Railroads Request Relief From the I.C.C. Signal Order

Some ask more time to prepare petitions, others want relief on certain territories, and other roads request hearings

SEVERAL railroads have petitioned the Interstate Commerce Commission for relief from compliance with the signaling order issued by the Commission on June 17, which was explained on page 420 of the July issue of *Railway Signling*. In general, the order requires the railroads to install block signaling on all lines, not now so equipped, on which freight trains are operated at 50 m.p.h. or more, or passenger trains at 60 m.p.h. or more, and additional protection in the form of train stop, train control or cab signaling is required on all tracks where any train is operated at 80 m.p.h. or more. Lists of railroads and territories on which the order may be effective were given on pages 469 to 471 in the August issue of *Railway Signling*.

The railroads were allowed 60 days, i.e., June 17 to August 18, in which to make a petition for extension of time or relief from the requirements of the order. Abstracts from several of these petitions follow:

The Chicago, Burlington & Quincy made a petition in which it respectfully requests a further hearing and reconsideration of the report and order of Division 3 of the Commission in the above-entitled proceedings dated June 17, 1947, pursuant to Sec. 17(8) of the Interstate Commerce Act, and that after such further hearing an order be made exempting this respondent from the provisions of said order, and in the event the aforesaid relief is denied that said order be modified insofar as it has reference to the portions of the lines of this respondent as hereinafter set forth.

In support of said petition respondent respectfully states that the order herein, insofar as it is applicable to a portion of the lines of its railroad, is not supported by the evidence, and is based on incompetent evidence, that no additional signal devices or changes in the operation of its manual block system, other than those now being used, are necessary in the public interest; and that this respondent desires a further hearing and reconsideration of said order and requests the right to adduce additional testimony thereon to show that the lines of this respondent should be exempted from the provisions of this order. In event of a denial thereof this respondent requests relief from the requirement for automatic train stop, train control or automatic continuous cab signaling on five sections of line where some trains are operated at 80 m.p.h. or more: (a) Lincoln to Denver; (b) Ashland, Neb., to Lincoln; (c) Red Oak, Iowa, to Pacific Jct.; (d) Pacific Jct. to Council Bluffs; and (e) North LaCrosse, Wis., to St. Paul, Minn. About 682 mi. of road are involved, and if automatic train control or cab signaling is installed, the expenditure would be approximately $6,430,160, or if automatic train stops were installed, the expenditure would be $128,740.

In discussing the 480-mi. line between Lincoln and Denver, the petition stated that this territory is equipped with a centralized traffic control system, except 6.03 mi. just east of Denver which is a controlled manual block signal system. The C.T.C. system includes power operation of all siding switches where trains meet or pass. All other hand-operated main-track switches are equipped with electric switch locks to prevent unauthorized movements onto the main track. The control machine is provided with an automatic train graph to record train movements, and the track diagram of the control machine is provided with continuous track indication lights to enable the dispatcher to know at all times the location of trains.

With the centralized traffic control system that respondent has placed in service on this line of railroad it is the conservative and considered judgment of the operating officials that the safety of the public is more fully protected than with any additional system of signals or blocking as required by the aforesaid order.

The Atchison, Topeka & Santa Fe pleaded that compliance with the full requirements of the order of June 17, 1947, indicates that the Santa Fe System includes more than 6,000 mi. of track where maximum authorized speeds are 80 or more miles per hour. In the short time available the Santa Fe made an intensive study of the effect of such order. As a result of the investigation, the Santa Fe concluded that application to their lines of the full requirements of the order under the schedule prescribed therein, would place an undue burden on petitioners without corresponding benefit in increased safety of operations and would also seriously interfere with present and future plans for installation of signaling systems and other improvements affecting safety and efficiency of railroad operation. The Santa Fe attempted to work out a program which they believe will permit them to comply with the general purpose of the order of June 17, 1947, without jeopardizing too seriously the completion of other planned improvements. This program involves the following:

(a) Postponement of the work of installation required by the order of June 17, 1947, for one year to permit the following installations of centralized traffic control which have already been programmed:

Between Canyon, Tex., and Texico, N. Mex., 76.8 mi. of single track; estimated cost $1,838,500.

Between Wellington, Kan., and Waynoka, Okla., 108.5 mi. of single track; estimated cost $2,700,000.

No deferment will be requested for completion of other centralized traffic control installations which had previously been planned such as between Barstow and Mojave, Cal., and between Bakersfield and Richmond, Cal. These must now be indefinitely postponed in order to make it possible to carry out the program for installations required by the Commission's order herein.

(b) Installation of automatic train stop systems on those portions of the main passenger lines between Chicago and Los Angeles, and between Newton, Kan., and Houston, Tex., where operation of passenger trains at speeds substantially in excess of 80 m.p.h. is essential. It is planned to install the train stop devices only on passenger locomotives. No freight locomotives or motor cars operate in excess of 60 m.p.h. Preliminary studies indicate that this installation will embrace 2,230.2 mi. of track between Chicago and Los Angeles and 380.4 mi. of track between Newton and Houston and will require installation of train stop devices on 219 passenger locomotives at a total cost of approximately $2,650,000.

(c) Installation of automatic block signals on 172.1 mi. of single track so as to provide a continuous automatic block signal system between Temple and Slaton, Tex., at an estimated cost

of $1,275,000. About 39.9 mi. of this installation between Buffalo Gap and Panhandle and Santa Fe Junction, Tex., has already been programmed, with the remainder of the installation to be made as conditions permit.

(d) Reduction of speeds where conditions make this a feasible method for complying with the order.

(e) Operation of passenger trains at a maximum authorized speed of 85 m.p.m. under automatic block signal protection on the following lines:

Between Barstow and Mojave, 71.6 mi. single track. (Installation of centralized traffic control is planned for this line.)

Between Bakersfield and Stockton, 236.2 mi. single track. (Installation of centralized traffic control is planned for this line.)

Between Santa Ana and Sorrento, Cal., 73.4 mi. single track equipped with centralized traffic control.

(f) Operation of passenger trains at a maximum authorized speed of 80 m.p.h. under automatic block signal protection on portions of the main lines where such speed can be maintained with safety. Such speeds would be attained under automatic block signal protection on portions of the lines between Chicago and Los Angeles, via La Junta, between Newton and Houston, between Ottawa Jct. and Tulsa, between Mulvane, and Dalies, between La Junta and South Denver, between San Bernardino and Fullerton, and between Stockton and Richmond.

The Central of Georgia has asked the Commission to modify its order to permit the operation of passenger trains at the top speed of 70 m.p.h. on tangent track and 65 m.p.h. on curved track over its line between Ames, Ga., and Central Junction, approximately 182 mi., without installing an automatic block signal system. The C. of G. also would operate freight trains at the top speed of 50 m.p.h. on tangent track and 45 m.p.h. on curved track over the same segment. This road told the Commission that it spent $1,457,600 for special additions and betterments in 1946, including the installation of an automatic block signal system over 183 mi. of single track between Americus, Ga., and Birmingham, Ala. It said that it is now in the process of installing centralized traffic control between Macon, Ga., and Forsyth, approximately 25 mi.

The Chesapeake & Ohio requests modification of the order only to the extent necessary to permit it to continue to operate passenger trains at speeds up to 85 m.p.h. on portions of its so-called Peninsula subdivision and Cincinnati division without installing at a cost of $500,000 the devices required by the Commission's order. The C. & O. said that such an expenditure could be better applied to other safety-promotion projects.

According to the C. & O., the two divisions are protected by automatic block signals of the long-range color-light type, displaying three and four indications as required. It said that the signals are spaced at adequate stopping distances for the operation of trains at speeds up to 85 m.p.h. Where the signals are not so spaced, it added, an equivalent stopping distance is provided by two or more signals arranged to display restrictive indications in accordance with Commission rules, standards and instructions.

Noting that it has had no passenger fatalities in 32 years, the C. & O. stated that the Peninsula and Cincinnati divisions "fit perfectly the conditions contemplated by the language of the . . . Commission that 'it also may be that under other circumstances, the requirements for such additional protection should be modified.'" In the latter connection, it said that the Commission has recognized that train speeds alone do not afford an "adequate yardstick" of the protection required on specific lines of railroad.

The Chicago & North Western said it would be required to make an expenditure of approximately $16 million on those portions of its line where maximum train speeds are 60 m.p.h. or more. It asked the Commission to postpone indefinitely the effective date of its order, or, after further hearing, to permit the C. & N. W. to continue to operate its trains at present authorized maximum speeds (varying up to 100 m.p.h. for passenger trains and 50 m.p.h. for freight trains) under the existing methods of operation.

The Chicago, St. Paul, Minneapolis & Omaha, observing that the installation of Commission-prescribed signals would cost approximately $6 million, said that speeds of 80 m.p.h. are maintained predominantly by streamlined passenger equipment which has a lower center of gravity and is equipped with high-speed electric brakes. It added that in block signal territory, its train and engine service employees are trained to strictly observe signal indications as well as the restrictions contained in operating rules, timetables and train orders. According to this road, which operates its trains under timetable, train orders, permissive manual block and automatic block systems, there is no need for installation of automatic or manual block signal systems or train-control on those territories where passenger trains are operated at 80 m.p.h. or more. Carrying out such an order, it said, would impose upon it an "undue financial burden" with consequent risk of curtailment of expenditures for essential improvements.

The Chicago, Rock Island & Pacific, which said that the cost of complying with the Commission's order would be approximately $9,079,000, asserted that the Commission should modify the order to permit it to operate some of its passenger trains over certain portions of its track at 60 m.p.h. or more without installing a block signal system and so that it may continue to operate some passenger trains over certain portions of its line, protected by automatic block signals, at 80 or 90 m.p.h. without installing train-stop or train-control systems or cab signals. According to the Rock Island, 3,028 mi. of its road are now protected by automatic block signals.

The Colorado & Southern, which seeks exemption from the entire order, told the Commission that it cannot possibly fix the speed of its passenger trains below 60 m.p.h. or its freight trains below 50 m.p.h. without substantially adversely affecting its business and without worsening its poor financial position. Only 39.7 mi. of the C. & S., between Walsenburg, Colo., and Trinidad, is protected by block signals.

According to the C. & S., it has had only 7 collisions in the last 7½ years. It said that the average cost for property damage, wrecking expense and personal injuries, which might have been avoided had block signals been installed, amounted to $5,975, or less than 8 per cent of the estimated annual cost of maintaining and operating an automatic block signal system, less installation costs. The road insisted that it is financially unable to bear the expense of installing and maintaining the proective devices prescribed by the Commission.

The Great Northern requested that the order be set aside in its entirety as to this respondent, or that the Commission enter a further order in said proceeding excepting and excluding this respondent from said order of June 17, 1947, and from the operation thereof, to the extent thereinafter requested in the petition. The reasons, grounds and facts which render the installation of such automatic signal systems unnecessary and unreasonable in the case of this respondent are hereinafter set forth. The installation of any such system or systems, to the extent the same have not previously been installed on the line of this respondent, would impose an unnecessary, unjust and unreasonable financial hardship on this respondent which is unjustified, and would be unduly burdensome at this time, and to require this respondent to install such additional facilities would violate its fundamental rights in the following particulars: (1) The order of the Commission is not supported by competent evidence as to this respondent or otherwise; (2) the findings are insufficient to justify any order against this respondent; (3) the order of the Commission is arbitrary and unreasonable as to this respondent and would deprive this respondent of its property without due process of law, in violation of the Federal Constitution; (4) under the applicable provisions of the Interstate Commerce Act the Commission is without authority to enter a general order applicable to this respondent in that the Commission's authority is confined to

the entry of orders as to individual carriers based on conditions as shown by competent evidence to exist on lines of such individual carriers and as a result of separate hearings accorded to such individual carriers; and (5) any order entered as a result of such proceedings is entered under the authority of a penal statute which must be strictly construed and there is no authority in the Commission under said statute, or otherwise, to enter a general order, or any order unsupported by competent evidence, applicable to this respondent.

In concluding its petition, the Great Northern requested that the order of June 17 be vacated, suspended and set aside in its entirety as to this respondent or modified (either with or without a hearing) so as to permit the operation of respondent's passenger trains up to a maximum speed of 85 m.p.h. on the sections of respondent's line between Long Lake, Minn., and Breckenridge, 182.9 mi.; Nolan, N.D., and C. K. Switch at Minot, 189.5 mi.; and Lyons, Wash., and Canby, 25.4 mi., all as set out in the foregoing petition.

The Great Northern estimated that the cost of installing cab signal system in the lines here involved would amount to approximately $2,176,950, and the railroad said this money would have to be obtained from diverting funds from other improvements, and that a much greater return for the money can be realized in the way of safety to passengers and employes and protection of property by use of such funds for other improvements.

The Gulf, Mobile & Ohio requested exemption from the entire order, but, if the Commission, after hearing and investigation should determine that it should not be excepted from the order in its entirety, the railroad requested that that order be modified with respect to following parts of its line: E. St. Louis, Ill., to Murphysville, 90.3 mi.; Winford Junction, Ky., to Perry, Tenn., 103.1 mi.; Ruslor, Miss., to Mobile, Ala., 330.5 mi.; Iselin, Tenn., to Jackson, Miss., 302.2 mi.; Jackson, Miss., to N. Slidell, La., 151.8 mi.; and Francis, Mo., to Clark, 28 mi. Above segments are operated under the timetable and train-order system, over which authorized passenger train speed is 60 to 69 m.p.h. and freight train speed 50 m.p.h., except between Jackson and N. Slidell, between which points authorized passenger train speed is over 69 m.p.h. The G.M.&O. said that the diversion of funds to comply with I.C.C. order will increase hazards rather than promote safety.

The Illinois Central seeks Commission authority to operate certain passenger trains with its present automatic block signal system at speeds of 80 m.p.h. or more, where permitted, between Chicago and New Orleans, La., and between Gilman, Ill. and Mont. Asserting that the signal protection in those territories is adequate for safe operation at permitted speeds, the I.C. said that except for its line between Champaign, Ill., and Branch Junction, 124 mi., where automatic train-control and cab signal protection is provided, it has during the past few years replaced all semaphore type signals with automatic block signals of the color-light type. It said that the cost of installing additional protection in the territories involved would amount to approximately $2,100,000. According to the petition, only five trains are operated at speeds to come under the Commission's order.

The Kansas City Southern proposes to proceed with the installation of the following additional automatic block signal system: (1) complete installation on line of the Kansas City Southern from Leeds, Mo. (in respondent's Kansas City terminal), to McElhany, installation of approximately 125 mi. in addition to existing installations of 50.9 mi. in the territory involved; (2) make installations on line of the Kansas City Southern from DeQueen, Ark., to Shreveport, La., a distance of approximately 125 mi.; and (3) make installations on line of the Louisiana & Arkansas from Baton Rouge, La., to New Orleans, a distance of approximately 80 mi.

The Kansas City Southern now has automatic block signal installations or centralized traffic control on a total of 96.8 mi. of its line. The foregoing program, when completed, will afford signal protection on some 43 per cent of its passenger mileage. It is not felt that operating and other conditions on the lines of these respondents would justify the expense of installing automatic train control or similar devices on any portion of their lines. On other portions of their lines where respondents do not at present propose to install block signal devices, the infrequency of passenger train density is so light that respondents might properly be excepted and should be excepted from the purview of the Commission's order. Respondents respectfully request that they be permitted to reserve the right to make either formal or informal presentation of their individual situations to the Commission in the event difficulties arise in connection with the progress of their above-described program or, otherwise in connection with meeting the requirements of the Commission's order.

The Missouri Pacific and its affiliates seek an extension until February 16, 1948, within which time to file exceptions to or seek modification of the Commission's order. They estimated that compliance with the order would affect approximately 2,693 mi. of track and result in an expenditure of $9,500,000.

The Missouri Pacific states that to install signal protection required by the order to maintain present speed of passenger and freight trains over aforesaid Missouri Pacific Lines will entail an expense to the trust estates of approximately $9,500,000 for the installation of signal protection on the following segments of track:

AUTOMATIC BLOCK SIGNALS

Location	Track Miles
McGehee-Collinston	73
Paragould-Wynne	61
Paragould-Knobel	21
Wynne-Helena	58
Marianna-Wimef	43
Kinder-Lake Charles	36
Little Rock-McGehee	102
Clarksville Subdiv.	12
Nassau Jct.-Crane	95
Batesville-Diaz	28
Rich Hill-Ft. Scott	26
Ft. Scott-Wichita	159
Wichita-Geneseo	88
Gypsum-Marquette	42
Valmeyer-Danley	17
Kinder-Anchorage	98
Edmonds-Brownsville	316
Spring-Ft. Worth	273
San Antonio-Lytle	17
Total	290
Total Block Signals	1,565

AUTOMATIC TRAIN STOP OR TRAIN CONTROL OR AUTOMATIC CONTINUOUSLY CONTROLLED CAB SIGNALS

Location	Track Miles
Kirkwood-Rock Creek Jct.	378
Osawatomie-Pueblo	563
Kansas City-Gilmore Jct.	187
	1,128
Grand Total	2,693

Whether all or a substantial part of this expense can be avoided by reducing train schedules depends upon many factors, some of which are now being studied and others of which cannot be determined until petitioner is more definitely informed as to what connecting and competing carriers expect to do with respect to certain operations. Speed tests are now under way on Missouri Pacific, and additional equipment for the making of such tests is being provided, to determine the effect of the order in the event speed is reduced within the limits prescribed.

As illustrative of the problems confronting petitioner, there is now in operation between St. Louis and Denver one steamlined train daily each direction, known as "Colorado Eagle." To protect the present maximum speed of the Colorado Eagle between St. Louis and Pueblo by installing train-stop, train-control, or cab-signals, would require an expenditure estimated at from $1,400,000 to $2,900,000, depending upon the kind of protections installed; and, on the other hand, to materially reduce the speed of this train, in view of the limited time for cleaning, servicing and other handling at turn-around points, may necessitate the purchase of another set of equipment for operation of said Colorado Eagle.

The arrival and departure time of the Colorado Eagle, the Missouri River Eagle, the Sunshine Special, and other fast trains has been correlated

with the departure and arrival time of connecting lines at such points as St. Louis, Kansas City, Omaha, and Denver. The new correlated schedules must be studied to determine to what extent it is practicable to reduce the speeds or change the arrival and departure time of such trains as those referred to. Furthermore, the reduction of speed would not be a practical solution in many instances if competing lines continue their existing competitive schedules.

Petitioner is advised and believes that in some instances, as, for example, on the Joplin-White River division, between Nevada, Mo., and Crane, and between Batesville, Ark., and Diaz, the volume of traffic is comparatively light, the number of trains operated at fast schedules is so limited, and the accident rate has been so low that petitioner expects, upon further investigation, to petition the Commission for a modification of the order with reference to such lines.

The Minneapolis, St. Paul & Saulte Ste. Marie for itself and as operating agent of the **Wisconsin Central** requested that the order be vacated and set aside in its entirety, as applying to these roads, or that the Commission modify that portion of said outstanding order requiring the installation of automatic or manual block signal systems on the conditions and under the circumstances therein stated by issuing an order recognizing that respondent's present method of operating freight and passenger trains by timetable and train orders supplemented by its system of manually blocking trains is in substantial compliance with said order, and for such other and further relief as may be deemed reasonable and proper.

The Nashville, Chattanooga & St. Louis, which has spent $1,691,000 for centralized traffic control installations since 1942, has asked the Commission to exempt its single-line main track between Bruceton, Tenn., and Aulon, 138.1 mi., from that part of the order requiring the installation of automatic block signal or manual block protection over segments where passenger trains are operated at 60 m.p.h. or more and freight trains at 50 m.p.h. or more. The road said that the Bruceton-Aulon line is now operated under a timetable and train-order system, but that its volume of traffic does not justify the installation of block signals.

The Norfolk & Western requested modification of the order, to permit operation of passenger trains on certain portions of its line at a speed not exceeding 90 m.p.h., without being required to install an automatic train stop, train control or continuously-controlled cab signal system. The territories affected are between the eastern yard limits of Portsmouth, Ohio, and Ironton, 23.18 mi., and between Poe, Va., and the western limits of the Norfolk, Va., terminal, 69.85 mi. These two segments are now protected by properly-spaced position-light wayside automatic signals, operated by coded track circuits. The spacing is adequate to permit safe operation at 90 m.p.h. or more. Train movements are authorized by timetable and train orders. The estimated cost of complying with the I.C.C. order for the Poe-Norfolk and the Portsmouth-Ironton territories, would be $500,000, plus annual maintenance costs of about $150,000. The road says that such an expenditure would be unjustified, because of the favorable accident record, excellent track structure and maintenance, adequacy of the present signal system to permit high-speed operation, design of motive power and other equipment for high-speed operation and, because of the necessity of making heavy capital expenditures and incurring heavy burdensome maintenance costs to equip and maintain large numbers of locomotives that are principally employed on portions of its lines where very restricted speed is necessary, and, which are used to a limited extent over portions of the line covered by the petition.

The St. Louis-Southwestern seeks authority to maintain speeds at 60 m.p.h. for passenger trains and 50 m.p.h. for freight trains over that portion of its line between Dexter Junction, Ark., and Pine Bluff Shops, 266.3 mi., without installing an automatic block signal or manual block system. The road said it is willing to install automatic block signals for 35 curves on that segment which are not presently protected. Cost of such installation, it said, would total $268,000, while the installation of similar devices to protect the entire line would amount to over $1 million. The latter expenditure, it contended, would be unwarranted because of light train density and 94.84 per cent of tangent track.

The Southern Pacific, which operates its "City of San Francisco" in excess of 80 m.p.h. in the territory between Oakland, Cal., and Ogden, Utah, also contends that cab signals or train-stop or control protection should be installed only on locomotives used to haul trains at authorized speeds of 80 m.p.h. or more. It said that the Oakland-Ogden segment is protected by an automatic block signal system.

The Texas & Pacific seeks relief from that portion of the order requiring the installation of an automatic block signal system or manual block system over lines where passenger trains are operated at 60 m.p.h. or more and freight trains at 50 m.p.h. or more. The order affects 112.5 mi. of line between Texmo Junction, La., and Lucas, where the road estimates it would cost $791,000 to install an automatic block signal system.

The T. & P. also objects to installing train-stop or train-control systems or cab signals on those parts of its line, now protected by an automatic block signal system, where it operates passenger trains at speeds of 80 m.p.h. or more. Estimating that such a project would require an expenditure from $1,268,400 to $2,455,500, the T. & P. said that if it is required to install automatic cab signals, such installations should be made solely within the cabs of those locomotives to be operated at a speed in excess of 79 m.p.h.

The Union Pacific seeks modification of the order to permit it to operate certain streamlined passenger trains up to and including 90 m.p.h. between Julesburg, Colo., and Denver, 197 mi.; Pocatello, Idaho, and Huntington, Ore., 336 mi.; and Ogden, Utah, and Los Angeles, Cal., 821 mi., all of which are protected by automatic block signals. The latter segment includes 101 mi. of track owned by the Atchison, Topeka & Santa Fe. The U. P. said that the cost of installing automatic cab signal devices on those lines would amount to approximately $3,193,000.

The Seaboard Air Line contends that cab signal devices should be installed only on those locomotives which are operated at speeds of 80 m.p.h. or more. At the same time, it said the Commission should modify its June 17 order so that it will supersede in so far as completion dates are concerned, an order in which the Commission, as reported in *Railway Signaling,* June, 1946, page 423, required the installation of a block signal system on certain S. A. L. lines. The road asserted that the present order is "more stringent" with respect to speeds and "is intended to supersede the completion schedules [which extend to April 1, 1950] prescribed by the earlier order."

The Wabash, stating that at present it has no automatic-train stop or train-control system or automatic continuously controlled cab signal devices, has requested the Commission to modify its order so as to permit the operation of one Diesel-electric powered passenger train in excess of 80 m.p.h. In lieu of such immediate modification, the Wabash has asked the Commission that it be given until December 31 to conduct a study in order to ascertain comparative costs and the effectiveness of installations required by the order. The Wabash said that, except for one Diesel-electric powered passenger train, for which the maximum permissible speed is 90 m.p.h., the present highest permissible speed for passenger and freight trains is 80 m.p.h. and 50 m.p.h., respectively. In addition to noting that the density of both passenger and freight operations on its lines is relatively light, the Wabash observed that it is unable to state at this time what the cost would be for the installation by it of train-stop or train-control systems or cab signals as prescribed by the Commission's order.