

APPENDIX R

UNITED STATES DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration

[Emergency Order No. 15, Notice No. 4]

Amendment of Emergency Order No. 15

The Federal Railroad Administration (FRA) issues this notice to amend Emergency Order No. 15 (Order) in response to comments received from petitioners who have requested an administrative review of the Order and FRA's further study of alternative remedial measures.

The Emergency Order was issued July 26, 1991, published in the Federal Register on July 31, and required that trains operated by the Florida East Coast Railway Company sound train-borne audible warning devices when approaching public highway-rail grade crossings.

On August 6, FRA received the first petition requesting review of the Order and began an informal conference process with effected parties. That process permitted petitioners to submit arguments for modification or withdrawal of the order. See 49 CFR 211.47. As part of that process, FRA provided petitioners a set of proposed remedial options, which, if implemented, would result in exemption from the requirements of the Order. The comment period on those options ended on January 15, 1993. Issuance of this notice concludes the conference process.

After review of the comments, FRA has decided to amend the performance specifications for various of the proposed remedial options in certain respects. This notice explains how FRA is responding to the comments offered by petitioners and amends the "Relief" section of the Order accordingly.

I. DISCUSSION OF COMMENTS

In September of 1992, FRA issued draft performance specifications for full highway-rail grade crossing barriers, traffic divisional islands, and temporary crossing closures. FRA announced its intention that, once the specifications were finalized, compliance with these standards would exempt a grade crossing from the requirements of the Order.

By the end of the comment period on January 15, 1993, FRA had received responses from eight petitioners: the cities of Hollywood, Jupiter, North Miami Beach and West Palm Beach; Martin County; Project

Whistle Stop (PWS); John A. Cavalier, Jr.; and the Florida East Coast Railway (FEC).

Funding

The most common concern among the petitioners was funding the remedial measures. Four groups raised this issue. Martin County estimated that the cost per crossing would be approximately \$85,000. As a result of this expense, they argued the "...proposed restrictions are too severe and do not represent the stated intent of providing an avenue for relief...." FRA consulted with Federal and State highway officials when it prepared the specifications. Retaining the level of safety afforded by the use of train horns was the central issue discussed. Protecting lives was given more consideration than cost. FRA hoped that less expensive alternatives would be available, and is still hopeful that less costly means of implementing these measures will develop as experience is gained.

Other petitioners addressed the question of who should pay. Hollywood rejected the remedial measures "until such time as the FRA identifies a proper and acceptable funding source other than the City of Hollywood and other affected cities...."

West Palm Beach mistakenly interpreted Federal and State statutes as requiring that such improvements "... be paid from federal and state funds." Federal statutes do not require that highway-rail crossing safety improvements be paid with Federal or State funds. Whether Federal highway safety or other State funds are used is a decision to be made by the Florida Department of Transportation. The use of Federal highway safety funds would require the concurrence of the Federal Highway Administration (FHWA).

Similarly, the Town of Jupiter argued that Federal law requires that the Federal government "significantly participate with the costs for upgrading crossings." FRA is not familiar with such a requirement. FRA has no funds which could be used for such purposes.

Jupiter suggested that FEC participate in the funding of necessary remedial measures other than closings. This is a decision which can only be made by FEC.

Quiet Zones

The issue of "quiet zones" was addressed by two petitioners, FEC and PWS. FEC opposes quiet zones, asserting it would be too complicated for locomotive engineers to keep track of zone limits. However, one reason FRA proposed quiet zones was a concern for the difficulty engineers would have if exemptions to the Emergency Order

were granted by individual crossing. As explained in Conference Notice No. Seven, a zone of sufficient length would assure that the locality would in fact realize an absence of train horns. Conversely, to establish quiet zones only at political boundaries, as FEC proposed, would unnecessarily impact crossings where train horns are not a problem, for example, in rural locations. We believe the half mile minimum to be a compromise between what is reasonable and what is practical. It is not reasonable to require more, nor is it practical to settle for less.

PWS stated that quiet zones were not needed, but provided no rationale. PWS went on to state that some jurisdictions are so small they would not have control over a track segment long enough to establish a zone. FRA recognizes that jurisdictions may need to coordinate to create zones, but sees no other option.

Finally, PWS argued that if quiet zones are established the use of train horns should be banned for the full day, and not just 10 P.M. to 6 A.M. The concept of a 24-hour ban in designated zones is reasonable. If the remedial measures are properly implemented for four quadrant gates, median barriers or one-way streets fully gated, FRA believes that a 24-hour ban could be consistent with the intent of the Emergency Order. FRA notes, however, that there may need to be a change in Florida law before local jurisdictions have the authority to establish 24-hour bans.

Four Quadrant Gates

PWS and FEC also opposed four quadrant gates. The addition of exit gates is designed to prevent circumvention of the entrance gates by impatient or misinformed motorists.

PWS questioned the need for a median barrier if four quadrant gates are to be used. Medians are specified to deter attempts to circumvent the entrance gates before the descent of the exit gates. The exit gates are delayed to allow motorists on the crossing to move clear before all the gates descend. FRA agrees that four quadrant gates are unnecessary if the standard gates with medians, as detailed in the attachment containing performance specifications FRA is adopting, are installed.

PWS has suggested leaving unpaved the space between opposing highway lanes over the tracks to prevent motorists from driving around downed gates. FRA is not convinced it would be any less costly to remove the pavement between lanes than to erect median barriers. In addition, this space is often too narrow to serve as a barrier to deter motorists from driving around the gate. Since an unpaved gap would also not be as easy to see as a median barrier, it could trap

motorists if the gap was inadvertently entered.

The FEC opposed four quadrant gates as an alternative to train horns, because they believed that "without the intimidation factor provided by an audible warning device, they [intoxicated or speeding motorists] are much more likely to crash through them [lowered gates] and into the path of an oncoming train." Available data do not support the FEC's statement. FRA reviewed 82 reports prepared by Florida law enforcement officers regarding FEC nighttime crossing accidents, including 63 cases where the driver either drove around or through the gates. Five of the 50 accidents (10 percent) occurred when the motorist drove through a gate while bans were in effect. In the remaining 45 cases the driver drove around the gates. Of the 13 no-ban incidents, three (23 percent) resulted from the driver going through a gate. The percentage of drivers involved in accidents going through gates, versus around them, did not increase during the ban period. Most drivers who have had accidents at crossings have slowed sufficiently to negotiate the crossing without going through the gates. The percentage of drivers failing to stop, or oblivious to the gates, did not increase. FRA therefore believes that additional gates with a median barrier would prevent the vast majority of motorists from attempting to beat the train.

In a related communication, the Florida Department of Transportation has suggested that "loop detectors" be used to preclude the closure of exit gates if a highway vehicle is present in the exit lanes. The FRA concurs in this suggestion and the specification for Alternative Remedial Measure #3 was therefore rewritten.

Longer Gate Arms

One petitioner proposed "that where there is a two lane road ... that the two gates be extended, no more than forty feet, which would have the effect of completely blocking traffic from entering the crossing." The petitioner suggested that, "[t]his would have the same effect as a four quadrant crossing ... and would be far less expensive." Engineering personnel worry that that approach could trap motorists on the tracks when gates close. Four quadrant gates are designed to close the entrance lane(s), and then, after a delay allowing motorists on the crossing to exit, to close the exit lane(s).

In a related suggestion, PWS proposes that "the street should be made one way and the arm long enough to prevent vehicles from going around from the incoming side." This is a valid suggestion. The FRA and the Florida Department of Transportation have prepared a set of specifications, similar to those already presented in Conference Notice #7, addressing this additional option. See the Performance Specification.

Terminating Rail Service

PWS suggested another remedial measure, i.e., shutting down rail operations on tracks where less than seven trains per week operate. However, no alternatives for moving freight were offered. Under most circumstances, rail transport is safer and more economical than moving freight over our nation's highways. Increased highway congestion would also put added wear on public roads. Further, by definition, this measure would eliminate train horns at a particular crossing less than once per day, obviously not the problem which these proceedings are attempting to address. Lastly, 80 percent of the FEC highway-rail crossings which were impacted by whistle bans in 1989 were on the FEC mainline with considerably more than one train per day. Substantially more than half of the remaining 20 percent, though not mainline, have more than one train per day. The impact of this alternative on the "whistle problem" would be minimal. The legal, logistical and transportation problems it would create would be out of proportion.

Pedestrian Traffic

FEC recommends that "any signs indicating ... closure should clearly indicate that the crossing is closed to **both** vehicular and pedestrian traffic." FRA agrees and will accordingly modify Note #2 the Implementation Notes. See Performance Specifications.

FEC also recommends that "the specifications should ensure adequate safeguards to prevent pedestrians ... from entering the railroad's right of way." FEC offers no suggestion as to what would be "adequate." FRA would have no objection to the establishment of further safeguards for pedestrians. However, it appears that current arrangements are adequate. All potential whistle ban crossings on the FEC are equipped with gates, lights and a bell. The bell is intended to warn pedestrians of the impending presence of a train. From 1980 through 1992, the FEC reported 19 pedestrian incidents at highway-rail crossings. Of these, six occurred while bans were effective. (Three of the six resulted in a death.) The following table shows the number of such incidents, by year.

'80	'81	'82	'83	'84	'85	'86	'87	'88	'89	'90	'91	'92
1	4	1	0	1	1*	1	2*	1/1*	1/1*	1*	1	2

* ban in effect (1/1* indicates one with ban in effect, one without)

These data neither support nor refute the effectiveness of train horns as a pedestrian warning device. Pedestrian incidents have occurred before, during and after the whistle bans. The use of a

second audible warning device (a train's horn), has not made an appreciable difference for pedestrians. The bell, flashing lights and gates, provide adequate warning for pedestrians.

Signs

One individual recommends that signs be placed at each crossing notifying motorists of the \$1,500 fine for violating a state statute by going around lowered gates. The FRA supports this concept, though we will not require such a sign in the revised specifications. This should remain a local option. We would caution that any traffic control sign is of little value unless the statute is enforced. If it is enforced, experience shows word will spread quickly.

Whistle Boards

PWS recommends that the FEC "install ground markers for the engineer to know when to blow the train horn." Such markers are commonly referred to as "whistle boards," and in Florida, because of State statutes, would be installed 1,500 feet from each crossing on each approach to the crossing. It has not been alleged that FEC locomotive engineers are forgetting to sound their trains' horns. Should this become a problem, this option would remain open to the FEC.

Excess Use of Train Horn

PWS has implied that locomotive engineers continue to sound the horn even after the locomotive has entered upon the highway-rail crossing, and that this practice should be curtailed, unless "the engineer thinks it will do some good." Most railroad operating rules, and FRA's Order, require that the last sounding of the train's horn for each crossing be "prolonged until the lead locomotive has passed through the crossing." This practice was established, and is continued, in an effort to reduce the number of incidents in which a highway motor vehicle runs into the side of the train. (More than a quarter of all crossing collisions occur when the highway user strikes the train.) In most of these, 67 percent, the lead unit (usually the locomotive) is struck. Overlooked in PWS's assertion is that many FEC crossings are closer together than 1,500 feet. As an engineer crosses over one crossing, he frequently is already sounding the horn for the next. Closing crossings is the best solution to this problem.

Highway Intersection, defined

PWS has suggested that the definition of an intersection, whether major or minor, be predicated on the number of traffic lanes. The proposed specifications distinguished intersections based on the presence or absence of turn lanes. PWS provided no rationale for its recommended change. FRA defers to the State and Federal engineering personnel with whom we consulted in preparing those specifications and retains the original definitions.

The Manual on Uniform Traffic Control Devices (MUTCD)

PWS recommends that the MUTCD "develop plans for placement of gates at all types of crossings." The MUTCD, in accordance with Part 1A-2 of the MUTCD:

- sets forth the basic principles that govern the design and usage of traffic control devices.
- The Manual presents traffic control device standards for all streets and highways open to public travel regardless of type or class or the governmental agency having jurisdiction.

However, the Manual specifically leaves design and placement to local engineering personnel:

The responsibility for the design, placement, operation and maintenance of traffic control devices rests with the governmental body or official having jurisdiction. 1A-3

Traffic control devices shall be placed only by the authority of a public body or official having jurisdiction, for the purpose of regulating, warning, or guiding traffic.
1A-3.1

The decision to use a particular device at a particular location should be made on the basis of an engineering study of the location. Thus, while this Manual provides standards for design and application of traffic control devices, the Manual is not a substitute for engineering judgement. 1A-4

The MUTCD is not a design manual. The PWS recommendation that the MUTCD predefine all possible scenarios and site plans is not within the scope of the MUTCD, nor is it realistic.

Implementation Not Always Possible

PWS accurately observes that some highway-rail grade crossings are configured in ways that make it impossible to implement the provisions of the proposed specifications, short of crossing closure. This is especially true when the road and track closely parallel, resulting in a short entrance road into the crossing. Certainly, prohibiting use of a train's horn would only exacerbate an already dangerous situation.

Exceptions

One individual requested that exception criteria be defined which would allow "local authorities to resolve problems with certain crossings that require special measures." This is too vague and open-ended to include in the specifications or remedial options. However, FRA will remain open to requests for exceptions which are forwarded with the positive endorsement of the Florida Department of Transportation.

Low Highway Traffic

Another commenter requested that exceptions be granted for crossings with low highway traffic. In most cases, such a crossing should be closed. However, the FRA will remain open to requests for exceptions which are forwarded with the positive endorsement of the Florida Department of Transportation.

Automated Horn System (AHS)

Two cities have expressed an interest in installing automated horns at grade crossings. A mid-west firm known as Railroad Consulting Services, Inc. is experimenting with a prototype Automated Horn System. It is presently working with the Union Pacific Railroad and the city of Gering, Nebraska. The AHS consists of horns permanently mounted at the crossing facing each direction of highway approach. The horns are activated by trains as they enter upon track circuits, as are flashing lights and gates, and continue to sound a set pattern until the train reaches the highway.

The effort underway in Nebraska is innovative and experimental. FRA has encouraged this initiative and is formally monitoring progress, though no FRA sanction is needed. There are some technical difficulties with the devices and some questions still remain unanswered, in the opinion of the FRA, but none so far appear insurmountable.

FRA is not yet prepared to endorse the use of the AHS along the

FEC right-of-way until further results have been received from the Nebraska experiment.

Availability of Data

One commenter stated that they have not been able to obtain the data used in FRA's analysis. All the data used in the original analysis and in subsequent reviews are available to the public on request. We are aware of no unfilled requests for data. Summary data were made available during and immediately following the opening meeting of the conference process, September 13, 1991. Subsequent publications, e.g., Conference Notice #3, Florida's Train Whistle Ban, 2nd Edition, September 1992, included a variety of summary and detail data. Other requesters, including some of those responding to Conference Notice #7, have received massive listings of data from FRA's accident files. Requests for specific data should be addressed to the Federal Railroad Administration, RRS-23, 400 7th Street S.W., Washington, D.C. 20590. There may be a nominal fee. It is recommended that a requester call, (202) 366-0533, to discuss a request prior to writing.

Indemnification

FEC has stated their opposition "to the substitution of audible warning devices with unproven alternatives. ... FRA should not permit the substitution of any alternative unless it is shown through adequate study to be equally effective." FEC's comments are without force; the proffered alternatives are adaptations of measures whose effectiveness is well known. Indeed, most of the alternatives will improve crossing safety during daytime and evening operations, as well as during the night.

Regarding the proposed alternative of nighttime closure of a crossing, the community would assume the responsibility for closing each crossing so configured each evening. FEC locomotive engineers would have to assume from 10 P.M. to 6 A.M. that each crossing was closed. FEC has requested that communities "be required to **indemnify** FEC for **any** liability resulting from accidents at such crossings during the hours in question." Such an action by FRA would be well beyond the safety mission of this agency and the scope of this proceeding.

Unrelated Issues

PWS raised a myriad of rail related issues, that are not affected by, nor do they impact on, whistle bans. These included the adequacy of current crossing installations, speed of trains, blockage of crossings by trains, rail car covers and hazardous materials

shipments. We have not responded to these concerns. PWS may address them separately to the FRA outside the confines of this proceeding.

Also, a few groups, including PWS, have again challenged original data and arguments, which were addressed in the FRA's original report, the Order, Conference Notices #3 and #7, and the 2nd Edition. The FRA is not willing to reargue these points.

Two commenters cited a newspaper story which purports a rise in crossing-related accident statistics of 28 percent since the bans were lifted. The FRA is not aware of the basis for this number. This number does not reconcile with information available to the FRA. In fact, in the year prior to the Order, the FEC reported 23 nighttime accidents at "impacted" crossings. In the year following, through July 25, 1992, FEC experienced only 10 nighttime accidents at the same crossings. This is a reduction of 57 percent.

Preliminary data for the State of Florida indicates that the state enjoyed a reduction of 16.4 percent in accidents and 74 percent in fatalities in 1992 versus 1991. This reduction is largely attributable to the gains achieved along the FEC right-of-way.

A Technical Meeting

Two commenters, have requested that a technical representative of the FRA attend an "informational hearing." The purpose would be to have "an open discussion of the alternative remedial measures" so that "residents" will develop a better understanding of "the technicalities involved in order to stop whistle blowing...."

The FRA believes that the remedial measures are sufficiently detailed. The sort of discussion proposed would more appropriately involve State, County and City transportation planners and engineering personnel.

II. AMENDMENT TO EMERGENCY ORDER NO. 15

The "Relief" section of Emergency Order No. 15 is amended as follows:

Relief

The FEC has indicated that it does not intend to seek relief from this Order. However, the local jurisdictions impacted by the Order have indicated that they desire a mechanism whereby they can take action that would ensure that the Order's effectiveness would be lifted with regard to particular crossing where certain alternate

measures are adopted. Some of those jurisdictions petitioned for review of the Order, which triggered a conference process under 49 CFR 211.47. As a result of that conference process, FRA has decided that a local jurisdiction may obtain relief from the impact of this Order by properly adopting one or more remedial measures (as set forth in the specifications below) at a highway-rail crossing or, where required, at a number of highway-rail crossings in a "quiet zone," and so notifying the Florida Department of Transportation (FDOT)¹ and the FEC in writing. FDOT must then certify whether the requirements of the relevant performance specifications have been met. Fourteen days after written notification has been sent from FDOT to the Docket Clerk, FRA, and to FEC, the impacted crossings may be considered exempt from the requirements of this Order

PERFORMANCE SPECIFICATIONS FOR ALTERNATIVE REMEDIAL MEASURES

DEFINITIONS

The following definitions pertain to these specifications:

Low Traffic Volume Streets: Any street carrying less than 2,000 vehicles per day.

Major intersection: Any intersection where traffic volume justifies the use of separate turn lanes.

Median barrier: Any device designed to prevent the intentional or accidental incursion of a vehicle into opposing lanes, e.g., a Jersey Barrier.

Median curb: A curb, either mountable or non-mountable, which defines a median.

Minor intersection: An intersection where traffic volumes do not require the use of separate turn lanes.

MUTCD: Manual on Uniform Traffic Control Devices (1988 Edition), Federal Highway Administration, U.S. Department of

¹ Notification to FDOT should be sent to: Manager, Rail Office, Florida Department of Transportation, 605 Suwannee St., Tallahassee, Fl., 32399-0450. Notification to the FEC should be sent to: Vice President-Transportation, Florida East Coast Railway Co., P.O. Drawer 1048, St. Augustine, Fl., 32084. Notification to FRA's docket clerk should be sent to: Docket Clerk, Federal Railroad Administration, 400 Seventh St., S.W., Room 8201, Washington, D.C., 20590.

Transportation.

Non-mountable (barrier) curb: A steep-faced curb 9-12 inches high intended to prevent intentional incursion by a vehicle into a defined area.

Quiet zone: A segment of railroad of not less than one-half mile (2,640 feet) in length on which all at-grade crossings are, in keeping with these specifications, closed during nighttime hours (10:00 p.m. to 6:00 a.m.), equipped with four quadrant gates, or equipped with gates with median barriers.

Traffic separator: A traffic island or median designed to guide traffic around an obstacle or to direct traffic in a particular direction.

SPECIFICATIONS

1. PERMANENT CLOSURE OF THE HIGHWAY-RAIL CROSSING: Eliminate the at-grade crossing through permanent closure of the street or highway or through grade separation (overpass or underpass).
2. NIGHTTIME CLOSURE OF THE HIGHWAY-RAIL CROSSING: Close the crossing to highway traffic during nighttime hours subject to the following conditions:
 - a. The closure system must completely block highway traffic from entering the crossing.
 - b. Activation and deactivation of the system will be the responsibility of the county or municipality responsible for the street or highway, which must undertake to reliably discharge this duty such that the crossing is closed continuously during the hours of 10:00 p.m. to 6:00 a.m.
 - c. The crossing must be part of a quiet zone, as defined in these specifications.
 - d. The system must be reasonably tamper and vandal proof.
 - e. MUTCD standards must be met for any barricades and signing used in the nighttime closure of the facility. Signing for alternate routes must also be included.
3. FOUR QUADRANT GATE SYSTEM: Install sufficient gates at a crossing to fully block highway traffic from entering a crossing when the gates are lowered, subject to the following conditions:

- a. Approaches on both sides of the highway-rail crossing will be separated with medians with non-mountable curbs or traffic separators. Such median construction will include energy dissipaters and median striping as required by MUTCD.
- b. Any median construction will extend at least 200 feet or to a major intersection, whichever is less. All major intersections must be a minimum of 100 feet from the highway-rail crossing. Any minor intersections within 200 feet of the crossing will be closed to crossing traffic.
- c. At low traffic volume streets, median curbs with vertical delineators (rubber pipes and low curbing) between opposing lanes may be used in place of non-mountable curbs or traffic separator.
- d. The maximum length of a gate arm will not exceed 40 feet.
- e. Gate timing for full closure systems should be based on these suggested times:

<u>step</u>	<u>Inc.</u>	<u>Time</u>
Lights start flashing	0	sec.
Entrance gates start down	3-5	"
Entrance gates fully lowered	9-15	"
Exit gates start down	4-6	"
Exit gates fully lowered	9-15	"

Exit gates will be equipped with a presence detection loop located between the outside track and the exit gate arm. This loop will raise or prevent the lowering of the exit gate arm if an automobile is detected within the loop. The loop or loops will be of sufficient size and number to detect an automobile in all exit lanes.

- f. The gap between the end of a lowered gate and the median will be less than one foot.
- g. Four quadrant gates will not be an option where traffic signal pre-emption exists.
- h. The crossing must be part of a quiet zone, as defined in these specifications.
- i. The system must be reasonably tamper and vandal proof.
- j. General principles of the AASHTO Roadside Design Guide

regarding median barrier construction will be adopted where applicable.

4. GATES WITH MEDIAN BARRIERS: Install median barriers at a crossing which prevent highway traffic from driving around lowered gates subject to the following conditions:
 - a. Approaches on both sides of the highway-rail crossing will be separated with median barriers. Any barrier so constructed will include markers as required by the MUTCD, and also energy dissipaters.
 - b. Median barriers will extend at least 200 feet or to a major intersection, whichever is less. All major intersections must be a minimum of 100 feet from the highway-rail crossing. Any minor intersections within 200 feet of the crossing will be closed to crossing traffic.
 - c. The maximum length of a gate arm will not exceed 40 feet.
 - d. The gap between the end of a lowered gate and the median barrier will be less than one foot.
 - e. The crossing must be part of a quiet zone, as defined in these specifications.
 - f. The system must be reasonably tamper and vandal proof.
 - g. General principles of the AASHTO Roadside Design Guide regarding median barrier construction will be adopted where applicable.
5. ONE WAY PAIRING OF ADJACENT STREETS: Adjacent streets would be made into one-way pairs and gates modified or relocated to completely block the approaching lanes of traffic, subject to the following conditions:
 - a. Streets to be made into one-way pairs should ideally be no more than one city block (300'-500') apart. Cross streets connecting the one-way pairs should be no more than one city block from each side of the crossings in Central Business Districts, nor more than one-quarter mile from each side of the crossings in suburban areas.
 - b. Lane capacities of both streets should be approximately the same.
 - c. Preferably, the gate arms on the approach side of the

crossings should be extended to within one foot of the left edge of pavement. The left edge of the pavement on the approach side in this configuration will include a non-mountable curb extending at least 200 feet or to a major intersection, whichever is less. Alternatively, the gate mechanisms on the far side of the crossings may be relocated to the left side of the approach lanes, and the gate arms sized to provide a maximum of one foot between the tips of the gate arms when in the lowered position.

- d. The maximum length of a gate arm will not exceed 40 feet.
- e. Two two-lane roadways one-way in the same direction may be paired with a single intervening multi-lane undivided roadway in the opposite direction provided all other conditions are met.
- f. Both crossings of a one-way pair must be part of a quiet zone, as defined in these specifications.
- g. Signing for one-way streets shall be in conformance with the MUTCD.

Implementation Notes:

The following statements reflect the desire and intent of parties to the conference with respect to application of the above specifications:

1. In regard to the full closure of highway-rail crossings, the FDOT and the FEC have expressed a willingness to discuss financial assistance for closing any highway-rail crossing impacted by this Emergency Order.
2. If a crossing is selected for nighttime closing, alternate highway traffic routes should be identified, and signs erected in accordance with the MUTCD and applicable FDOT and local standards informing pedestrians and the motoring public that the streets will be closed from 10:00 pm until 6:00 am and that alternate routes must be used.
3. Any crossing equipped with a four quadrant gate system or with gates and median barriers should also be equipped with constant warning time devices.
4. All gate arms should be equipped with strobe lights located on the centerline of each driving lane when the gates are lowered. The strobe lights will be activated when the gates begin to

lower. Florida DOT and the local jurisdictions should carefully monitor the effect of these strobe lights on vehicle drivers after the gates have been lowered.

5. Illumination (street lighting) of these highway-rail crossings is encouraged.

This amendment is effective from the date of issue of this notice.

Issued in Washington, D.C., on August 31, 1993.

[SIGNED]
Jolene M. Molitoris
Administrator