

waiver process, as specified in 49 CFR part 211, applies.

Paragraph (a) of this section addresses jointly submitted waiver petitions as specified by 49 U.S.C. 20153(d). Such a petition must be submitted by both any railroad whose tracks cross the highway and by the appropriate traffic control authority or law enforcement authority which has jurisdiction over the roadway crossing the railroad tracks. Although section 20153(d) requires that a joint application be made before a waiver of a provision of this regulation is granted, FRA, in paragraph (b), addresses the situation that may occur if the two parties can not reach agreement to file a joint petition. Section 20153(i)(3) gives the Secretary (and, by delegation, the Administrator) the authority to waive in whole or part any requirement of section 20153 (with certain limited exceptions) if it is determined not to contribute significantly to public safety. FRA thus has decided to accept individually filed waiver applications (under certain conditions) as well as jointly filed applications. In an effort to encourage the traffic control authority and the railroad to agree on the substance of the waiver request, FRA requires that the filing party specify the steps it has taken in an attempt to reach agreement with the other party. Additionally, the filing party must also provide the other party with a copy of the petition filed with the FRA.

It is clear that FRA prefers that petitions for waiver reflect the agreement of both entities controlling the two transportation modes at the crossing. If agreement is not possible, however, FRA will entertain a petition for waiver, but only after the two parties have attempted to reach an agreement on the petition.

Paragraph (c) provides that each petition for a waiver must be filed in the manner required by 49 CFR part 211.

Paragraph (d) provides that the Administrator may grant the waiver if the Administrator finds that it is in the public interest and that safety of highway and railroad users will not be diminished. The Administrator may grant the waiver subject to any necessary conditions required to maintain public safety.

#### *Section 222.21 When Must a Locomotive Horn Be Used?*

Paragraph (a) of this section addresses the duty to sound the locomotive horn when approaching and passing through a public highway-rail grade crossing. The locomotive horn shall be sounded when such locomotive or lead car is approaching and passes through each public highway-rail grade crossing. This

paragraph also requires that sounding of the horn be in the pattern of two long, one short, and one long blast be initiated at the place specified in paragraph (b) of the section and that the pattern be repeated or prolonged until the locomotive or train occupies the crossing. This paragraph also states that the pattern may be varied as necessary where crossings are spaced closely together.

FRA proposed to adopt the industry standard pattern for sounding of horns at grade crossings. FRA received a number of requests that we define what "long" and "short" horn blasts are. The apparent intent of the commenters is to ensure that the locomotive horn not be sounded excessively when entering a grade crossing. It is clear that some engineers at some times "lean on the horn" for longer periods than is common in the industry. Despite this, the vast majority of engineers apply the locomotive horn appropriately. Imposing strict time requirements for the sound pattern would impose unrealistic limits on engineers and add to their already full workload. The Florida East Coast Railway recommended that the horn pattern be left up to the individual railroad. While some locomotive horns can be preprogrammed with specific horn sequences, FRA will not be requiring such horns, nor has a need for them yet been shown. FRA is thus retaining the proposed language of "long" and "short" blasts. FRA is also leaving to the railroad or individual engineer the decision as to how to vary the horn pattern when crossings are spaced closely together. Such decisions have been made by these parties for many years, and there has been no showing that there is a need to alter those determinations.

Paragraph (b) of the NPRM addressed the location at which the locomotive horn needs to begin being sounded. The basic premise of this section as proposed in the NPRM was that the locomotive horn should be sounded no less than 20, nor more than 24 seconds in advance of a grade crossing, but in no event could the horn be sounded more than  $\frac{1}{4}$  mile in advance of the crossing.

Research has shown that the effect of a locomotive horn sounded at a distance greater than  $\frac{1}{4}$  mile from a crossing is attenuated to the extent that it does not provide warning to the motorist. The NPRM relied on the presence of whistle boards to notify the engineer when to sound the horn. Thus the proposal went into great detail regarding the present location of whistle boards and adjusting the location of whistle boards in the future. However, the BLE, representing

the majority of railroad engineers in the country, testified that engineers did not need variably-placed whistle boards to indicate the proper location at which to sound horns. The BLE testified that engineers could provide a time-based warning if asked to do so. As a result, FRA has revised paragraph (b) to simply provide a range of time between which the locomotive horn must be sounded in advance of a grade crossing, while retaining the outside limit of  $\frac{1}{4}$  mile.

As noted above, FRA proposed that the horn be sounded at least 20, but not more than 24 seconds, before the locomotive enters the crossing. This proposal generated a number of comments, the majority of which objected that the proposal required the horn to be sounded for an excessive period of time. Missouri's Division of Motor Carrier and Railroad Safety stated that the "range of 20 to 24 seconds will be difficult for engineers to determine when not traveling near maximum authorized speed." The agency recommended a minimum of 15 seconds, which provides, according to the agency, a 10 second margin. The Commissioner of the City of Aventura, Florida stated that 20 seconds may be acceptable during the day, but is unreasonable at night. The Commissioner suggested 10 seconds of warning during nighttime hours. The Florida East Railway said that it wasn't aware of technology to enable a train moving at less than maximum authorized speed to properly blow the horn within 20 to 24 seconds. The FEC recommended further thought on the subject. The FEC further stated that if FEC train speed is 60 miles per hour, the one-quarter mile limit only provides for 15 seconds warning rather than 20 to 24 seconds warning. The FEC is correct, and as noted below, that is the desired result.

As a result of comments received and the results of its research on this issue, FRA has revised the proposal to provide that the locomotive horn be sounded at least 15 seconds, but no more than 20 seconds, before the locomotive enters the crossing, but in no event shall a locomotive horn sounded in accordance with paragraph (a) be sounded more than one-quarter mile in advance of a public highway-rail grade crossing. This provision as revised recognizes that establishing only a set location at which horns must be sounded (as is the case under many present State laws), has the potential to disrupt local communities without affecting the warning provided to the motorist. Because a fixed location for sounding of a horn results in differing periods of warning depending on the speed of the train, FRA chose to