THE GENERAL ASSEMBLY OF PENNSYLVANIA

HOUSE BILL

No. 1223

Session of 1987

INTRODUCED BY DeLUCA, KASUNIC, ITKIN, PHILLIPS, VEON, FOX,
DOMBROWSKI, TIGUE, TRELLO, MELIO, HALUSKA, McHALE,
D. W. SNYDER, PETRARCA, MICHLOVIC, E. Z. TAYLOR, RICHARDSON,
BELARDI AND DALEY, APRIL 29, 1987

REFERRED TO COMMITTEE ON CONSUMER AFFAIRS, APRIL 29, 1987

AN ACT

- 1 Amending Title 66 (Public Utilities) of the Pennsylvania 2 Consolidated Statutes, providing for inspection of highway
- 3 crossing safety devices by railroads or carriers.
- 4 The General Assembly of the Commonwealth of Pennsylvania
- 5 hereby enacts as follows:
- 6 Section 1. Title 66 of the Pennsylvania Consolidated
- 7 Statutes is amended by adding a section to read:
- 8 § 2707. Inspection of highway crossing safety devices.
- 9 (a) General rule. -- Railroads or carriers shall be required
- 10 to inspect highway crossing safety devices as required by this
- 11 <u>section</u>.
- 12 (b) Monthly inspection. -- At least once a month, the
- 13 railroads or carriers shall:
- 14 (1) Inspect the relays to ascertain proper condition.
- 15 (2) Open the alternating current power feed to place the
- installation on standby battery.
- 17 (3) Operate the crossing protection and determine that

- there are no burned out lamps and that the auxiliary devices
- 2 such as crossing bells and no turn and second train signs are
- 3 <u>operating properly.</u>
- 4 (4) Measure the voltage of the main batteries at the
- 5 <u>crossing while the charge is off and batteries are supplying</u>
- 6 <u>the lighting load and record the values.</u>
- 7 (5) Wipe dust off the flasher roundels using a soft
- 8 cloth and, if necessary, water and determine as far as
- 9 <u>practicable that the adjustment of focus has not been</u>
- 10 <u>disturbed</u>.
- 11 (6) Observe that no obstruction interferes with the gate
- operation or obscures views of the lamps.
- 13 (7) Restore the alternating current power and protection
- to normal operation and determine that all rectifiers are
- 15 <u>energized by alternating current. If a definite hum is not</u>
- detected at each rectifier, check the actual charging current
- to insure that batteries are being charged.
- 18 (8) Measure the voltage of the main batteries and track
- 19 cells while the cells are on charge and record the values.
- 20 Values must be in accord with the values shown on the
- 21 manufacturer's instructions for the type of cell, or the
- 22 rectifiers should be adjusted for those values.
- 23 (9) Inspect the main and track batteries at the highway
- 24 <u>location for the height of the electrolyte, tightness of</u>
- 25 <u>connections and cleanliness.</u>
- 26 (c) Ouarterly inspection. -- At least once every three months,
- 27 the railroads or carriers shall:
- 28 (1) Check the actual charging current, not the rectifier
- 29 <u>output, of all batteries at highway and approach locations</u>
- 30 and record the information on the battery record card.

- 1 Charging currents and voltage of cells under charge should be
- 2 adjusted in accordance with the manufacturer's instructions
- for the particular battery and temperature. If it is
- 4 necessary to add water, this shall be recorded on the battery
- 5 record card.
- 6 (2) Inspect all bond and fouling wires within the
- 7 <u>approaches to the crossing.</u>
- 8 (d) Annual inspection. -- At least annually, the railroads or
- 9 carriers shall:
- 10 (1) Check the visibility and focus of signals and check
- the visibility and condition of signs, including railroad
- 12 <u>advance warning signs on the highway and crossing signs or</u>
- 13 <u>their equivalent.</u>
- 14 (2) Check the electric gates to ascertain that when the
- 15 gates start to assume the horizontal position flashing lights
- start to operate. Check the gates to see that they reach the
- 17 full horizontal position per the manufacturer's instructions.
- 18 (3) Check the electric gates to see that the gates raise
- 19 to full upright position in not less than the time required
- 20 per the manufacturer's instructions.
- 21 (4) Check the number of flashes per minute and adjust
- 22 per the manufacturer's instructions.
- 23 (5) Check the flashing contacts by observing that at
- 24 <u>least one lamp on each crossarm is burning when the flasher</u>
- 25 is at rest.
- 26 (6) Check the voltage at lamps after the alternating
- 27 <u>current power has been off and the flashers have operated for</u>
- 28 <u>12 minutes. Gate arm lamp voltages should be checked at the</u>
- junction box or gate mechanism case.
- 30 (7) Take the hydrometer readings on all nickel iron and

- 1 <u>nickel cadmium cells to ascertain that the specific gravity</u>
- is in accordance with the manufacturer's specifications.
- 3 <u>Values and temperature of the electrolyte shall be recorded</u>
- 4 <u>on the battery record card.</u>
- 5 (8) Take the specific gravity readings of the lead acid
- 6 type batteries at the main and approach locations in
- 7 <u>accordance with the manufacturer's instructions before the</u>
- 8 <u>addition of water.</u>
- 9 <u>(9) Where the circuit controllers are in service on</u>
- 10 <u>outlying switches to cut out operating of crossing</u>
- 11 protection, test each circuit controller with proper
- 12 obstruction between the switch point and stock rail when the
- switch is reversed and observe that the relay so controlled
- 14 functions as intended.
- 15 (10) Check the gate arm torque adjustment in accordance
- with the manufacturer's instruction.
- 17 (11) Check the time delay of starting circuits.
- 18 (12) Check the time delay of cut-out circuits.
- 19 (13) Where protection is automatic using directional
- 20 <u>stick relays, check the operation for each track in each</u>
- 21 direction and, after the tests are completed, observe that
- 22 the directional stick relays are deenergized.
- 23 (14) Test the grade crossing predictors, motion sensors
- 24 and overlay track circuits in accordance with the
- 25 <u>manufacturer's instructions.</u>
- 26 (e) Records.--All inspections, tests and any corrective
- 27 action taken shall be recorded. A set of blueprints shall be
- 28 <u>kept at every highway crossing protection location. They shall</u>
- 29 be kept up to date and pertain to that specific location.
- 30 Section 2. The Pennsylvania Public Utility Commission shall

- 1 adopt regulations within 90 days of the effective date of this
- 2 act in order to implement this act.
- Section 3. This act shall take effect in 60 days. 3