed that the applicant railroad is the only one in the United States now operating over-height cars. Instances were cited where these over-height cars had been misrouted or mishandled. It was contended that to have cars of such a height as to have less than 7-foot clearance on some of the overhead structures would present a safety hazard.

In summary, the principal hazard of high cars was alleged to arise from the fact that there were occasions when the railroad employees would get on top of the high cars. To counter this the applicant railroad proposed that these high cars should be distinctively marked, and instructions would be issued to all employees concerned to the effect that, if it were necessary to go on top of a high car, the train should be stopped before the man does so.

A careful consideration of all of this evidence and of the oral arguments presented herein discloses that the principal reason of applicant in requesting permission to operate these high cars is an economic one. It would enable them to retain the business they now enjoy from the Chrysler Motor Corporation. The opposition resolves itself into two main types: (1) the opposition of the Brotherhoods to the effect that the high cars would present a safety hazard, and (2) the opposition of the California Division of Highways to the effect that the use of high cars would require the

construction of higher bridges at a greater cost to the state. In considering these issues, we now observe that the problem necessarily narrows itself down to four bridges and two tunnels which do not have clearances of at least 23 feet 8 inches.

Under the terms of General Order 26-D, this Commission has issued rules and regulations relating to minimum clearances, and, in particular, minimum overhead clearances. The order provides that there shall be a minimum overhead clearance above railroad and street railroad tracks of 22 feet 6 inches, and, further, that such clearances apply to cars having a height not exceeding 15 feet 6 inches. The order further provides that "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 not less than such additional height."

In effect, General Order 26-D holds that if a railroad is to operate freight cars of a height greater than 15 feet 6 inches, such operations must not be conducted under overhead structures which have less than 7 feet overhead clearance above the top of the cars. In other words, if the Santa Fe Railway is to operate freight cars of a height of 16 feet 8 inches, the overhead clearance should be 23 feet 8 inches in order to conform to the provisions of General Order 26-D.

In the instant case, a fair view of the testimony leads us to conclude that the proposed operation could be conducted over tracks which in all instances would have overhead clearances of at least 23 feet 8 inches, with the exception

of the two tunnels in the Cajon Pass and the two bridge structures designated as A-35 at Victorville. The Pacific Electric bridge at San Bernardino could be brought to the required height of 23 feet 8 inches for a total estimated cost of \$34,000, according to Exhibit 12, and the bridge at Highgrove could be brought to the prescribed clearances by the lowering of the tracks at a cost of approximately \$15,000, according to the testimony of the regional engineer of applicant railroad. Although this regional engineer stated that the lowering of the track under the Highgrove bridge would make an undesirable profile, he presented no convincing objections as to why it should not be done. Bridge aA-38 at Victorville could be raised to a clearance of 23 feet 8 inches at a cost of about \$15,000, according to the testimony of the regional engineer of applicant railroad.

As to the remaining three underpasses, the two tunnels on Cajon Pass could be brought to clearances of 23 feet 5 inches by correcting the ballast, and the railroad in this proceeding offered to make that correction. Therefore, these tunnels would have a clearance over the top of the 16-foot 8-inch cars of 6 feet 9 inches. Furthermore, the testimony in this record shows that the men would rarely be out on top of these cars in the vicinity of these tunnels, and if the safety precautions suggested by the railroad are followed they would never be on top of high cars when they were in motion. In the vicinity of the two bridge structures designated as A-35 at Victorville, according to the testimony in this record, there is little

probability that men would be on top of moving cars, and, again, if the precautions suggested by the railroad were followed, they would never be on top of the high cars when in motion. The applicant railroad in this proceeding has offered and agreed to raise all of the other impaired clearances consisting of the various types of signals as shown on Exhibit 1.

Therefore, we conclude and hereby find that the proposed operation of high cars can be conducted under the two tunnels on Cajon Pass and the two bridge structures designated as A-35 at Victorville without presenting an undue safety hazard. The impaired clearances on all other structures and overhead signals on the proposed route can be increased to a minimum height of 23 feet 8 inches.

As to the position of the California Division of Highways, the increased costs of new structures which may be caused by the operation of high cars can be considered in appropriate proceedings relating thereto.

Upon consideration of all of the facts of record, we hereby find that the application should be granted subject to the conditions hereinafter set out.

O R D E R

IT IS HEREBY ORDERED:

The Atchison, Topeka and Santa Fe Railway Company is exempted from the provisions of Section 2.5 of the Commission's General Order 26-D in the operation of freight cars having a height of 16 feet 8 inches from the top of the rail to the top

of the running board, for the sole purpose of transporting automobile bodies, subject to the following conditions:

(1) That the authorization shall apply only over the following route in California: from the Topock Bridge at the California-Arizona state line, via Needles, Barstow, San Bernardino and Fullerton, to the Hobart Yard, thence via the Los Angeles Junction Railway to the assembly plant of the Chrysler Corporation in the vicinity of Los Angeles. Empty cars are to be returned over the same route.

(2) That on or before March 1, 1953, every overhead bridge, signal or other obstruction on the above-described route shall be raised so that the lowest point of each structure will be not less than 23 feet 8 inches above the top of the rail, with the exception of the two bridge structures at Victorville designated as A-35, and tunnels Nos. 1 and 2 in the Cajon Pass. The minimum clearance in each of tunnels Nos. 1 and 2 in the Cajon Pass shall be increased to at least 23 feet 5 inches.

(3) That applicant shall maintain adequate telldaes on either side of any overhead structure having a clearance of less than 23 feet 8 inches along the above-described route.

(4) That each car herein authorized to be operated shall be permanently stenciled or equipped with placards, and such markings maintained in a legible condition adjacent to the ladder or hand holds at all four corners approximately 5 feet above the top of the rail, with yellow letters at least 3 inches high, reading as follows: THIS CAR EXCESS HEIGHT 16 FEET 8 INCHES HIGH ABOVE TOP OF RAIL. In addition there shall be

placed after the number on each car the letter "H", to be painted in the same color and of the same size as the numerals or letters in the number.

(5) That when any train contains freight cars herein authorized to be operated, such freight cars shall be blocked in a single unit, and, if the total number of cars in the train permits, cars of such excess height shall be located in the train so as to be at least five cars distant from either the caboose or the engine.

(6) That each member of the crew of each train containing freight cars herein authorized to be operated shall be informed by an appropriate train order that the consist of the train includes freight cars of such excess heights, specifying the number thereof and advising that no member of the train crew is required to ride on top of any such freight cars while train is moving through passing tracks or over the main line between stops.

(7) That any yard crew required to handle freight cars herein authorized to be operated shall be notified through its supervising officials of the presence of such freight cars in said yard.

(8) That no member of a road or yard crew shall be required to ride on top of the freight cars herein authorized to be operated.

(9) That no new overhead construction on the route herein authorized shall be less than 23 feet 8 inches above the top of the rail.

The effective date of this order shall be twenty (20) days after the date hereof.

Dated at San Francisco, California, this 28th day of July, 1952.

[Signature]
President
Justus J. Casper
Harold H. Hill
[Signature]
[Signature]
Commissioners