THE WASHINGTON TERMINAL COMPANY

SPECIAL INSTRUCTIONS ELECTRIC OPERATION

FOR THE GOVERNMENT OF EMPLOYEES

DECEMBER 5, 1934
THE WASHINGTON TERMINAL COMPANY

SPECIAL INSTRUCTIONS
ELECTRIC OPERATION

FOR THE GOVERNMENT
OF EMPLOYEES

DECEMBER 5, 1934
NOTICE

Instructions herein contained are for the government of Employes whose duties are prescribed by them. Employes affected must have a copy of these instructions with them while on duty, be conversant with and obey the same. If any doubt as to their meaning, employes must apply to proper authority for instructions.

B. R. Tolson,
Manager.

December 5th, 1934.
ELECTRICAL OPERATION

1. Electrified tracks: The following tracks will be equipped for electric operation.

NORTH OF NEW YORK AVENUE:

"YA" lead and track No. 1—"A" yard for 212 feet north of switch point "YA".

"AK" lead north to switch connection "C" yard, tracks 1 to 6—"C" Yard.

"A" Yard—south end of tracks for distance shown from switch connection:

<table>
<thead>
<tr>
<th>Track</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>330 feet</td>
</tr>
<tr>
<td>3</td>
<td>220</td>
</tr>
<tr>
<td>4</td>
<td>220</td>
</tr>
<tr>
<td>5</td>
<td>256</td>
</tr>
<tr>
<td>6</td>
<td>360</td>
</tr>
<tr>
<td>7</td>
<td>250</td>
</tr>
</tbody>
</table>

Three crossovers—Coach Yard—Two at south end—one connecting leads "YF" and "AK" and one connecting leads "AK" and "YF";—North end—one connecting leads "YF" and "AK".

"YF" lead north to switch connection
Track No. 10—"E" Yard.
"C" Yard—South end of tracks 1 to 6, inclusive from "AK" lead and track 7 from "YF" lead, for distance shown from switch connection:

Track 1—315 feet
" 2—335 "
" 3—180 "
" 4—190 "
" 5—310 "
" 6—275 "
" 7—510 "

"E" Yard—south end of tracks for distance shown from switch connection:

Track 3—350 feet
" 4—225 "
" 5—160 "
" 6—250 "
" 7—180 "
" 8—150 "
" 9—150 "
" 10—230 "

"YG" lead, north to switch connection track No. 9—"G" Yard.

"G" Yard—south end of tracks for distance shown from switch connection:
Track 9—160 feet
  " 10—280 "
  " 11—160 "
  " 12—140 "
  " 13—225 "
  " 14—300 "
  " 15—175 "

"H" Yard—ladder track north to switch connection track 5—"H" yard and south end of tracks for distance shown from switch connection:

  Track 5—310 feet
  "  6—225 "
  "  7—425 "
  " 10—215 "

Tracks 8 and 9—"H" yard—each for entire length.

Connection from "H" Yard ladder, north end—northward to a point approximately Eight Hundred Feet (800') north of Wye Bridge.

Engine tracks 51 and 52, with connecting crossover at Wye Bridge.

Crossover north of Wye Bridge, between track 51 and connection from "H" Yard Ladder.
Ivy City—South engine storage yard—tracks 1 and 2 for entire length with connecting crossover and ladder track to east turntable.

Coal storage yard—track No. 8 through east engine inspection pit to east turntable and east engine house, track 25.

South of New York Avenue:

“C” Interlocking:—Tracks 37 to 42, both inclusive. Crossovers Nos. 91, 93, 97 and crossover No. 81, connecting leads “JY” and “YG”—south end.

“K” Interlocking:—Between Signal Bridges “K” and “H”—tracks 37 to 42, both inclusive.

South of Bridge “H”—tracks, switches and crossovers Points “B” to “H”, both inclusive, Signal Bridge “H” to Station tracks Nos. 12 to 32, both inclusive; boundary on the West includes slip switches Nos. 143, 131, 127, 121 and single switch 141 and Boundary on the East includes slip switches 102, 101, 67 and 12.

Union Station:—Upper level—tracks Nos. 12 to 20, both inclusive.

Lower level and First Street Tunnel—tracks 21 to 29, both inclusive, Southward,
embracing leads, switches and crossovers to a point in each the Southward and Northward Tubes, First Street Tunnel, approximately 480 feet south of North Portal.

North end, Station tracks 30, 31 and 32, for a distance shown from switch connection:

Track 30—375 feet
   " 31—230 "
   " 32—230 "

2. Enginemen of steam engines must shut off throttle and not use blower while passing under men working the catenary system.

3. Employes are warned that it is dangerous to approach within three feet of catenary system wires or signal power wires.

4. No unqualified employe shall do any work near overhead wires or apparatus unless a qualified employe is assigned to protect him against personal injuries.

5. Employes are cautioned that they must not be on top of box cars, engines or other high equipment when movements are being made from sidings, yards or other tracks which are not electrified to tracks which are electrified.
6. When an overhead wire failure occurs that may obstruct adjoining tracks, all tracks must be protected immediately.

7. "Special Instructions for Employees in Electrified Territory" are issued in book form No. C. T. 290. Employees working in electrified territory must be conversant with these instructions.

8. Yardmasters and Conductors will be responsible for knowing that Trainmen and Caretakers of shipments and equipment understand these instructions.

9. Enginemen will be responsible for knowing that Firemen understand and comply with these instructions.

10. When newly employed or inexperienced Trainmen are working on the crew, the older members must call the attention of the new men to the possible danger.

11. "Alternating Current Multiple-Unit Car Equipment Instructions" are issued in book form No. 66-C. Employees whose duties are prescribed in these instructions must be conversant with them.

12. The master controller handle must in no case be blocked, fastened or otherwise tampered with in such a manner as to pre-
vent the spring tension returning it to the Emergency Position if the engineman's hand is removed.

13. When necessary for engineman to leave his compartment due to trouble while on the road, the brake valve and master controller handles must be removed and kept in his possession.

14. When two or more multiple-unit trains have been stopped on same track a short distance apart, each engineman should not attempt to start his train until 30 seconds after train ahead has started and then should accelerate slowly by notching up the controller.

15. If train does not start, accelerates slowly or unevenly, examine the control cut-out plug, if properly inserted, the overload relays should be reset. If this does not relieve the condition the train crew should examine the control cut-out switches on each car closing any found open without being tagged, reporting same to the Engineman.

16. In the event of damaged pantograph the engineman, assisted by train crew, must make prompt effort to free panto-
graph from wire so that train can proceed if possible. Pantographs damaged in any part should have grounding switch closed and should be tied down as close to the car roof as possible and the loose ends of pantograph tubing should be tied fast.

17. Multiple-Unit trains must not assist in starting passenger trains except that the multiple-unit train may move against the rear of train, making a full service application of brakes, and hold rear end of train while slack is taken by engine. Power must not be applied to multiple-unit train to assist in taking slack or in moving the train. The cutting lever at head end of multiple unit train must be raised so that train can move away if engine is able to start train.

Multiple unit trains must render no assistance whatever in starting freight trains.

18. INSTRUCTIONS FOR HEATING MULTIPLE UNIT CARS:

PRR Power Director will obtain from Train Clerk temperature reading at 3:00, 7:00 and 11:00 A.M. also at 3:00, 7:00 and 11:00 P.M., daily and more frequently if temperature changes make it necessary; Train Clerks will issue instructions to all concerned as to information to be dis-
played on heat boards as directed by Power Director, in accordance with the following:

Temperature above 55 degrees

—No. 0 heat board.

“ between 55 and 30 degrees
—No. 1 heat board.

“ between 30 and 21 degrees
—No. 2 heat board.

“ below 21 degrees
—No. 3 heat board.

Car Inspectors must heat the cars prior to their departure. It has been found that a No. 3 heat applied to a cold car will bring the temperature in cars to 65 degrees in the elapsed time, as shown below, for the various outside temperatures:

Outside temperature          Time:

0 to 10 degrees             2 hours 10 minutes
10 to 20                   “           1 hour 50 minutes
20 to 30                   “           1 hour 25 minutes
30 to 40                   “           50 minutes
40 to 50                   “           25 minutes
55                        “           10 minutes

Heat boards will be displayed during the heating Season at the following locations:
Station Master's Office—
Car Foreman's Office—Eckington Coach Yard.

Trainmen on registering will observe the heat board posted to ascertain what heat board is in effect, after which they will check the heat switches of cars in their train and know that they are heated for the proper temperature.

Car doors must be kept closed except when passengers are loading or unloading.

The signal whistle magnet valve snap switches on Multiple Unit Cars must be turned off at all locations on trains of four cars or less, except the front or operating end, and the rear end. On trains of five or more cars the snap switch must not be turned off at the end of car from which trainmen regularly give communicating signals.

19. Multiple Unit cars with motors inoperative shall be placed in trains at Terminals according to the following schedule, when necessary.

*Single Units.*

<table>
<thead>
<tr>
<th>Total number of cars in train</th>
<th>Number of inoperative cars</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 4 5 6 7 8 9 10</td>
<td>0 0 1 1 1 1 2 2</td>
</tr>
</tbody>
</table>
Double and Single Units.

4 double units ........1 double unit inoperative
3 double and 1 single unit. 1 single unit inoperative
2 double and 2 single units. 1 single unit inoperative
3 double and 2 single units 1 single unit inoperative

This practice is permissible only to move inoperative cars to car shops for repairs and, otherwise, only in extreme cases of deranged car supply to avoid long delays. This does not apply to cars becoming inoperative while on the road, which will be handled as directed by the Manager.

20. The emergency train brake attached to the master controller of electric engines must be in service on the end from which the engine is being operated, with the following exceptions only:

1: When making shifting movements.
2: During backward movement, when Engineman is required to look backward out of Cab Window.
3: When Enginemen are being instructed in the operation of the electric engines, during which time a qualified Engineman is standing by acting as instructor.
21. When an electric engine or an “MU” car becomes derailed, pantograph must be lowered immediately.

When there is a possibility that the contact between electric engines or “MU” cars, and the electric return circuit, as represented by the rail, may be broken, pantographs must be lowered immediately.

No pantograph shall be raised until it has been definitely established that the electric engine or “MU” car is again making proper contact with the rail return circuit.

22. On cars laying over, pantographs must be kept down except when required to be against wire to make necessary tests, heat cars or to prepare them for movement.

Engineman must turn out headlights before leaving equipment or when headlights are not required. Trainmen must turn out interior lights when not required.


1040 tons or less—no notching restrictions.
1041 to 1100 tons—Controller handle must not be moved above 18th notch.

1101 to 1200 tons—controller handle must not be moved above 17th notch.

1201 to 1250 tons—Controller handle must not be moved above 16th notch.

Trains will be double headed when tonnage exceeds 1250.

In computing tonnage, the weight of each car as given in the following table will be used.

90 tons: diner.
85 tons: Pullman, Business.
65 tons: P-70, R-50, R-50A, R-60, R-60-A, Railway Express.

When a car of classification not shown is in a train, the stencil weight must be used, with proper adjustment for the loading.

Conductors must compute the weight of train and advise Engineman.
The operation of the engine must be in accordance with the above controller notch restrictions and "Engineman’s Instruction Book, Electric Locomotive—Type P-52."