ALJ/PAB/jc

Decision 90 08 005 AUG 8 1990 ORIGINAL

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of the City of El Segundo for an order authorizing construction of a new crossing at-grade between Douglas Street and the track of the Atchison, Topeka & Santa Fe Railway Company, PUC 2H-15.0, and for closing an existing grade crossing at 118th Street, PUC 2H-13.4.	Application 89-02-007 (Filed February 3, 1989; amended June 5, 1989)

James R. Felton, Attorney at Law, for the City of El Segundo, applicant.
R. Curtis Ballantyne, Attorney at Law, for The Atchison, Topeka and Santa Fe Railway Company, protestant.
Raymond R. Toohey, for the Safety Division.

O P I N I O N

On February 3, 1989, applicant, the City of El Segundo (City), filed an application requesting authority under Public Utilities (PU) Code §§ 1201-1205 to construct an at-grade crossing between Douglas Street and the track of the Atchison, Topeka & Santa Fe Railway Company (Santa Fe) and to close an existing grade crossing at 118th Street in El Segundo, Los Angeles County. The proposed new at-grade crossing is part of the City's planned roadway extension to connect the existing dead-ends of Douglas Street.

On March 3, 1989, Santa Fe filed a protest to this application and requested a hearing to present further facts surrounding the request. Santa Fe alleged that applicant's application was incomplete and requested that certain specific information regarding the proposed construction be provided. On

June 5, 1989, applicant amended its application providing the additional information requested by protestant.

On October 4, 1989, a prehearing conference was held to ascertain the positions of the parties and issues in the proceeding. Applicant, protestant, and representatives of the Commission Safety Branch (Safety Branch), Los Angeles County Transportation Commission (LACTC) and United Transportation Union (Union) appeared. There are four disputed issues: the need for the crossing, its proposed location and general configuration, drainage to the railroad tracks and the closing of the 118th Street crossing.

Protestant contends that: there is no need for the crossing; it is unsafe; and, closing the 118th Street crossing does not compensate for opening a crossing at Douglas Street. Safety Division contends that prior Decisions (D.) 65703 and 70065 deny this very same request and that a similar request from another applicant is denied in Application of City of Lancaster, D.88-11-041. LACTC and Union take no position.

Should the Commission approve the application, there is no objection to exempting applicant from General Order (GO) 72-B as requested to allow the use of rubber instead of asphalt for the proposed crossing surface construction. The parties also agree that applicant will bear the cost of construction and maintenance of the crossing.

Evidentiary hearings were held in Los Angeles, California on January 8, 9, and 10, 1990. Prior to the hearing, parties indicated that agreement had been reached on the drainage issue should the application be approved. Applicant presented six witnesses; protestant presented two witnesses. Safety Branch participated in cross-examination of all witnesses. Union and LACTC did not participate in the hearings. Closing statements were made by applicant, protestant and Safety Branch. Applicant and protestant filed opening and closing legal briefs analyzing

D.88-11-041, which denies an application to build an at-grade crossing. The matter was submitted on receipt of protestant's reply brief on March 21, 1990.

The proposed decision of ALJ Bennett was filed on June 25, 1990. Comments and replies were duly filed. We make no substantive changes in the proposed decision.

Crossing Background

In 1963, the City requested authority to construct two at-grade crossings on Douglas Street. The proposed crossings are called "the northern crossing" and "the southern crossing." In D.65703, the Commission authorized the construction of the northern crossing but found no need for the southern crossing because the surrounding industrial area was undeveloped.

In 1965, the City again requested authority to construct the southern crossing. While finding a need for a crossing, the Commission denied the request to construct an at-grade crossing because the proposed angle of the crossing was hazardous. D.70065 concluded that any proposed crossing must be at separated grades (an underpass or overpass) rather than at-grade in the interest of public safety.

The instant application is a third request to construct an at-grade crossing at the same Douglas Street site, the southern crossing, which was the subject of D.65703 and D.70065.

Applicant's Evidence

In this proceeding, applicant contends that the need for the crossing has increased since 1965 and an underpass is unreasonably costly. The proposed Douglas Street railroad crossing is part of the City plan to connect the present dead-ends of Douglas Street by a new curved roadway (reversing curve). The connecting roadway must be curved to reach the non-adjacent ends of Douglas Street. As it curves, the new roadway crosses Santa Fe's railroad track at a 48-degree angle. Applicant contends that a connected Douglas Street will alleviate traffic congestion and will provide a secondary through street within the city which will improve general traffic circulation in the industrial area and

surrounding neighborhoods. Douglas Street would then be an additional north-south secondary arterial in the city.

The proposed site of the Douglas Street connection with its at-grade crossing is in an industrial/commercial community of approximately one square mile bounded by El Segundo Boulevard on the north, Sepulveda Boulevard on the west, Rosecrans Avenue on the south, and Aviation Boulevard on the east. The proposed changes in Douglas Street is one of several transportation improvement measures intended to reduce existing and anticipated future traffic congestion along the major and secondary arterials within the city. Future improvements under consideration include: widening Sepulveda and/or Aviation Boulevards; and, upgrading traffic signals and the interconnect system in Manhattan Beach and El Segundo along Sepulveda Blvd. and Rosecrans Avenue.

Future additional traffic in the location of the proposed Douglas Street crossing is projected as a result of on- and off-ramps to the Century (Glen M. Anderson) Freeway (I-105) currently under construction along the City's northern border. Douglas and Nash Streets will be one-way conduits between El Segundo Boulevard and this freeway. The light rail transit line is associated with the construction of I-105 following the Santa Fe right-of-way with an aerial station adjacent to the proposed Douglas Street crossing.

The area of the proposed crossing is currently inhabited by light industry, such as aerospace and manufacturing, and commercial businesses. At present, major companies in the area include Xerox and Chevron. The total employment of all businesses in the area is 80,000 workers. The existing commercial and industrial building floor space totals 14 million square feet (Exhibit 4) with planned additions of 12 million square feet (Exhibit 8, p. 2). The El Segundo Employers Association, comprised of City industry representatives seeking to maximize efficient transportation in this area, supports the application. (Exhibit 5.)

Applicant presents a Preliminary Engineering Report (report) and Initial Environmental Study (study) for its proposed Douglas Street connection. (Exhibit 8.) The report evaluates the feasibility of an at-grade crossing and an underpass. An overpass is not considered a feasible option because an aerial light rail transit track and station are planned to be constructed by LACTC at the proposed site in the near future. The traffic analysis performed as part of the study shows that traffic congestion in the industrial area will be improved but not completely alleviated by the proposed Douglas Street connection. (Exhibit 8, Table 1.) In addition, the Douglas Street connection is projected to improve overall traffic circulation in the City which is an objective of its General Plan and it reduces traffic in the neighboring cities of Manhattan Beach, Redondo Beach, and Hawthorne. It provides better fire and police services in the City by reducing response time for certain locations and providing an evacuation route in the case of chemical cloud or spill in nearby industrial areas. At present, the average daily traffic on Douglas Street is 16,000 vehicles on the north end and 8,000 on the south end, with projections of future increases of an additional 220,000 vehicle trips per day on the surrounding roadway network. (Exhibit 8, pp. 1-2.) It is uncertain what portion of the increased traffic will use Douglas Street.

The report estimates the cost of the proposed at-grade crossing as $575,000 and that of a grade separation as $2.8 million. Barton, the Chief Engineer of De Leuw, Cather & Company preparing the report and study, testified that the present cost of a grade separation in the current construction market is roughly $3 - $3.5 million. The report recommends the adoption of the at-grade crossing proposal or underpass alternative, with no preference for either. The report indicates the City's preference, an at-grade crossing, is the cheaper alternative.

Applicant's witness, Devaraj, testified that neither local nor state funds for an underpass are available now, and are unlikely to be available in the future. In Devaraj and Barton's opinion, should this application be denied, the city would abandon the project.

The initial environmental study concludes the proposed project will affect the environment but not to a significant degree and any impacts can be adequately mitigated. (Exhibit 8, pp. 15-19.)

Applicant does not consider the proposed 48-degree angle of the street/railroad intersection to be unreasonably hazardous for motorists, cyclists or pedestrians even though it recognizes the inherent hazard of such a crossing. Applicant contends that other such crossings exist without any undue safety hazard, providing photographs of overhead light rail transit tracks of the Bay Area Rapid Transit System (BART) for comparison. (Exhibit 12.) Applicant believes that warning signals, crossing arm protection, a central barrier, a 90^{o} angle bike path and rubberized crossing surface sufficiently mitigate any danger such crossings may present.

Applicant's proposed closure of the nearby 118th Street at-grade crossing will cause the number of Santa Fe railroad crossings to be the same. Applicant contends that maintenance at the proposed crossing is less than that of the existing 118th Street crossing.

Applicant contends that the proposed crossing will not interfere with railroad operations which consist of 4-6 trains per day. In applicant's opinion this is a minimal schedule. Because of the Consolidated Transportation Corridor (Corridor) planned for use by railroad companies and trucks transporting cargo to the Ports of Long Beach and Los Angeles, applicant asserts that existing railroad traffic crossing Douglas Street will be reduced as trains are re-routed through the new Corridor in the future. Construction of the Corridor railroad tracks and surrounding

traffic control system is scheduled to begin in 1993, with completion in 1997. (Exhibit 14.)

Meyers, Vice President and General Manager of General Services at TRW, Inc., supported the application and explained the benefit of a connected Douglas Street to the movement of large spacecraft roughly once or twice a year. Now, traffic signals are temporarily removed to transport spacecraft to Los Angeles International Airport along the one route able to accommodate such a large transport vehicle. Douglas Street provides a shorter, less cumbersome route for this transportation.

LACTC witness, Miller, testified that a connected Douglas Street is crucial to access the planned 120-space parking lot servicing the El Segundo light rail transit station passengers. Without such access from east and west via Douglas Street, it is unlikely that the El Segundo light rail transit station will be built. However, another light rail transit station will be built in Hawthorne, less than one mile away, regardless of the outcome of the Douglas Street extension. The station would be near Compton Blvd., in the City of Hawthorne, not in the City of Compton, and less than one mile away. Miller agreed that the lack of an El Segundo station will not affect the light rail system.

Protestant's Evidence

Protestant's witness, San Miguel, believes that the proposed crossing does unreasonably interfere with train traffic and that the train operations at the proposed sight are not minimal. He contends that the angle of the proposed crossing causes a dangerous approach due to an insufficient line of sight for both vehicles and trains. He recommends additional warning devices should the application be approved. He does not believe the closure of the 118th Street crossing compensates for opening the proposed crossing at Douglas Street.

Train operations in the area are in two categories: through trains and switching operations. There are 4-6 through

trains a week destined for the Port of Long Beach. These trains travel at approximately 20 mph through the industrial area. The remaining trains enter the area via the main track and service industries in the Douglas Street proposed crossing location. Immediately northwest of the proposed crossing, the main Santa Fe track running north and south splits into a "Y". The main branch continues north and south gradually curving east while a branch track curves westward away from Douglas St. toward individual industry locations (West Leg of Wye, west by railroad reckoning, away from Los Angeles, not geographically west). Connecting the west leg of the wye and the main branch is the "east leg of the wye" (east by railroad reckoning, towards Los Angeles), a second branch track. The west leg of the wye is called a "lead track". The lead track, east leg of the wye and the main track form a triangular shaped circuit with the capability of switching trains from the lead track to the main branch track. (Exhibit 11.) The east leg of the wye connects with six industrial spur tracks in the area and a siding/storage track. A spur track is a short track which serves one industry location. Twice a day, trains are switched from the main track to the east leg of the wye, then onto the siding/storage track, and later in the day to the west leg of the wye for access back to the main track. Each train in this movement consists of five to ten cars each. This switching movement creates the potential of blocking the proposed crossing for longer than the ten-minute limit in GO 135 while switching operations are being performed. Within 4-6 months, protestant expects to switch an additional 20-30 cars onto the wye tracks, creating longer and more frequent blocking delays. Also, within the next 3-4 years, Santa Fe will add to the switching location one doublestack trash container train with between 15-20 three hundred foot cars, forming a total train length of approximately 4,500-6,000 feet. This train will also create delay at the proposed crossing.

Santa Fe opposes all crossing interference of main tracks, but poses no opposition to crossings over lead and spur tracks. However, Santa Fe classifies the proposed Douglas Street crossing as interference with a main track because of the close proximity of the main and wye tracks. The stopping and backward movement to perform switching will block both the main track and one leg of the wye. Santa Fe considers the operations in this location to be sufficient to warrant no interference by an at-grade crossing.

San Miguel believes the proposed crossing is unsafe because of the 48-degree angle of intersection of the railroad track and Douglas Street. This angle causes a larger flangeway opening, that is, the opening between the track itself and the asphalt. San Miguel testified that this opening is large enough to entrap the tires of bicycles, and sometimes motorcycles, as they cross the track. Once trapped in the gap between the rail and the surrounding crossing surface, the cyclist may lose control of the vehicle and fall into the path of the train or oncoming vehicular traffic. San Miguel recalls that such instances in other locations have caused serious bodily injury or the death of cyclists. In San Miguel's opinion, at-grade crossings should strive for a 90-degree angle with the railroad track.

San Miguel testified that the line of sight of vehicles travelling north or south will be impaired for both vehicle and train drivers because of the angle of approach, the support beams for the aerial light rail track and station, and the existence of fences and buildings. He recommended that the line of sight along the railroad track be a minimum of 225 uninterrupted feet in order for a vehicle and train driver alike to see each other's approach. This recommendation is based upon the analysis of a 90-degree crossing, and train and vehicle speed contained in the "Railroad-Highway Grade Crossing Handbook" published by the United States Department of Transportation-Federal Highway Administration,

September 1986. (Exhibit 19.) San Miguel points out that this minimum of 225 feet must be increased to compensate for skewed crossings with angles less than 90 degrees, such as the proposed Douglas Street crossing.

San Miguel does not consider the closure of 118th Street to be an even exchange for opening a Douglas Street crossing because traffic is lighter at 118th Street and the angle of the crossing is 90 degrees, a safer approach in his opinion.

Should this application be granted, San Miguel recommends the following crossing protection: for the southbound vehicular traffic, a Standard No. 9-A cantilever with gates and flashing lights on the curb side, and a Standard No. 9 gate with flashing light signals in the raised center median; for northbound traffic, two Standard No. 9 gates with flashing lights, one on the curb side and one on the raised center median.

Safety Branch agrees that the proposed crossing is unsafe and points out that this same request has twice been denied. It cites City of Lancaster, supra, as the Commission's current policy in such cases. In its brief, applicant contends that the facts in City of Lancaster are distinguishable from those in this application. Protestant argues that City of Lancaster is directly comparable with the application in this proceeding.

Discussion

There is no doubt that currently, as in 1965, there is a need for some type of railroad crossing at Douglas Street. Applicant has presented convincing evidence that this need has increased over the past years. However, no change from the 1965 configuration of an at-grade crossing at the Douglas Street site is proposed. It was the hazard of the approximately 48-degree angle which caused the 1965 application to be denied. Applicant concedes that there is no other feasible configuration for an at-grade crossing because of the non-adjacent ends of Douglas Street. Applicant's study indicates that the only other viable alternative

is an underpass. Applicant rejects this alternative because it is too costly. Applicant does not deny that a 48-degree crossing is dangerous, but asserts that this danger is minimized by warning devices, a central barrier, a 90° angle bike path and rubberized roadway at the crossing. The dilemma presented in this proceeding is evaluating the need for an at-grade crossing given the danger of the proposed 48-degree angled crossing. The safety of the general public is an overriding concern which includes the safety of employees of the industries in the area and that of potential light rail transit passengers.

Under such circumstances, our responsibility is to assist in providing a reasonable means of access to areas isolated by a railroad track, as well as providing a safe means of doing so. In such cases, the need for an at-grade crossing is not weighed against the public interest in safety; both objectives must be achieved simultaneously. When this is not achieved, the application must be denied. (City of Arcadia (1953) 52 CPUC 711, 715.)

While it is true that the Lancaster decision denies a request to construct an at-grade crossing, the central focus of that case is whether interference with a main railroad track is justified. The Commission concluded that it was not. In the instant proceeding, there are two overriding issues: safety and interference with the main railroad track. We do not reach the issue of interpreting Lancaster until the safety of the proposed at-grade crossing is first determined.

We find nothing in this record to indicate that the 48-degree proposed crossing is safer now than it was in 1965. We are not convinced that the line of sight for trains and vehicles is satisfactory. It is less than that recommended for a 90-degree crossing, therefore, unreasonable for a 48-degree crossing. There is testimony that drivers frequently ignore crossing warning

signals and barriers. Therefore, we must give little weight to applicant's proposed mitigation measures.

The examples of safe skewed crossings provided by applicant are not 48-degree angle crossings comparable to the one proposed in this proceeding. We must give little weight to this comparison. Therefore, the record in this proceeding indicates that the proposed at-grade crossing does not accomplish both goals of reasonable access and safety. It is true that we continuously seek to reconstruct or eliminate hazardous crossings, such as those with skewed-angles, because of the undue danger they pose. We would frustrate our own purposes by approving such a request here.

Applicant's study indicates that an underpass is equally feasible, yet costly. We do not consider cost to override the issue of safety. Applicant does not indicate that any serious attempts have been made to secure commerce and/or industry contributions to the construction of an underpass, a frequent resolution of such funding problems. Applicant has been aware for twenty years that this Commission does not favor an at-grade crossing at the proposed site. We find applicant's inaction since 1965 in pursuing the approved alternative of an underpass to be imprudent. We have no recourse except to deny this application. Accordingly, we also deny the request to close the 118th Street at-grade crossing.

Findings of Fact

1. Applicant requests authority to construct an at-grade crossing with specific warning signals and protection barriers at a site on Douglas Street across the railroad tracks of Santa Fe. The proposed crossing is part of applicant's General Plan to connect the dead-ends of Douglas Street. This portion of applicant's request is the same as presented in A.45112 and A.47429 which was subsequently denied in D.65703 and D.70065, respectively.

2. Los Angeles County Transportation Commission plans to construct light rail transit tracks above Santa Fe's tracks at the

proposed Douglas Street crossing and an aerial light rail transit station adjacent to the proposed crossing. The construction of the aerial light rail transit station is more feasible if the dead-ends at Douglas Street are connected. However, another light rail transit station is planned in Hawthorne less than one mile away. The overhead light rail tracks are feasible, regardless of whether Douglas Street is connected.

3. Applicant estimates that 16,000 vehicles per day will use the proposed crossing. A through street at Douglas Street will ease traffic congestion in the square mile industrial and commercial area surrounding the site, but will not avoid congestion. The connection of Douglas Street's dead-end is part of the total plan to redistribute traffic in the City of El Segundo.

4. The connection of Douglas Street, plus the construction of the planned aerial light rail station will increase traffic at the site of the proposed crossing. Therefore, there is a need for some type of railroad crossing at the proposed site if Douglas Street is connected. However, it is uncertain what effect other General Plan traffic redistribution will have on the existing dead-end configuration at Douglas Street.

5. Applicant's proposed connecting roadway is described as a reversing curve which crosses the railroad track at approximately a 48-degree angle. Applicant proposes to install warning devices, a central barrier, a 90° angle bike path and rubberized crossing surface in order to decrease the hazard of such a skewed crossing.

6. Santa Fe presented evidence to show that the safe uninterrupted line of sight for a 90-degree crossing with train and vehicle speeds of 20 and 30 mph, respectively, is 225 feet. Therefore, a reasonable line of sight for the proposed 48-degree crossing is greater than 225 feet.

7. The line of sight for the proposed crossing does not meet Santa Fe's recommended line of sight because it is interrupted by numerous pillars supporting the overhead light rail system and

station. Therefore, the proposed line of sight is dangerous and creates a substantial potential for an accident.

8. The hazard created by the skewed angle crossing is lessened by the installation of warning devices and barriers. However, even with mitigation measures, an unreasonable accident hazard remains because vehicle drivers frequently ignore all safety devices and these mitigation measures do not affect the line of sight for train and vehicle drivers.

9. Approximately 120 parking spaces are contained in the planned parking lot which accommodates light rail passengers at the Douglas Street site. The impact on the accident potential at the proposed site of the light rail system and station is undetermined.

10. The cost of an at-grade crossing and underpass at the proposed Douglas Street site is approximately $575,000 and $3 - 3.5 million, respectively.

11. The record regarding the proposed at-grade crossing requested in this proceeding does not accomplish the goals of providing a reasonable crossing and one that is safe.

12. There is no other possible configuration of an at-grade crossing at the proposed site.

Conclusion of Law

The application should be denied.

O R D E R

IT IS ORDERED that the request for authority to construct an at-grade crossing at the proposed Douglas Street site is denied.

This order becomes effective 30 days from today.

Dated AUG 8 1990, at San Francisco, California.

G. MITCHELL WILK
President
FREDERICK R. DUDA
STANLEY W. HULETT
JOHN B. OHANIAN
PATRICIA M. ECKERT
Commissioners

I CERTIFY THAT THIS DECISION WAS APPROVED BY THE ABOVE COMMISSIONERS TODAY

NEAL J. SHULMAN, Executive Director