NATIONAL TRANSPORTATION SAFETY BOARD

WASHINGTON, D.C.

Railroad Accident Brief Report

LAX 96 FR 014 REAR-END COLLISION SOUTHERN PACIFIC TRANSPORTATION COMPANY BEAUMONT, CALIFORNIA AUGUST 30, 1996

About 8:10 a.m., Pacific daylight time, on August 30, 1996, a Southern Pacific Lines (SP) freight train SP 7405 East collided with the rear end of standing SP freight train 1 LBBPX-29, near Beaumont, California. SP 7405 East was moving at about 20 mph at the time of the collision. The lead locomotive unit from the striking train and the rear car on the standing train were derailed. Fuel oil was released from the derailed locomotive when the fuel tank ruptured in the collision; however, the spill was contained to the immediate accident site. There were no injuries. Monetary damage was estimated to be \$176,000.

Upon departing Loma Linda, California, by signal indication, both crewmembers of the SP 7405 East stated they were aware that they were following SP freight train 1 LBBPX-29. At Hinda, milepost (MP) 559, the train dispatcher lined the route for SP 7405 East to cross over from track No. 2 to track No. 1. The crew said they received a red over yellow aspect at the crossover indicating the movement from track No. 2 to track No. 1. Once occupying track No. 1, the crew reported that they proceeded, but were prepared to stop at the next signal as required by the red over yellow aspect at the crossover. When reaching the signal at MP 560, the engineer stated she stopped approximately 500 feet prior to the signal because the early morning sun made it difficult for the conductor to see the signal. The crew related that at this point the conductor walked to the end of the locomotive and reported to the engineer by radio that the signal displayed a green aspect. The crew testified that the engineer was unable to see the signal from the engineer's seat because the locomotive was operating with the long hood forward. Furthermore, the engineer stated that while stopped she stepped out of the locomotive cab on to the side walkway and leaned over the handrails to see the signal. The engineer said she could see a red aspect on the lower signal unit; however, she felt that there was some indication on the upper signal unit, but it was difficult to be certain because she was looking directly into the sun. This signal was not equipped with an upper signal unit, applicable to the movement of the SP 7405. The upper signal unit on this mast was facing in the opposite direction.

In a later interview, the engineer said she realized that this signal was only equipped with one signal head. The engineer confirmed that she had seen the red aspect and had erroneously read into the situation a nonexistent aspect in the upper unit that was actually the back side of the signal for the opposite direction.

The engineer and conductor related that they assumed the reason they had crossed over was to pass the preceding train. Both employees stated that they had discussed this scenario and that it was a logical assumption for them to make. If this assumption had been true, the signal at MP 560 would most likely have displayed a green aspect.

The engineer stated later that she had concluded the signal displayed a clear indication. As shown by the data from the event recorder, the engineer accelerated from a stop to 35 mph into the section of track beyond the signal. The conductor related that after passing the signal he saw a train standing on the track ahead of their movement. The standing train was in the middle of a 4-degree curve to the right. Once discerning that the train was not on the adjacent track, the conductor said he instructed the engineer to slow down, which the engineer did as confirmed by the data from the event recorder. When the conductor realized that the deceleration was not adequate, he stated later that he requested the engineer to stop immediately. The data from the event recorder recorded that the engineer applied the brakes with an emergency application and the locomotive consist slowed to 20 mph before abruptly falling to 0 mph when striking the standing train at MP 560.5.

PROBABLE CAUSE

The National Transportation Safety Board determines that the probable cause of this accident was the engineer and the conductor of the striking train mistakenly interpreted the restricted signal indication to be clear because of sunglare.

Adopted: August 18, 1998