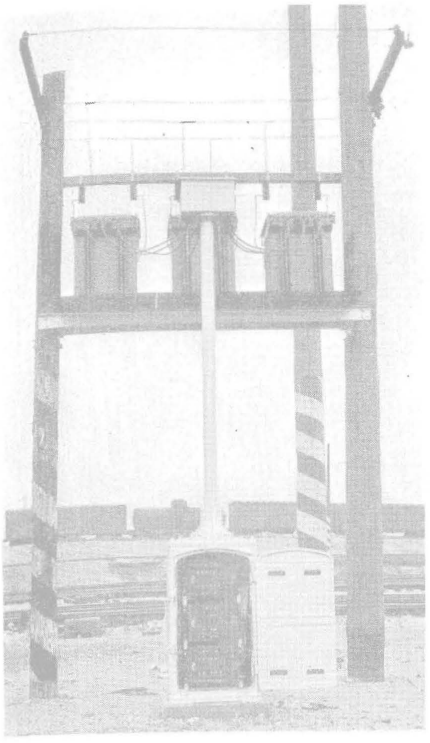

Three 75 K.V.A. transformers with circuit breaker units housed in instrument case

line and three different transformer locations established in each yard feed grounded-neutral 220-440-volt, 60-cycle power distribution systems provided for the various groups of switches. A Union Switch & Signal Company cast-iron instrument case location was established adjacent to each transformer layout to house Westinghouse S999005 single-pole, 35-amp., no-fuse "De-ion" circuit-breaker panels.

In the east yard, near the hump, a 25-k.v.a. pole-mounted Westinghouse transformer supplies power for the four pair of scissors-crossover heaters. Another 25-k.v.a. pole-mounted transformer location a little further east feeds five pair of heating units applied on the group lead track switches. Thirty pairs of heaters on the body track switches are fed from a bank of three 75-k.v.a. transformers mounted on a platform of H-pole construction. A similar set-up is provided in the west yard except that the middle transformer location, at the group lead track switches, feeds four rather than five pair of heating units. The neutral of the 220-440-volt line was grounded to the yard 3-in. air line at each transformer secondary. Two 220-volt heater units, in parallel, are independently controlled by means of a "De-ion" breaker. Each breaker is operated manually by means of a toggel switch to either the "on" or "off" position. In case the breaker is tripped by an overload, the toggle handle assumes a center position and must be restored to the "off" position before it can be placed in the "on" position to restore the circuit.

At the 25-k.v.a. transformer locations, the leads between the transformer and the instrument case consist of two No. 3 rubber-covered for the "hot" wires, and one No. 4 rubber-covered wire for the neutral, run in 1½-in. conduit to the top of the instrument case. At the 75-k.v.a. transformer locations, the "hot" wires between the transformer and instrument case are No. 3/0 rubber-covered, while the neutral is a No. 0 rubber-covered; these wires are run open into a sheet-iron box supported on top of a 4-in. pipe post mounted on the instrument case. The neutral connection to the outlets at the switches at all locations is No. 6 wire. The "hot" wires between the instrument cases and the heater outlets are single-conductor No. 8 solid Okosheath buried in sand. This cable enters the instrument cases through the bottom.

This installation was designed by F. E. Beutler, assistant engineer, in charge of signaling on the Belt Railway, and was installed under the direction of C. B. Lomas, chief electrician.

Signal construction gang at Clearing yard

Illinois Central Application Denied

THE Interstate Commerce Commission, Division 3, has denied the application of the Illinois Central and the Alton for authority to discontinue a mechanical interlocking at Mason City, Ill., and to substitute therefor a crossing gate with color-light signals. The commission's report, issued after hearings were held and briefs submitted, reads in part as follows:

"The existing interlocking 'home' signals, located several hundred feet from the crossing, provide a definite stopping point for an approaching train, and those signals, together with the derails, prevent a train from entering upon the crossing when the route is set up for a conflicting movement, or if the crossing is occupied by a train on the other track. With the proposed arrangement, one of the most important signals involved is located on the gate itself, and, therefore, is invisible from a train approaching from the west or south if the crossing is occupied by a train on the other line. In the absence of derails, such approaching train could foul or proceed upon the crossing without passing a stop signal, even though the gate were set for conflicting movement or the crossing already occupied. The proposed plan makes no provision for a signal or any means to indicate to an approaching northbound engineman on the Alton track the point at which his train must be brought to a stop.

It is proposed as a part of the new arrangement that bulletin instructions with respect to the new operation will be issued to Alton train and enginemen operating on this division. However, analysis of the testimony on this subject clearly indicates that the proposed rules would be no more restrictive than the present rules so far as approach to the crossing is concerned, and would not be a satisfactory substitute for the present signals and derails. We find that the proposed arrangement is contrary to standard railroad signal practice and decreases rather than promotes safety of operation.

An order will be entered denying the present petition without prejudice to the right of petitioners to submit a modified proposal which, in accordance with standard signal practice, will provide a stop indication before reaching the crossing for a train approaching it from either direction on the Alton when the way is not clear for that train to proceed over the crossing."