

# NORTHERN PACIFIC TERMINAL COMPANY

## RULES AND REGULATIONS

### Governing Movement of Trains Through Interlocking Plant at South End of Passenger and Freight Yards

Effective on or Before May 1st, 1915, Exact Date to be Fixed by Bulletin.

Superseding "Semaphore Signals of Jan. 19, 1913."

### INTERLOCKING DEFINITIONS.

**Interlocking**—An arrangement of switch, lock and signal appliances so interconnected that their movement must succeed each other in a predetermined order.

**Interlocking Plant**—An assemblage of switch, lock and signal appliances, interlocked.

**Interlocking Station**—A place from which an interlocking plant is operated.

**Interlocking Signals**—The fixed signals of an interlocking plant.

**Home Signal**—A fixed signal at the point at which trains are required to stop when the route is not clear.

**Dwarf Signal**—A low fixed signal.

### GENERAL DESCRIPTION AND MEANING OF SIGNALS.

1. Fixed signals will be of one prescribed form; the semaphore, which consists of a post with an arm projecting outward to the right as viewed from an approaching train.

2. Indications for day time are given by two positions, and in addition during darkness by Three lights of prescribed color.

3. Fixed signals will be of one kind: the Home Signal which indicates either "Proceed" or "Stop."

4. When the arm is extended horizontally, or in addition a red light is displayed, it indicates "Stop." When the arm is inclined downward at an angle of 60 degrees, or in addition a green light is displayed, it indicates "Proceed."

6. Arms will not be put on semaphore signals until they are in service. After being so placed they must be regarded as in service whether bulletin has been issued or not.

### DESCRIPTION OF LEADS TO FREIGHT YARD.

Approaching from the south the Terminal Co. Freight Yard is entered by two leads: tracks 15 to 20, including the Roundhouse tracks, will be known as the "20 lead." Tracks 21 to 24 will be known as the "24 lead." (See map on back of sheet.)

### WHISTLE SIGNALS.

**Note.**—When the Home Signal is at "Stop" the following whistle signals will be used covering movement through the interlocking plant: When the Home Signal is at "Proceed" the whistle must not be sounded.

The signals prescribed are illustrated by "o" for short sounds; "—" for longer sounds. Whistle signals should be graduated in sound and duration according to the distance from the interlocking station, and never louder than absolutely necessary.

### FROM EAST PORTLAND

To Passenger Yard, one long (thus —).  
To 20 lead, 3 short and two long (thus o o o —).  
To 24 lead, 4 short and one long (thus ( o o o o —).  
To S. P. & S., two short and one long (thus o o —).

### TOWARDS EAST PORTLAND

For Albina, one long and one short (thus — o).  
For Troutdale, two long (thus — —).  
For S. P. Main Line, one short and one long (thus o —).  
For S. P. Yard, one short, one long, and one short (thus o — o).  
For East Second Street, two short and one long (thus o o —).

### SWITCHING MOVEMENTS

From 20 lead—  
To 24 lead, one long and four short (thus — o o o o).  
To passenger yard, one short and two long (thus o — —).  
From 24 lead—  
To 20 lead, two long and three short (thus — — o o o).  
To Passenger Yard, one short and two long (thus o — —).

From Passenger Yard—  
To 24 lead, four short and one long (thus o o o o —).  
To 20 lead, three short and two long (thus o o o — —).  
When conditions are favorable use hand or lantern signals for route desired, omitting whistle signals.

### ELECTRIC TRAINS

OPERATING BETWEEN DEPOT TRACKS 1 AND 2—FOURTH STREET AND ELECTRIC CAR YARD

From Fourth Street—  
To Depot, one short and two long (thus o — —).  
To Yard, two short and one long (thus o o —).

From Depot—  
To Fourth Street, one short and two long (thus o — —).  
To Yard, two long (thus — —).

From Yard—  
To Depot track 1, one long (thus —).  
To Depot track 2, two long (thus — —).

To Fourth Street, two long and one short (thus — — o).  
Around the Wye—  
From any direction, four short (thus o o o o).

For steam switch engines working on Fourth Street, none. Use following hand and lantern signals—  
To Fourth Street, 4 "car" signs.  
To Hazlewood, 2 "car" signs.

### RULES.

602. Interlocking signals, unless otherwise provided, do not affect the movements of trains under the time-table or train rules; nor dispense with the use or the observance of other signals whenever they may be required.

### Signalmen.

611. The normal indication of Home Signal is "Stop."

612. Levers, or other operating appliances, must be used only by those charged with the duty and as directed by the rules.

613. Signal levers must be kept in the position giving the normal indication, except when signals are to be cleared for an immediate train or engine movement.

614. When the route is clear the signals must be cleared sufficiently in advance of approaching trains to avoid delay.

615. Signals must be restored so as to give the normal indication as soon as the train for which they are cleared has passed the home signal limits of the interlocking plant, except that where electric locking is in use, signals will be restored to normal indication as soon as rear end of train has passed them.

616. If necessary to change any route for which the signals have been cleared for an approaching train or engine, switches must not be changed or signals cleared for any conflicting route until the train or engine, for which the signals were first cleared, has stopped.

617. A switch or facing point lock must not be moved when any portion of a train or an engine is standing on, or closely approaching, the switch or detector bar.

618. Levers must be operated carefully and with a uniform movement. If any irregularity, indicating disarranged connections, is detected in their working, the signals signals must be restored so as to give the normal indication and the connections examined.

619. During cold weather the levers must be moved as often as may be necessary to keep connections from freezing.

620. If a signal fails to work properly its operation must be discontinued and the signal secured so as to give the normal indication until repaired.

621. Signalmen must observe, as far as practicable, whether the indication of the signals corresponds with the position of the levers.

622. Signalmen must not make nor permit any unauthorized alterations or additions to the plant.

623. If there is a derailment or if a switch is run through or if any damage occurs to the track or interlocking plant, the signals must be restored so as to give the normal indication, and no train or switching movement permitted until all parts of the interlocking plant and track liable to consequent injury have been examined and are known to be in a safe condition.

624. If necessary to disconnect a switch from the interlocking apparatus the switch must be securely fastened.

625. During storms or drifting snow special care must be used in operating switches. If the force whose duty it is to keep the switches clear is not on hand promptly when required, the fact must be reported to the Superintendent.

626. If any electrical or mechanical appliance fails to work properly the Superintendent and Signal Supervisor must be notified and only duly authorized persons permitted to make repairs.

627. When switches or signals are undergoing repairs signals must not be given for any movements which may be affected by such repairs, until it has been ascertained from the repairmen that the switches are properly set for such movements.

628. Signalmen must observe all passing trains and note whether they are intact; should there be any indication of conditions endangering the train, or any other train, the signalman must take such measures for the protection of trains as may be practicable.

629. If a signalman has information that an approaching train has parted, he must, if possible, stop trains or engines on conflicting routes, clear the routes for the parted train, and give the "Train-parted" signal to the engineman.

630. Signalmen must have the proper appliances for hand signaling ready for immediate use. Hand signals must not be used when the proper indication can be displayed by the fixed signals. When hand signals are necessary they must be given from such a point and in such a way that there can be no misunderstanding on the part of the enginemen or trainmen as to the signals, or as to the train or engine for which they are given.

In giving hand signals for a train to move through interlocking limits against fixed signals, the signalman must be on the ground and use a yellow flag by day, and a yellow light by night.

631. If necessary to discontinue the use of any fixed signal, hand signals must be used and the Superintendent and Signal Supervisor notified.

632. Signalmen will be held responsible for the care of the interlocking station, lamps and supplies, and of the interlocking plant, unless provided for otherwise.

633. Lights in interlocking stations must be so placed that they cannot be seen from approaching trains.

634. Lights must be used upon all fixed signals from sunset to sunrise, and whenever the signal indications cannot be clearly seen without them.

635. If a train or engine over-runs a Stop-signal, the fact, with the number of train or engine, must be reported to the Superintendent.

636. Only those whose duties require it shall be permitted in the interlocking station.

637. At all interlockings where there is a signalman on duty a signal must be given for each train movement made.

638. At interlocking plants where there is a station signal or block signal operated by the signalman, such signals must not be cleared until after the interlocking signals governing the same route have first been cleared.

639. Signals may be taken away from a train at any time, if anything is discovered that might endanger the safety of the train, and every effort must be made to avoid accident.

640. When it is safe to do so, switches and signals must be operated on the request of sectionmen or inspectors.

### Enginemen and Trainmen.

661. Trains or engines must be run to, but not beyond, a signal indicating "stop."

662. If a "proceed" signal, after being accepted, is changed to a "stop" signal before it is reached, the stop must be made at once. Such occurrences must be reported to the Superintendent.

663. Enginemen and trainmen must not accept a "proceed" signal as against fixed signals until they are fully informed of the situation and know that they are protected. When hand signals are given as above for trains to pass fixed signals at STOP, in cases where such signals govern the movement of trains over railroad crossings and drawbridges, the conductor or person in charge of engine or train must send a man ahead to such crossings or drawbridges before passing of same with his train. Where fixed signals are in operation trainmen must not give "proceed" signal against them.

664. The enginemen of a train which has parted must sound the whistle signal for "Train-parted" on approaching an interlocking station.

665. An engineman receiving a "Train-parted" signal from a signalman must answer by the whistle signal for "Train-parted."

666. When a parted train has been re-coupled the signalman must be notified.

667. Sand must not be used over movable parts of an interlocking plant.

668. Conductors must report to the Superintendent any unusual detention at interlocking plants.

669. No train or engine must act on a signal given for a preceding train, nor, having passed over a route in one direction must it return over the same route without receiving the proper signal to do so.

670. Flying switches must not be made within the limits of an interlocking plant.

671. An engineman receiving a hand signal, as per Rule 663, must understand that such signal is good only through the interlocking limits and does not extend through the automatic block.

672. All enginemen and trainmen must obey promptly the signals and orders of signalmen within interlocking limits.

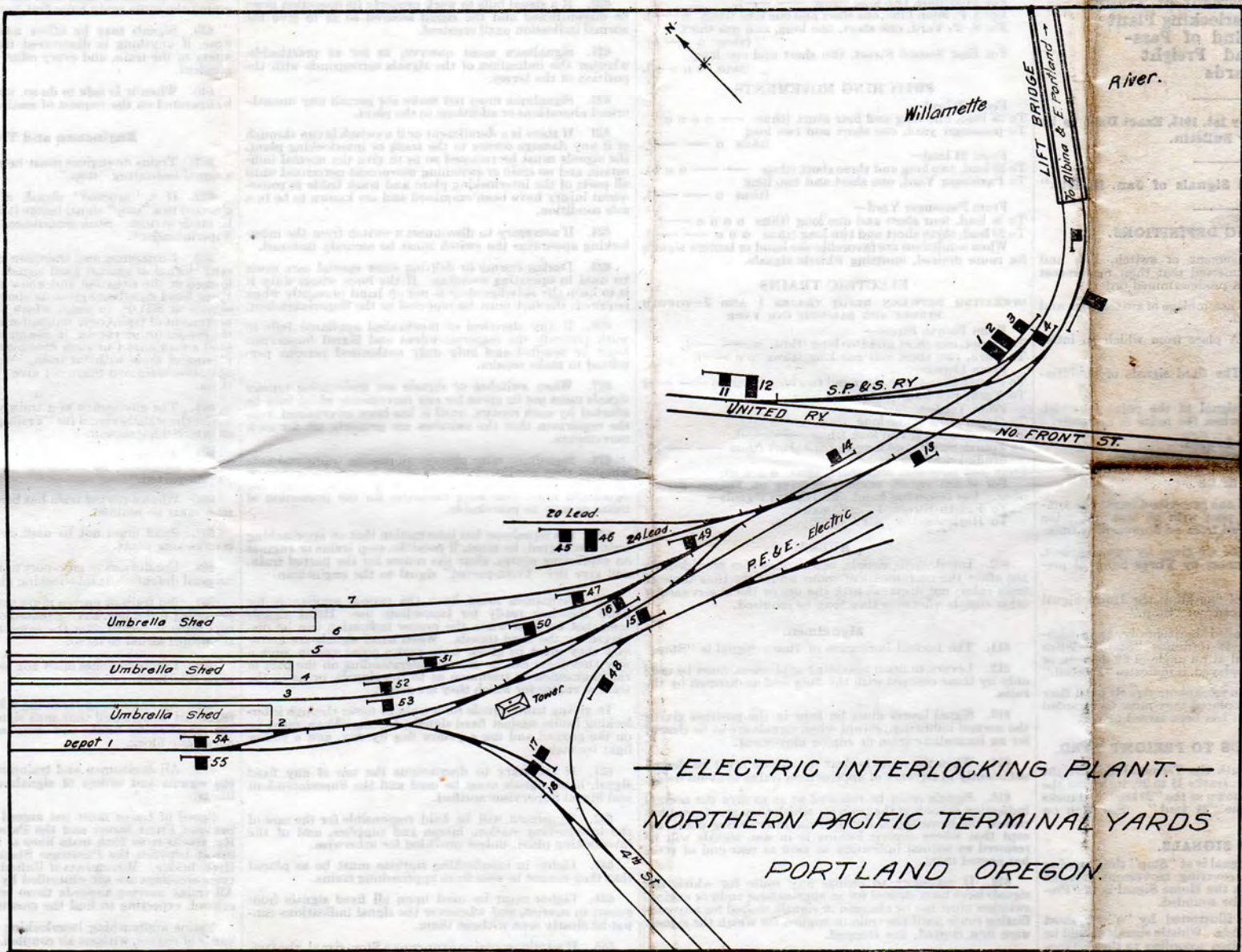
Speed of trains must not exceed six (6) miles per hour between Front Street and the Passenger Station. United Ry. tracks cross both main lines at the center line of Front Street between the Passenger Station and the Willamette River bridge. Movements of United Ry. trains approaching these crossings are not controlled by the interlocking plant. All trains moving towards these crossings must be under control, expecting to find the crossings occupied.

Trains approaching interlocking plant with cars in advance of engine, without air coupled, and intending to move through plant, must use extra care to avoid accidents, or damage to interlocking equipment through train parting; must come to a stop not less than one hundred feet from Home Signal, if signal is at stop; must set a sufficient number of brakes, and give the stop signal in ample time to insure bringing train to a standstill, as above outlined. (See rules 662 and 14.)

E. LYONS,  
Manager.



NORTHERN PACIFIC TERMINAL COMPANY



—ELECTRIC INTERLOCKING PLANT.—  
 NORTHERN PACIFIC TERMINAL YARDS  
 PORTLAND OREGON.